

## Program

## Room S1

Keidokan Building 104

## Luminescence Chemistry Ensemble: Innovations in Scientific Principle, Intellectual Property, and Human Resource Development

Thursday, March 24, AM

(9 : 30 ~ 9 : 45)

**1S1-01 Special Program Lecture** Opening Remarks - Luminescence Chemistry Ensemble: Innovations in Scientific Principle, Intellectual Property, and Human Resource Development (Grad. Sch. Educ., Hiroshima Univ.)  
○AMIMOTO, Kiichi (09:30~09:45)

Chair: AMIMOTO, Kiichi (9 : 45 ~ 10 : 10)

**1S1-02 Special Program Lecture** The application and effect of teaching materials utilizing peroxyoxalate chemiluminescence. (LUMICA Co.)  
○SANO, Hiroyuki (09:45~10:10)

Chair: NISHIDA, Jun-ichi (10 : 10~10 : 35)

**1S1-03 Special Program Lecture** The Novel Fluorescent Domain in the Crystal of Organic Boron Complexes: The Excited Multimer (Grad. Sch. Eng., Osaka Pref. Univ.)  
○IKEDA, Hiroshi (10:10~10:35)

Chair: YUASA, Junpei (10 : 35~11 : 00)

**1S1-04 Special Program Lecture** Startups and Educational Material Production Focused on the Color-changeable Fluorescent Dyes that Utilized Suzuki-Miyaura Cross-Coupling (Fac. Env.Earth Sci., Hokkaido Univ.)  
○YAMADA, Koji (10:35~11:00)

Chair: YOSHIHARA, Toshitada (11 : 00~11 : 25)

**1S1-05 Special Program Lecture** Teacher-training programs and outreach activities through studies on the luminescence chemistry (Fac. Edu., Shinshu Univ.)  
○ITO, Fuyuki (11:00~11:25)

Chair: TANAKA, Kazuo (11 : 25~11 : 50)

**1S1-06 Special Program Lecture** Mechanics and Luminescence of Flexible Molecules (RCMS, Nagoya Univ.)  
○SAITO, Shohei (11:25~11:50)

Chair: IKEDA, Hiroshi (11 : 50~12 : 30)

**1S1-07 Special Program Lecture** ※ (Grad. Sch. Sci., Eng., Yamagata Univ.)  
○KIDO, Junji (11:50~12:30)

## Invitation to the life science controlled by reactive oxygen species &amp; free radicals

Thursday, March 24, PM

(13 : 30~13 : 35)

**1S1-08 Special Program Lecture** Introduction (Tokyo Tech)  
○OKURA, Ichiro (13:30~13:35)

Chair: KOHNO, Masahiro (13 : 35~14 : 05)

**1S1-09 Special Program Lecture** Basic knowledge for controlling and applying reactive oxygen and free radicals (Showa Pharm. Univ.)  
○OZAWA, Toshihiko (13:35~14:05)

Chair: ARII, Masayuki (14 : 05~15 : 05)

**1S1-10 Special Program Lecture** Role of functional biosubstances to prevent from the injury caused by the oxidative stress (Frontier C., Univ. of Miyazaki)  
○NAKAJIMA, Akira (14:05~14:35)

**1S1-11 Special Program Lecture** Control of Reactive Oxygen Species and Free Radicals by Kampo formulation (NTUT)  
○HIRAYAMA, Aki (14:35~15:05)

Chair: OKURA, Ichiro (15 : 05~16 : 05)

**1S1-12 Special Program Lecture** Antimicrobial intervention by reactive oxygen species (Sch. Dent., Tohoku Univ.)  
○NIWANO, Yoshimi (15:05~15:35)

**1S1-13 Special Program Lecture** Research and development of functional vegetables preventing a lifestyle-related disease (DESIGNER

FOODS) ○NIWA, Masumi (15:35~16:05)

Chair: OZAWA, Toshihiko (16 : 05~16 : 30)

**1S1-14 Special Program Lecture** Reactive oxygen species and free radical research for prolongation of healthy life expectancy (Grad. Sch. Biosci. Biotech., Tokyo Tech)  
○KOHNO, Masahiro (16:05~16:30)

## Special Lecture

Friday, March 25, AM

Chair: SUZUKI, Keisuke (10 : 00~10 : 50)

**2S1-01# Special Lecture** Asymmetric Pd-NHC\* Catalyzed C(sp<sup>3</sup>)-H Bond Functionalization (Dep. of Org. Chem., Univ. of Geneva)  
○E. PETER, Kündig (10:00~10:50)

## Room S2

Keidokan Building 106

## A New Paradigm for "MONODZUKURI" : Initiated with Innovative Synthetic Transformations

Thursday, March 24, AM

Chair: TANAKA, Katsunori (9 : 30 ~ 12 : 10)

**1S2-01 Special Program Lecture** Synthesis and Application of Novel Organosilanes (IMCE, Kyushu Univ.)  
○IGAWA, Kazunobu (09:30~09:50)

**1S2-02 Special Program Lecture** Cooperative Catalysis for MONODUKURI Strategies (Grad. Sch. Eng., Kyoto Univ.)  
○NAKAO, Yoshiaki (09:50~10:10)

**1S2-03 Special Program Lecture** MONODUKURI strategy for advanced materials using ubiquitous light elements (Grad. Sch. Sci., The Univ. of Tokyo)  
○TSUJI, Hayato (10:10~10:30)

**1S2-04 Special Program Lecture** Development of new synthetic method by using reactive molecules (Sch. Sci. Tech., Kwansai Gakuin Univ.)  
○HAMURA, Toshiyuki (10:30~10:50)

**1S2-05 Special Program Lecture** "MONODUKURI" strategy to overcome the limits of synthetic organic chemistry: total synthesis of palau'amine (Inst. Bio. Sci., Tokushima Univ. Grad. Sch.)  
○NAMBA, Kosuke (10:50~11:10)

**1S2-06 Special Program Lecture** Creation of novel molecules via natural product synthesis with MONODUKURI strategy (Grad. Sch. Pharm. Sci., Nagoya Univ.)  
○YOKOSHIMA, Satoshi (11:10~11:30)

**1S2-07 Special Program Lecture** MONODUKURI for drug discovery: Mirror-image screening of chiral natural product derivatives (Grad. Sch. Pharm. Sci., Kyoto Univ.)  
○OISHI, Shinya (11:30~11:50)

**1S2-08 Special Program Lecture** Toward creating molecules useful in chemical biology (Syn. Org. Chem. Lab., RIKEN; RIKEN CSRS)  
○HIRAI, Go (11:50~12:10)

(12 : 10~12 : 30)

**1S2-09 Special Program Lecture** Synthetic Monodzukuri Strategy in Vivo and Summary (Bio. Syn. Chem. Lab., RIKEN)  
○TANAKA, Katsunori (12:10~12:30)

CO<sub>2</sub> Recycling in Biomolecular Chemistry: Toward Interdisciplinary Blending Native and Artificial Photosynthetic Researches

Thursday, March 24, PM

Chair: FUJII, Ikuo (13 : 30~13 : 50)

**1S2-10 Special Program Lecture** Opening Remarks - CO<sub>2</sub> Recycling in Biomolecular Chemistry: Toward Interdisciplinary Blending Native and Artificial Photosynthetic Researches (Grad. Sch. Sci., Kitasato Univ.)  
○ISHIDA, Hitoshi (13:30~13:50)

Chair: TAKAGI, Masahiro (13 : 50~14 : 15)

**1S2-11 Special Program Lecture** CO<sub>2</sub>-concentrating mechanism in microalgae: Functions and expression of inorganic carbon-transporters in a model green alga, Chlamydomonas (Grad. Sch. Bio., Kyoto Univ.)

○FUKUZAWA, Hideya (13:50~14:15)

Chair: AOI, Keigo (14 : 15~14 : 40)

**1S2-12 Special Program Lecture** Functional and evolutionary studies of photosynthetic CO<sub>2</sub>-fixing enzyme RuBisCO for utilization of CO<sub>2</sub> as a resource (Grad. Sch. Human Dev. Env., Kobe Univ.) ○ASHIDA, Hiroki (14:15~14:40)

Chair: NAGASAKI, Takeshi (14 : 40~15 : 05)

**1S2-13 Special Program Lecture** Developing sustainable CO<sub>2</sub> conversion and utilization systems through bioelectrochemical and geobiotechnological approaches. (R&D Center Submarine Resources, JAMSTEC) ○INAGAKI, Fumio; ISHII, Shunichi; IMACHI, Hiroyuki (14:40~15:05)

Chair: WADA, Takehiko (15 : 05~15 : 30)

**1S2-14 Special Program Lecture** Light-driven CO<sub>2</sub> fixation using cyanobacterial photosystem and bacterial formate dehydrogenase (Fac. Agr., Shinshu Univ.) ○IHARA, Masaki (15:05~15:30)

Chair: NAKAJIMA, Yumiko (15 : 30~15 : 55)

**1S2-15 Special Program Lecture** Direct Carboxylation of Carbon-Hydrogen Bonds Using CO<sub>2</sub> (Grad. Sch. Sci., Eng., Tokyo Tech) ○IWASAWA, Nobuharu (15:30~15:55)

Chair: TAMIYAKI, Hitoshi (15 : 55~16 : 20)

**1S2-16 Special Program Lecture** Development of photocatalysts for CO<sub>2</sub> reduction (Grad. Sch. Sci., Eng., Tokyo Tech) ○ISHITANI, Osamu (15:55~16:20)

Chair: MIHARA, Hisakazu (16 : 20~16 : 30)

**1S2-17 Special Program Lecture** closing remarks (Shimadzu Corp.) ○TSUCHIBUCHI, Tsuyoshi (16:20~16:30)

## Current trends on "organ on a chip" and possible contribution to bimolecular science

Saturday, March 26, PM

(13 : 10~13 : 20)

**3S2-01 Medium and Long-Term Program Lecture** Introductory remark (Grad. Sch. Eng., Osaka Univ.) ○TAMIYA, Eiichi (13:10~13:20)

Chair: TAMIYA, Eiichi (13 : 20~14 : 20)

**3S2-02 Medium and Long-Term Program Lecture** Organs-on-a-chip aims to substitute animal testing (BRI, AIST) ○FUJITA, Satoshi (13:20~13:40)

**3S2-03 Medium and Long-Term Program Lecture** Toward better understanding of human body responses using organ(s) on-a-chip systems (Grad. Sch. Eng., The Univ. of Tokyo; Sch. Eng., Tokai Univ.; IIS, The Univ. of Tokyo) ○SAKAI, Yasuyuki; KIMURA, Hiroshi; FUJII, Teruo (13:40~14:00)

**3S2-04 Medium and Long-Term Program Lecture** Micro/nano chemistry-based electrochemical imaging device for cell analysis (Grad. Sch. Environmental Studies, Tohoku Univ.) ○INO, Kosuke (14:00~14:20)

Chair: FUJITA, Satoshi (14 : 20~15 : 40)

**3S2-05 Medium and Long-Term Program Lecture** Stimuli-responsive molecular tools for manipulating and visualizing biological phenomena (RCAST, The Univ. of Tokyo) ○YAMAGUCHI, Satoshi (14:20~14:40)

**3S2-06 Medium and Long-Term Program Lecture** LSPR chip device for cell assay (Grad. Sch. Eng., Osaka Univ.) ○SAITO, Masato (14:40~15:00)

**3S2-07 Medium and Long-Term Program Lecture** Development of multi-throughput organs-on-a-chip (AIST) ○SUGIURA, Shinji; SATOU, Taku; SHIN, Kazumi; KANAMORI, Toshiyuki (15:00~15:20)

**3S2-08 Medium and Long-Term Program Lecture** Fabrication of 3D-Tissue Constructs Based on Polymer Science for Organ on a Chip (Grad. Sch. Eng., Osaka Univ.) ○MATSUSAKI, Michiya; AKASHI, Mitsuru (15:20~15:40)

Chair: SAKAI, Yasuyuki (15 : 40~17 : 00)

**3S2-09 Medium and Long-Term Program Lecture** Chip devices for engineering 3D tissues (Grad. Fac. Eng., Yokohama Natl. Univ.) ○FUKUDA, Junji (15:40~16:00)

**3S2-10 Medium and Long-Term Program Lecture** 3D biological tissue business - Drug screening using 3D tissue models- (BioMedical Technology HYBRID Co., Ltd.) ○AKAGI, Takami; NAGURA, Mayuka; NAWANO, Masaaki; MATSUSAKI, Michiya; BABA, Masanori; MARUYAMA, Ikuro; AKASHI, Mitsuru (16:00~16:20)

**3S2-11 Medium and Long-Term Program Lecture** Current status of in vitro toxicity test development utilizing human hepatocytes and related products (NIHS) ○ISHIDA, Seiichi (16:20~16:40)

**3S2-12 Medium and Long-Term Program Lecture** Activities on

Next generation technology for Personalized healthcare (Sysmex Corp.)

○YOSHIDA, Tomokazu (16:40~17:00)

## Controlled Supramolecular Polymerization: Examples and Hints

Sunday, March 27, AM

(9 : 30 ~9 : 35)

**4S2-01 Special Program Lecture** Introduction (Grad. Sch. Eng., Chiba Univ.) ○YAGAI, Shiki (09:30~09:35)

Chair: SUGIYASU, Kazunori (9 : 35 ~10 : 50)

**4S2-02 Special Program Lecture** Molecular design and aggregation mechanism for realization of kinetically controlled supramolecular polymerization (Julius-Maximilians-Universität Würzburg) ○OGI, Soichiro; WUERTHNER, Frank (09:35~10:00)

**4S2-03 Special Program Lecture** A Space-Filling Design for the Construction of Large-Area Organic Thin Films with High Structural Integrity (Chem. Res. Lab., Tokyo Tech) ○SHOJI, Yoshiaki (10:00~10:25)

**4S2-04 Special Program Lecture** Advanced Precision Polymerization: Molecular Design for Side-Chain Sequence and Main Chain Topology (Grad. Sch. Eng., Kyoto Univ.) ○OUCHI, Makoto (10:25~10:50)

Chair: YAGAI, Shiki (10 : 50~12 : 25)

**4S2-05 Special Program Lecture** Supramolecular Polymerization with Non-planer  $\pi$ -conjugated Monomers (RIKEN CEMS) ○MIYAJIMA, Daigo (10:50~11:15)

**4S2-06 Special Program Lecture** Amyloid fibrils: Supramolecular polymers formed by denatured proteins (IPR, Osaka Univ.) ○GOTO, Yuji (11:15~11:50)

**4S2-07 Special Program Lecture** Molecular self-assembly and functions based on controlled energy landscapes (Grad. Sch. Eng., Kyushu Univ.; CMS, Khushu Univ.) ○KIMIZUKA, Nobuo (11:50~12:25)

(12 : 25~12 : 30)

**4S2-08 Special Program Lecture** Summary (Org. Mat. Group, NIMS) ○SUGIYASU, Kazunori (12:25~12:30)

## Recent Advances in Single-Molecule Science toward Single-Molecule Technologies

Sunday, March 27, PM

(13 : 30~13 : 35)

**4S2-09 Special Program Lecture** Introductory talk (ISIR, Osaka Univ.) ○TANIGUCHI, Masateru (13:30~13:35)

Chair: KIGUCHI, Manabu (13 : 35~14 : 45)

**4S2-10 Special Program Lecture** Atomic-scale nanofabrication and single molecule transistors (IIS, The Univ. of Tokyo) ○HIRAKAWA, Kazuhiko; YOSHIDA, Kenji; DU, Shaoqing (13:35~14:05)

**4S2-11 Special Program Lecture** Synthesis and Physical Properties of Insulated Metallopolymers (Grad. Sch. Eng., Kyoto Univ.) ○TERAO, Jun (14:05~14:25)

**4S2-12 Special Program Lecture** Structure-property relationship and single-molecule conductance of long insulated oligothiophenes (ISIR, Osaka Univ.) ○IE, Yutaka (14:25~14:45)

Chair: TANIGUCHI, Masateru (14 : 50~16 : 30)

**4S2-13 Special Program Lecture** Theoretical investigations on electron transport of pi-contact molecular junctions (MCES, Tokyo Tech) ○TADA, Tomofumi (14:50~15:10)

**4S2-14 Special Program Lecture** Single-molecule luminescence/absorption spectroscopy (RIKEN) ○KIM, Yousoo (15:10~15:30)

**4S2-15 Special Program Lecture** SERS and I-V (Grad. Sch. Sci., Eng., Tokyo Tech) ○KIGUCHI, Manabu (15:30~15:50)

**4S2-16 Special Program Lecture** Thermoelectricity in atomic and molecular junctions (ISIR, Osaka Univ.) ○TSUTSUI, Makusu (15:50~16:10)

**4S2-17 Special Program Lecture** Investigation of electronic structure of single-molecule junctions by thermoelectric measurements (Grad. Sch. Eng. Sci., Osaka Univ.) ○YAMADA, Ryo; LEE, Seeki; TANAKA, Shoji; TADA, Hirokazu (16:10~16:30)

## Room S3

Keidokan Building 201

### CSJ Award Presentation

Thursday, March 24, AM

Chair: YOSHIDA, Jun-ichi (11:00~12:00)

- 1S3-01<sup>#</sup> CSJ Award Presentation** Development of Synthetic Reactions Based on Novel Molecular Activation Methods and Studies on Dynamic Functions of Synthetic Helical Molecules and Molecular Systems (Grad. Sch. Pharm. Sci., Tohoku Univ.) ○YAMAGUCHI, Masahiko (11:00~12:00)

Thursday, March 24, PM

Chair: YAMANOUCHI, Kaoru (13:00~14:00)

- 1S3-02<sup>#</sup> CSJ Award Presentation** Photochemical Reaction Field Created by Metal Nanostructures and Its Application to Energy Conversion Systems (RIES, Hokkaido Univ.) ○MISAWA, Hiroaki (13:00~14:00)

Friday, March 25, AM

Chair: TAKAI, Kazuhiko (11:00~12:00)

- 2S3-01<sup>#</sup> CSJ Award Presentation** Generation of Highly Coordinated Anionic Reactive Species and Their Application to Organic Synthesis (Grad. Sch. Eng., Osaka Univ.) ○KAMBE, Nobuaki (11:00~12:00)

Friday, March 25, PM

Chair: YAMANOUCHI, Kaoru (13:00~14:00)

- 2S3-02 CSJ Award Presentation** Advanced Experimental and Theoretical Studies on Molecular Inner-shell Excitation (PMS, IMS) ○KOSUGI, Nobuhiro (13:00~14:00)

Chair: SHODA, Shin-ichiro (14:30~15:30)

- 2S3-03<sup>#</sup> CSJ Award Presentation** Creative Synthesis of Organic-Inorganic Molecular Hybrid Materials (Grad. Sch. Eng., Kyoto Univ.) ○CHUJO, Yoshiki (14:30~15:30)

Chair: KUWABATA, Susumu (16:00~17:00)

- 2S3-04<sup>#</sup> CSJ Award Presentation** Creation of Electro- and Photo-functional Molecular Systems Based on Coordination Programming (Grad. Sch. Sci., The Univ. of Tokyo) ○NISHIHARA, Hiroshi (16:00~17:00)

## Room S4

Keidokan Building 202

### Creation of precise organic synthesis and functional materials based on molecular space

Thursday, March 24, AM

(9:30~9:35)

- 1S4-01 Special Program Lecture** Opening remarks (Grad. Sch. Fish. Sci. Env. Studies, Nagasaki Univ.) ○SHIRAKAWA, Seiji (09:30~09:35)

Chair: MURASE, Takashi (9:35~11:15)

- 1S4-02 Special Program Lecture** Development of the desymmetrized and distorted Nickel complexes and its application to asymmetric catalysis (Syn. Org. Chem. Lab., RIKEN) ○SOHTOME, Yoshihiro (09:35~10:05)

- 1S4-03 Special Program Lecture** Nanoscopic and mesoscopic molecular assembly explored by high-resolution electron microscopy (Grad. Sch. Sci., The Univ. of Tokyo; Org. Int. Res. Pro., The Univ. of Tokyo) ○HARANO, Koji (10:05~10:40)

- 1S4-04 Special Program Lecture** Preparation and Functions of Polyhedral Polymer Gels Constructed from Crystal Cross-linking of Porous Coordination Polymers (Fac. Sci., Hokkaido Univ.) ○SADA, Kazuki (10:40~11:15)

Chair: TAKASHIMA, Yoshinori (11:25~12:30)

- 1S4-05 Special Program Lecture** Construction of Supramolecular Materials Based on Pillar-Shaped Macrocyclic Hosts Pillar[n]arenes (Grad. Sch. Nat. Sci. Technol., Kanazawa Univ.) ○OGOSHI, Tomoki (11:25~11:55)

- 1S4-06 Special Program Lecture** Catalyst-controlled molecular

transformation based on dynamic molecular recognition (ICR, Kyoto Univ.) ○KAWABATA, Takeo (11:55~12:30)

### SPring-8 Symposium on XAFS—Fundamental Guidance and Applications

Thursday, March 24, PM

Chair: TAKAYA, Hikaru (13:30~14:40)

- 1S4-07 Special Program Lecture** Evolution of the XAFS spectroscopy (SR Center, Ritsumeikan Univ.) ○OHTA, Toshiaki (13:30~14:10)

- 1S4-08 Special Program Lecture** The present status of X-ray absorption fine structure(XAFS) measurement at SPring-8. (JASRI/SPring-8) ○NITTA, Kiyofumi (14:10~14:40)

Chair: IWAMOTO, Takahiro (14:40~16:30)

- 1S4-09 Special Program Lecture** Structural analysis of metal nanoclusters by XAFS (Grad. Sch. Sci., The Univ. of Tokyo; ESICB, Kyoto Univ.) ○YAMAZOE, Seiji (14:40~15:10)

- 1S4-10 Special Program Lecture** Novel heterogeneous catalysts for practical organic synthesis (Fac. Sci., Kyushu Univ.) ○TOKUNAGA, Makoto (15:10~15:40)

- 1S4-11 Special Program Lecture** An industrial application: A world of advanced batteries unveiled by XAFS (NISSAN ARC, LTD.) ○IMAI, Hideto (15:40~16:00)

- 1S4-12 Special Program Lecture** Soft X-ray photoabsorption spectroscopy; from the foundation to the application. (JASRI/SPring-8) ○TAMENORI, Yusuke (16:00~16:30)

### New trend of functional materials design based on microscopic molecular motions

Sunday, March 27, AM

(9:30~9:35)

- 4S4-01 Special Program Lecture** Opening remarks (Fac. Eng., Kagawa Univ.) ○FUNAHASHI, Masahiro (09:30~09:35)

Chair: KISHIMURA, Akihiro (9:35~10:40)

- 4S4-02 Special Program Lecture** Design of continuous functional surface through the self-organization of liquid crystals (Tokyo Univ. of Agri. and Tech.) ○CHIKAWA, Takahiro (09:35~09:55)

- 4S4-03 Special Program Lecture** 2D Self-Assembly of Heptazine Derivatives at the Solution/Solid Interfaces (Fac. Eng., Kagawa Univ.) ○UEMURA, Shinobu (09:55~10:15)

- 4S4-04 Special Program Lecture** Supramolecular Assembly of Conjugated Molecules (Pol. Mater. Unit, NIMS) ○TAKEUCHI, Masayuki; TAKAI, Atsuro (10:15~10:40)

Chair: YOSHIZAWA, Michito (10:40~11:20)

- 4S4-05 Special Program Lecture** Dynamic Supramolecular Ion Channels Inspired by Membrane Proteins (Grad. Sch. Biosci. Biotech., Tokyo Tech; PRESTO, JST) ○MURAOKA, Takahiro (10:40~11:00)

- 4S4-06 Special Program Lecture** Synthesis and physical property of liquid-crystalline electronic functional materials based on the mobility of side chains (Fac. Eng., Kagawa Univ.) ○FUNAHASHI, Masahiro (11:00~11:20)

Chair: TAKEUCHI, Masayuki (11:20~12:25)

- 4S4-07 Special Program Lecture** Synthesis and Property of Supramolecular Polymers produced via Molecular Recognition (Grad. Sch. Sci., Hiroshima Univ.) ○HAINO, Takeharu (11:20~11:45)

- 4S4-08 Special Program Lecture** Construction of Novel Fluorescent Solids through Discrete  $\pi$ -Stacking (Chem. Res. Lab., Tokyo Tech) ○YOSHIZAWA, Michito; SEKIGUCHI, Shoya (11:45~12:05)

- 4S4-09 Special Program Lecture** Fabrication of supramolecular capsules through the control of dynamic behavior of component molecules (Grad. Sch. Eng., Kyushu Univ.) ○KISHIMURA, Akihiro (12:05~12:25)

(12:25~12:30)

- 4S4-10 Special Program Lecture** closing remarks (Chem. Res. Lab., Tokyo Tech) ○YOSHIZAWA, Michito (12:25~12:30)

### Topology/Geometry-driven Electron Systems toward New Horizon of Functional Materials

Sunday, March 27, PM

(13:30~13:40)

- 4S4-11 Special Program Lecture** The preface of the present special program (Grad. Sch. Eng., Nagoya Univ.) ○ONOE, Jun (13:30~13:40)

Chair: MATSUDA, Kazunari (13:40~15:00)

- 4S4-12 Special Program Lecture** Application of knot theory and 3-dimensional topology to chemistry (Grad. Sch. Sci., Eng., Saitama Univ.)

- SHIMOKAWA, Koya (13:40~14:00)  
**4S4-13 Special Program Lecture** Quantum physics in curved nanostructures (Dept. Env. Sci., Univ. Yamanashi) ○SHIMA, Hiroyuki (14:00~14:20)  
**4S4-14 Special Program Lecture** Correlation between Structure and Physical/Chemical Properties in Small Metal Clusters (Tokyo Univ. of Sci.) ○NEGISHI, Yuichi (14:20~14:40)  
**4S4-15 Special Program Lecture** A possibility of a structure-induced molecular switch (Grad. Sch. Eng. Sci., Osaka Univ.) ○KITAGAWA, Yasutaka; TAKEBAYASHI, Taku; ASAOKA, Mizuki; MIYAGI, Koji; NISHIKUBO, Rena; NAKANO, Masayoshi (14:40~15:00)

Chair: TANAKA, Kentaro (15:00~16:20)

- 4S4-16 Special Program Lecture** Geometric Structure-Function Relationships of Porous Ionic Crystals (Grad. Sch. Arts and Sci., The Univ. of Tokyo) ○UCHIDA, Sayaka (15:00~15:20)  
**4S4-17 Special Program Lecture** Development of Novel Properties and Functionalities in Nano-materials based on Optical Science (IAE, Kyoto Univ.) ○MATSUDA, Kazunari (15:20~15:40)  
**4S4-18 Special Program Lecture** Topological Polymer Chemistry: New Concepts and Practices for Constructing Unusual Macromolecular Architectures (Grad. Sch. Sci., Eng., Tokyo Tech) ○TEZUKA, Yasuyuki (15:40~16:00)  
**4S4-19 Special Program Lecture** Symplectic geometry and topological polymers: application of modern differential geometry to novel polymeric materials (Ochanomizu Univ.) ○DEGUCHI, Tetsuo (16:00~16:20)

(16:20~16:30)

- 4S4-20 Special Program Lecture** Perspectives on New Approaches to Electron Systems driven by Geometry and Topology toward Novel Functional Materials (Ochanomizu Univ.) ○DEGUCHI, Tetsuo (16:20~16:30)

## Room S5

Keidokan Building 203

The next generation of medical and veterinary technology-collaboration of medical, medicinal, and veterinary science and engineering

Thursday, March 24, AM

(9:30~9:35)

- 1S5-01 Special Program Lecture** Opening Remarks (Grad. Sch. Biosci. Biotech., Tokyo Tech) ○MATSUMURA, Yuriko (09:30~09:35)

Chair: MATSUMURA, Yuriko (9:35~10:20)

- 1S5-02 Special Program Lecture** Chemistry creates the Japan's future (MIB, METI) ○MOGI, Tadashi (09:35~09:50)  
**1S5-03 Special Program Lecture** Owners and their pets. Spend their lives together. (Tottori Univ. Veterinary Med. Center) ○ITO, Norihiko (09:50~10:20)

Chair: YAMAKI, Satoshi (10:20~11:20)

- 1S5-04 Special Program Lecture** Exploration of predictive biomarkers detected by LC-MS-IT-TOF (Grad. Sch. Biosci. Biotech., Tokyo Tech) ○MATSUMURA, Yuriko (10:20~10:50)  
**1S5-05 Special Program Lecture** Development of profiling method of lipid mediator species using triple quadrupole LCMS system and applications (Shimadzu Corp.) ○YAMADA, Masaki (10:50~11:20)

Chair: OKURA, Ichiro (11:20~12:30)

- 1S5-06 Special Program Lecture** Analytical technologies driving pharmaceutical research and development (Shimadzu Corp.) ○ASAKAWA, Naoki (11:20~11:55)  
**1S5-07 Special Program Lecture** Metabolomics Analysis for Discovering Biomarkers in Colorectal Cancer (Grad. Sch. Med., Kobe Univ.; AMED) ○YOSHIDA, Masaru (11:55~12:30)

How much do we know about self-assembly mechanism: From amyloid to artificial systems

Thursday, March 24, PM

Chair: HIRAOKA, Shuichi (13:30~15:00)

- 1S5-08 Special Program Lecture** Investigation of the early events of protein aggregation in amyloid formation (Grad. Sch. Sci., Kobe Univ.) ○CHATANI, Eri (13:30~14:00)  
**1S5-09 Special Program Lecture** Supramolecular Assemblies that Propagate Like Amyloid Fibrils (Org. Mat. Group, NIMS) ○SUGIYASU, Kazunori (14:00~14:30)

- 1S5-10 Special Program Lecture** Assembly and disassembly of amyloid fibrils by molecular dynamics simulations (NINS; Sch. Physical Sci., SOKENDAI) ○OKUMURA, Hisashi (14:30~15:00)

Chair: SUGIYASU, Kazunori (15:00~16:30)

- 1S5-11 Special Program Lecture** Self-Assembly Process of Supramolecular Complexes (Grad. Sch. Arts and Sci., The Univ. of Tokyo) ○HIRAOKA, Shuichi (15:00~15:30)

- 1S5-12 Special Program Lecture** Theoretical Chemistry of Self-Assembly Process (Grad. Sch. Eng., Kyoto Univ.) ○SATO, Hirofumi (15:30~16:00)

- 1S5-13 Special Program Lecture** Self-Assembly Dynamics of Biological Molecules Observed by High-Speed Atomic Force Microscopy (Inst. Sci. Eng., Kanazawa Univ.) ○UCHIHASHI, Takayuki; KONNO, Hiroki (16:00~16:30)

Functional materials and devices open up new bioanalyses

Sunday, March 27, AM

(9:30~9:33)

- 4S5-01 Special Program Lecture** Opening (Fac. of Sci., JWU) ○SATO, Kae (09:30~09:33)

Chair: NAKANISHI, Jun (9:33~10:19)

- 4S5-02 Special Program Lecture** Nanoscale temperature imaging based on near-infrared nanophosphors (Fac. Ind. Sci. Technol., Tokyo Univ. of Sci.) ○KAMIMURA, Masao; SOGA, Kohei (09:33~09:56)

- 4S5-03 Special Program Lecture** Markerless and Noninvasive Identification of Human Cells using Polyion-Complex Sensor Array (Grad. Sch. Arts and Sci., The Univ. of Tokyo) ○YOSHIMOTO, Keitaro (09:56~10:19)

Chair: SATO, Kiichi (10:19~11:05)

- 4S5-04 Special Program Lecture** New cell migration assays based on photoactivatable surfaces (MANA, NIMS) ○NAKANISHI, Jun (10:19~10:42)

- 4S5-05 Special Program Lecture** In vitro Fabrication of 3D-Tissues by Controlling Nano-Environment on Cell Surfaces (Grad. Sch. Eng., Osaka Univ.) ○MATSUSAKI, Michiya; AKASHI, Mitsuru (10:42~11:05)

Chair: YOSHIMOTO, Keitaro (11:10~11:56)

- 4S5-06 Special Program Lecture** Development of Cell Culture Microdevice (Fac. of Sci., JWU) ○SATO, Kae (11:10~11:33)

- 4S5-07 Special Program Lecture** Development of Microdevices for Sophisticated Bioassays (Grad. Sch. Sci. Tech., Gunma Univ.) ○SATO, Kiichi (11:33~11:56)

Chair: SATO, Kae (11:56~12:19)

- 4S5-08 Special Program Lecture** Market of functional materials (Inst. Micro. Tech. Co., Ltd.) ○TAZAWA, Hidekatsu (11:56~12:19)

(12:19~12:22)

- 4S5-09 Special Program Lecture** Concluding remarks (MANA, NIMS) ○NAKANISHI, Jun (12:19~12:22)

Chemical Approaches for Integrated Single Cell Analysis

Sunday, March 27, PM

(13:30~13:35)

- 4S5-10 Special Program Lecture** Introduction (Grad. Sch. Eng., Kyoto Univ.) KASHIDA, Hiromu; ○HAMACHI, Itaru (13:30~13:35)

Chair: KASHIDA, Hiromu (13:35~14:35)

- 4S5-11 Special Program Lecture** Development of Nano Electrochemical Microscopy for Chemical Mapping (Grad. Sch. Nat. Sci. Technol., Kanazawa Univ.) ○TAKAHASHI, Yasufumi (13:35~13:55)

- 4S5-12 Special Program Lecture** Development of a single cell and a single nucleus analysis methods by nanobiodevices (Grad. Sch. Eng., Nagoya Univ.) ○KAJI, Noritada; YASUI, Takao; BABA, Yoshinobu (13:55~14:15)

- 4S5-13 Special Program Lecture** DNA barcode genetics to understand heterogeneous cell population (RCAST, The Univ. of Tokyo) ○YACHIE, Nozomu (14:15~14:35)

Chair: TAKAHASHI, Yasufumi (14:35~15:35)

- 4S5-14 Special Program Lecture** Photo-responsive cell manipulation tools for single-cell analysis (RCAST, The Univ. of Tokyo) ○YAMAGUCHI, Satoshi (14:35~14:55)

- 4S5-15 Special Program Lecture** Imaging of chromatin structures (Okazaki Institute for Integrative Bioscience) ○MIYANARI, Yusuke (14:55~15:15)

**4S5-16 Special Program Lecture** Development of Single Cell Analytical Technology to Elucidate Biological Functions of Cancer Stem Cells (Grad. Sch. Eng., Osaka Univ.) ○MATSUSAKI, Michiya (15:15~15:35)

Chair: MATSUSAKI, Michiya (15 : 35~16 : 30)

**4S5-17 Special Program Lecture** Chemical- and physical-approaches for single-cell thermal biology. (Org. Univ. Research Init., Waseda Univ.) ○SUZUKI, Madoka (15:35~15:55)

**4S5-18 Special Program Lecture** A Chemical approach for visualization of neurotransmitter receptors in live neuronal tissues (Grad. Sch. Eng., Kyoto Univ.) ○KIYONAKA, Shigeki (15:55~16:15)

**4S5-19 Special Program Lecture** RNA imaging in living cells by using novel artificial nucleic acid, SNA (Grad. Sch. Eng., Nagoya Univ.) ○KASHIDA, Hiromu (16:15~16:30)

## Room S6

Keidokan Building 204

### The Prospects for Photofunctional Soft Crystals

Thursday, March 24, AM

(9 : 30 ~ 9 : 35)

**1S6-01 Special Program Lecture** Opening remarks (Fac. Sci., Hokkaido Univ.) ○KATO, Masako (09:30~09:35)

Chair: TSUGE, Kiyoshi (9 : 35 ~ 10 : 05)

**1S6-02 Special Program Lecture** Soft Crystals showing mechanical-induced phase change (Grad. Sch. Eng., Hokkaido Univ.) ○ITO, Hajime (09:35~10:05)

Chair: SHIOTSUKA, Michito (10 : 05~10 : 35)

**1S6-03 Special Program Lecture** Photofunctionalities of vapor-responsive soft crystals (Fac. Sci., Hokkaido Univ.) ○KATO, Masako (10:05~10:35)

Chair: SUENOBU, Tomoyoshi (10 : 35~11 : 05)

**1S6-04 Special Program Lecture** Luminescence of Soft Crystals by the Molecular-Controlled Interface (Coll. Sci. Eng., Aoyama Gakuin Univ.) ○HASEGAWA, Miki (10:35~11:05)

Chair: HASEGAWA, Yasuchika (11 : 05~11 : 35)

**1S6-05 Special Program Lecture** From Liquid Crystal to Soft Crystal and its Electronics and Photonics Applications (Grad. Sch. Eng., Osaka Univ.) ○OZAKI, Masanori (11:05~11:35)

Chair: HASEGAWA, Miki (11 : 35~12 : 05)

**1S6-06 Special Program Lecture** Functions of elasticoluminescence materials (AIST Kyushu) ○XU, Chao-nan (11:35~12:05)

Chair: MIYATAKE, Tomohiro (12 : 05~12 : 25)

**1S6-07 Special Program Lecture** Structural Control of Chiral Aggregates using Mechanical Rotation-Induced Fluid Dynamics (IIS, The Univ. of Tokyo) ○ISHII, Kazuyuki (12:05~12:25)

(12 : 25~12 : 30)

**1S6-08 Special Program Lecture** Closing Remark (UNISOKU Co., Ltd.) ○NAKAGAWA, Tatsuo (12:25~12:30)

### Molecular Self-Assembly for the Future

Thursday, March 24, PM

(13 : 30~13 : 40)

**1S6-09 Special Program Lecture** Opening Remarks (Grad. Sch. Sci. Eng., TMU) ○KATO, Tadashi (13:30~13:40)

Chair: TOSHIMA, Naoki (13 : 40~14 : 40)

**1S6-10 Special Program Lecture** Bilayer Membrane, Nanofilm, Molecular Organization (FAIS) ○KUNITAKE, Toyoki (13:40~14:10)

**1S6-11 Special Program Lecture** Molecular Architecture Chemistry and Surface Forces Measurement (WPI-AIMR, Tohoku Univ.) ○KURIHARA, Kazue (14:10~14:40)

Chair: HIGASHI, Nobuyuki (14 : 40~15 : 40)

**1S6-12 Special Program Lecture** Design of Next Generation Nano Materials (Grad. Sch. Eng., Kyushu Univ.) ○NAKASHIMA, Naotoshi (14:40~15:10)

**1S6-13 Special Program Lecture** Adaptability of atoms and molecules to potentially restricted spaces (X-Breed, Shinshu Univ.) ○KANEKO,

Katsumi (15:10~15:40)

Chair: MAEDA, Mizuo (15 : 40~16 : 40)

**1S6-14 Special Program Lecture** Development of biofunctional materials based on stimuli-responsive self-assembling molecules (Grad. Sch. Eng., Kyoto Univ.) ○HAMACHI, Itaru (15:40~16:10)

**1S6-15 Special Program Lecture** Biomimetics based on self-organization. (Sch. Sci. Eng., CIST) ○SHIMOMURA, Masatsugu (16:10~16:40)

(16 : 40~16 : 50)

**1S6-16 Special Program Lecture** Closing remark (Air Liquide Labo.) ○IIDA, Kazutoshi (16:40~16:50)

### Elements Strategy for the Future Materials

Saturday, March 26, PM

(13 : 30~13 : 35)

**3S6-01 Medium and Long-Term Program Lecture** Introductory (NAIST) ○MURAI, Shinji (13:30~13:35)

Chair: MURAI, Shinji (13 : 35~15 : 05)

**3S6-02 Medium and Long-Term Program Lecture** From Elements Science to Element Strategy Initiative (RIKEN) ○TAMAO, Kohei (13:35~14:05)

**3S6-03 Medium and Long-Term Program Lecture** Element Strategy in Materials Science (MCES, Tokyo Tech) ○HOSONO, Hideo (14:05~14:35)

**3S6-04 Medium and Long-Term Program Lecture** Chemistry and technology utilizing ubiquitous materials (WPI-iCeMS, Kyoto Univ.) ○KITAGAWA, Susumu (14:35~15:05)

Chair: NAKAMURA, Eiichi (15 : 05~17 : 05)

**3S6-05 Medium and Long-Term Program Lecture** Elements strategy in catalyst development of chemical companies (Nippon Shokubai Co., Ltd.) ○TSUNEKI, Hideaki (15:05~15:35)

**3S6-06 Medium and Long-Term Program Lecture** Physical properties of liquid boron (IMR, Tohoku Univ.) ○OKADA, Junpei (15:35~16:05)

**3S6-07 Medium and Long-Term Program Lecture** Molecular Catalysis and Element Strategy (Grad. Sch. Eng., The Univ. of Tokyo) ○NOZAKI, Kyoko (16:05~16:35)

**3S6-08 Medium and Long-Term Program Lecture** Elements Strategy for New Nano-Materials (Dep. Chem., Sch. Sci., Kyoto Univ.) ○KITAGAWA, Hiroshi (16:35~17:05)

(17 : 05~17 : 10)

**3S6-09 Medium and Long-Term Program Lecture** Concluding remarks (Grad. Sch. Sci., The Univ. of Tokyo) ○NAKAMURA, Eiichi (17:05~17:10)

### Scope for molecular information systems with molecular spin

Sunday, March 27, AM

(9 : 30 ~ 9 : 50)

**4S6-01 Special Program Lecture** Introductory remarks (AIST) ○ASAI, Yoshihiro (09:30~09:50)

Chair: ASAI, Yoshihiro (9 : 50 ~ 10 : 50)

**4S6-02 Special Program Lecture** Measurement and Control of Spin with Single Molecule Precision for Material Development of Information Processing (IMRAM, Tohoku Univ.) ○KOMEDA, Tadahiro (09:50~10:20)

**4S6-03 Special Program Lecture** Spin Effect on Carrier Dynamics in Materials for Organic Electronics (Grad. Sch. Sci. and Technol., Niigata Univ.; Center for Inst. Anal., Niigata Univ.) ○IKOMA, Tadaaki (10:20~10:50)

Chair: KOMEDA, Tadahiro (10 : 50~12 : 20)

**4S6-04 Special Program Lecture** Spin-dependent transport based on localized spins of organic radical (Grad. Sch. Sci., Nagoya Univ.) ○MATSUSHITA, Michio (10:50~11:20)

**4S6-05 Special Program Lecture** Molecular Spin Technology and Quantum Control for Quantum Computers (Grad. Sch. Sci., Osaka City Univ.) ○SATO, Kazunobu (11:20~11:50)

**4S6-06 Special Program Lecture** Actuality and possibility of nano-spintronics devices (Grad. Sch. Eng. Sci., Osaka Univ.) ○SUZUKI, Yoshishige (11:50~12:20)

(12 : 20~12 : 30)

**4S6-07 Special Program Lecture** Closing remarks (IMRAM, Tohoku Univ.) ○KOMEDA, Tadahiro (12:20~12:30)

## Development of cooperative photoresponsive molecular system

Sunday, March 27, PM

Chair: MATSUO, Koji (13:30~13:40)

**4S6-08 Special Program Lecture** Opening remarks (Fac. Sci. Tech., Ryukoku Univ.) ○UCHIDA, Kingo (13:30~13:40)

Chair: UCHIDA, Kingo (13:40~15:00)

**4S6-09 Special Program Lecture** Development of novel photomechanical phenomena of photoresponsive molecular crystals by high-order photoexcitation (Grad. Sch. Eng., Osaka City Univ.) ○KOBATAKE, Seiya (13:40~14:00)

**4S6-10 Special Program Lecture** Formation of Dimension-Controlled Assemblies Comprising Photoresponsive Ions (Coll. Pharm. Sci., Ritsumeikan Univ.) ○MAEDA, Hiromitsu (14:00~14:20)

**4S6-11 Special Program Lecture** Development of Stimuli-Responsive Polymers Conjugated with Chemical Reactions (Fac. Sci., Hokkaido Univ.) ○SADA, Kazuki (14:20~14:40)

**4S6-12 Special Program Lecture** Orientation control of liquid crystalline polymers and role of the free surface (Grad. Sch. Eng., Nagoya Univ.) ○SEKI, Kazuhiro (14:40~15:00)

Chair: KOBATAKE, Seiya (15:10~16:30)

**4S6-13 Special Program Lecture** Photofunctional Supramolecular  $\pi$ -Conjugated Systems for Solar Energy Conversion (Fac. Sci. Tech., Keio Univ.) ○HASOBE, Taku (15:10~15:30)

**4S6-14 Special Program Lecture** Preparation of Chalcopyrite-type Quantum Dots and Their Size- and Composition-dependent Photochemical Properties (Grad. Sch. Eng., Nagoya Univ.) ○TORIMOTO, Tsukasa (15:30~15:50)

**4S6-15 Special Program Lecture** Multiexciton Dynamics in Semiconductor Nanoparticles and their Application to Photoresponsive Molecular Systems (Sch. Sci. Tech., Kwansai Gakuin Univ.) ○TAMAI, Naoto (15:50~16:10)

**4S6-16 Special Program Lecture** Advanced control of photochemical reactions by multiple-photon processes (Grad. Sch. Eng. Sci., Osaka Univ.) ○MIYASAKA, Hiroshi (16:10~16:30)

## Room S7

Keidokan Building 301

## Emerging Areas in Chemical Biology - Innovation in life science powered by instrumental analysis

Thursday, March 24, AM

(9:30~9:35)

**1S7-01 Medium and Long-Term Program Lecture** Introduction (Grad. Sch. Sci., Osaka Univ.) ○MURATA, Michio (09:30~09:35)

Chair: MURATA, Michio (9:35~10:05)

**1S7-02 Medium and Long-Term Program Lecture** Structural aspects on lipophilic drug recognition by multi-drug efflux transporter. (Grad. Sch. Biosci. Biotech., Tokyo Tech) ○MURAKAMI, Satoshi (09:35~10:05)

Chair: SHINADA, Tetsuro (10:05~11:05)

**1S7-03 Medium and Long-Term Program Lecture** Dynamic and structural analysis of sphingomyelin by NMR for understanding the molecular basis of lipid raft formation (Fac. Sci., Kyushu Univ.) ○MATSUMORI, Nobuaki; KINOSHITA, Masanao (10:05~10:35)

**1S7-04 Medium and Long-Term Program Lecture** Functional analysis of glycans with PET and fluorescent imaging (Grad. Sch. Sci., Osaka Univ.) ○FUKASE, Koichi (10:35~11:05)

Chair: UEDA, Minoru (11:20~12:20)

**1S7-05 Medium and Long-Term Program Lecture** Lipid distribution and function revealed by mass spectrometry imaging (Fac. Med., Hamamatsu Univ. Sch. Med.) ○SETOU, Mitsutoshi (11:20~11:50)

**1S7-06 Medium and Long-Term Program Lecture** Advanced lipidomics to understand the quality difference of fatty acids in biological systems (RIKEN IMS) ○ARITA, Makoto (11:50~12:20)

(12:20~12:30)

**1S7-07 Medium and Long-Term Program Lecture** Summary (Grad. Sch. Biosci. Biotech., Tokyo Tech) ○MURAKAMI, Satoshi (12:20~12:30)

## Future prospect for renewable energy: Spiraling-up development of solar cell and artificial photosynthesis

Friday, March 25, PM

(13:30~13:40)

**2S7-01 Medium and Long-Term Program Lecture** Opening remark (Cent. Artificial Photosynthesis, TMU) ○INOUE, Haruo (13:30~13:40)

Chair: INOUE, Haruo (13:40~16:20)

**2S7-02 Medium and Long-Term Program Lecture** Fusion of artificial photosynthesis and solar cells (Toyota Central R&D Labs., Inc.) ○MORIKAWA, Takeshi (13:40~14:10)

**2S7-03 Medium and Long-Term Program Lecture** Current Status and Future Prospect of Thin-film Solar-cell Technology (SOLAR FRONTIER K.K.) ○KUSHIYA, Katsumi (14:10~14:40)

**2S7-04 Medium and Long-Term Program Lecture** New trend of solar cell: Organic inorganic halide perovskite (Grad. Sch. Eng., Toin Univ. of Yokohama) ○MIYASAKA, Tsutomu (14:40~15:10)

**2S7-05 Medium and Long-Term Program Lecture** Renewable energies from a viewpoint of life-cycle-analysis including time-scale (The Univ. of Tokyo) ○MISONO, Makoto (15:20~15:50)

**2S7-06 Medium and Long-Term Program Lecture** Innovation of artificial photosynthesis (MCRC) ○SETOYAMA, Tohru (15:50~16:20)

(16:20~16:30)

**2S7-07 Medium and Long-Term Program Lecture** Closing remark (Grad. Sch. Sci., Eng., Tokyo Tech) ○ISHITANI, Osamu (16:20~16:30)

## CSJ Public Lecture

Saturday, March 26, PM

Chair: ONODA, Akira (13:30~14:20)

**3S7-01 CSJ Public Lecture** No title in English (Somenotsukasa Yoshioka) ○YOSHIOKA, Sachio (13:30~14:20)

Chair: KITAGISHI, Hiroaki (14:20~15:10)

**3S7-02 CSJ Public Lecture** Health Care Science at Suntory World Research Center "Dreaming Big Toward New Future Values" (SUNTORY WELLNESS LIMITD) ○KONTANI, Masanori (14:20~15:10)

Chair: YASUDA, Makoto (15:20~16:10)

**3S7-03 CSJ Public Lecture** Natural gas diffusion and deployment of new business through technology development of Osaka Gas (OSAKA GAS CO.,LTD.) ○MATSUMOTO, Masahide (15:20~16:10)

Chair: YORIMITSU, Hideki (16:10~17:00)

**3S7-04 CSJ Public Lecture** Without English (KYOTO UNIVERSITY OF ART&DESIGN) ○OIKE, Kazuo (16:10~17:00)

## Effective Synthesis of Bio-functional Middle-size Molecules by Reaction Integration

Sunday, March 27, AM

(9:30~9:35)

**4S7-01 Special Program Lecture** Opening remarks (Grad. Sch. Sci., Osaka Univ.) ○FUKASE, Koichi (09:30~09:35)

Chair: MATSUBARA, Seijiro (9:35~10:20)

**4S7-02 Special Program Lecture** Reaction Integration Based on Flash Chemistry (Grad. Sch. Eng., Kyoto Univ.) ○YOSHIDA, Jun-ichi (09:35~10:00)

**4S7-03 Special Program Lecture** Efficient introduction of Carbon Monoxide into Organic Molecules Using a Flow Reaction System (Grad. Sch. Sci., Osaka Pref. Univ.) ○FUKUYAMA, Takahide (10:00~10:20)

Chair: NAKADA, Masahisa (10:20~11:10)

**4S7-04 Special Program Lecture** Towards Efficient Synthesis of Natural Products (Grad. Sch. Pharm. Sci., Nagoya Univ.) ○FUKUYAMA, Tohru (10:20~10:45)

**4S7-05 Special Program Lecture** Lessons from Total Synthesis of Hybrid Natural Products (Grad. Sch. Sci., Eng., Tokyo Tech) ○SUZUKI, Keisuke (10:45~11:10)

Chair: DOI, Takayuki (11:20~12:30)

**4S7-06 Special Program Lecture** Total synthesis and biological evaluation of large peptide natural products (Grad. Sch. Pharm., The Univ. of Tokyo) ○INOUE, Masayuki (11:20~11:45)

**4S7-07 Special Program Lecture** Towards assembly line synthesis of

skeletally diverse natural products and its variants (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○OGURI, Hiroki (11:45~12:10)

- 4S7-08 Special Program Lecture** Discovery of High-Affinity Middle Molecules through In Situ Ligation of Strong and Weak Ligands On Cell Surface (Bio. Syn. Chem. Lab., RIKEN) ○TANAKA, Katsunori (12:10~12:30)

## Element-Block Materials as Innovative Chemical Technology for Vivid Future of Japan

Sunday, March 27, PM

Chair: TOMITA, Ikuyoshi (13 : 30~14 : 50)

- 4S7-09 Special Program Lecture** New Polymeric Materials Based on Element-Blocks (Grad. Sch. Eng., Kyoto Univ.) ○CHUJO, Yoshiki (13:30~13:50)
- 4S7-10 Special Program Lecture** Functionalization of polysilsesquioxane by element-blocks for the application to semiconductor devices (Osaka Municipal Technical Research Institute) ○WATASE, Seiji (13:50~14:20)
- 4S7-11 Special Program Lecture** Synthesis of Semiconducting Polymers Utilizing New Acceptor Units and Their Application to Organic Photovoltaics (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○NISHIHARA, Yasushi (14:20~14:50)

Chair: OHSHITA, Joji (14 : 50~16 : 20)

- 4S7-12 Special Program Lecture** Nanocomposites provided from perhydropolysilazane as an Element-Block (Grad. Sch. Sci., Eng., Tokyo Tech; Tokyo Tech ACEEES) ○SAITO, Reiko (14:50~15:20)
- 4S7-13 Special Program Lecture** Functionalization on Luminescent Lanthanide Compounds with Element-block Chemistry (Coll. Sci. Eng., Aoyama Gakuin Univ.) ○HASEGAWA, Miki (15:20~15:50)
- 4S7-14 Special Program Lecture** Synthesis of element block polymers based on T8-caged silsesquioxanes (KIT) ○NAKA, Kensuke (15:50~16:20)

## Room S8

Keidokan Building 302

## New prospects created by Molecular design and Molecular technology

Thursday, March 24, PM

(13 : 00~13 : 10)

- 1S8-01 Medium and Long-Term Program Lecture** Introductory Remarks (Grad. Sch. Eng., The Univ. of Tokyo) ○KATO, Takashi (13:00~13:05)
- 1S8-02 Medium and Long-Term Program Lecture** Molecular Technology - Crest (Mol. Cat. Res. Center, Chubu Univ.) ○YAMAMOTO, Hisashi (13:05~13:10)

Chair: MAEDA, Satoshi (13 : 10~14 : 10)

- 1S8-03 Medium and Long-Term Program Lecture** New Asymmetric Catalytic System Featuring Switch and Amplification of Chirality (Grad. Sch. Eng., Kyoto Univ.) ○SUGINOME, Michinori (13:10~13:30)
- 1S8-04 Medium and Long-Term Program Lecture** Molecular Technology for Chemical Control of Epigenetics toward Drug Discovery (Med. Sci., Kyoto Pref. Univ. of Med.) ○SUZUKI, Takayoshi (13:30~13:50)
- 1S8-05 Medium and Long-Term Program Lecture** Development of Novel Synthetic Transformations by Cooperative Multi-Element Catalysis (Grad. Sch. Eng., Kyoto Univ.) ○NAKAO, Yoshiaki (13:50~14:10)

Chair: SUGINOME, Michinori (14 : 10~14 : 50)

- 1S8-06 Medium and Long-Term Program Lecture** Electron Microscopic Approach to Molecular Technology of Fluxional Molecules (Grad. Sch. Sci., The Univ. of Tokyo) ○NAKAMURA, Eiichi (14:10~14:30)
- 1S8-07 Medium and Long-Term Program Lecture** Development of Automated Reaction Path Search Methods as a Tool for Exploring Unknown Reaction Pathways (Fac. Sci., Hokkaido Univ.) ○MAEDA, Satoshi (14:30~14:50)

(15 : 00~15 : 05)

- 1S8-08 Medium and Long-Term Program Lecture** Molecular Technology: PRESTO Research (Grad. Sch. Eng., The Univ. of Tokyo) ○KATO, Takashi (15:00~15:05)

Chair: MAKIURA, Rie (15 : 05~15 : 50)

- 1S8-09 Medium and Long-Term Program Lecture** Revealing mechanical, electronic, and chemical properties of molecules at atomic-scale (Univ. of Basel) ○KAWAI, Shigeki (15:05~15:20)
- 1S8-10 Medium and Long-Term Program Lecture** Degradation and fracture processes of polymers: combination between quantum chemistry and statistical physics (IMR, Tohoku Univ.) ○HIGUCHI, Yuji (15:20~15:35)
- 1S8-11 Medium and Long-Term Program Lecture** Development of Polymer/Ionic-Liquid Blend Films Stabilized by Polymer-Brush-Afforded Hybrid Particles (ICR, Kyoto Univ.) ○OHNO, Kohji (15:35~15:50)

Chair: KAWAI, Shigeki (15 : 50~16 : 50)

- 1S8-12 Medium and Long-Term Program Lecture** Development of Molecular Technology that Enables the Control of Fluorescence Blinking (ISIR, Osaka Univ.; PRESTO, JST) ○KAWAI, Kiyohiko (15:50~16:05)
- 1S8-13 Medium and Long-Term Program Lecture** Mechanical understanding of biomembrane molecules and its application to nanobiodevice innovation (Kagoshima Univ.) ○MURAKOSHI, Michio (16:05~16:20)
- 1S8-14 Medium and Long-Term Program Lecture** Bottom-up technologies for a sliding nano-actuator (RISC, AIST) ○TAKENAKA, Yoshiko (16:20~16:35)
- 1S8-15 Medium and Long-Term Program Lecture** Directional Motion of Heterointegrated Soft Molecular Assembly (Fac. Sci., Hokkaido Univ.; PRESTO, JST) ○KAGEYAMA, Yoshiyuki (16:35~16:50)

Chair: MURAKOSHI, Michio (16 : 50~17 : 35)

- 1S8-16 Medium and Long-Term Program Lecture** Creation of highly oriented functional molecular nanosheets utilizing liquid phase interfaces (Grad. Sch. Eng., Osaka Pref. Univ.) ○MAKIURA, Rie (16:50~17:05)
- 1S8-17 Medium and Long-Term Program Lecture** Practical Breakthrough in Organic Photon-Electron Conversion Devices by Control of Spin Multiplicity Conversion (Grad. Sch. Sci., Eng., Yamagata Univ.) ○PU, Yong-jin (17:05~17:20)
- 1S8-18 Medium and Long-Term Program Lecture** Pluripotent stem molecule for green electronics (Grad. Sch. Adv. Integration Sci., Chiba Univ.) ○AOKI, Nobuyuki; MIYAMOTO, Katsuhiko; OMATSU, Takashige; J.P. Bird; OCHIAI, Yuichi (17:20~17:35)

(17 : 35~17 : 50)

- 1S8-19 Medium and Long-Term Program Lecture** Concluding Remarks (Grad. Sch. Eng., The Univ. of Tokyo) ○KATO, Takashi (17:35~17:50)

## Forefront and future of low-dimensional inorganic/polymer nanocomposites materials with advanced functions and novel structures

Sunday, March 27, AM

(9 : 30~9 : 35)

- 4S8-01 Special Program Lecture** Opening remarks (Fac. Eng., FIT) ○MIYAMOTO, Nobuyoshi (09:30~09:35)

Chair: MIYATA, Hirokatsu (9 : 35~11 : 05)

- 4S8-02 Special Program Lecture** Alignment Control and Functionalization of Fusion Materials Composed of Biomineral-based Nanocrystals and Polymers (Grad. Sch. Eng., The Univ. of Tokyo) ○KATO, Takashi (09:35~10:05)
- 4S8-03 Special Program Lecture** Development of clay-based super gas barrier film (RCPT, AIST) ○EBINA, Takeo (10:05~10:35)
- 4S8-04 Special Program Lecture** Innovation of Soft Nanocomposite Materials Using Exfoliated Clay Minerals: Their Design, Superior Properties, and New Characteristics (Coll. Industrial Tech., Nihon Univ.) ○HARAGUCHI, Kazutoshi (10:35~11:05)

Chair: NAKATO, Teruyuki (11 : 05~12 : 25)

- 4S8-05 Special Program Lecture** Preparation of cyclic tetrasiloxanes capable of forming two-dimensional layered aggregates and development to polymer hybrids (Grad. Sch. Sci., Eng., Kagoshima Univ.) ○KANEKO, Yoshiro (11:05~11:30)
- 4S8-06 Special Program Lecture** Anisotropic structures of inorganic nanosheet liquid crystals for synthesis of advanced functional materials (Fac. Eng., FIT) ○MIYAMOTO, Nobuyoshi (11:30~11:55)
- 4S8-07 Special Program Lecture** Aqua Materials with Macroscopically Oriented Structures (RIKEN CEMS) ○ISHIDA, Yasuhiro (11:55~12:25)

(12 : 25~12 : 30)

- 4S8-08 Special Program Lecture** Concluding remarks (Grad. Sch. Med., Yamaguchi Univ.) ○KAWAMATA, Jun (12:25~12:30)

## Science of movable molecules realizing new functions

Sunday, March 27, PM

(13 : 30~13 : 35)

**4S8-09 Special Program Lecture** Science of functional mobile molecules: An introduction (Okazaki Institute for Integrative Bioscience)  
○IINO, Ryota (13:30~13:35)

Chair: IINO, Ryota (13 : 35~16 : 30)

**4S8-10 Special Program Lecture** Toward Design of Mobile Biomolecules: Design Proteins from Scratch and Remodel Naturally Occurring Proteins (CIMoS, IMS) ○KOGA, Nobuyasu (13:35~14:00)

**4S8-11 Special Program Lecture** Evolutionary engineering of the ribosome (BRI, AIST) ○MIYAZAKI, Kentaro (14:00~14:25)

**4S8-12 Special Program Lecture** Visualization of chemical reactions and conformational changes of functional mobile biomolecules (Fac. Sci. Technol., Tokyo Univ. of Sci.) ○MASAIKE, Tomoko (14:25~14:50)

**4S8-13 Special Program Lecture** Visualization of Functional Dynamics of Biological Mobile Molecules with High-Speed Atomic Force Microscopy (Inst. Sci. Eng., Kanazawa Univ.) ○UCHIHASHI, Takayuki (14:50~15:15)

**4S8-14 Special Program Lecture** Molecular mechanism of a rotary movable molecule based on the crystal structures (Grad. Sch. Sci., Chiba Univ.; PRESTO, JST) ○MURATA, Takeshi (15:15~15:40)

**4S8-15 Special Program Lecture** Emergence of artificial ion channel property based on coordination movable molecules (WPI-iCeMS, Kyoto Univ.) ○FURUKAWA, Shuhei (15:40~16:05)

**4S8-16 Special Program Lecture** Development and Functionalization of Synthetic Molecular Machines (Grad. Sch. Biosci. Biotech., Tokyo Tech) ○KINBARA, Kazushi (16:05~16:30)

## Room S9

Chishinkan1 Building 222

### Molecular Science for Complex Systems: Approach to Novel Functional Design

Thursday, March 24, PM

Chair: KITAO, Akio (13 : 30~14 : 20)

**1S9-01 Medium and Long-Term Program Lecture** How can we achieve functional conversion of enzymes? -aiming at repair of damaged DNA- (Grad Sch. Eng., Nagoya Inst. of Tech.) ○IWATA, Tatsuya (13:30~13:55)

**1S9-02 Medium and Long-Term Program Lecture** Regular structures of peptide oligomers of unnatural proline analogues bearing flexible amide bonds (Grad. Sch. Pharm., The Univ. of Tokyo) ○OTANI, Yuko (13:55~14:20)

Chair: MIZUTANI, Yasuhisa (14 : 20~15 : 35)

**1S9-03 Medium and Long-Term Program Lecture** Alkyl- $\pi$  Soft Molecular Systems with Precision Control of Optoelectronic Property (MANA, NIMS) ○NAKANISHI, Takashi (14:20~14:45)

**1S9-04 Medium and Long-Term Program Lecture** Functionalization of Magic Gold Clusters (Grad. Sch. Chem. Sci. Technol., Tokyo Univ. of Sci.) ○NEGISHI, Yuichi (14:45~15:10)

**1S9-05 Medium and Long-Term Program Lecture**  $\pi$ -hybrid compounds composed of  $\pi$ -conjugated unsaturated hydrocarbons and a metal cluster (Grad. Sch. Sci., Eng., Tokyo Tech) ○MURAHASHI, Tetsuro (15:10~15:35)

Chair: KANDORI, Hideki (16 : 00~16 : 50)

**1S9-06 Medium and Long-Term Program Lecture** Development of new functions based on control of triplet energy landscape (Grad. Sch. Eng., Kyushu Univ.) ○YANAI, Nobuhiro (16:00~16:25)

**1S9-07 Medium and Long-Term Program Lecture** Soft Molecular Functions of Nanocapsules with Polyaromatic Frameworks (Chem. Res. Lab., Tokyo Tech) ○YOSHIZAWA, Michito; KONDO, Kei (16:25~16:50)

(16 : 50~17 : 30)

**1S9-08 Medium and Long-Term Program Lecture** Discussion (16:50~17:30)

## Room G1

Chishinkan3 Building 114

### Topical Technology - New Materials Holding the Key to the Practical Use

Thursday, March 24, AM

(10 : 00~10 : 10)

**1G1-07 Introduction** (ISIR, Osaka Univ.) ○SEKITANI, Tsuyoshi (10:00~10:10)

Chair: SEKITANI, Tsuyoshi (10 : 10~12 : 10)

**1G1-08 ATP Special Invited Lecture** Practical use of digital fabrication technologies (Grad. Sch. IST., The Univ. of Tokyo) ○KAWAHARA, Yoshihiro (10:10~10:50)

**1G1-12 ATP Invited Lecture** Digital health in IoT; Internet of Healthy Things (JSR Corp.) ○HIEDA, Katsuhiko (10:50~11:20)

**1G1-15 ATP Keynote Lecture** The Age of Re-Definition: IoT and Innovation (RCAST, The Univ. of Tokyo) ○MORIKAWA, Hiroyuki (11:20~12:10)

Thursday, March 24, PM

Chair: MORII, Katsuyuki (13 : 10~15 : 20)

**1G1-26 ATP Keynote Lecture** Creation of Next-Generation Chemical Plant - How to utilize the acquired knowledge through the activity - (Daicel Corp.) ○ANDO, Takahiko (13:10~14:00)

**1G1-31 ATP Special Invited Lecture** Single Virus and Bacteria Detection Using Solid-state Nanopore Devices and Machine Learning (ISIR, Osaka Univ.) ○TANIGUCHI, Masateru; YOKOTA, Kazumichi; TSUTSUI, Makusu; WASHIO, Takashi; KAWAI, Tomoji (14:00~14:40)

**1G1-35 ATP Invited Lecture** OMRON MEMS Sensing Devices for IoT social realization (OMRON Corp.) ○HOSOYA, Katsmi (14:40~15:10)

**1G1-38 ATP Incubation Time** (15:10~15:20)

Chair: IINO, Hiroaki (15 : 20~17 : 10)

**1G1-39 ATP Special Invited Lecture** A Healthcare Device and Materials (Grad. Sch. Sys. Info., Kobe Univ.) ○KAWAGUCHI, Hiroshi; IZUMI, Shintaro; YOSHIMOTO, Masahiko (15:20~16:00)

**1G1-43 ATP Invited Lecture** The interface technology and devices for the Cyber-Physical Systems (Nippon Shokubai Co., Ltd.) ○MORII, Katsuyuki (16:00~16:30)

**1G1-46 ATP Special Invited Lecture** Patch-type bio-sensors and medical-IoT in home (ISIR, Osaka Univ.) ○SEKITANI, Tsuyoshi; YOSHIMOTO, Shusuke; ARAKI, Teppei; UEMURA, Takafumi (16:30~17:10)

Friday, March 25, AM

(9 : 10~9 : 20)

**2G1-02** opening remarks by the organizers (ICR, Kyoto Univ.) ○TSUJII, Yoshinobu (09:10~09:20)

Chair: ERIYAMA, Yuichi (9 : 20~10 : 50)

**2G1-03 ATP Keynote Lecture** Structural application of cellulose nanofibers (RISH, Kyoto Univ.) ○YANO, Hiroyuki (09:20~10:10)

**2G1-08 ATP Special Invited Lecture** Little CNF, but great effect. How to utilize cellulose nano fibers as an enhancer for carbon composites! (Fac. Sci. Eng., Doshisha Univ.) ○FUJI, Toru (10:10~10:50)

Chair: IMAIZUMI, Mitsuhiro (10 : 50~12 : 00)

**2G1-12 ATP Special Invited Lecture** Realization of High-Performance CNF-Reinforced Resin Nanocomposite Materials Using Polymer Dispersants (ICR, Kyoto Univ.) ○SAKAKIBARA, Keita (10:50~11:30)

**2G1-16 ATP Invited Lecture** Outlook for wood plastic composites (TOCLAS CORP.) ○ITO, Hirokazu (11:30~12:00)

Friday, March 25, PM

(13 : 00~15 : 40)

**2G1-25 Panel Discussion** social implementation of CNF by industry-government-academia collaboration (ICR, Kyoto Univ.; RISC, AIST; RISH, Kyoto Univ.; Inst. Innovation Research, Hitotsubashi Univ.; MIB., METI; TOCLAS CORP.) (13:00~14:00)

**2G1-31 ATP Incubation Time** (14:00~14:10)

**2G1-32 ATP Invited Lecture** Development of gas barrier sheet using CNF (Daio Paper Corp.) ○OOKAWA, Junya (14:10~14:40)

**2G1-35 ATP Invited Lecture** Application of cellulose nanofiber to thickener and emulsion/dispersion stabilizer (DKS Co. Ltd.) NANBA,



## Room G2

Chishinkan3 Building 115

Tatsuya; NODA, Kouji; GOI, Yousuke; OZINNO, Kazuhito (14:40~15:10)  
**2G1-38 ATP Invited Lecture** Development of Cellulose Nanofiber Nonwoven Sheet as a New Functional Material (Asahi Kasei Fibers Corp.)  
 OONO, Hirofumi (15:10~15:40)

Chair: ZETTSU, Nobuyuki (15 : 40~17 : 40)

**2G1-41 ATP Special Invited Lecture** Importance of Role of Interface in Continuous Fiber Reinforcement Composite Materials (Fac. Eng., Gifu Univ.) ONAKAI, Asami (15:40~16:20)

**2G1-45 ATP Special Invited Lecture** Control of Dispersibility of Cellulose Nanowhiskers (Fac. Textile Sci. Technol., Shinshu Univ.)  
 OARAKI, Jun (16:20~17:00)

**2G1-49<sup>o</sup> ATP Special Invited Lecture** Development of Bacterial Cellulose-based Inorganic-Organic Hybrid Materials (PPC,Chulalongkorn Univ.; COE on Petrochemical and Materials Technology; NU-PPC Plasma Chemical Technology Laboratory) ORatana, RUJIRAVANIT (17:00~17:40)

(17 : 40~17 : 50)

**2G1-53** Prospects of cellulose nanofiber (RISC, AIST) OENDO, Takashi (17:40~17:50)

### Saturday, March 26, AM

(9 : 00 ~9 : 10 )

**3G1-01** opening remarks (Sch. Sci. Eng., CIST) OSHIMOMURA, Masatsugu (09:00~09:10)

Chair: SHIMOMURA, Masatsugu (9 : 10 ~10 : 50)

**3G1-02 ATP Invited Lecture** Biomimetics in Agricultural Sciences (Fac. Agr., Kyoto Univ.) OMORI, Naoki; MITSUNO, Hideo (09:10~09:40)

**3G1-05 ATP Invited Lecture** Biomimetic materials based on soft dispersed system stabilized with solid particles (Fac. Eng., OIT) OFUJII, Syuji (09:40~10:10)

**3G1-08 ATP Special Invited Lecture** Development of Products Mimicked from a Morpho Butterfly (Teijin Limited) OHIROSE, Haruko (10:10~10:50)

Chair: MORI, Naoki (11 : 00~12 : 00)

**3G1-13 ATP Invited Lecture** The NanoSuit method to observe the living mammalian tissue and cell. (Fac. Med., Hamamatsu Univ. Sch. Med.) OTAKAKU, Yasuharu (11:00~11:30)

**3G1-16 ATP Invited Lecture** Adhesion surface design inspired by aquatic animals (Grad. Fac. Life Sci., Hokkaido Univ.) OKUROKAWA, Takayuki (11:30~12:00)

### Saturday, March 26, PM

Chair: FUJII, Syuji (13 : 00~15 : 00)

**3G1-25 ATP Keynote Lecture** Emergence of Novel Structure & Function in a Micro Crowding System: Supervised by Smart Living Organisms (Fac. Life Med. Sci., Doshisha Univ.) OYOSHIKAWA, Kenichi (13:00~13:50)

**3G1-30 ATP Invited Lecture** Bright structural color materials from colloidal particles that mimic melanin granules (Grad. Sch. Eng., Chiba Univ.) OKOHRI, Michinari (13:50~14:20)

**3G1-33 ATP Special Invited Lecture** Expectation of biomimetics and possibility for flow control. (Hitachi, Ltd.) MIYAZAKI, Mariko; MORIYA, Hiroshi; OMIYAUCHI, Akihiro (14:20~15:00)

Chair: KUROKAWA, Takayuki (15 : 10~16 : 50)

**3G1-38 ATP Special Invited Lecture** Advanced analysis and evaluation technology for biomimetics (Shimadzu Corp.) Otakeuchi, Seiji; YASUI, Yoshihide (15:10~15:50)

**3G1-42 ATP Invited Lecture** Antifouling activity of self-assembled microstructured surfaces against barnacles (Dept. of Chem., Asahikawa Med. Univ.; Grad. Sch. Eng., Tohoku Univ.; CRIEPI; Sch. Sci. Eng., CIST) OMUROSAKI, Takayuki; ABE, Kentaro; JINNO, Tatsuya; NOGATA, Yasuyuki; SHIMOMURA, Masatsugu (15:50~16:20)

**3G1-45 ATP Invited Lecture** Comparative Analysis on Social Implementation of Biomimetics Technologies: Relationships between Patent Application and Academic Paper Publication (Coll. Hum. Social Sci., Kanazawa Univ.) OKOHSAKA, Ryo; UCHIYAMA, Yuta; FUJIHARA, Yoshinori (16:20~16:50)

## Challenge for the emerging issues with new biotechnologies

Thursday, March 24, PM

(13 : 00~13 : 10)

**1G2-25** Theme of this session explained by the organizers (Grad. Sch. Sci., The Univ. of Tokyo) OSUGA, Hiroaki (13:00~13:10)

Chair: OHNO, Osamu (13 : 10~14 : 50)

**1G2-26 ATP Invited Lecture** Challenge of GreenPeptide to Cancer: A New Solution by Immunotherapy with Peptide Vaccines (Green Peptide Co., Ltd) OUEJIMA, Yasuhide (13:10~13:40)

**1G2-29 ATP Invited Lecture** Key success factor to establish a startup company from a university laboratory - Scientific breakthrough and Of the future industrialization - (3-D Matrix, Ltd.) ONAGANO, Keiji (13:40~14:10)

**1G2-32 ATP Incubation Time** (14:10~14:20)

**1G2-33 ATP Invited Lecture** iPS cell business and the global expansion (ReproCELL Inc.) OYOKOYAMA, Chikafumi (14:20~14:50)

Chair: TAKAHASHI, Toshiyuki (14 : 50~16 : 50)

**1G2-36 ATP Invited Lecture** The frontline of new drug development: Visual Cycle Modulation (VCM) technology for Dry Age-related Macular Degeneration (AMD) (Acucela Inc.) OKUBOTA, Ryo (14:50~15:20)

**1G2-39 ATP Invited Lecture** Business strategy of regenerative medicine utilizing alliance with bio-ventures (Sumitomo Dainippon Pharma Co., Ltd.) OKIMURA, Toru (15:20~15:50)

**1G2-42 ATP Incubation Time** (15:50~16:00)

**1G2-43 ATP Special Invited Lecture** Innovation, Bio-venture, and OUVV (OSAKA Univ. Venture Capital Co., Ltd.) OMATSUMI, Yoshio (16:00~16:40)

**1G2-47 ATP Incubation Time** (16:40~16:50)

### Friday, March 25, PM

(13 : 00~13 : 10)

**2G2-25** Organizer outline explanation (Fac. Sci. Tech., Keio Univ.) OMIYAMOTO, Kenji (13:00~13:10)

Chair: MIYAMOTO, Kenji (13 : 10~15 : 20)

**2G2-26 ATP Special Invited Lecture** Development of biodevice for non-invasive diagnosis (Panasonic Corp.) OHANAI, Yosuke (13:10~13:50)

**2G2-30 ATP Special Invited Lecture** Biogas analyzing system with semiconductor gas sensors (Nissha Printing Co., Ltd.) OHANADA, Mariko (13:50~14:30)

**2G2-34 ATP Special Invited Lecture** Research and development of biochip for stress measurement (Health Research Inst., AIST) OWAKIDA, Shin-ichi (14:30~15:10)

**2G2-38 ATP Incubation Time** (15:10~15:20)

Chair: TSURUTA, Hitoshi (15 : 20~17 : 20)

**2G2-39 ATP Special Invited Lecture** The Development and Fabrication of In-vitro Diagnostic Electrochemical Devices (Techno Medica Co., Ltd.) OYAMAZAKI, Hiroki (15:20~16:00)

**2G2-43 ATP Special Invited Lecture** On-chip Fluorescence-based Biosensor Using Graphene Surface (NTT BRL) OUENO, Yuko; FURUKAWA, Kazuaki (16:00~16:40)

**2G2-47 ATP Special Invited Lecture** Development of electrochemical immunosensor using nanoparticles (Sysmex Corp.) OHORI, Nobuyasu (16:40~17:20)

### Saturday, March 26, AM

(9 : 00 ~9 : 10 )

**3G2-01** Introduction (IMCE, Kyushu Univ.) OTANAKA, Masaru (09:00~09:10)

Chair: NISHIKAWA, Naoyuki (9 : 10 ~12 : 00)

**3G2-02 ATP Special Invited Lecture** National strategy for promoting development of medical devices, and basic principles for evaluating biocompatibility of biomaterials (Div. Med. Dev., NIHS) OHAISHIMA, Yuji (09:10~09:50)

**3G2-06 ATP Special Invited Lecture** Design of biocompatible materials (IMCE, Kyushu Univ.) OTANAKA, Masaru (09:50~10:30)

**3G2-10 ATP Special Invited Lecture** Functionalization of biodegradable polycarbonates to improve biocompatibility and their application

(Grad. Sch. Sci., Eng., Yamagata Univ.) ○FUKUSIMA, Kazuki (10:30~11:10)

- 3G2-14 ATP Special Invited Lecture** Strategy for preparation of new biomedical materials inspired by the decellularized biological tissue (IBB, Tokyo Med. and Dental Univ.) ○KISHIDA, Akio (11:10~11:50)  
**3G2-18 ATP Incubation Time** (11:50~12:00)

### Saturday, March 26, PM

Chair: TANAKA, Masaru (13 : 30~14 : 20)

- 3G2-28 ATP Keynote Lecture** Development of Bioinspired Polymeric Materials in Medical Fields-Synthesis, Properties and Clinical Applications-(Grad. Sch. Eng., The Univ. of Tokyo) ○ISHIHARA, Kazuhiko (13:30~14:20)

Chair: AOI, Keigo (14 : 20~15 : 50)

- 3G2-33 ATP Special Invited Lecture** The effect of primary structure of ethylene glycol (EG)-based polymer on surface biocompatibility. (Fac. Sci., Tokyo Univ. of Sci.) ○OTSUKA, Hidenori (14:20~15:00)  
**3G2-37 ATP Special Invited Lecture** Aggregation States and Dynamics of Polymer Chains at Water Interfaces (Grad. Sch. Eng., Kyushu Univ.) ○TANAKA, Keiji (15:00~15:40)  
**3G2-41 ATP Incubation Time** (15:40~15:50)

Chair: ONISHI, Tomoyuki (15 : 50~17 : 40)

- 3G2-42 ATP Invited Lecture** Industrial coating and patterning of the biocompatible materials. (OSAKA ORGANIC CHEM. IND. LTD; Grad. Sch. Sci. Eng., Univ. of Toyama) ○SARUWATARI, Yoshiyuki; KITANO, Hiromi (15:50~16:20)  
**3G2-45 ATP Invited Lecture** Creation of Biocompatible Hemodialysis Membrane (Toray Industries, Inc.) ○UENO, Yoshiyuki (16:20~16:50)  
**3G2-48 ATP Special Invited Lecture** Polymer Materials for Medical Devices (TERUMO CORP.) ○KAWANISHI, Tetsuro (16:50~17:30)  
**3G2-52 ATP Incubation Time** (17:30~17:40)

## Room J3 Chishinkan3 Building 214

### Resource, Next Generation Energy and Environment

#### Thursday, March 24, AM

(10 : 00~10 : 30)

- 1J3-07 Session Introduction** (IRCHE, Kyushu Univ.) ○SASAKI, Kazunari (10:00~10:10)

Chair: SASAKI, Kazunari (10 : 10~11 : 10)

- 1J3-08 ATP Keynote Lecture** The efforts toward the realization of the hydrogen society (ANRE, METI) ○TOBE, Chihiro (10:10~11:00)  
**1J3-13 ATP Incubation Time** (11:00~11:10)

Chair: DAIMON, Hideo (11 : 10~12 : 30)

- 1J3-14 ATP Special Invited Lecture** Honda Fuel cell Vehicle Development and Toward Hydrogen Society (Honda R&D Co.,Ltd.) ○MORIYA, Takashi (11:10~11:50)  
**1J3-18 ATP Invited Lecture** Current situations and issues of Hydrogen Production, storage and transportation, hydrogen refueling station technologies. (JX Nippon Oil & Energy Corp.) ○NAKAMURA, Tsutomu (11:50~12:20)

#### Thursday, March 24, PM

Chair: NAKAMURA, Tsutomu (13 : 20~14 : 40)

- 1J3-27 ATP Special Invited Lecture** Advanced alkaline water electrolysis system for renewable hydrogen production (Asahi Kasei Corp.) ○USUI, Taketoshi (13:20~14:00)  
**1J3-31 ATP Invited Lecture** Research and Development of High Efficiency Hydrogen Production Technology by Thermochemical Process (JAEA) ○INAGAKI, Yoshiyuki (14:00~14:30)  
**1J3-34 ATP Incubation Time** (14:30~14:40)

Chair: HORITA, Teruhisa (14 : 40~16 : 40)

- 1J3-35 ATP Special Invited Lecture** Development of Highly Active Pt Core-Shell Catalyst (Fac. Sci. Eng., Doshisha Univ.) ○DAIMON, Hideo; INABA, Minoru (14:40~15:20)  
**1J3-39 ATP Invited Lecture** Challenges and outlook for polymer electrolyte membrane for PEFC in the phase of commercialization (W.L.GORE & ASSOCIATES, Co., LTD.) ○MATSUURA, Toyohiro (15:20~15:50)  
**1J3-42 ATP Incubation Time** (15:50~16:00)

Chair: SASAKI, Kazunari (16 : 00~17 : 10)

- 1J3-43 ATP Special Invited Lecture** Development of Large-Scale SOFC toward Realization of Hydrogen Society (Mitsubishi Hitachi Power Systems, Ltd.) ○KITAGAWA, Yuuichirou (16:00~16:40)  
**1J3-47 ATP Invited Lecture** Research and Developments for Solid Oxide Fuel Cell Technology (iECO, AIST) ○HORITA, Teruhisa (16:40~17:10)

### Friday, March 25, AM

(9 : 00 ~9 : 10)

- 2J3-01** Opening Remarks (IRC3, AIST) ○SATO, Kazuhiko (09:00~09:10)

Chair: TAKAYA, Hikaru (9 : 10 ~10 : 40)

- 2J3-02 ATP Keynote Lecture** Introduction to Organosilicon Chemistry: From Basic Aspects to New Frontiers of  $\pi$ -Conjugated Silicon Compounds (RIKEN) ○TAMAO, Kohei (09:10~10:00)  
**2J3-07 ATP Invited Lecture** New Products Developing by "Si" Materials (Shin-Etsu Chemical Co., Ltd.) ○SAKUTA, Koji (10:00~10:30)  
**2J3-10 ATP Incubation Time** (10:30~10:40)

Chair: SEKO, Shinzo (10 : 40~11 : 50)

- 2J3-11 ATP Invited Lecture** Development of a Novel Synthetic Method for Silanols (IRC3, AIST) ○IGARASHI, Masayasu (10:40~11:10)  
**2J3-14 ATP Special Invited Lecture** Chemistry of Low-Coordinate Silicon Compounds (Div. of Chem., Fac. Pure Appl. Sci., Univ. of Tsukuba) ○SEKIGUCHI, Akira (11:10~11:50)

### Friday, March 25, PM

Chair: SEKO, Shinzo (13 : 00~14 : 10)

- 2J3-25 ATP Invited Lecture** Development of stronger glass materials (ASAHI GLASS CO., LTD.) ○MURAYAMA, Suguru; NAKASHIMA, Tetsuya (13:00~13:30)  
**2J3-28 ATP Invited Lecture** Heterojunction crystalline Si solar cell with thin-film technology (KANEKA CORP.) ○ADACHI, Daisuke; YAMAMOTO, Kenji (13:30~14:00)  
**2J3-31 ATP Incubation Time** (14:00~14:10)

Chair: FUKAYA, Norihisa (14 : 10~16 : 30)

- 2J3-32 ATP Invited Lecture** Development of Silicon Nanowire Array-Supported Pd Catalyst (RIKEN CSRS) ○YAMADA, Yoichi M. A. (14:10~14:40)  
**2J3-35 ATP Invited Lecture** Characteristics of Ethyl Silicates and Their Applications (COLCOAT CO.,Ltd) ○HASEGAWA, Minoru (14:40~15:10)  
**2J3-38 ATP Incubation Time** (15:10~15:20)  
**2J3-39 ATP Invited Lecture** Silicone's Contribution to Industry and Society - Current Picture and the Future Vision (Dow Corning Toray Co., Ltd.) ○SAKURAI, Eriko (15:20~15:50)  
**2J3-42 ATP Special Invited Lecture** Iron-catalyzed preparation of organosilicon compounds and silicones (IMCE, Kyushu Univ.) ○NAGASHIMA, Hideo (15:50~16:30)

(16 : 30~16 : 40)

- 2J3-46** Closing Remarks (IRC3, AIST) ○SATO, Kazuhiko (16:30~16:40)

### Saturday, March 26, PM

(13 : 00~13 : 10)

- 3J3-25** opening address of organizing committee (Fac. Sci., Tokyo Univ. of Sci.) ○KOMABA, Shinichi (13:00~13:10)

Chair: KOMABA, Shinichi (13 : 10~14 : 40)

- 3J3-26 ATP Keynote Lecture** Barriers against R&D activities: In the case of R&D on LIB (Nishi Yoshio Laboratories) ○NISHI, Yoshio (13:10~14:00)  
**3J3-31 ATP Special Invited Lecture** Challenges to Realize the Next-Generation Lithium-Ion Batteries (Fac. Sci. Eng., Doshisha Univ.) ○INABA, Minoru (14:00~14:40)

Chair: ABE, Ryu (14 : 40~16 : 00)

- 3J3-35 ATP Special Invited Lecture** operando Analyses of battery Reactions and the Design of High Rate Capability Cathode (Grad. Sch. Human and Environ. Stud., Kyoto Univ.) ○UCHIMOTO, Yoshiharu (14:40~15:20)  
**3J3-39 ATP Special Invited Lecture** All-Solid-State Lithium Secondary Batteries Using Inorganic Glass-Based Electrolytes (Grad. Sch. Eng., Osaka Pref. Univ.) ○TATSUMISAGO, Masahiro; HAYASHI, Akitoshi (15:20~16:00)

Chair: KOMABA, Shinichi (16 : 00~16 : 40)

- 3J3-43 ATP Special Invited Lecture** An aqueous type lithium air

rechargeable battery and the materials development (Grad. Sch. Eng., Mie Univ.) ○IMANISHI, Nobuyuki (16:00~16:40)

(16 : 40~16 : 50)

**3J3-47** Closing address of organizing committee (Fac. Sci., Tokyo Univ. of Sci.) ○KOMABA, Shinichi (16:40~16:50)

## Room J4

### Chishinkan3 Building 215

### Resource, Next Generation Energy and Environment

Thursday, March 24, PM

(13 : 00~13 : 10)

**1J4-25** Introduction (Grad. Sch. Eng., Toin Univ. of Yokohama) ○MIYASAKA, Tsutomu (13:00~13:10)

Chair: MIYASAKA, Tsutomu (13 : 10~14 : 00)

**1J4-26** ATP Keynote Lecture Photovoltaics for next-generation energy supply devices (RCAST, The Univ. of Tokyo) ○SEGAWA, Hiroshi (13:10~14:00)

Chair: SEGAWA, Hiroshi (14 : 00~15 : 30)

**1J4-31** ATP Special Invited Lecture Toward development of high performance and hysteresis-less perovskite solar cells (Grad. Sch. Eng., Toin Univ. of Yokohama) ○MIYASAKA, Tsutomu (14:00~14:40)

**1J4-37** ATP Invited Lecture Development of new semiconducting polymers toward reduction of photon energy loss in organic solar cells (RIKEN CEMS) ○OSAKA, Itaru (15:00~15:30)

Chair: MIYASAKA, Tsutomu (15 : 30~16 : 40)

**1J4-40** ATP Invited Lecture Degradation mechanism of planer hetero-junction perovskite solar cell (RSET., Kanazawa Univ.) ○TAIMA, Tetsuya (15:30~16:00)

**1J4-43** ATP Special Invited Lecture Crystal growth and photovoltaic properties of lead perovskite (Grad. Sch. Sci., The Univ. of Tokyo) ○NAKAMURA, Eiichi (16:00~16:40)

Friday, March 25, AM

Chair: ITO, Seigo (9 : 30 ~10 : 40)

**2J4-04** ATP Invited Lecture Highly Efficient Perovskite Solar Cells: Elucidation of the Intermediates and Development of Novel Organic Semiconductors (ICR, Kyoto Univ.) ○WAKAMIYA, Atsushi (09:30~10:00)

**2J4-07** ATP Special Invited Lecture ※ (Grad. Sch. Life Sci. Sys. Eng., KIT) OGOMI, Yuhei; ○HAYASE, Shuzi (10:00~10:40)

Chair: WAKAMIYA, Atsushi (11 : 00~12 : 10)

**2J4-13** ATP Invited Lecture Stability of Perovskite Solar Cells (Grad. Sch. Eng., Univ. of Hyogo) ○ITO, Seigo (11:00~11:30)

**2J4-16** ATP Special Invited Lecture High Efficiency and durability of perovskite Solar Cells (Environment and Energy Mater. Div., NIMS) ○HAN, Liyuan (11:30~12:10)

Friday, March 25, PM

Chair: WAKAMIYA, Atsushi (13 : 30~14 : 00)

**2J4-28** ATP Invited Lecture Quantum Dot Solar Cells: Control of Nano-interface and Mechanism of Improving Energy Conversion Efficiency (Grad. Sch. Sci. Eng., The Univ. of Electro-Communications) ○SHEN, Qing; TOYODA, Taro (13:30~14:00)

Chair: ABE, Ryu (14 : 00~15 : 20)

**2J4-31** ATP Special Invited Lecture Artificial Photosynthesis using Photocatalysts (Fac. Sci., Tokyo Univ. of Sci.) ○KUDO, Akihiko (14:00~14:40)

**2J4-35** ATP Special Invited Lecture High-efficiency hydrogen production by the optimized connection of solar cells and water electrolyzers (Grad. Sch. Eng., The Univ. of Tokyo) ○SUGIYAMA, Masakazu (14:40~15:20)

Chair: KUDO, Akihiko (15 : 40~16 : 50)

**2J4-41** ATP Invited Lecture Photoelectrochemical water splitting using iron oxide based semiconducting electrodes (Grad. Sch. Eng., Kyushu Univ.) ○IDA, Shintaro; FUTAGAMI, Takamitsu; ISHIHARA, Tatsumi (15:40~16:10)

**2J4-44** ATP Special Invited Lecture Development of visible light responsive photocatalysts for solar hydrogen production (Grad. Sch. Eng.,

Kyoto Univ.) ○ABE, Ryu (16:10~16:50)

Saturday, March 26, AM

Chair: MATSUO, Yutaka (10 : 30~11 : 30)

**3J4-10** ATP Invited Lecture Recent study on flexible film-type dye-sensitized and perovskite solar cells (Pecell Technologies, Inc.; Grad. Sch. Eng., Toin Univ. of Yokohama) ○IKEGAMI, Masashi (10:30~11:00)

**3J4-13** ATP Invited Lecture Organic photovoltaics for the indoor use (ROHM Co., Ltd.) ○AOKI, Yoichi (11:00~11:30)

Saturday, March 26, PM

Chair: SAYAMA, Kazuhiro (13 : 00~13 : 50)

**3J4-25** ATP Keynote Lecture Recent Research Progress in Water Splitting for Hydrogen Production (Grad. Sch. Eng., The Univ. of Tokyo) ○DOMEN, Kazunari (13:00~13:50)

Chair: IKEDA, Shigeru (13 : 50~16 : 00)

**3J4-30** ATP Special Invited Lecture Highly efficient solar formate generation from CO<sub>2</sub> and H<sub>2</sub>O using a semiconductor/metal-complex hybrid system (Toyota Central R&D Labs., Inc.) ○MORIKAWA, Takeshi; ARAI, Takeo; SATO, Shunsuke; YAMANAKA, Ken-ichi; SUZUKI, M. Tomiko (13:50~14:30)

**3J4-36** ATP Invited Lecture Photo-catalytic and electrochemical reduction of carbon dioxide by inorganic catalysts (Advanced Research Div., Panasonic Corp.) ○YOTSUHASHI, Satoshi (14:50~15:20)

**3J4-39** ATP Special Invited Lecture Production of value-added chemicals by artificial photosynthesis (RCPV, AIST) ○SAYAMA, Kazuhiro (15:20~16:00)

## Room P

### Davis Memorial Auditorium

Thursday, March 24, PM

(15 : 00~16 : 30)

Energy

Energy

**1PC-001** Improved Thermoelectric Properties by Solvent Treatment in Organic Thermoelectric Film Containing Carbon Nanotubes and Nanodispersed Poly(nickel ethenetetrathiolate) (Fac. Eng., Tokyo Univ. of Sci., Yamaguchi) ○SADAKATA, Shifumi; OSHIMA, Keisuke; ASANO, Hitoshi; SHIRAIISHI, Yukihide; TOSHIMA, Naoki

**1PC-002** Development of n-Type Thermoelectric Materials by Doping CNT-Polymer Hybrid with Hydrazine Derivatives (Fac. Eng., Tokyo Univ. of Sci., Yamaguchi) ○OSHIMA, Keisuke; ASANO, Hitoshi; SHIRAIISHI, Yukihide; TOSHIMA, Naoki

**1PC-003** Dispersion of Carbon Nanotubes by Pd Nanoparticles for Organic Thermoelectric Hybrid Materials (Fac. Eng., Tokyo Univ. of Sci., Yamaguchi) ○INOUE, Junta; OSHIMA, Keisuke; ASANO, Hitoshi; SHIRAIISHI, Yukihide; TOSHIMA, Naoki

**1PC-004** P-dopant Enhanced Carbon Nanotube-based Transparent Organic Solar Cells for Window Applications (Grad. Sch. Sci., The Univ. of Tokyo) ○JJEON, Il; DELACOU, Clement; KASKELA, Antti; KAUPPINEN, Esko; MARUYAMA, Shigeo; MATSUO, Yutaka

**1PC-005** Degradation analysis of organic photovoltaics by ESR spectroscopy (CEREBA; Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba; Grad. Sch. Eng., Kyoto Univ.; Toray Industries, Inc.) ○SHIMOMURA, Satoru; YAMANARI, Toshihiro; NAMATAME, Miki; WATANABE, Takahiro; TAMAI, Yasunari; OHKITA, Hideo; ITO, Shinzaburo; MARUMOTO, Kazuhiro

**1PC-006** Layered Hybrid Perovskites with Silsesquioxane Interlayers (RCPT, AIST) ○KATAOKA, Sho; ENDO, Akira

**1PC-007** Thermovoltaic cell that uses host-guest interaction between polymers and triiodide and the improvement of the Seebeck coefficient (Kyushu Univ.) ○ZHOU, Hongyao; YAMADA, Tepei; KIMIZUKA, Nobuo

**1PC-008** Thermophysical property analysis and material design of sugar alcohol series as phase change material: a molecular simulation study (NRI, AIST) ○INAGAKI, Taichi; ISHIDA, To

**1PC-009** Crystal growth control of near-infrared perovskite solar cells consisting of tin halide complex (Grad. Sch. Life Sci. Sys. Eng., KIT) ○OGOMI, Yuhei; SHEN, Qing; IIKUBO, Satoshi; YOSHINO, Kenji; HAYASE, Shuzi

**1PC-010** Development of photon upconversion molecular systems functioning in air-saturated water (Grad. Sch. Eng., Kyushu Univ.; CMS, Khushu Univ.; PRESTO, JST) ○KOUNO, Hironori; YANAI, Nobuhiro; KIMIZUKA, Nobuo

- 1PC-011** Syntheses of Metal Nanoparticles in Porous Coordination Frameworks by Hydrogen Reduction under High Pressure (FIRST, Konan Univ.) ○SATO, Yasushi; TAKASHIMA, Yohei; TSURUOKA, Takaaki; AKAMATSU, Kensuke
- 1PC-012** Smart-Stack Technology: Development of High-Efficiency Multi-Junction Solar Cells Using Metal Nanoparticle Arrays (FREA, AIST) ○MIZUNO, Hidenori; MAKITA, Kikuo; SUGAYA, Takeyoshi; OHSIMA, Ryuji; TAKATO, Hidetaka; MATSUBARA, Koji; NIKI, Shigeru
- 1PC-013** Hydrogen Evolution from Water using Wide-Gap Chalcopyrite Photocathodes (Grad. Sch. Eng. Sci., Osaka Univ.) ○HOZAN, Shuji; SUGIMOTO, Minoru; IKEDA, Shigeru; HARADA, Takashi; NAKANISHI, Shuji
- 1PC-014** High-performance Li-ion rechargeable battery using a stable organic neutral radical as a cathode active material (KFTRAL, KANEKA CORP.) ○FUJISAKI, Megumi; TSUJI, Ryotaro; KEISHIMA, Miwa; MURATA, Tsuyoshi; MORITA, Yasushi
- 1PC-015** Hydrogen Storage System with the Use of Carbon Dioxide (RCPV, AIST) ○TSURUSAKI, Akihiro; SUNA, Yuki; MANAKA, Yuichi; ONISHI, Naoya; HIMEDA, Yuichiro
- 1PC-016** Practical Production of Hydrogen by Formic Acid Dehydrogenation (RCPV, AIST) ○ONISHI, Naoya; FUJITA, Etsuko; MUCKERMAN, James T.; HIMEDA, Yuichiro; SUNA, Yuki; TSURUSAKI, Akihiro
- 1PC-017** A simple methodology to modify titanium oxide nanoparticles as visible light responsive photocatalyst by plasma processes (Hokkaido Univ.; Grad. Sch. Eng., Nagoya Univ.) ○ISHIDA, Yohei; MOTOKANE, Yasutomo; YONEZAWA, Tetsu; TOKUNAGA, Tomoharu
- 1PC-018** Development of an environment-friendly surface modification agent for SAM coating (Chiba Research Center, R&D division, Nippon Soda Co., Ltd.; ICR, Kyoto Univ.) ○MIEDA, Eiko; YAMATE, Taiki; KUMAZAWA, Kazuhisa; SUZUKI, Hiroshi; HASEGAWA, Takeshi
- 1PC-019** Solar water splitting using (CuGa)<sub>1-x</sub>Zn<sub>2x</sub>S<sub>2</sub> photocathodes with a chalcopyrite structure (Fac. Sci., Tokyo Univ. of Sci.) ○IKEDA, Satoru; IWASE, Akihiko; KUDO, Akihiko
- 1PC-020<sup>#</sup>** ORR Activity of a Non-precious Metal Carbon Catalyst Prepared from Iron-salen Complexes with Different Ligand Frameworks : Effects of Ligand Frameworks on the Activity (Grad. Sch. Eng., Osaka Univ.) ○TANAKA, Yuta; ONODA, Akira; HAYASHI, Takashi
- 1PC-021<sup>#</sup>** In situ observation of dynamic inter-domain motion in cellulose dehydrogenase anchored on an electrode surface with a modified heme cofactor (Grad. Sch. Eng. Sci., Osaka Univ.) ○HARADA, Hirofumi; SUNAGAWA, Naoki; IGARASHI, Kiyohiko; ONODA, Akira; HAYASHI, Takashi
- 1PC-022** Decomposition of an aqueous ammonia solution over visible-light-responsive metal sulfide photocatalysts (Fac. Sci., Tokyo Univ. of Sci.) ○II, Kazutaka; MATSUMOTO, Daisuke; IWASE, Akihiko; KUDO, Akihiko
- 1PC-023** Z-schematic CO<sub>2</sub> reduction consisting of metal sulfide photocatalysts and a reduced graphene oxide TiO<sub>2</sub> composite photocatalyst (Fac. Sci., Tokyo Univ. of Sci.) ○HIGUCHI, Tomoya; TAKAYAMA, Tomoaki; IWASE, Akihiko; KUDO, Akihiko
- 1PC-024** Development of Water-Soluble Cobalt Complexes and Their Catalytic Properties for Light-Driven Hydrogen Evolution (Grad. Sch. Sci., Osaka City Univ.) ○SANOU, Junhei; HIROTSU, Masakazu; NAKAJIMA, Hiroshi
- 1PC-025** Development and Application of Ion-Conductive Liquid Crystals for Lithium-Ion Batteries (Grad. Sch. Eng., The Univ. of Tokyo; iECO, AIST) ○ONUMA, Taira; SAKUDA, Junji; MOTOKUNI, Takenouchi; HOSONO, Eiji; YOSHIO, Masafumi; ZHOU, Haoshen; KATO, Takashi
- 1PC-026** Visible-light-induced water oxidation on tungsten acid photocatalysts loaded with Ru species in the presence of iodate electron acceptor (Grad. Sch. Eng., Kyoto Univ.) ○SUZUKI, Hajime; HIGASHI, Masanobu; ABE, Ryu
- 1PC-027<sup>#</sup>** Development of catalytic inorganic membrane and cells for energy application (Fac. Sci., Univ. of Glasgow; Fac. Sci., Kyushu Univ.) ○NAKANISHI, Keita; COOPER, Geoffrey; POINTS, Laurie; BLOOR, Leanne; OHBA, Masaaki; CRONIN, Leroy
- 1PC-028<sup>#</sup>** Promotion of Nuclear Spin Conversion of Adsorbed Hydrogen in Porous Magnets (Grad. Sch. Sci., Kyushu Univ.) ○OHTSUBO, Yuta; MISHIMA, Akio; HORI, Akihiro; KOSHIYAMA, Tomomi; OHBA, Masaaki
- 1PC-029<sup>#</sup>** Development of Dicopper Complexes as a Cathode Catalyst for Polymer Electrolyte Fuel Cell: Control of the Redox Potential (Fac. Sci. Eng., Doshisha Univ.) ○HACHIGATA, Shinya; KITAYAMA, Kou; TSUJI, Tomokazu; HITOMI, Yutaka; KODERA, Masahito
- 1PC-030<sup>#</sup>** Molecular Orientation-Dependent Photochemical Behavior of Porphyrin Derivatives Coordinated Nanoparticles (Dep. Chem., Sch. Sci., Kyoto Univ.) ○EGUCHI, Daichi; SAKAMOTO, Masanori; TERANISHI, Toshiharu
- (Ion-Kagaku; Ltd.; TMCIT) KARINO, Hitoshi; ○TAMURA, Kenji
- 1PC-032** Improvement of Printing Weather Resistance for the Sign Sheet and Development of the Relation Products (Nissoku Co.; TMCIT) HARADA, Akemi; ○TAMURA, Kenji
- 1PC-033** Selective Synthesis of Unsymmetrical Alkoxysilanes by Nucleophilic Substitution Reactions Using Solid Acid Catalysts and/or Microwave Irradiation (IRC3, AIST) ○YAMASHITA, Hiroshi; HATORI, Makiko; YOSHINAGA, Michiyo; YOSHIMURA, Aya; HAN, Li-biao; SHIMADA, Shigeru; SATO, Kazuhiko
- 1PC-034** Properties and Reactivities of Unsymmetrical Alkoxysilanes Containing Methoxy or Ethoxy Groups and Other Alkoxy Groups (IRC3, AIST) ○YOSHIMURA, Aya; YAMASHITA, Hiroshi; HATORI, Makiko; YOSHINAGA, Michiyo; HAN, Li-biao; SHIMADA, Shigeru; SATO, Kazuhiko
- 1PC-035<sup>#</sup>** Prediction of n-octanol/water partition coefficients using molecular simulation combined with the theory of solutions in the energy representation (Toray Industries, Inc.) KITABATA, Masahiro; KAWAKAMI, Tomonori; ○SHIGEMOTO, Isamu; MITSUTA, Yuki; MATUBAYASI, Nobuyuki
- 1PC-036** Transesterification Catalyzed by Highly Active Quaternary Ammonium Salts (Grad. Sch. Eng., Nagoya Univ.) ○YOSHIDA, Yurika; TABATA, Yuji; OGURA, Yoshihiro; YAMASHITA, Kenji; HATANO, Manabu; ISHIHARA, Kazuaki
- 1PC-037** Development of environmentally benign hydrocyanation reaction by using Nickel catalyst (IRC3, AIST) ○NEMOTO, Koji; NAGAFUCHI, Tsuyoshi; TOMINAGA, Ken-ichi
- 1PC-038<sup>#</sup>** Advanced technologies of Highly Durable Reverse Osmosis Membrane. (Toray Industries, Inc.) ○YONEDA, Keisuke; SHIMURA, Harutoki; NAKATSUJI, Koji; SASAKI, Takao; KIMURA, Masahiro
- 1PC-039** Direct Synthesis of Tetraalkoxysilane from Silica and alcohol (IRC3, AIST) ○CHOI, Seong Jib; FUKAYA, Norihisa; YASUDA, Hiroyuki; HORIKOSHI, Toshio; SATO, Kazuhiko; CHOI, Jun-chul
- 1PC-040<sup>#</sup>** Low fouling PVDF polymer separation membrane; its characteristics and wastewater treatment properties (Toray Industries, Inc.) ○KATO, Satoshi; OKAMOTO, Yoshiki; KITADE, Tamotsu
- 1PC-041<sup>#</sup>** Remarkable acceleration and increased enantioselectivity of lipase-catalyzed asymmetric acylation in liquid carbon dioxide (Sch. Biosci. Biotech., Tokyo Tech) ○HOANG, Hai Nam; NAGASHIMA, Yoshihiro; MATSUDA, Tomoko
- 1PC-042** The reaction control of cyclosiloxane synthesis by using femto-reactor (IRC3, AIST) ○IDO, Yohei; WAKISAKA, Akihiro; TOMINAGA, Ken-ichi
- 1PC-043** Recovery of rare metals and comprehensive extraction study using a novel acidic diamide-type ligand (NSED, JAEA) ○SHIMOJO, Kojiro; YABE, Makoto; SUGITA, Tsuyoshi; OKAMURA, Hiroyuki; OHASHI, Akira; NAGANAWA, Hirochika
- 1PC-044** Fine chemical synthesis via clean oxidations catalyzed by simple iron catalysts (IRC3, AIST) ○TANAKA, Shinji; KON, Yoshihiro; TAMURA, Masanori; SATO, Kazuhiko
- 1PC-045** Study on the fouling material of PVDF hollow fiber membranes for water treatment (Toray Industries, Inc.) ○YASUDA, Takaaki; IWAI, Kenta; HANAKAWA, Masayuki; SASAKI, Takao
- 1PC-046<sup>#</sup>** Au-Catalyzed Reaction of Silanols with Hydrosilanes Leading to Unsymmetrical Siloxanes (IRC3, AIST) ○SATO, Yasushi; SATO, Kazuhiko; SHIMADA, Shigeru
- 1PC-047** Development of Byproduct-Free Siloxane Bond Formation (IRC3, AIST) ○MATSUMOTO, Kazuhiro; KAPPAM VEETIL, Sajna; SATO, Kazuhiko; SHIMADA, Shigeru
- 1PC-048<sup>#</sup>** Catalyst-free click reaction of multi-functional nitrile N-oxides (Grad. Sch. Sci., Eng., Tokyo Tech) ○SOGAWA, Hiromitsu; TSUTSUBA, Toyokazu; MONJIYAMA, Shunsuke; TAKATA, Toshikazu
- 1PC-049** Iridium-catalyzed hydrosilylation of allyl chloride and allyl acetate (IRC3, AIST) NAKAJIMA, Yumiko; MATSUMOTO, Kazuhiro; URABE, Yasuko; ANDO, Wataru; SATO, Kazuhiko; ○SHIMADA, Shigeru
- 1PC-050** An enzymatic bioreactor which produces *meso*-galactaric acid and electrical energy simultaneously from D-galacturonic acid (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○SAKUTA, Riku; TAKEDA, Kouta; OHNO, Hiroyuki; NAKAMURA, Nobufumi
- 1PC-051<sup>#</sup>** Facile Preparation of Polycyclic Difuran Compounds via Nucleophilic Addition to Haloalkynes Followed by Cyclization Involving C-H Activation (Grad. Sch. Biosci. Biotech., Tokyo Tech; PRESTO, JST) ○HATA, Takeshi; TATSUMI, Yuta; TAKAHASHI, Naoto; SHIGETA, Masayuki; URABE, Hirokazu
- 1PC-052** High efficient removal of methanethiol on Porous Coordination Polymer under ambient conditions (Advanced Research Div., Panasonic Corp.; WPI-iCeMS, Kyoto Univ.) ○MORITA, Masashi; WAKITA, Hidenobu; NOMURA, Takaaki; HIGUCHI, Masakazu; KITAGAWA, Susumu
- 1PC-053** Development of Tantalum Oxynitride Photoanode modified with Polyoxometalate as Water Oxidation Cocatalyst (Grad. Sch. Eng., Kyoto Univ.) ○IWASE, Yukari; TOMITA, Osamu; HIGASHI, Masanobu; ABE, Ryu
- 1PC-054** The Chemistry of Cyclic Phenyl-Substituted Silsesquioxane Oligomers (IRC3, AIST) ○YAGIHASHI, Fujio; IGARASHI, Masayasu; NAKAJIMA, Yumiko; ANDO, Wataru; SATO, Kazuhiko; YUMOTO, Yoshiyuki; MATSUI, Chinami; SHIMADA, Shigeru

## Resources/Environment/GSC(Green Sustainable Chemistry)

### Resources/Environment/GSC

- 1PC-031** Development and Applications of Environmental Loading Reduction Systems Based on the Ionic Semiconductor and Relation Technologies

- 1PC-055** Catalytic activity of metallocene-type Ti(III) complexes towards olefin hydrosilylation reactions (IRC3, AIST) ○EGUCHI, Katsuya; NAKAJIMA, Yumiko; AOYAGI, Keiya; FURUKAWA, Haruhiko; SUGIE, Atsushi; ANDO, Wataru; SATO, Kazuhiko; SHIMADA, Shigeru
- 1PC-056** Regenerated GFRP by using decomposed GFRP resin by unsaturated alcohol under pressurized microwave irradiation (Fac. Eng., Sojo Univ.) ○IKENAGA, Kazutoshi; NAGAMITSU, Hiroki; KIKUKAWA, Tomonoro
- 1PC-057** Improving mechanical properties and chemical recycling of hybrid composite materials using biomass-derived fiber and carbon fiber in the reinforcement (Kanazawa Inst. of Tech.) ○YAMADA, Yusuke; KITAMURA, Hajime; TSUKEGI, Takayuki; NSHIDA, Haruo; YOSHIMURA, Osamu
- 1PC-058<sup>#</sup>** Reduction of halogenated benzenes using a metallic Ca-catalyst method (Grad. Sch. Comprehensive Scientific Research, Pref. Univ. of Hiroshima) ○KATAYAMA, Yumi; KATO, Ryo; HARADA, Hiroyuki; SIMION, Cristian; MITOMA, Yoshiharu
- 1PC-059** Easy Analysis Method for the Additives in Plastics. (TOSHIBA CORP.) ○MORIMOTO, Sayaka; OKI, Mitsuhiro; SATO, Yuka; KOYAMA, Tsubasa
- 1PC-060** The microparticulation with the valence change of uranium in a weakly acid solution (NSED, JAEA) ○OUCHI, Kazuki; OTOBE, Haruyoshi; KITATSUJI, Yoshihiro
- 1PC-061<sup>#</sup>** In situ Fabrication of Porous Coordination Polymer Membrane with Controlled Microstructure by Surface Modification with Hetero-Elemental Inorganic Buffer Layer (WPI-iCeMS, Kyoto Univ.) ○LIU, Yi; MATSUDA, Ryotaro; CARO, Juergen; KUSAKA, Shinpei; HORI, Akihiro; KITAGAWA, Susumu
- 1PC-062<sup>#</sup>** Chemical analyses on condensed structures in derivatives of native lignin using several methods (Fac. Life Env. Sci, Pref. Univ. of Hiroshima) INOUE, Sara; YAMAMOTO, Masaki; SHIMIZU, Souichirou; ○AOYAGI, Mitsuru
- 1PC-063<sup>#</sup>** Bromination of kerf loss silicon with Fe catalysis and the Si thin film made by electrodeposition using the obtained bromosilanes (Dept. of Chem. and Bio. Eng) ○TOMONO, Kazuaki; SAKAMOTO, Ryo; OKADA, Masahiro; KAKIHARA, Shunta; TAMAKI, Yoshinori
- 1PC-064<sup>#</sup>** Control of Composition Distribution along Depth Direction in Blended Membrane of Liquid Crystalline Polymers. (Chem. Res. Lab., Tokyo Tech) ○KONDO, Katsuya; IYODA, Tomokazu; HIBI, Yusuke; MAZAKI, Yasuhiro
- 1PC-065** Fabrication of Permeable Membrane with Perpendicular Nanotransport channels via Phase Separation of Block Copolymers (Interdisciplinary Grad. Sch. Sci. and Eng., Tokyo Tech) IYODA, Tomokazu; HIBI, Yuri; ○SHIMIZU, Yuta
- 1PC-066<sup>#</sup>** Precious-metal-free exhaust catalysts using Nanophase-separation structures as active sites (Environment and Energy Mater. Div., NIMS; Grad. Sch. Sci., Eng., Saitama Univ.; Grad. Sch. Eng., The Univ. of Tokyo; WPI-AIMR, Tohoku Univ.) ○IMAI, Tsubasa; TANABE, Toyokazu; ABE, Hideki
- 1PC-067** Z-scheme Water Splitting under visible light over Photocatalyst Panels consisting of Rh-doped SrTiO<sub>3</sub> and BiVO<sub>4</sub> Fine Particles (Res. Inst., TOTO Ltd.) ○OKUNAKA, Sayuri; TOKUDOME, Hiromas; ABE, Ryu
- 1PC-068** Development of high-performance cesium strontium adsorbent using the Phase-separating method Porous glass. (Grad. Sch. Fac. Env. and Info. Sci., Yokohama Natl. Univ.) ○NAGASAWA, Hiroshi; SUZUKI, Takahiro; NAGANO, Sho; AMEMIYA, Takashi; ITOH, Kiminori
- 1PC-069** Porous Silica Synthesized from hydrochloric Acid Extract of Copper Smelting Slag (Fukushima Nat. Coll. Tech) ○HAGIRI, Masahide; HONDA, Kazufumi; UCHIDA, Shuji
- 1PC-070** Synthesis and properties of quantum-sized tin oxide clusters (Chem. Res. Lab., Tokyo Tech) ○INOMATA, Yusuke; ALBRECHT, Ken; YAMAMOTO, Kimihisa
- 1PC-071** Development of novel water-soluble iridium complex with highly catalytic activities for the hydrogenation of carbon dioxide (ETRI, AIST) ○SUNA, Yuki; ONISHI, Naoya; TSURUSAKI, Akihiro; MANAKA, Yuichi; HIMEDA, Yuishiro
- 1PC-072** Development of eco-friendly Soap-Based Class A Foam for Peat Fire (Shabondama Soap Co.,LTD.) ○KANYAMA, Takahide; KAWAHARA, Takayoshi; KAWANO, Tomonori; HARAGUCHI, Akira
- 1PC-073<sup>#</sup>** Analysis of Hydrolysis Reaction and Coagulation Process for Al Polynuclear Complexes by Quantitative <sup>27</sup>Al NMR for Application to Water Treatment (Grad. Sch. Eng., Kobe Univ.; Center for Environ. Manage. Kobe Univ.) ○SAKATA, Genki; MAKI, Hideshi; MIZUHATA, Minoru
- 1PC-074** Synthesis of polyaddition polymers from fatty acid derivatives by reversible Diels-Alder reaction (TRI-OSAKA) ○INOUE, Yohtaro; NAKAHASHI, Akiko; TACHI, Hideki
- 1PC-075** Guest Responsive Luminescent Property of Re(V)Zn(II) Porous Coordination Polymer and Control of the Responsiveness (Fac. Sci., Kyushu Univ.) ○MIURA, Hiroki; MISHIMA, Akio; KOSHIYAMA, Tomomi; OHBA, Masaaki
- 1PC-076<sup>#</sup>** Direct Oxidation of Benzene to Phenol with H<sub>2</sub>O<sub>2</sub> Catalyzed by Dinickel Complexes Stabilized by Dinucleating Ligands (Fac. Sci. Eng., Doshisha Univ.) ○ZAOPUTRA, Antonius Andre; TSUJI, Tomokazu; HITOMI, Yutaka; KODERA, Masahito

## New Materials

## New Materials

- 1PC-077** Synthesis of eight-membered cyclic vinylsulfones and their photoluminescence (Fac. of Eng., Okayama Univ. of Sci.; Fac. of Sci., Okayama Univ. of Sci.) ○ORITA, Akihiro; WAKAMATSU, Kan; OHTA, Shinya; NISHIDA, Takanori; TOMIYAMA, Katsutoshi; SHINOHARA, Kenta
- 1PC-078** Photoluminescence of 1,3,6,8-tetra(trimethylsilyl)ethynylpyrene in the solid states (Fac. of Eng., Okayama Univ. of Sci.; Fac. Textile Sci. Technol., Shinshu Univ.) ORITA, Akihiro; ○NISHIDA, Takanori; XU, Feng; NAKAMURA, Hiromu; SUGIYAMA, Koki; OHTA, Kazuchika
- 1PC-079** Synthesis of Chitosan Aerogels for Transparent, Flexible Thermal Insulators (RCPT, AIST) ○TAKESHITA, Satoru; YODA, Satoshi
- 1PC-080** Radical Polymerization of Methyl Methacrylate Initiated with 1-Hexyl-3-methylimidazolium Type Ionic Liquids (Tohoku Seikatsu Bunka Univ.) ○KANNO, Shuichi
- 1PC-081** Newly designed filler filling electrolyte membrane prepared by Controlled Radical Polymerization with Particles (CRPwP) (Grad. Sch. Sci., Eng., Yamagata Univ.) ○SHITO, Keiji; MATSUI, Jun; MASUHARA, Akito; ARITA, Toshihiko
- 1PC-082<sup>#</sup>** Development of high visibility structural color materials based on core-shell particles having polydopamine black shell layer (Grad. Sch. Eng., Chiba Univ.) ○KOHRI, Michinari; KAWAMURA, Ayaka; TANIGUCHI, Tatsuo; KISHIKAWA, Keiki
- 1PC-083** Elastic organic single crystals of a  $\pi$ -conjugated molecule (Dept. Appl. Chem., Nat. Def. Acad.) ○HAYASHI, Shotaro; KOIZUMI, Toshio
- 1PC-084** Measurement of polymer-polymer interaction and selectivity evaluation using gold nanoparticle grafted polylactide. (Grad. Sch. Mat. Sci., NAIST) ○FUJISHIRO, Shinya; KAN, Kai; AJIRO, Hiroharu; AKASHI, Mitsuru
- 1PC-085** Preparation and gas barrier characteristics of polysilazane-derived multilayered film on alicyclic polyimide film using UV irradiation (Grad. Sch. Eng. Sci., Shibaura Inst. of Tech.) ○YANAGITA, Kazuya; OHISHI, Tomoji
- 1PC-086<sup>#</sup>** Reshaping and Alignment Control of Photoresponsive Liquid-Crystalline Elastomers with Exchangeable Crosslinks (Research and Development Initiative, Chuo Univ.; Grad. Sch. Sci. Eng., Chuo Univ.) ○UBE, Toru; KAWASAKI, Kyohei; IKEDA, Tomiki
- 1PC-087** Self-assembly of periodic structures with dynamic photoirradiation (Chem. Res. Lab., Tokyo Tech) ○AIZAWA, Miho; HISANO, Kyohei; AKAMATSU, Norihisa; BARRETT, Christopher J.; SHISHIDO, Atsushi
- 1PC-088<sup>#</sup>** Anti-counterfeit technology using plasmonic gold nanoparticles self-assemblies (LASTI, Univ. of Hyogo) ○FUKUOKA, Takao; YAMAGUCHI, Akinobu; MORI, Yasushige
- 1PC-089** Synthesis and properties of fluorine-containing chiral gelator (Grad. Sch. Of Humanities and Sci., Ochanomizu Univ.) ○KONDO, Eri; SATO, Hisako; YAMAGISHI, Akihiko; YAJIMA, Tomoko
- 1PC-090<sup>#</sup>** Molecular-shape Selectivity by Cavities of Rigid Dendrimers (Chem. Res. Lab., Tokyo Tech) ○KATOH, Yuto; KAMBE, Tetsuya; IMAOKA, Takane; YAMAMOTO, Kimihisa
- 1PC-091<sup>#</sup>** Synthesis of macromoleculerlar [2]rotaxane having a hydrophilic axle polymer chain and its application to rotaxane cross-linkers (Grad. Sch. Sci., Eng., Tokyo Tech) ○AOKI, Daisuke; SUZUKI, Daisuke; TAKATA, Toshikazu
- 1PC-092<sup>#</sup>** Synthesis and Structure of Janus Octasilsesquioxane (Grad. Sch. Sci. Tech., Gunma Univ.) ○OGURI, Naoki; EGAWA, Yasunobu; TAKEDA, Nobuhiro; UNNO, Masafumi
- 1PC-093** The elucidation of the oxidation mechanism of graphite by potassium permanganate (RCIS, Okayama Univ.) ○MORIMOTO, Naoki; TAKEUCHI, Yasuo; NISHINA, Yuta
- 1PC-094<sup>#</sup>** Tailoring the Oxygen Content of Graphene Oxide for Specific Applications (Okayama Univ.) ○NISHINA, Yuta; MORIMOTO, Naoki
- 1PC-095<sup>#</sup>** Coordination Star Polymers: Synthesis and Possible Applications (WPI-iCeMS, Kyoto Univ.) ○HOSONO, Nobuhiko; MATSUDA, Ryotaro; KITAGAWA, Susumu
- 1PC-096<sup>#</sup>** Highly Selective Adsorption of Ethylene over Ethane by a Redox Active Flexible PCP (WPI-iCeMS, Kyoto Univ.) ○SEN, Susan; HOSONO, Nobuhiko; KUSAKA, Shinpei; HORI, Akihiro; MATSUDA, Ryotaro; KITAGAWA, Susumu
- 1PC-097** Eu complex synthesis by microwave heating and Light fastness evaluation of Eu complexes. (Nihon keiko kagaku) MATSUMURA, Takeko; ○SATO, Toshimasa; KISHI, Munetaka
- 1PC-098** Biomimetic synthesis and mechanical properties of phosphorylated poly(vinyl alcohol)-hydroxyapatite composite material (Grad. Sch. Eng., Doshisha Univ.) ○KUSAKABE, Akane; MIZUTANI, Tadashi
- 1PC-099<sup>#</sup>** Hierarchically functionalised Inorganic Nanocrystal/Metal-Organic Framework Core/Shell Structures (FIRST, Konan Univ.) ○OHASHI, Takashi; TSURUOKA, Takaaki; TAKASHIMA, Yohei; AKAMATSU, Kensuke
- 1PC-100** Development research of a new curing catalyst for epoxy resin using imidazole inclusion crystal. (Nippon Soda Co., Ltd.; Grad. Sch. Sci., Eng., Tokyo Tech) ○AOYAMA, Kazumasa; NOMURA, Tomoya; SHIBATA, Hiromoto; SUZUKI, Hiroshi; UEKUSA, Hidehiro
- 1PC-101** Development of Manganese dioxide/Graphene composites (KRI,

- Inc.) OYAMAJI, Nana; ZAIMA, Hiroaki
- 1PC-102** Mechanical properties and functionality evaluation of carbon fiber composite material (Kanazawa Inst. of Tech.) OKITAMURA, Hajime; YAMADA, Yusuke; TSUKEGI, Takayuki; NISHIDA, Haruo; YOSHIMURA, Osamu
- 1PC-103** Preparation of Self-healing Organic-Inorganic Hybrid Films by using Thiol-containing Silsesquioxanes (Osaka Municipal Technical Research Institute) OTOMORI, Daiki; MITAMURA, Kouji; WATASE, Seiji; KOGA, Tomoyuki; HIGASHI, Nobuyuki; MATSUKAWA, Kimihiro
- 1PC-104** hard coating film with stress dispersion mechanism (Toray Industries, Inc.) OIWAYA, Tadahiko; ISHIDA, Yasuyuki
- 1PC-105** Research on matrix resin for CFRP using molecular dynamics method (Nippon steel & sumikin chemical Co., Ltd.) OOCHI, Noriaki; FUJIMOTO, Shin-etsu; TAKEUCHI, Genki; HAYASHI, Keichi
- 1PC-106<sup>#</sup>** Fabrication of Anodic Oxidation Porous Alumina Titanium Oxide Thin Film Nano-composite and Application to Model Electrode for Lithium-ion Battery (Grad. Sch. Eng., Kobe Univ.; Center for Environ. Manage. Kobe Univ.) OSETO, Shohei; MAKI, Hideshi; MIZUHATA, Minoru
- 1PC-107<sup>#</sup>** Spinning of Metal-Organic Nanotubes in a Lyotropic Liquid Crystalline Phase (Grad. Sch. Eng., The Univ. of Tokyo) OYAMAGISHI, Hiroshi; FUKINO, Takahiro; AIDA, Takuzo
- 1PC-108<sup>#</sup>** Polymeric Thioureas As Underwater Adhesives (Grad. Sch. Eng., The Univ. of Tokyo) OYANAGISAWA, Yu; AIDA, Takuzo
- 1PC-109** Developments of Ionic liquids that transform into porous coordination polymers by photoirradiation (Grad. Sch. Sci., Kobe Univ.) OUEDA, Takahiro; TOMINAGA, Takumi; MOCHIDA, Tomoyuki
- 1PC-110** Study of Aggregation Behavior for Homogeneous Polyoxypropylene-Polyoxyethylene Type Nonionic Surfactant for the Purpose of Control of Nano Structure (Grad. Sch. Human. Sci., Nara Women's Univ.; Cosmos Technical Center Co., Ltd.) OYADA, Shiho; YOSHIMURA, Tomokazu; HASHIMOTO, Satoru; SUZUKI, Toshiyuki
- 1PC-111<sup>#</sup>** Chemical modification of poly(ethylene terephthalate) fabric by means of  $\gamma$ -irradiation (Fac. Edu., Shizuoka Univ.) OYAGI, Tatsuhiko; TOYOSHIMA, Yukie; SAWATARI, Chie
- 1PC-112<sup>#</sup>** Thickness dependence of Liesegang pattern -Explore Reaction-diffusion process in ultra thin films (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) OJIANG, Jinxing; SAKURAI, Kenji
- 1PC-113** Copper particle system for low temperature sintering (Grad. Sch. Eng., Hokkaido Univ.) OYONEZAWA, Tetsu; TSUKAMOTO, Hiroki
- 1PC-114** High-Performance  $Ll_0$ -FePd/ $\alpha$ -Fe Nanocomposite Magnets with Controlled Crystal Grain Size (ICR, Kyoto Univ.; Adv. Mater. Eng. Div., Toyota Motor Corp.) OMATSUMOTO, Kenshi; SATO, Ryota; TRINH, Thang Thuy; SAKUMA, Norisugu; TERANISHI, Toshiharu
- ## Electro-Communications/Electronics
- ### Electro-Communications/Electronics
- 1PC-115** Characterization of organic single-crystal transistors based on asymmetric alkyl-phenyl chrysene derivatives (Tokai Univ.; Ushio ChemiX Co.) OONOZUKA, Tomoya; OTUKI, Hiroyuki; OKAMOTO, Kazuo; KUNUGI, Yoshihito
- 1PC-116** Organic Thin-film Transistors based on Binaphthyl Derivatives (Tokai Univ.; Ushio ChemiX Co.) OSASAKI, Takuya; MONZAKI, Masaki; OKAMOTO, Kazuo; KUNUGI, Yoshihito
- 1PC-117** Characterization of solution processed organic single crystal transistors based on alkyl 21DNTT (Sch. Eng., Tokai Univ.) OEBISAWA, Ryo; TUTUI, Masanori; OKAMOTO, Kazuo; KUNUGI, Yoshihito
- 1PC-118** The development of the copper fine wiring formation technology in air using the copper complex and the laser irradiation. (Grad. Sch. Eng. Sci., Shibaura Inst. of Tech.) OKIMURA, Ryutarou; OHISHI, Tomoji
- 1PC-119<sup>#</sup>** Synthesis, Crystal Structure and Emission Properties of Bipyrrroles Having Extended Conjugation Systems (Kitakyushu Nat. Coll. of Tech.) OKAWARA, Toru; ISHIHAMA, Kohei; KAWANO, Reo; KATO, Tamami; FUKUDA, Ryu; TAKEHARA, Kenji
- 1PC-120** Development of Graphene-based Composite Films (Grad. Sch. Eng., Hiroshima Univ.) OIMAE, Ichiro; ISAAK, Izzah Syazwani; KOMAGUCHI, Kenji; HARIMA, Yutaka
- 1PC-121<sup>#</sup>** Carrier-Transporting Phosphorescent Organoiridium Complexes Aimed at Application to Solution-Processed OLEDs (Grad. Sch. Eng., Osaka Pref. Univ.; TRI-OSAKA) OKAMURA, Naoki; YAGI, Shigeyuki; MAEDA, Takeshi; NAKAZUMI, Hiroyuki; SAKURAI, Yoshiaki
- 1PC-122** Microwave Synthesis of functional metal complexes With newly developed microwave reactors with solid statemicrowave generators (Minerva Light Lab.) OMATSUMURA, Takeko; KISHI, Munetaka; YAMASHITA, Kazunori; SHIMIZU, Naoto; SAWADA, Hirokazu
- 1PC-123** Microwave catalytic rapid synthesis - Study on microwave synthesis of phosphorescent metal complexes and accurate analysis. (Minerva Light Lab.) OMIYAKE, Takatoshi; MATSUMURA, Takeko; SHIMIZU, Naoto; SAWADA, Hirokazu; WATANABE, Takashi; NISHIMURA, Hiroshi
- 1PC-124<sup>#</sup>** High Definition Microfabrication Technology of Organic-Inorganic Hybrid Materials Using Photosensitive Paste Method. (Toray Industries, Inc.) OTANINO, Takahiro; KOBAYASHI, Yasuhiro; YAMAMOTO, Youhei; HAMANO, Tsubasa; IGUCHI, Yuichiro
- 1PC-125** Highly Thermal Resistant Temporary Bonding Adhesives (Toray Industries, Inc.) OKAZAWA, Toru; FUJIWARA, Takenori; ARIMOTO, Shinji; TOMIKAWA, Masao
- 1PC-126<sup>#</sup>** Synthesis, Properties, and OLED Characteristics of 2,2' -Bipyridine-Based Electron-Transport Materials with Molecular Shape Anisotropy (Grad. Sch. Sci., Eng., Yamagata Univ.; ROEL) OWATANABE, Yuichiro; SASABE, Hisahiro; YOKOYAMA, Daisuke; BEPPU, Teruo; KATAGIRI, Hiroshi; KIDO, Junji
- 1PC-127** On site fabrication of fullerene-diamine adduct thin-film and its application for electron transport material (Sch. Eng., The Univ. of Shiga Pref.) OAKIYAMA, Tsuyoshi; NISHIKAWA, Hayato; IZUMOTO, Daisuke; BANYA, Shoto; OKU, Takeo
- 1PC-128** Synthesis of graphene nanoribbon from a novel surface transformable molecule (IAE, Kyoto Univ.) ONAKAE, Takahiro; SONG, Shaotang; KOJIMA, Takahiro; SAKAGUCHI, Hiroshi
- 1PC-129** Evaluation of sintered silver films by using a little amount of silver nanoinks: Fabrication and Characterization of conductive patterns by using needle type dispenser (Osaka Municipal Technical Research Institute; Grad. Sch. Eng., Osaka Univ.; Daiken Chemical Co., Ltd.) OKASHIWAGI, Yukiyasu; SAITOH, Masashi; HASEGAWA, Takahiro; KOIZUMI, Atsushi; SHIGEMUNE, Tasuku; KOJIMA, Takanori; FUJIWARA, Yasufumi; KAKIUCHI, Hiroshi; AOYAGI, Nobuyoshi; YOSHIDA, Yukio; MATSUKAWA, Kimihiro; NAKAMOTO, Masami
- 1PC-130<sup>#</sup>** Development of the novel primer material suitable for adhesion of the cyclic olefin polymer film and an electroconductive layer (Nippon Soda Co. Ltd.; Grad. Sch. Eng., Chiba Univ.) OYAMATE, Taiki; MIEDA, Eiko; SUZUKI, Hiroshi; KUMAZAWA, Kazuhisa; AKAZOME, Motohiro
- 1PC-131<sup>#</sup>** Molecular design for highly efficient delayed fluorescence emitters by visualizing radiative and nonradiative decays (ICR, Kyoto Univ.) OSHIZU, Katsuyuki; UEJIMA, Motoyuki; SATO, Tohru; TANAKA, Kazuyoshi; ADACHI, Chihaya; KAJI, Hironori
- 1PC-132** Development of Green Light-Emitting Phosphorescent Materials for OLEDs (IRC3, AIST; Furuya Metal Co., Ltd.) OKONNO, Hideo; IDO, Yohei; TAKEISHITA, Tomohiro; KOIKE, Kazuhide; SUGITA, Yoshiro; ITO, Takashi
- ## Medical Care/Health Care/Biotechnology
- ### Medical Care/Health Care/Biotechnology
- 1PC-133** Development of Innovative Biomedical Materials Using RNA Aptamer (Div. Med. Dev., NIHS) ONOMURA, Yusuke; FUKUI, Chie; TOIDA, Hitomi; MORISHITA, Yuki; NIIMI, Shingo; MIYAKAWA, Shin; LING, Jin; NAKAMURA, Yoshikazu; HAISHIMA, Yuji
- 1PC-134** Search for VEGF-capturing RNA aptamer for development of novel functional biomedical materials (Div. Med. Dev., NIHS) OMORISHITA, Yuki; NOMURA, Yusuke; FUKUI, Chie; NIIMI, Shingo; YOSHIKAZU, Nakamura; HAISHIMA, Yuji
- 1PC-135<sup>#</sup>** Limit of detection of a POCT chip made by molecularly imprinted polymer and fluorescent labeled target molecule (Hitachi, Ltd.) OTANIGUCHI, Shin-ichi; MURASE, Nobuo; KITAYAMA, Yukiya; TAKEUCHI, Toshifumi
- 1PC-136<sup>#</sup>** Methodology of Selective Conjugate Drugs to Antibody (RIKEN; Tokyo Chemical Industry Co., LTD.) OMANABE, Shino; HABU, Masato; ISHIHARA, Mikio; MATSUZAKI, Yuji; ITO, Yukishige
- 1PC-137** Attainment of high sensitive analysis of lipid membrane by in situ nanoparticles preparation on cell membrane (Sch. Eng. Sci., Osaka Univ.) OKAMOTO, Yukihiro; IKEDA, Takumi; SUGA, Keishi; UMAKOSHI, Hiroshi
- 1PC-138** Development of membrane protein separation method with lipid nano-membrane (Grad. Sch. Eng. Sci., Osaka Univ.) OKAMOTO, Yukihiro; TSUJIMOTO, Yusuke; SUGA, Keishi; UMAKOSHI, Hiroshi
- 1PC-139** Development of Tyrosine Phosphatase Screening System using Tyrosine-selective Chemical Modification (Chem. Res. Lab., Tokyo Tech) OSATO, Shinichi; NAKAMURA, Kosuke; NAKANO, Hirofumi; NAKAMURA, Hiroyuki
- 1PC-140** Identification of alpha-substituted acylamines as novel, potent and orally active mGluR5 negative allosteric modulators (Pharmaceutical Research Laboratories, Toray Industries, Inc.) OYOSHIKAWA, Keita; OHYAMA, Tomofumi; TAKAHASHI, Eiki; NUMAJIRI, Yoshitaka; KONNO, Mitsuhiro; MORIYAMA, Masaki; TAKEMI, Natsumi; KUNITA, Kana; NISHIMURA, Kazumi; HAYASHI, Ryoji
- 1PC-141** Functional analysis of a marine polyketide with selective cytotoxicity under nutrient starvation conditions (Sch. Adv. Eng., Kogakuin Univ.) OHNO, Osamu; OITO, Ami; IWASAKI, Arihiro; SUENAGA, Kiyotake; MATSUNO, Kenji
- 1PC-142<sup>#</sup>** Development of Photo-Patternable and Room Temperature Adhesive Materials (JSR Corp.) ODOI, Takashi; KANEKO, Masahiro; HOSHIKO, Kenji; NISHIMURA, Isao; HAYASHI, Eiji
- 1PC-143** A novel surface-enhanced Raman scattering on Au nanoshells using dielectrophoresis in micro-optofluidic devices (LASTI, Univ. of Hyogo) YAMAGUCHI, Akinobu; OFUKUOKA, Takao; UTSUMI, Yuichi
- 1PC-144<sup>#</sup>** Synthesis of GlcA4S, GalN Derivatives as an Inhibitor against Japanese Encephalitis Virus Infection (Aichi Univ. of Educ.; The Univ. of Aizu) OSAKURAGI, Miho; SUZUKI, Ayaka; NOTO, Mahiro; HIDARI, Kazuya; NAKANO, Hirofumi

# Room A1

## Chishinkan1 Building 101

### Education and History of Chemistry

Thursday, March 24, AM

Chair: NINOMIYA, Junko (9 : 30 ~ 10 : 30)

\* 9:20-9:30: interval for laptop PC connection.(1A1-04, 1A1-05, 1A1-06, 1A1-07, 1A1-08, 1A1-09)

**1A1-04** Oxidation of vegetable oils utilizing photo-radical initiator (Grad. Sch. Mathematics Sci. Edu., Tokyo Univ. of Sci.) ○OSANAI, Koki; INOUE, Masayuki

**1A1-05** Which amino acid shows Xanthoprotein Reaction? (Grad. Sch. Mathematics Sci. Edu., Tokyo Univ. of Sci.) ○TOMITA, Yuki; INOUE, Masayuki

**1A1-06** Synthesis of esters utilizing acetylsalicylic acid as the reagent for acetylation (Grad. Sch. Mathematics Sci. Edu., Tokyo Univ. of Sci.) ○FUJIWARA, Hiroyuki; MITSUI, Shuta; INOUE, Masayuki

**1A1-07** Development of experimental materials to study the phased oxidation of Toluene (Grad. Sch. Mathematics Sci. Edu., Tokyo Univ. of Sci.) ○SHIMAMURA, Matsuri; INOUE, Masayuki

**1A1-08** Distinction of structural isomers of esters by hydroxamic acid iron (III) method (Grad. Sch. Mathematics Sci. Edu., Tokyo Univ. of Sci.) ○NOGAMI, Saori; INOUE, Masayuki

**1A1-09** Development of the experiment to measurement iodine value with N-Chlorosuccinimide (Grad. Sch. Mathematics Sci. Edu., Tokyo Univ. of Sci.) ○KOBAYASHI, Satomi; INOUE, Masayuki

Chair: INOUE, Masayuki (10 : 40~11 : 20)

\* 10:30-10:40: interval for laptop PC connection.(1A1-11, 1A1-12, 1A1-13, 1A1-14)

**1A1-11** Metallic luster by oxide film of Sn-Zn alloy (National Institute of Technology, Oita College) ○TANAKA, Yudai; UENO, Takahisa; NINOMIYA, Junko; MATUMOTO, Yoshihisa

**1A1-12** A method for evaluating water pollution by luminescence in the marine symbiotic bacterium *Vibrio fischeri*. (National Institute of Technology, Oita College) ○HIRANO, Rui; SUGIHARA, Yuya; UENO, Takahisa; NINOMIYA, Junko; MORITA, Hiroshi

**1A1-13** Immobilization of *Vibrio fischeri* to Fibroin - alginic acid film and method of preserving the film. (National Institute of Technology, Oita College) ○NINOMIYA, Junko; FURUKAWA, Takashi; MORITA, Hiroshi

**1A1-14** Development of Teaching Material and Learning Program for Enzymatic Hydrolysis of Cellulose (Grad. Sch. Educ., Hiroshima Univ.) ○NINOMIYA, Takuya; AMIMOTO, Kiichi

Thursday, March 24, PM

Chair: NAKAGAWA, Tetsuo (14 : 30~15 : 30)

\* 14:20-14:30: interval for laptop PC connection.(1A1-34, 1A1-36, 1A1-38)

**1A1-34\*** Review of the terminology used in high school "Chemistry" in Japan-Activities of the Subcommittee for the Review of the Terminologies in Chemical Education in High Schools (Orgn. for Educ. Adv., Tokyo Univ. of Sci.; Coll. Sci. Eng., Aoyama Gakuin Univ.; Junior & Senior High School at Komaba, Uni. of Tsukuba; Rikkyo Niiza Junior & Senior High School; Fac. of Food and Nutritional Sci., Toyo Univ.; Tama Univ. Hijirigaoka High School; Fac. Sci., Tokyo Univ. of Sci.; Fac. Sci. Eng., Soka Univ.; Chem. Res. Lab., To) WATANABE, Tadashi; ○SHIMOI, Mamoru; NISHIHARA, Hiroshi; OSAKADA, Kohtarō; ITO, Masato; INOUE, Masayuki; UTAGAWA, Akiko; KARAYAMA, Masaki; WATANABE, Tomohiro; KAJIYAMA, Masaaki; SUGIMURA, Hideyuki; GOTO, Kenichi

**1A1-36\*** Development and evaluation in the scientist training program for the junior high school students (Fac. Edu., Ehime Univ.) ○OHASHI, Atsushi; SUMIDA, Manabu; WADA, Takayuki; OZAWA, Yuuki

**1A1-38\*** An Inquiry Laboratory Activity Combined Elimination of Alcohol with Addition of Alkene (Grad. Sch. Educ., Hiroshima Univ.) ○AMIMOTO, Kiichi; SASAKI, Masahiro

Chair: OHASHI, Atsushi (15 : 40~16 : 30)

\* 15:30-15:40: interval for laptop PC connection.(1A1-41, 1A1-42, 1A1-43, 1A1-44, 1A1-45)

**1A1-41** Practical Lesson on Microscale Experiment in Youngsters' Science Festival 2015 at Kobe, Japan: Classifying Aqueous Solutions into Acidic, Neutral, and Alkaline Ones (Kobe College) ○NAKAGAWA, Tetsuo

**1A1-42** Study on experiment of freezing point depression using naphthalene as solvent (Keio Shonan Fujisawa Jr.&Sr. High School) ○HIRAMATSU, Shigeki

**1A1-43** A learning program for chemistry class in high school utilizing over-the-counter medicines as a teaching tool (Fac. Edu., Gunma Univ.) ○KAMEDA, Eri; ONO, Tomonobu; MASUDA, Hiromitsu; HIOKI, Hideaki

**1A1-44** Development of Microscale Experiment for Electrolysis using Artifi-

- 1PC-145<sup>#</sup>** Development of post-translational modifications toward novel bioactive peptides (Grad. Sch. Sci., The Univ. of Tokyo; PRESTO, JST) ○KATO, Yasuharu; GOTO, Yuki; SUGA, Hiroaki
- 1PC-146** Blood compatibility of poly(tetrafluoroethylene-co-vinyl alcohol) (Grad. Sch. Mat. Sci., NAIST; Daikin Industries, Ltd.) ○TOTANI, Masayasu; ANDO, Tsuyoshi; TANIHARA, Masao; MOHRI, Haruhiko; TANAKA, Yoshito; KANBARA, Tadashi; MIKI, Jun
- 1PC-147<sup>#</sup>** Identification of novel and potent DDRs inhibitors having a SF<sub>5</sub> group (Toray Industries, Inc.) ○NISHIO, Yukihiko; TSUTSUI, Hideyuki; OKIMURA, Keiichi; UDAGAWA, Syuji; KUBOTA, Yuko; YAMAMOTO, Masashi; NISHIMURA, Yutaka; MASUDA, Tomohide; KAINO, Mie; MEGURO, Hiroyuki; SEKIYA, Yumiko
- 1PC-148** Strategy for screening peptides regulating enzymatic activities (Osaka Univ.FBS) ○HARADA, Shoko; MATSUMOTO, Katsuhiko; UEDA, Hiroki
- 1PC-149** Design of Chiral Brønsted Acid Catalysts for Asymmetric Diels-Alder Reaction of Trisubstituted Nitroalkenes (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○FUJII, Yudai; KUDOH, Takayuki; SAKAKURA, Akira
- 1PC-150** Development of Intramolecular Dehydro Diels-Alder Reaction of Indolyl-1,6-diyne for the Synthesis of Substituted Carbazoles (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○FUJISAWA, Syo; KUDOH, Takayuki; SAKAKURA, Akira
- 1PC-151** Development of Intramolecular Transesterification Reaction of 3,5-Diketoester for Synthesis of  $\alpha$ -methoxy- $\gamma$ -pyrone compounds (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○ONDA, Kai; SAKAKURA, Akira
- 1PC-152<sup>#</sup>** Development of antibodies that show antigen-dependent fluorescence enhancement (Sch. Mat. Sci., JAIST; USHIO Inc.) ○FUKUNAGA, Keisuke; WATANABE, Takayoshi; NOVITASARI, Dian; ABE, Ryoji; OHASHI, Hiroyuki; HOHSAKA, Takahiro
- 1PC-153<sup>#</sup>** Attempt for the formation of carbon-carbon bond in ribosome (Grad. Sch. Sci., The Univ. of Tokyo) ○KURODA, Tomohiro; TAKATSUJI, Ryo; GOTO, Yuki; SUGA, Hiroaki
- 1PC-154** Construction of 3D cardiac tissues by iPSC cell-derived cardiomyocytes employing collagen coating method and introduction of blood vessel structures (Graduate School of Frontier Biosciences, Osaka Univ.) ○HIURA, Ayami; SHIMA, Fumiaki; MATSUSAKI, Michiya; AKASHI, Mitsuru
- 1PC-155** Preparation of Various Polysaccharide Composite Films by Utilizing Hot Press Technique and Surface Functionalization (Fac. Eng., Tokyo Univ. of Sci.; Grad. Sch. Chem. Sci. Technol., Tokyo Univ. of Sci.; Fac. Pharm. Sci., Tokyo Univ. of Sci.) ○IIJIMA, Kazutoshi; TSUJI, Yuna; KURIKI, Izumi; KAKIMOTO, Atsushi; NINOMIYA, Rie; IYODA, Takuya; FUKAI, Fumio; HASHIZUME, Mineo
- 1PC-156<sup>#</sup>** Adhesive ATP-Switch for Modulation of Bimolecular Functions (Grad. Sch. Eng., The Univ. of Tokyo) ○OKURO, Kou; SASAKI, Mizuki; AIDA, Takuzo
- 1PC-157** Construction of 3D tissues by stereoscopically modeled hydrogel composed of thermoresponsive polymers (Graduate School of Frontier Biosciences, Osaka University.) ○TAKAMURA, Yasushi; SHIMA, Fumiaki; YOSHIDA, Hiroaki; AKASHI, Mitsuru
- 1PC-158<sup>#</sup>** Electrochemical Detection of Nereistoxin-related Pesticides (Kumamoto Univ.; Forensic Sci. Lab., Nagasaki Pref. Police H. Q.) ○SHIMADA, Hiroshi; NOGUCHI, Shiori; YOSHIMURA, Keisuke; KITAMURA, Yusuke; NISHIYAMA, Katsuhiko; IHARA, Toshihiro
- 1PC-159** Structural Design of Injectable Hydrogel for High Performance 3D Cell Culture (Fac. Sci., Tokyo Univ. of Sci.) ○MATSUKUMA, Daisuke; ISHIKAWA, Shohei; TAKAHASHI, Chihiro; ASAWA, Yukiyo; HOSHI, Kazuto; OTSUKA, Hidenori
- 1PC-160<sup>#</sup>** Magnetic-plasmonic hybrid Ag@FeCo@Ag core@shell@shell nanoparticles for isolation of intracellular membrane vesicles (Sch. Mat. Sci., JAIST) ○TAKAHASHI, Mari; MOHAN, Priyank; HIGASHIMINE, Koichi; NAKADE, Akiko; MOTT, Derrick; HAMADA, Tsutomu; MATSUMURA, Kazuaki; TAGUCHI, Tomohiko; MAENOSONO, Shinya
- 1PC-161<sup>#</sup>** Improved biocompatibility of biodegradable polycarbonates based on surface hydration (Grad. Sch. Sci., Eng., Yamagata Univ.) ○FUKUSHIMA, Kazuki; TAKAOKA, Shunya; KISHI, Kohei; OTA, Takayuki; INOUE, Yuto; TANAKA, Masaru
- 1PC-162<sup>#</sup>** Development of a novel small-diameter vascular graft by hybridization of ECM and artificial materials (IBB, Tokyo Med. and Dental Univ.) ○NAKAMURA, Naoko; KIMURA, Tsuyoshi; WU, Pingli; MORITA, Hiroko; FUJISATO, Toshiya; KISHIDA, Akio
- 1PC-163<sup>#</sup>** The NanoSuit method to observe the living mammalian tissue and cell. (Fac. Med., Hamamatsu Univ. Sch. Med.) ○TAKAKU, Yasuharu; SUZUKI, Chiaki; HARIYAMA, Takahiko
- 1PC-164<sup>#</sup>** In vitro selection of TET1-inhibitory macrocyclic peptides (The Univ. of Tokyo) ○NISHIO, Kosuke; KATOH, Takayuki; SUGA, Hiroaki
- 1PC-165<sup>#</sup>** Analysis of photosensitized oxidative damage of biomolecules by phosphorus(V) porphyrins and speculation of their binding states (Grad. Sch. Sci. Technol., Shizuoka Univ.) ○OUYANG, Dongyan; HIRAKAWA, Kazutaka
- 1PC-166** Cell Introduction of Binuclear Metal Complexes that Efficiently Cleave DNA (Fac. Sci. Eng., Doshisha Univ.) ○KADOYA, Yuki; FUKUI, Katsuki; ASO, Kenta; HITOMI, Yutaka; KODERA, Masahito

cial Salmon Roe (Kobe Coll. Junior and Senior High School) ○IKEDA, Ikuhiro

**1A1-45** Development of a teaching material for electrodeposition of sodium metal in propylene carbonate. (Fac. Edu., Chiba Univ.) ○SHIGENAGA, Tatsuhiko; HAYASHI, Hideko

### Friday, March 25, AM

Chair: KEIKO, Shoji (10 : 10~10 : 50)

- \* 10:00-10:10: interval for laptop PC connection.(2A1-08, 2A1-09, 2A1-10, 2A1-11)
- 2A1-08** Examination of the teaching material of biomass to introduce carbon neutral concept (Fac. Edu., Hirosaki Univ.) ○CHOUNAN, Yukiyasu; HARADA, Takuma; KATSUKAWA, Kenzo
- 2A1-09** Analysis of Graph Drawing Abilities of Undergraduates Wishing to Become Elementary School Teachers - Case of a Solubility Curve (Fac. Edu., Univ. of Ryukyus) ○YOSHIDA, Akira
- 2A1-10** Implementation of the organic chemistry course in a newly installed department of chemistry in a faculty of technology (Faculty of Science and Technology) ○NAGATA, Toshi
- 2A1-11** Development of Bunsen burner attachment for burner work in laboratory (Grad. Sch. Eng., Utsunomiya Univ.) ○IWAI, Hidekazu; HASEGAWA, Kazutoshi

Chair: NARIAI, Hiroyuki (11 : 00~12 : 00)

- \* 10:50-11:00: interval for laptop PC connection.(2A1-13, 2A1-16)
- 2A1-13** CSJ Award for Merits for Chemical Education Contribution to Chemistry Education through Development of Teaching Materials for Experiments and Improving the Curriculum of Chemistry & Science Education (Hirano Senior High Sch. Attached to Osaka Kyoiku Univ.) ○HORIKAWA, Masayoshi
- 2A1-16** CSJ Award for Merits for Chemical Education Contribution to Popularization of Chemical Education through Experiment Focused Chemistry (Grad. Sch. Eng., Kyoto Univ.) ○HAYASHI, Masayuki

### Friday, March 25, PM

Chair: SANO, Hirosi (13 : 10~14 : 10)

- \* 13:00-13:10: interval for laptop PC connection.(2A1-26, 2A1-28, 2A1-29, 2A1-30)
- 2A1-26\*** Laboratory Experiments on Ionic Liquids integrating Various Basic Concepts (Shuhko Middle School; Tohoku Univ.) ○SHOJI, Keiko; OGINO, Kazuko
- 2A1-28** Development of High-school Chemistry Teaching Materials due to the introduction of Medicinal Chemistry to study the Structure and Efficacy of Pharmaceutical Products (Sci.Edu.Cen., Hokkaido Edu.Res.Inst.) ○ITO, Takayuki; MATSUHASHI, Hiromi; SHIMIZU, Tadashi
- 2A1-29** Development of teaching materials using 3D printing to support chemical education for developmental disorders by visualization and haptization. (Kyoto Municipal Fushimi Technical High School) ○HATA, Sohei
- 2A1-30\*** Ambiguity in the Periodic Table (Tohoku Univ.) ○OGINO, Kazuko

Chair: KAMEI, Osamu (14 : 20~14 : 50)

- \* 14:10-14:20: interval for laptop PC connection.(2A1-33)
- 2A1-33** CSJ Award for Merits for Chemical Education Contribution to Popularization of Chemistry through Experiments (Keio Girls Senior High Sch.) ○TAMURA, Sadayoshi
- Chair: NAGATA, Toshi (15 : 00~16 : 00)
- \* 14:50-15:00: interval for laptop PC connection.(2A1-37, 2A1-39, 2A1-41, 2A1-42)
- 2A1-37\*** Analysis of the Tendency with the Systematized Survey on the History of Technology: Cement manufacturing, Bottom plough, Petrochemical, Arc welding and Coke oven (NMNS) ○KAMEI, Osamu
- 2A1-39\*** Representation of the Anionic or Cationic Polymerization process by new structural formula (Laboratory office of Global Energy System) ○SANO, Hirosi
- 2A1-41** A Book consisting of stories of metaphorical expression for the purpose of active learning to chemistry. (Salesian Polytechnic) ○NAGAO, Akemi; SHIMIZU, Yo; TARUKI, Monami; TUCHIYA, Syodo; NAKAMURA, Tomoe; MIKAMI, Aika; UJIE, Kazuhiko
- 2A1-42** Development of environmental-benign Teaching Materials using Magnetic Ionic Liquids (Fac. Edu., Kagawa Univ.) ○WATANABE, Keigo; TAKAGI, Yumiko

### Saturday, March 26, AM

Chair: TAKAGI, Yumiko (9 : 10 ~9 : 40)

- \* 9:00-9:10: interval for laptop PC connection.(3A1-02, 3A1-03)
- 3A1-02** Ion analysis experiment using of alum crystal (NIGAWA GAKUIN HIGH SCHOOL) ○YONEZAWA, Takeshi
- 3A1-03\*** Chemistry Education for Freshman and Sophomore having various background (Kanazawa Inst. of Tech.) ○OYABU, Matashige

Chair: OGINO, Kazuko (9 : 50 ~10 : 50)

- \* 9:40-9:50: interval for laptop PC connection.(3A1-06, 3A1-09)
- 3A1-06** CSJ Award for Merits for Chemical Education The development and promotion in chemical experiment teaching (Miyagi Prefectural Tagajo High Sch.) ○SASAKI, Katsunori
- 3A1-09** CSJ Award for Merits for Chemical Education Contribution to Chemical Education through Lectures on Chemical Experiments for Junior High School Students (Tsuruoka Nat. Coll. of Tech.) ○SEGAWA, Toru

Chair: SHIMOI, Mamoru (11 : 00~12 : 00)

- \* 10:50-11:00: interval for laptop PC connection.(3A1-13)
- 3A1-13** CSJ Award for Chemical Education Contributions to Encountering Chemistry through Experimentation (Fac. Bio. Eng., Toin Univ. of Yokohama) ○SAITO, Kiyoshi

## Room A2

Chishinkan1 Building 102

### Resources Utilization Chemistry

Thursday, March 24, PM

#### Biomass and waste utilization

Chair: SHIRAI, Masayuki (13 : 30~14 : 20)

- \* 13:20-13:30: interval for laptop PC connection.(1A2-28, 1A2-29, 1A2-30, 1A2-31, 1A2-32)
- 1A2-28** Secondary reaction in degradation products during pyrolysis of bisphenol A (Grad. Sch. Environmental Studies, Tohoku Univ.) ○ONO, Shunsuke; KUMAGAI, Shogo; KAMEDA, Tomohito; YOSHIOKA, Toshiaki
- 1A2-29** Cellulose-polyethylene interactions during pyrolysis (Grad. Sch. Environmental Studies, Tohoku Univ.) ○FUJITA, Kohei; KUMAGAI, Shogo; KAMEDA, Tomohito; YOSHIOKA, Toshiaki
- 1A2-30** Oxidation of cellulose in ionic liquids using platinum-loaded titanium dioxide electrode (Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○YAMAKI, Eri; IKEDA, Kazuma; FUJITA, Kyoko; OHNO, Hiroyuki; NAKAMURA, Nobufumi
- 1A2-31** Effects of cation species of onium hydroxide aqueous solutions on cellulose dissolution ability (Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○TAJIMA, Miyu; SATO, Daiki; TSURUMAKI, Akiko; OHNO, Hiroyuki
- 1A2-32** Effect of ion structure and water content on lignin dissolution ability of the ionic liquids (Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○AKIBA, Takashi; SHIMO, Mizuki; YAMANAKA, Sachiko; TSURUMAKI, Akiko; OHNO, Hiroyuki

### Friday, March 25, AM

#### Waste utilization

Chair: OHTA, Hidetoshi (10 : 00~11 : 00)

- \* 9:50-10:00: interval for laptop PC connection.(2A2-07, 2A2-08, 2A2-10, 2A2-11)
- 2A2-07\*** Development of vanadium extraction process based on aqueous solution from low vanadium content industrial waste (Grad. Sch. Sci., Eng., Yamagata Univ.) ○TAKAHASHI, Hirota; MATSUSHIMA, Yuta
- 2A2-08\*** Recycling educational waste 1 - selective dehydration of copper ammine complex monohydrate - (Fac. Sci., Univ. of Ryukyus) ○NAKAGAWA, Tessui; SHIROMA, Masaaki
- 2A2-10** Recycling educational waste 2 - Thermodynamic properties of CuSO<sub>4</sub> as an ammonia trapping material - (Grad. Sch. Eng. Sci., Univ. of Ryukyus) ○SHIROMA, Masaaki; NAKAGAWA, Tessui
- 2A2-11\*\*** A study on depolymerization reactions of polyamides in supercritical methanol (Grad. Sch. Med., Yamaguchi Univ.; Ube Industries) ○KAMIMURA, Akio; MATSUMOTO, Hiroshi; KAISO, Kouji; YOSHIMOTO, Makoto

#### Biomass utilization

Chair: KAMIMURA, Akio (11 : 10~12 : 10)

- \* 11:00-11:10: interval for laptop PC connection.(2A2-14, 2A2-15, 2A2-16, 2A2-18)
- 2A2-14** Solvolysis reaction of benzyl phenyl ether in water-methanol. (Grad. Sch. Eng., Iwate Univ.) ○SASAKI, Hiroki; SATO, Osamu; YAMAGUCHI, Aritomo; NANAHO, Hidetaka; SHIRAI, Masayuki
- 2A2-15** Hydrodeoxygenation of 4-Propylphenol into Propylbenzene under Mild Conditions by Ionic Liquid-Modified Pt/Zelite Catalysts (Grad. Sch. Sci., Eng., Ehime Univ.) OHTA, Hidetoshi; ○KUROO, Akihiro; NAKATUKA, Mao; WATANABE, Yutaka; HAYASHI, Minoru
- 2A2-16\*** Preparation of a protein-chitin nanofiber complex from crab shells and



its applications (Grad. Sch. Eng., Tottori Univ.) ○IFUKU, Shinsuke; URAKAMI, Takeshi; NAGASHIMA, Masaaki; EGUSA, Mayumi; IZAWA, Hironori; SAIMOTO, Hiroyuki

**2A2-18\*** Coloration of Wool Fibers by Reaction with Reducing Sugars -Influence of Mordant Processing- (Osaka Municipal Technical Research Institute) ○OHE, Takeru; YOSHIMURA, Yurika

## Environmental and Green Chemistry

Friday, March 25, PM

Chair: TOYAO, Takashi (13 : 00~14 : 00)

\* 12:50-13:00: interval for laptop PC connection.(2A2-25, 2A2-27, 2A2-28, 2A2-30)

**2A2-25\*** High-Efficiency Steam Generation by using nanoporous graphene (WPI-AIMR, Tohoku Univ.) ○ITO, Yoshikazu; TANABE, Yoichi; JIUHUI, Han; FUJITA, Takeshi; TANIGAKI, Katsumi; CHEN, Mingwei

**2A2-27** Development of Solution Plasma Treated Liquid for Application to Plant Growth (Grad. Sch. Fac. Sci. Technol., Tokyo Univ. of Sci.) ○HONDA, Kaede; TERASHIMA, Chiaki; NAKATA, Kazuya; KATSUMATA, Kenichi; KONDO, Takeshi; YUASA, Makoto; FUJISHIMA, Akira

**2A2-28\*\*** Highly efficient electro-synthesis of glycolic acid from oxalic acid and water using light energy (I<sub>2</sub>CNER, Kyushu Univ.) ○KITANO, Sho; HATA, Shinichi; WATANABE, Ryota; SADAKEYO, Masaaki; YAMAUCHI, Miho

**2A2-30** Highly Selective Transesterification of Glycerol to Acetyl glycerol Using Metal Cation-exchanged Montmorillonite Catalyst (Grad. Sch. Eng. Sci., Osaka Univ.) ○MORITA, Takamasa; MAENO, Zen; MITSUDOME, Takato; MIZUGAKI, Tomoo; JITSUKAWA, Koichiro; KANEDA, Kiyotomi

Chair: ITO, Yoshikazu (14 : 10~14 : 40)

\* 14:00-14:10: interval for laptop PC connection.(2A2-32, 2A2-33)

**2A2-32** One-pot Transformation of Levulinic Acid to 2-Methyltetrahydrofuran Catalyzed by H-beta Zeolite-supported Platinum and Molybdenum (Grad. Sch. Eng. Sci., Osaka Univ.) ○TOGO, Keito; MAENO, Zen; MITSUDOME, Takato; MIZUGAKI, Tomoo; JITSUKAWA, Koichiro; KANEDA, Kiyotomi

**2A2-33\*** Reduction of halogenated benzenes using a metallic Ca-catalyst method (Grad. Sch. Comprehensive Scientific Research, Pref. Univ. of Hiroshima) ○KATAYAMA, Yumi; KATO, Ryo; HARADA, Hiroyuki; SIMION, Cristian; MITOMA, Yoshiharu

Saturday, March 26, AM

Chair: TERASHIMA, Chiaki (9 : 00 ~ 10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(3A2-01, 3A2-03, 3A2-04, 3A2-05, 3A2-06)

**3A2-01\*\*** Comprehensive OH reactivity studies in Wakayama forest and low impact on the formation of harmful ozone (Grad. Sch. Human and Environ. Stud., Kyoto Univ.) ○RAMASAMY, Sathiyamurthi; IDA, Akira; JONES, Charlotte; KATO, Shungo; TSURUMARU, Hiroshi; KISHIMOTO, Iori; KAWASAKI, Shio; SADANAGA, Yasuhiro; NAKASHIMA, Yoshihiro; NAKAYAMA, Tomoki; MATSUMI, Yutaka; MOCHIDA, Michihiro; KAGAMI, Sara; DENG, Yang; OGAWA, Shuhei; KAWANA, Kaori; KAJII, Yoshizumi

**3A2-03** Chemical analysis and OH reactivity measurement of volatile organic compounds emitted from *Pinus densiflora* (Grad. Sch. Human and Environ. Stud., Kyoto Univ.) ○KISHIMOTO, Iori; SAKAMOTO, Yosuke; KAJII, Yoshizumi

**3A2-04** Total carbon measurement of biogenic VOC by catalyzed oxidation - non dispersive infra-red spectroscopy (Grad. Sch. Human and Environ. Stud., Kyoto Univ.) ○ITO, Kensuke; KISHIMOTO, Iori; RAMASAMY, Sathiyamurthi; SAKAMOTO, Yosuke; KAJII, Yoshizumi

**3A2-05** Conversion of CO<sub>2</sub> and CH<sub>4</sub> using plasma-catalyst. (Grad. Sch. Eng., Saitama Inst. of Tech.) ○KAWASHIMA, Kiritaka; ARITANI, Hirofumi

**3A2-06** The role of extracellular polysaccharides (EPS) and metal cations inducing *Microcystis* colony formation (Fac. Eng., Chiba Univ.) ○OMORI, Ken; AMANO, Yoshimasa; MACHIDA, Motoi; IMAZEKI, Fumio

Chair: SATO, Kei (10 : 10~11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(3A2-08, 3A2-09, 3A2-10, 3A2-12, 3A2-13)

**3A2-08** Spatial and component correlativity of atmospheric aerosol (Osaka City Inst. Public. Health & Env. Sci.) ○FUNASAKA, Kunihiro; ASAKAWA, Daichi; IKEMORI, Fumikazu; COULIBALY, Souleymane; HASEI, Tomohiro; WATANABE, Tetsushi

**3A2-09#** Monitoring of polycyclic aromatic hydrocarbons in aerosol deposition (roof top and roadside vegetation) in Afghanistan (Grad. Sch. Biosphere Sci.) ○KHPALWAK, Wahdatullah; JADOON, Waqar Azeem; ABDELDAYEM, Sherif; SAKUGAWA, Hiroshi

**3A2-10\*\*** Efficient decomposition of a new fluorocarbon surfactant: perfluoroalkyl disulfonate to fluoride ions in subcritical and supercritical water (Fac.

Sci., Kanagawa Univ.) ○HORI, Hisao; SAITO, Hiroki

**3A2-12** Analysis of Hydrolysis Reaction and Coagulation Process for Aluminum Polynuclear Complexes by Quantitative <sup>27</sup>Al NMR (Grad. Sch. Eng., Kobe Univ.; Center for Environ. Manage., Kobe Univ.) ○SAKATA, Genki; MAKI, Hideshi; MIZUHATA, Minoru

**3A2-13** Development of a Dye Nanoparticle-coated Test Strip for On-site Analysis of Iron(II) Ion in Environmental Water (Grad. Sch. Eng., Nagaoka Univ. of Tech.) ○USHIKI, Banri; TAKAHASHI, Yukiko

Chair: KUBOTA, Yoshihiro (11 : 20~12 : 00)

\* 11:10-11:20: interval for laptop PC connection.(3A2-15, 3A2-16, 3A2-17, 3A2-18)

**3A2-15** OH reactivity of secondary products formed from the photooxidation of isoprene-xylene mixture system (NIES; Tokyo Univ. of Agri. and Technol.; Grad. Sch. Human and Environ. Stud., Kyoto Univ.) ○SATO, Kei; NAKASHIMA, Yoshihiro; IMAMURA, Takashi; KAJII, Yoshizumi

**3A2-16** Characteristics study of Missing OH reactivity during ambient measurement campaign at National Institute for Environmental Studies (NIES) ○TSURUMARU, Hiroshi; SAKAMOTO, Yosuke; IDA, Akira; KATO, Shungo; YOKOUCHI, Yoko; MOCHIZUKI, Akihito; KAJII, Yoshizumi

**3A2-17** Development of novel measurement techniques for total peroxy radical yield from atmospheric OH radical reaction (Kyoto Univ.) ○SAKAMOTO, Yosuke; TSURUMARU, Hiroshi; IDA, Akira; KAJII, Yoshizumi

**3A2-18** Methodology development of HO<sub>2</sub> reactivity measurement in the air with laser spectroscopy (Fac. Integrated Human Studies, Kyoto Univ.) ○FUJII, Tomihide; TSURUMARU, Hiroshi; SAKAMOTO, Yosuke; KAJII, Yoshizumi

Saturday, March 26, PM

Chair: YOSHIDA, Hisao (13 : 10~14 : 10)

\* 13:00-13:10: interval for laptop PC connection.(3A2-26, 3A2-27, 3A2-28, 3A2-29, 3A2-30, 3A2-31)

**3A2-26#** Mechanochemical Decomposition of Asbestos involved in Slates in the Presence of Calcium Polysulfide (Grad. Sch. Sci. Eng., Saga Univ.) ○TABATA, Masaaki; SHONO, Akifumi

**3A2-27** <sup>113</sup>Cd MAS NMR spectra of Cd<sup>2+</sup> hydrolysis products (Fac. of Sci., JWU) ○SAKAI, Yuka; KAWAMOTO, Daisuke; YUKOYAMA, Takushi; MIYAZAKI, Akane

**3A2-28** Photo-Fenton Reaction of Methyl Orange with Iron-treated Hydroxyapatite Catalyst modified with Organic Moiety (Dept. Lib. Arts, Saitama Med. Univ.; TAIHEI CHEMICAL INDUSTRIAL CO., LTD.) ○MORIGUCHI, Takeshi; NAKAGAWA, Souhei

**3A2-29** Enhanced Water Oxidation on Rh-modified TaON Photoanode under Visible Light Irradiation (Sch. Eng., Kyoto Univ.) ○KATO, Yoichiro; ABE, Ryu; HIGASHI, Masanobu

**3A2-30** Development of the Photocatalyst Aiming the Nitrogen Fixation for Plant Growth (Fac. Sci. Technol., Tokyo Univ. of Sci.) ○SAKURAI, Yusei; TERASHIMA, Chiaki; NAKATA, Kazuya; KATSUMATA, Kenichi; KONDO, Takeshi; YUASA, Makoto; FUJISHIMA, Akira

**3A2-31** Deposition of Titanium Dioxide Films by Atmospheric Pressure Plasma Jet and Its Photocatalytic Activity (Fac. Sci. Technol., Tokyo Univ. of Sci.) ○TABEI, Rena; TERASHIMA, Chiaki; NAKATA, Kazuya; KATSUMATA, Kenichi; KONDO, Takeshi; YUASA, Makoto; FUJISHIMA, Akira

Chair: KANECO, Satoshi (14 : 20~15 : 20)

\* 14:10-14:20: interval for laptop PC connection.(3A2-33, 3A2-34, 3A2-35, 3A2-36, 3A2-37)

**3A2-33** Photooxidative Decomposition of Aqueous Chlorophenols Under Aeration Using a Photosensitizer Dye Nanoparticle Coated Membrane Composed of Methylene Blue and Silica Nanoparticle. (Grad. Sch. Eng., Nagaoka Univ. of Tech.) ○IKARASHI, Taro; TAKAHASHI, Yukiko

**3A2-34** Mimicking catalytic reactions for the fixation of carbon dioxide by methanogenic bacteria (Grad. Sch. Eng., Hokkaido Univ.) ○FUKUSHIMA, Masami; IGARASHI, Mami

**3A2-35** Synthesis of tungsten oxide photocatalysts and oxygen evolution from water under irradiation of visible light. (Coll. Life Sci., Ritsumeikan Univ.) ○KANEYAMA, Yuka; TANAKA, Atsuhiko; SANADA, Tomoe; KOJIMA, Kazuo

**3A2-36** Synthesis of WO<sub>3</sub> and photocatalytic degradation of acetic acid in water (Coll. Life Sci., Ritsumeikan Univ.) ○YAMAMOTO, Akifumi; TANAKA, Atsuhiko; SANADA, Tomoe; KOJIMA, Kazuo

**3A2-37\*\*** Ionic Liquid-Amine Solutions as Novel CO<sub>2</sub> Capture Absorbents (RITE) ○CHOWDHURY, Firoz; KATO, Tsuguhiro

Chair: FUNASAKA, Kunihiro (15 : 30~16 : 10)

\* 15:20-15:30: interval for laptop PC connection.(3A2-40, 3A2-41, 3A2-42, 3A2-43)

**3A2-40** Development of environmental-benign Ionic liquids with dissolution ability of cellulose (Kagawa Univ.) ○NISHIDA, Risa; TAKAGI, Yumiko

**3A2-41** Fabrication and Optimization of TiO<sub>2</sub>/SiO<sub>2</sub> Thin Films for Photocatalytic Application (Fac. Sci. Technol., Tokyo Univ. of Sci.)

○ADACHI, Takahiro; TERASHIMA, Chiaki; NAKATA, Kazuya; KATSUMATA, Kenichi; KONDO, Takeshi; YUASA, Makoto; FUJISHIMA, Akira

**3A2-42** Development of Diamond Photoelectrode for Carbon Dioxide Reduction (Fac. Sci. Technol., Tokyo Univ. of Sci.) ○HIRANO, Yui; KURIYAMA, Haruo; ROY, Nitish; TERASHIMA, Chiaki; NAKATA, Kazuya; KATSUMATA, Kenichi; KONDO, Takeshi; YUASA, Makoto; FUJISHIMA, Akira

**3A2-43<sup>#</sup>** Structural Analysis and Photocatalytic Characterization of TiO<sub>2</sub> Treated by Solution Plasma (Fac. Sci. Technol., Tokyo Univ. of Sci.) ○NAITO, Akane; TERASHIMA, Chiaki; NAKATA, Kazuya; KATSUMATA, Kenichi; KONDO, Takeshi; YUASA, Makoto; FUJISHIMA, Akira

## Room A3

### Chishinkan1 Building 103

### Energy and Related Chemistry, Geo and Space Chemistry

Thursday, March 24, PM

Chair: MASUO, Sadahiro (12 : 40~13 : 30)

\* 12:30-12:40: interval for laptop PC connection.(1A3-23, 1A3-25, 1A3-26, 1A3-27)

**1A3-23\*** Source and generation environment analysis of petroleum based on naphthalene composition (CRIS, Hokkaido Univ.) ○ASAHINA, Kenta; SUZUKI, Noriyuki

#### Geochemistry/Radiochemistry

**1A3-25** Observation for absorption reactions of radioactive aerosols on foliar surface (Sch. Sci., Osaka Univ.) ○ZHANG, Zijian; NINOMIYA, Kazuhiko; SHINOHARA, Atsushi

**1A3-26** Study on chemical environmental effect of muon capture process for gaseous molecules containing C and O atoms. (Grad. Sch. Sci., Osaka Univ.) ○YOSHIDA, Go; NINOMIYA, Kazuhiko; INAGAKI, Makoto; HIGEMOTO, Wataru; KAWAMURA, Naritoshi; SHIMOMURA, Koichiro; MIYAKE, Yasuhiro; MIURA, Taichi; KUBO, Kenya; SHINOHARA, Atsushi

**1A3-27** Muonic Atom Formation Process in Benzene and Cyclohexane Molecules (Grad. Sch. Sci., Osaka Univ.; KEK) ○INAGAKI, Makoto; NINOMIYA, Kazuhiko; FUJIHARA, Kazuya; YOSHIDA, Go; KASAMATSU, Yoshitaka; KUBO, Kenya; HIGEMOTO, Wataru; KAWAMURA, Naritoshi; NAGATOMO, Takashi; MIYAKE, Yasuhiro; MIURA, Taichi; SHINOHARA, Atsushi

#### Quantum dots solar cells

Chair: MAITANI, Masato (13 : 40~15 : 00)

\* 13:30-13:40: interval for laptop PC connection.(1A3-29, 1A3-31, 1A3-32, 1A3-33, 1A3-34, 1A3-35)

**1A3-29\*** Hydrogen Sorption and Desorption Behaviors of Metal-Carbon Composites Derived from Metal Containing PAN Fibers Prepared by Electrospinning Method (Grad. Sch. Sci. Tech., Nihon Univ.) ○KANEKO, Takehiro; WATANUKI, Yasuhiro; TOYAMA, Takeshi; KOJIMA, Yoshiyuki; NISHIMIYA, Nobuyuki

**1A3-31** Fabrication of PbS quantum dot solar cell - Correlation between surface ligand and device performance- (Sch. Sci. Tech., Kwasei Gakuin Univ.) ○TSUJII, Naoya; MASUO, Sadahiro

**1A3-32** Effect of capping layer in Perovskite solar cells (Grad. Sch. Life Sci. Sys. Eng., KIT) ○HIROTANI, Daisuke; FUJIKAWA, Naotaka; OGOMI, Yuhei; QING, Shen; TOYODA, Taro; HAYASE, Shuzi

**1A3-33** Enhanced Performance of Sensitized Solar Cells by Surface-Coating ZnSe-AgInSe<sub>2</sub> Solid Solution Quantum Dots (Sch. Eng., Nagoya Univ.) ○SHIBAKAWA, Hiroko; DOUKE, Yusuke; KAMEYAMA, Tatsuya; KAWARAYA, Masahide; SEGAWA, Hiroshi; KUWABATA, Susumu; TORIMOTO, Tsukasa

**1A3-34** Studies of Dye-sensitized Solar Cells Using Natural Anthocyanidin 3-O-glucosides (Grad. Sch. Info. Sci., Nagoya Univ.) ○KIMURA, Yuki; WAKAMIYA, Atsushi; YOSHIDA, Kumi

**1A3-35\*** Enhanced Carrier Transport Distance in PbS-Quantum-Dot Solar Cells using ZnO nanowires (RCAS, The Univ. of Tokyo) ○WANG, Haibin; NAKAZAKI, Jotaro; KUBO, Takaya; SEGAWA, Hiroshi

#### Plasmonic photochemistry

Chair: WAKAMIYA, Atsushi (15 : 10~16 : 20)

\* 15:00-15:10: interval for laptop PC connection.(1A3-38, 1A3-40, 1A3-42, 1A3-43, 1A3-44)

**1A3-38<sup>#</sup>** Photo-emission and photo-electric conversion of an interfacial Eu

complex on a mesoporous TiO<sub>2</sub> nano film (Coll. Sci. Eng., Aoyama Gakuin Univ.) ○ISHII, Ayumi; SAKAI, Tatsuro; OGATA, Shuhei; HASEGAWA, Miki

**1A3-40<sup>#</sup>** Plasmon-enhanced photocurrent generation with a controlled semiconductor thin film for perovskite solar cells (RIES, Hokkaido Univ.) ○SHALAN, Ahmed Esmail; SAWAYANAGI, Hiroki; NAKAMURA, Keisuke; OSHIKIRI, Tomoya; UENO, Kosei; WU, Hui-ping; DIAU, Eric W.; MISAWA, Hiroaki

**1A3-42** Plasmon-induced photoelectric conversion using gold nanoparticles loaded TiO<sub>2</sub> nanotube (RIES, Hokkaido Univ.) ○TAKAKURA, Ryohei; OSHIKIRI, Tomoya; UENO, Kosei; WU, Hui-ping; DIAU, Eric W.; KONDO, Toshiaki; MASUDA, Hideki; HISAWA, Hiroaki

**1A3-43** Electric properties evaluation of titanium dioxide for high-performance thin film plasmonic solar cells (RIES, Hokkaido Univ.) ○NAKAMURA, Keisuke; KATASE, Takayoshi; OSHIKIRI, Tomoya; UENO, Kosei; OHTA, Hiromichi; MISAWA, Hiroaki

**1A3-44** Plasmonic solar cells with controlled interface structure (RIES, Hokkaido Univ.) ○SAWAYANAGI, Hiroki; NAKAMURA, Keisuke; OSHIKIRI, Tomoya; UENO, Kosei; MISAWA, Hiroaki

Friday, March 25, AM

#### Fuel cells

Chair: SAKAI, Toshio (9 : 00 ~9 : 50)

\* 8:50-9:00: interval for laptop PC connection.(2A3-01, 2A3-02, 2A3-03, 2A3-04, 2A3-05)

**2A3-01** In situ study of oxidation states of platinum nanoparticles on PEFC electrode by near ambient pressure hard X-ray photoelectron spectroscopy (MMS, IMS) ○TAKAGI, Yasumasa; UEMURA, Yohei; NAKAMURA, Takahiro; YU, Liwei; SEKIZAWA, Ok; URUGA, Tomoya; TADA, Mizuki; IWASAWA, Yasuhiro; YOKOYAMA, Toshihiko

**2A3-02** CO/CO<sub>2</sub>/H<sub>2</sub> /H<sub>2</sub>O reaction mechanism on electrodes with oxide proton conductor in solid oxide fuel cells (Grad. Sch. Sci., Eng., Tokyo Tech) ○IZUMI, Takaaki; SHIMAMURA, Ryota; IHARA, Manabu

**2A3-03** Influence of surface modification of the fuel cell electrode catalyst on the cell characteristics (KRI,inc) ○ANDO, Taishi; ASAKURA, Noriaki; KAITO, Takahiro; JOZUKA, Tetsuya; MATSUDA, Toshihiko

**2A3-04** Synthesis of Hetero-atom-doped Carbon Materials and the Catalytic Activity for Oxygen Reduction Reaction (ISIR, Osaka Univ.; Daihachi Chem. Ind. Co.,Ltd.; Grad. Sch. Eng., Osaka Univ.; KFTRAL, KANEKA CORP.) ○INADA, Yuhi; DAIJO, Masato; AMAYA, Toru; TSUJI, Ryotaro; SUZUKI, Takeyuki; HIRAO, Toshiyazu

**2A3-05<sup>#</sup>** Photoelectrochemical Zero Bias Hydrogen Generation with a Novel Three Compartment Cell for Decreasing Theoretical and Total Water Electrolysis Voltage (12) (Fukushima Coll., Nat. Inst. of Tech.) ○SAKAMAKI, Kenji; KATO, Ryoko; ENDO, Haruka; SATO, Masataka; KAMO, Yoichi

#### Hydrogen generation

Chair: IMANISHI, Akihito (10 : 00~11 : 00)

\* 9:50-10:00: interval for laptop PC connection.(2A3-07, 2A3-09, 2A3-11, 2A3-12)

**2A3-07\*** Evaluation for Alkaline Water Electrolysis System Fabrication for using Renewable Energy and Behavior of Hydrogen Generation for Electric Power Fluctuation (FREA, AIST) ○KITAJIMA, Akiko; TSUJIMURA, Taku

**2A3-09\*** A study on the characteristics of the Ni-P alloy electrode for alkaline water electrolysis (Grad. Sch. Eng., Utsunomiya Univ.; Vantec Co.Ltd) ○YOSHIHARA, Sachio; ASANUMA, Kenta; SUZUKI, Daisuke; SUZUKI, Kazuyoshi

**2A3-11** Enhancement effect of manganese ion doping on two-step water splitting reaction with CeO<sub>2</sub> for solar hydrogen production (Fac. Eng., Univ. of Miyazaki) ○KANEKO, Hiroshi; MIZUSE, Atsushi; OSAMURA, Shota

**2A3-12** Visible-Light-Driven Water Oxidation with Organic Push-Pull Sensitizer (Grad. Sch. Eng., Kyoto Univ.; WPI-iCeMS, Kyoto Univ.) ○NISHIZAWA, Yusuke; YAMAMOTO, Masanori; IMAHORI, Hiroshi

Chair: AMAYA, Toru (11 : 10~12 : 10)

\* 11:00-11:10: interval for laptop PC connection.(2A3-14, 2A3-16, 2A3-18)

**2A3-14<sup>#</sup>** High-pressure hydrogen generation from formic acid in aqueous media under mild temperatures (AIST; CREST, JST) ○IGUCHI, Masayuki; HIMEDA, Yuichiro; MANAKA, Yuichi; KAWANAMI, Hajime

**2A3-16<sup>#</sup>** Theoretical Study of the Hydrogen Storage to a Novel Truncated Tetrahedron Hydrocarbon (Sch. Sci., Tokai Univ.) ○ISHIKAWA, Shigeru

**2A3-18\*** In-situ evaluation of photocatalytic carriers in TiO<sub>2</sub> film with transient grating method (Fac. Sci. Eng., Chuo Univ.) ○KUWAHARA, Shota; KATAYAMA, Kenji

Friday, March 25, PM

## Thermo storage

Chair: KUWAHARA, Shota (13 : 40~14 : 40)

- \* 13:30-13:40: interval for laptop PC connection.(2A3-29, 2A3-31, 2A3-32, 2A3-33)
- 2A3-29\*\*** Catalytic CO<sub>2</sub> to CO conversion by Fe porphyrin dimers. Mechanistic and Kinetic Studies (Inst. Sci. Tech. Res., Chubu Univ.) ○ZAHARAN Zaki N.; MOHAMED Eman; NARUTA, Yoshinori
- 2A3-31** Non-fluidized Organic Latent Heat Storage Material : Effect of Additive on Thermal Stability (Fac. Eng., Shinshu Univ.) ○SUZUKI, Kei; SAKAI, Toshio
- 2A3-32** Development of Heat Storage Materials for Precise Temperature Control (Fac. Eng., Shinshu Univ.) ○YUMOTO, Kenya; SAKAI, Toshio
- 2A3-33\*** Thermophysical property analysis and material design of sugar alcohol inerts as phase change material: a molecular simulation study (NRI, AIST) ○INAGAKI, Taichi; ISHIDA, Toyokazu

## Dye-sensitized solar cells and Organic photovoltaics

Chair: ITO, Seigo (16 : 50~18 : 10)

- \* 16:40-16:50: interval for laptop PC connection.(2A3-48, 2A3-49, 2A3-50, 2A3-51, 2A3-52, 2A3-54, 2A3-55)
- 2A3-48** Development of spectral splitting photovoltaics employing perovskite and wideband dye-sensitized solar cells (RCAST, The Univ. of Tokyo) ○KINOSHITA, Takumi; UCHIDA, Satoshi; SEGAWA, Hiroshi
- 2A3-49** Dye Sensitized Solar Cells Utilizing Phenothiazine-Acceptor Dyads Bundled by  $\pi$ -Conjugated System (Grad. Sch. Sci., Osaka City Univ.; Grad. Sch. Eng., Shizuoka Univ.) ○UEDA, Yuki; SUZUKI, Shuichi; KOZAKI, Masatoshi; ISO, Kazuki; KONNO, Akinori; OKADA, Keiji
- 2A3-50** Investigation on the career dynamics at the interface of hole transfer materials and electrodes in solid-state dye sensitized solar cells (Grad. Sch. Sci. Eng., Chuo Univ.) ○YAMAGUCHI, Miki; KUWAHARA, Shota; SHEN, Qing; TOYODA, Taro; KATAYAMA, Kenji
- 2A3-51** Observation of carrier dynamics in dye-sensitized solar cells in nitoroxyl radical redox electrolyte (Grad. Sch. Sci. Eng., Chuo Univ.) ○NISHIMURA, Taisei; KUWAHARA, Shota; SHEN, Qing; TOYODA, Taro; KATAYAMA, Kenji
- 2A3-52\*\*** Visible-Light-Driven Water Oxidation by Ruthenium-Based Molecular Catalyst—Porphyrin—Fullerene-Linked Pentad (Grad. Sch. Eng., Kyoto Univ.; WPI-iCeMS, Kyoto Univ.) ○YAMAMOTO, Masanori; IMAHORI, Hiroshi
- 2A3-54** Polymer Solar Cells Using Fullerene Derivatives with Solubilizing Substituents Removable through retro-Diels-Alder Reaction (Grad. Sch. Eng., Kyoto Univ.; WPI-iCeMS, Kyoto Univ.) ○SHIBATA, Sho; UMEYAMA, Tomokazu; IMAHORI, Hiroshi
- 2A3-55** Synthesis and Isolation of cis-2 Regiospecific Ethylene-Tethered Indene Dimer-Fullerene Adducts for Polymer Solar Cell Applications (Grad. Sch. Eng., Kyoto Univ.) ○UMEYAMA, Tomokazu; TAO, Ran; SHIBATA, Sho; HIGASHINO, Tomohiro; IMAHORI, Hiroshi

Saturday, March 26, AM

## Capacitor, secondary battery

Chair: FUJIGAYA, Tsuyohiko (9 : 00~10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(3A3-01, 3A3-02, 3A3-03, 3A3-05)
- 3A3-01** Fabrication of Multilayer Thin Films Composed of Ru Complexes Toward Energy Storage Devices in Water (Grad. Sch. Sci. Eng., Chuo Univ.) ○MOTOYAMA, Daisuke; YOSHIKAWA, Kai; OZAWA, Hiroaki; HAGA, Masa-aki
- 3A3-02** Improvement of chemical stability of electrolyte solution for vanadium redox flow battery using phosphoric acid additives and its charge-discharge characteristics (Grad. Sch. Eng., Doshisha Univ.) ○SATO, Masato; KUME, Yusuke; HASHINOKUCHI, Michihiro; DOI, Takayuki; INABA, Minoru
- 3A3-03\*\*** Effect of trace water on lithium deposition/dissolution in tetraglyme-based electrolytes (Grad. Sch. Eng., The Univ. of Tokyo) ○KOSHIKAWA, Hiroyuki; MATSUDA, Shoichi; KAMIYA, Kazuhide; KUBO, Yoshimi; UOSAKI, Kohei; NAKANISHI, Shuji; HASHIMOTO, Kazuhito
- 3A3-05\*** Transition metal complex with macrocyclic ligand based soluble catalysts that improve the charging performance of Li-O<sub>2</sub> batteries (ICYS, NIMS) ○MATSUDA, Shoichi; MORI, Shigeki; KUBO, Yoshimi; UOSAKI, Kohei; HASHIMOTO, Kazuhito; NAKANISHI, Shuji

## Secondary battery, solid electrolyte

Chair: MATSUMOTO, Kazuhiko (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(3A3-08, 3A3-09, 3A3-10, 3A3-11, 3A3-12, 3A3-13)
- 3A3-08** Polymer wrapped Carbon Nanotube for Lithium Air Battery (Grad. Sch. Eng., Kyushu Univ.; I<sub>2</sub>CNER, Kyushu Univ.; PRESTO, JST)

FUJIGAYA, Tsuyohiko; OKANAMORI, Ryota; IL, Chan Jang; ISHIHARA, Tatsumi; NAKASHIMA, Naotoshi

**3A3-09** Withdrawn**3A3-10** Decomposition mechanism of nonaqueous electrolyte on Li<sub>2</sub>CoO<sub>2</sub> ( $x < 0.5$ ) cathode of Lithium-ion batteries (Fac. Sci., Kyushu Univ.) ○FUJITOMO, Chisaki; MURAYAMA, Haruno; TOKUNAGA, Makoto**3A3-11** Hydrothermal synthesis of LiMnPO<sub>4</sub> active material fine particles for application to all-solid-state lithium batteries (Grad. Sch. Eng., Osaka Pref. Univ.) HAYASHI, Akitoshi; ○ASANO, Takamasa; NOI, Kousuke; TATSUMISAGO, Masahiro**3A3-12** Preparation conditions of Li<sub>3</sub>PS<sub>4</sub> solid electrolytes using ethyl propionate (Grad. Sch. Eng., Osaka Pref. Univ.) HAYASHI, Akitoshi; ○UEMATSU, Miwa; YUBUCHI, So; TATSUMISAGO, Masahiro**3A3-13** Preparation of Na<sup>+</sup> ion conductive Na<sub>3+x</sub>PS<sub>4</sub> glass-ceramics by a mechanical milling technique (Grad. Sch. Eng., Osaka Pref. Univ.; ESICB, Kyoto Univ.) HAYASHI, Akitoshi; ○TSUJII, Fumika; NAKAMURA, Yuta; TANIBATA, Naoto; TATSUMISAGO, Masahiro

Chair: KOMABA, Shinichi (11 : 20~12 : 30)

\* 11:10-11:20: interval for laptop PC connection.(3A3-15, 3A3-16, 3A3-17, 3A3-18, 3A3-19, 3A3-20)

**3A3-15** Li ion dynamics in solid electrolytes LAGP by NMR (Toray Research Center, Inc.) ○SAKIYAMA, Yoko; MIYOSHI, Riko; HASEGAWA, Yuichi; SAITO, Masahiro**3A3-16** Preparation of sulfur-rich FeS<sub>x</sub> composite positive electrodes by mechanical milling and their application to all-solid-state lithium batteries (Grad. Sch. Eng., Osaka Pref. Univ.) HAYASHI, Akitoshi; ○HAN, Mouin; HAKARI, Takashi; TATSUMISAGO, Masahiro**3A3-17** Preparation of sulfur-kejen black composite positive electrodes and their application to all-solid-state sodium secondary batteries (Grad. Sch. Eng., Osaka Pref. Univ.; ESICB, Kyoto Univ.) HAYASHI, Akitoshi; ○SATO, Yuta; MATSUYAMA, Takuya; TATSUMISAGO, Masahiro**3A3-18** All-solid-state sodium secondary batteries using Na<sub>2</sub>O-Al<sub>2</sub>O<sub>3</sub>-coated Na<sub>0.7</sub>Fe<sub>0.5</sub>Mn<sub>0.5</sub>O<sub>2</sub> positive electrode active material particles (Grad. Sch. Eng., Osaka Pref. Univ.; Panasonic Corp.) HAYASHI, Akitoshi; ○KONISHI, Masahisa; YUBUCHI, So; ITO, Yusuke; SASAKI, Izuru; IWAMOTO, Kazuya; TATSUMISAGO, Masahiro**3A3-19** Ionic conductivity of poly (ethylene carbonate) electrolytes with a magnesium salt (Grad. Sch. Eng., Osaka Pref. Univ.) HAYASHI, Akitoshi; ○FUJITA, Masaaki; KATO, Atsataka; TATSUMISAGO, Masahiro**3A3-20\*\*** Magnesium coordination environment in Mg[N(SO<sub>2</sub>CF<sub>3</sub>)<sub>2</sub>]<sub>2</sub>-based electrolytes (Grad. Sch. Energy Sci., Kyoto Univ.) ○VERYASOV, Gleb; MATSUMOTO, Kazuhiko; HAGIWARA, Rika

Saturday, March 26, PM

## Perovskite solar cells

Chair: WAKAMIYA, Atsushi (13 : 40~14 : 50)

- \* 13:30-13:40: interval for laptop PC connection.(3A3-29, 3A3-30, 3A3-31, 3A3-33, 3A3-35)
- 3A3-29** Crystalline facet effect of TiO<sub>2</sub> on characteristics of organic-inorganic hybrid perovskite solar cells (Grad. Sch. Sci., Eng., Tokyo Tech) ○TATEYAMA, Akito; MAITANI, Masato; OMURA, Aoi; TSUBAKI, Shuntaro; MULMUDI, Hemant Kumar; BOIX, Pablo P.; MATHEWS, Nripan; WADA, Yuji
- 3A3-30** Morphology Effects of Anisotropic Scaffold on Organic-Inorganic Hybrid Perovskite Solar Cells (Grad. Sch. Sci., Eng., Tokyo Tech; RCAST, The Univ. of Tokyo) OMURA, Aoi; TATEYAMA, Akito; TSUBAKI, Shuntaro; ○MAITANI, Masato; SEGAWA, Hiroshi; WADA, Yuji
- 3A3-31\*** Defect structure and electronic properties of the heterojunction thin films constituting organometal halide perovskite solar cells (Fac. Bio., Hosei Univ.) ○OGATA, Hironori; INAMI, Eiichi; MORIKAWA, Hirotoshi; FUJIBAYASHI, Maiho
- 3A3-33\*** Improvement of the photoelectric conversion characteristics of perovskite solar cells using a niobium pentoxide as scaffold layer (Micro-Nano Tech. Hosei Univ.) ○INAMI, Eiichi; MORIKAWA, Hirotoshi; FUJIBAYASHI, Maiho; ISHIGAKI, Takamasa; OGATA, Hironori
- 3A3-35** Perovskite/p-Type Crystal Silicon Tandem Solar Cells (Grad. Sch. Eng., Univ. of Hyogo) ○KANDA, Hiroyuki; UZUM, Abdullah; NISHINO, Hitoshi; ITO, Seigo

Chair: KINOSHITA, Takumi (15 : 00~16 : 10)

- \* 14:50-15:00: interval for laptop PC connection.(3A3-37, 3A3-38, 3A3-39, 3A3-40, 3A3-42)
- 3A3-37** Evaluation of Blocking NiO for CH<sub>3</sub>NH<sub>3</sub>PbI<sub>3</sub> Perovskite Solar Cell (Sch. Eng., Univ. of Hyogo) ○FUKUMOTO, Shota; KANAYA, Shusaku; MIZUTA, Gai; KANDA, Hiroyuki; ITO, Seigo
- 3A3-38** Perovskite solar cells using NiO Inorganic Hole-Conductor Material (Sch. Eng., Univ. of Hyogo) ○NISHINA, Tomoya; KANAYA, Syusaku; MIZUTA, Gai; KANDA, Hiroyuki; ITO, Seigo
- 3A3-39\*** Development of Polymers Using Partially Oxygen-bridged Triarylamine Skeleton for Hole-transporting Buffer Layer in Perovskite Solar Cells (ICR, Kyoto Univ.; Grad. Sch. Eng., Osaka Univ.; PRESTO, JST) ○GOPAL, Anesh; NISHIMURA, Hidetaka; MARUYAMA, Naoki; LEE,

Jaehyun; SHIMAZAKI, Ai; ISHIDA, Naoki; SAEKI, Akinori; WAKAMIYA, Atsushi; MURATA, Yasujiro

**3A3-40<sup>#</sup>** The Chemical Pathways Connecting Lead(II) Iodide and Perovskite via Polymeric Plumbate(II) Fibers (Fac. Sci., The Univ. of Tokyo) ○SHOYAMA, Kazutaka; GUO, Yunlong; SATO, Wataru; MATSUO, Yutaka; INOUE, Kento; HARANO, Koji; LIU, Chao; TANAKA, Hideyuki; NAKAMURA, Eiichi

**3A3-42<sup>#</sup>** Polymer-stabilization of lead perovskite active layer for solar cells and photodetector (Fac. Sci., The Univ. of Tokyo) ○GUO, Yunlong; SATO, Wataru; SHOYAMA, Kazutaka; INOUE, Kento; NAKAMURA, Eiichi

## Room A4

### Chishinkan1 Building 105

### Chemical Biology

Thursday, March 24, AM

Chair: TAMURA, Tomonori (10 : 10~11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(1A4-08, 1A4-09, 1A4-10, 1A4-11, 1A4-12, 1A4-13)

**1A4-08** Synthesis and Evaluation of <sup>13</sup>C/<sup>15</sup>N-labeled Phosphorylcholine Probe for Theranostics of Tumor Hypoxia (Grad. Sch. Eng., Kyoto Univ.) ○SUZUKI, Yuki; YAMADA, Hisatsugu; KIMURA, Yu; TANABE, Kazuhito; SON, Aoi; AOYAMA, Yasuhiro; KONDO, Teruyuki

**1A4-09** Chemiluminescent system using generation of singlet oxygen: Substituent effect on vinyl phenol derivative as emission unit (Grad. Sch. Eng., Kyoto Univ.) ○UMEHARA, Yui; TANABE, Kazuhito; SON, Aoi; KONDO, Teruyuki

**1A4-10** Synthesis and Functional Evaluation of anticancer reagent-conjugated gadolinium oxide nanoparticle for theranostics (Grad. Sch. Eng., Kyoto Univ.; C-Pier, Kyoto Univ.; Grad. Sch. Inform., Kyoto Univ.; ICR, Kyoto Univ.) ○IMAI, Yuta; KIMURA, Yu; IMAI, Hirohiko; MATSUDA, Tetsuya; TOSHIMITSU, Akio; KONDO, Teruyuki

**1A4-11** Quantitative changes of the clock genes induced by administration of an in vivo CO receptor (Grad. Sch. Eng., Doshisha Univ.) ○MINEGISHI, Saika; KITAGISHI, Hiroaki; NEGI, Shigeru; KANO, Koji

**1A4-12** Electrochemical detection of intracellular redox state in photosynthetic cyanobacterial cells (Sch. Eng. Sci., Osaka Univ.; Fac. Eng., The Univ. of Tokyo; RCSE, Osaka Univ.) ○TANAKA, Kenya; KIMURA, Kota; KANEKO, Masahiro; TUNANUNKUL, Pornpitra; ISHIKAWA, Masahito; HASHIMOTO, Kazuhito; NAKANISHI, Shuji

**1A4-13<sup>#</sup>** Microfluidic Device for Raman Imaging and Beating Motion Analysis Study of Single Cardiomyocytes (Grad. Sch. Eng., Osaka Univ.) ○ESPULGAR, Wilfred Villariza; SAITO, Masato; LEE, Jong-kook; TAMIYA, Eiichi

Chair: KIYONAKA, Shigeki (11 : 20~12 : 20)

\* 11:10-11:20: interval for laptop PC connection.(1A4-15, 1A4-17, 1A4-18, 1A4-19, 1A4-20)

**1A4-15\*** Chemical biology on phytotoxin coronatine (1) Structure-activity relationship study of coronatine as a multi-functional ligand (Grad. Sch. Sci., Tohoku Univ.) ○TAKAOKA, Yousuke; EGOSHI, Shusuke; HAYASHI, Kengo; IWASHITA, Toshiki; SUZUKI, Takeshi; ISHIMARU, Yasuhiro; UEDA, Minoru

**1A4-17** Chemical biology of phytotoxin coronatine (2) Detection of the target protein involved in stomatal reopening activity by coronatine-based molecular probe (Sch. Sci., Tohoku Univ.) ○HAYASHI, Kengo; IWASHITA, Toshiki; EGOSHI, Syusuke; ISHIMARU, Yasuhiro; TAKAOKA, Yousuke; UEDA, Minoru

**1A4-18** Cellular uptake of fluorescent DNA probe mediated by cell penetrating peptide (Fac. Eng., The Univ. of Tokyo) ○TAMAI, Makoto; HAYASHI, Gosuke; OKAMOTO, Akimitsu

**1A4-19** Photoactivatable probe for Surface-Enhanced Raman Scattering (Grad. Sch. Eng., The Univ. of Tokyo; RCAST, The Univ. of Tokyo) URANO, Wataru; ○KATADA, Sumika; YAMAGUCHI, Satoshi; OKAMOTO, Akimitsu

**1A4-20<sup>#</sup>** Exciton-Controlled Hybridization-Sensitive Fluorescent RNA Probes for the Application of Riboswitch Measurement (Grad. Sch. Eng., The Univ. of Tokyo) ○GUO, Lihao; AKIMITSU, Okamoto

Thursday, March 24, PM

Chair: TAKAOKA, Yousuke (13 : 30~14 : 30)

\* 13:20-13:30: interval for laptop PC connection.(1A4-28, 1A4-30, 1A4-32, 1A4-33)

**1A4-28\*** Synthesis and evaluation of new firefly luciferin analogues for luminescent materials (Grad. Sch. Sci. Tech., Keio Univ.) ○IOKA, Shuji; SAITOH, Tsuyoshi; IWANO, Satoshi; MAKI, Shojiro; SUZUKI, Koji; IMOTO, Masaya; NISHIYAMA, Shigeru

**1A4-30<sup>#</sup>** Protein labeling using ligand-directed chemistry (7): Live imaging of

$\mu$ -opioid receptor (Grad. Sch. Eng., Kyoto Univ.) ○KANOMATA, Kyohei; KIYONAKA, Shigeki; HAMACHI, Itaru

**1A4-32** Protein Labeling using Ligand-directed Chemistry (8) Visualization of metabotropic glutamate receptors keeping their functions (Grad. Sch. Eng., Kyoto Univ.) ○OKUNO, Kyouhei; WAKAYAMA, Sho; KIYONAKA, Shigeki; HAMACHI, Itaru

**1A4-33** One-step synthesis of COOH terminated hyper-branched polyglycerol on nanodiamond surface and its bio-application through biotin avidin interaction (Grad. Sch. Eng., Kyoto Univ.) ○TRADA, Daiki; SOTOMA, Shingo; SHIRAKAWA, Masahiro

Chair: HOSOYA, Takamitsu (14 : 40~15 : 40)

\* 14:30-14:40: interval for laptop PC connection.(1A4-35, 1A4-37, 1A4-38, 1A4-40)

**1A4-35\*** Chemistry of Irreversible Protein Inhibition (1) : Exploration of a new reactive group for development of irreversible inhibitors (Grad. Sch. Pharm., Kyushu Univ.) ○FUCHIDA, Hirokazu; SHINDO, Naoya; HATSUYAMA, Yuji; TABATA, Shigekazu; MIURA, Chizuru; OKAMOTO, Kei; WATARI, Kosuke; ONO, Mayumi; OJIDA, Akio

**1A4-37** Chemistry of Irreversible Protein Inhibition (2) : Construction of a reactive fragment compound library and its application to discovery of irreversible inhibitors. (Grad. Sch. Pharm., Kyushu Univ.) ○MIURA, Chizuru; OKAMOTO, Kei; OHSAWA, Tomoyo; SHINDO, Naoya; KUWATA, Keiko; OJIDA, Akio

**1A4-38<sup>#</sup>** Synthesis of modified peptides using mesyl group (Grad. Sch. Eng., The Univ. of Tokyo; RCAST, The Univ. of Tokyo) ○TAKENAKA, Mei; OKAMOTO, Akimitsu

**1A4-40** Selective enrichment strategies for posttranslational hydroxyllysine using periodate oxidation (Grad. Sch. Eng., The Univ. of Tokyo) ○ISHIBASHI, Maho; HAYASHI, Gosuke; OKAMOTO, Akimitsu

Chair: MIZUKAMI, Shin (15 : 50~16 : 50)

\* 15:40-15:50: interval for laptop PC connection.(1A4-42, 1A4-44, 1A4-45, 1A4-46, 1A4-47)

**1A4-42<sup>#</sup>** Membrane Receptor Engineering by On-Cell Coordination Chemistry (1): Mechanistic Study on Allosteric Activation of Ionotropic Glutamate Receptors (Grad. Sch. Eng., Kyoto Univ.) ○KUBOTA, Ryou; KIYONAKA, Shigeki; HAMACHI, Itaru

**1A4-44** Membrane Receptor Engineering by On-Cell Coordination Chemistry (2): Direct Activation of Metabotropic Glutamate Receptors by Pd Complex (Sch. Eng., Kyoto Univ.) ○OJIMA, Kento; KIYONAKA, Shigeki; HAMACHI, Itaru

**1A4-45** Membrane Receptor Engineering by On-Cell Coordination Chemistry (3): Regulation of the activity of adrenoceptor (Grad. Sch. Eng., Kyoto Univ.) ○NOMURA, Wataru; KUBOTA, Ryou; HAMACHI, Itaru

**1A4-46** Imaging analysis of floating cells using polymeric ultrathin film (Sch. Sci., Osaka Univ.) ○HATANNO, Kanae; KABAYAMA, Kazuya; OKAMURA, Yosuke; FUKASE, Koichi

**1A4-47** Development of phosphoprotein recognition molecule of toward the regulation of TGF- $\beta$  signaling pathway (Grad. Sch. Sci., Osaka Univ.) ○OKUMURA, Erika; MANABE, Yoshiyuki; FUKASE, Koichi

Chair: KABAYAMA, Kazuya (17 : 00~18 : 00)

\* 16:50-17:00: interval for laptop PC connection.(1A4-49, 1A4-50, 1A4-51, 1A4-52, 1A4-53, 1A4-54)

**1A4-49** Fluorescence sensing based on the transformation at 9 position of the xanthene dye(1): Ratio imaging of hydrogen peroxide in acidic autolysosome (Grad. Sch. Pharm., Kyushu Univ.) ○OZAWA, Yusuke; TAKASHIMA, Ippai; KAWAGOE, Ryosuke; UCHINOMIYA, Shohei; OJIDA, Akio

**1A4-50** Fluorescence sensing based on the transformation at 9 position of the xanthene dye(2): Ratio imaging of hydrogen polysulfides in living cell (Grad. Sch. Pharm., Kyushu Univ.) ○KAWAGOE, Ryosuke; UCHINOMIYA, Shohei; OJIDA, Akio

**1A4-51** Fluorescence sensing based on the transformation at 9 position of the xanthene dye(3): AM contact imaging of zinc ion on cell surface (Grad. Sch. Pharm., Kyushu Univ.) ○KANEGAE, Anna; TAKASHIMA, Ippai; KAWAGOE, Ryosuke; UCHINOMIYA, Shohei; SUGIMOTO, Manabu; IDEO, Toshihiro; OJIDA, Akio

**1A4-52** Construction of photo-induced CO releasing cell-puncturing protein needle for regulation of cellular functions (Tokyo Tech) ○TAKEYA, Sho; FUJITA, Kenta; UENO, Takafumi

**1A4-53** Photoregulation of artificial  $\beta$ -turn structure using photochromic molecule (Grad. Sch. Eng., Osaka Univ.) ○KASHIBE, Masayoshi; MIZUKAMI, Shin; KIKUCHI, Kazuya

**1A4-54** A study on the introduction of supramolecular CO receptor into the living cells (Grad. Sch. Eng., Doshisha Univ.) ○MIYOSHI, Hirotsuna; KITAGISHI, Hiroaki

Friday, March 25, AM

Chair: DOHNO, Chikara (9 : 00 ~ 10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(2A4-01, 2A4-02, 2A4-03, 2A4-05, 2A4-06)

**2A4-01** Synthesis and evaluation of fusicoccin derivatives modified at the 19-position to enhance the stabilization effect on protein-protein interaction

- (ISIR, Osaka Univ.) O HAN, Ling; YONEYAMA, Toru; ICHIHARA, Osamu; HIGUCHI, Yusuke; KATO, Nobuo
- 2A4-02** Development of the detection method for unsaturated aldehyde based on dimerization reaction of conjugated imine (Grad. Sch. Sci., Osaka Univ.) O TSUCHIDA, Hiroya; SHIMOYAMA, Atsushi; TANAKA, Katsunori; FUKASE, Koichi
- 2A4-03\*\*** Protein labeling using ligand-directed chemistry (1): Quantitative evaluation of the reactivity and protein labeling efficiency in LDSP chemistry (Grad. Sch. Eng., Kyoto Univ.; RIES, Hokkaido Univ.; CREST, JST) O MASUDA, Marie; NISHIKAWA, Yuki; KANOMATA, Kyohei; MATSUO, Kazuya; TAMURA, Tomonori; HAMACHI, Itaru
- 2A4-05** Protein labeling using ligand-directed chemistry (2): Construction of FRET-based biosensor under living cell conditions by LDSP chemistry (Grad. Sch. Eng., Kyoto Univ.; CREST, JST) O NISHIKAWA, Yuki; MASUDA, Marie; MATSUO, Kazuya; TAMURA, Tomonori; HAMACHI, Itaru
- 2A4-06** Protein Labeling using Ligand-directed Chemistry (3): Development of Supramolecular LDT Chemistry toward In Vivo Labeling (Grad. Sch. Eng., Kyoto Univ.; CREST, JST) O HAGI, Shinichiro; KUBOTA, Ryuu; HAMACHI, Itaru

Chair: KABAYAMA, Kazuya (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(2A4-08, 2A4-09, 2A4-10, 2A4-12, 2A4-13)
- 2A4-08** Redesign of PYP-tag labeling system for acceleration of labeling reactions (Graduate School of Engineering, Osaka University) O GAO, Jingchi; HORI, Yuichiro; KIKUCHI, Kazuya
- 2A4-09** Fluorescence imaging of DNA methylation using smallmolecule-protein hybrid probe (Grad. Sch. Eng., Osaka Univ.) O NISHIDA, Ayuko; HORI, Yuichiro; KIKUCHI, Kazuya
- 2A4-10\*** Fluorogenic PYP-tag probes for revealing function of GLUT4 N-glycan (Grad. Sch. Eng., Osaka Univ.) O HORI, Yuichiro; HIRAYAMA, Shinya; KIKUCHI, Kazuya
- 2A4-12** Theranostics labeling probe of biomolecules (Biofunctional synthetic chemistry laboratory, RIKEN) O FUJIKI, Katsumasa; TANAKA, Katsunori
- 2A4-13** In vivo kinetics and accumulation of Albumin-AGEs (Bio. Syn. Chem. Lab., RIKEN) O TSUTSUI, Ayumi; OGURA, Akihiro; TAHARA, Tsuyoshi; NOZAKI, Satoshi; URANO, Sayaka; WATANABE, Yasuyoshi; TANAKA, Katsunori

Chair: KITA, Masaki (11 : 20~12 : 20)

- \* 11:10-11:20: interval for laptop PC connection.(2A4-15, 2A4-17, 2A4-18, 2A4-19, 2A4-20)
- 2A4-15\*\*** Analysis of the function of artificial histone H2A based on protein chemical synthesis (Grad. Sch. Eng., The Univ. of Tokyo) O SUEOKA, Takuma; HAYASHI, Gosuke; OKAMOTO, Akimitsu
- 2A4-17** Synthesis and biological evaluation of fluorescent neopeltolide analogues (Grad. Sch. Life Sci., Tohoku Univ.) O YANAGI, Shota; NOGUCHI, Takuma; KAWAKAMI, Masato; SASAKI, Makoto; FUWA, Haruhiko; NIWA, Shinsuke; SUGIMOTO, Asako
- 2A4-18** Efficient synthesis of  $\alpha$ -Gal epitope and development of the novel tumor therapy utilizing synthetic  $\alpha$ -Gal (Grad. Sch. Sci., Osaka Univ.) O TOKUNAGA, Kento; MANABE, Yoshiyuki; KABAYAMA, Kazuya; FUKASE, Koichi
- 2A4-19** STD-NMR study of the interactions between vancomycin derivatives and Staphylococcus aureus penicillin-binding protein (Grad. Sch. Life Sci., Tohoku Univ.) O HATAKEYAMA, Arisa; ITO, Kaori; SAKAKURA, Masayoshi; TAKAHASHI, Hideo; INABA, Kenji; ARIMOTO, Hirokazu
- 2A4-20** Isolation and structure elucidation of a new bioactive compound from the Micronesian marine sponge. (Grad. Sch. Advanced Sci. Eng., Waseda Univ.) O ISHIBASHI, Nobuhiro; KIND K., Kanto; HAYASHI-TAKANAKA, Yoko; KIMURA, Hiroshi; NAKAO, Yoichi

## Friday, March 25, PM

Chair: HORI, Yuichiro (13 : 30~14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(2A4-28, 2A4-31, 2A4-33)
- 2A4-28#** Young Scholar Lectures of CSJ Neuro Chemical Biology: chemical approaches for visualization or activation of neurotransmitter receptors (Kyoto Univ.) O KIYONAKA, Shigeki
- 2A4-31\*\*** Development and biological application of fluorescent sensors for microenvironmental change (IBB, Tokyo Med. and Dental Univ.) O HIRANO, Tomoya; SHIRAIISHI, Takuya; NOJI, Yuuki; KATO, Daiki; KAGECHIKA, Hiroyuki
- 2A4-33** N-Acyl-N-alkyl-sulphonamide for Protein Labelling (Sch. Eng., Kyoto Univ.) O TSUKIDATE, Taku; TAMURA, Tomonori; HAMACHI, Itaru
- Chair: OJIDA, Akio (14 : 40~15 : 40)
- \* 14:30-14:40: interval for laptop PC connection.(2A4-35, 2A4-36, 2A4-38, 2A4-39, 2A4-40)
- 2A4-35** Protein labeling using ligand-directed chemistry(5):bifunctional catalyzed promaied acyl transfer reaction (Grad. Sch. Eng., Kyoto Univ.; CREST, JST) O RI, Shin; TAMURA, Tomonori; HAMACHI, Itaru
- 2A4-36\*** Protein Labelling Using Ligand-Directed Chemistry (6) Chemical

- labeling of GABAA receptors for a drug screening assay. (Grad. Sch. Eng., Kyoto Univ.) O YAMAURA, Kei; KIYONAKA, Shigeki; HAMACHI, Itaru
- 2A4-38** Synthesis and evaluation of the phosphorescent ruthenium complex for the real-time imaging of local oxygen concentration in living cell nucleus (Grad. Sch. Eng., Kyoto Univ.) O HARA, Daiki; TANABE, Kazuhito; SON, Aoi; KONDO, Teruyuki
- 2A4-39** Improvement in sensitivity of FISH method for single molecule detection of 5-methylcytosine (RCAST, The Univ. of Tokyo; Grad. Sch. Eng., The Univ. of Tokyo) O ICHIU, Anri; HAYASHI, Gosuke; OKAMOTO, Akimitsu
- 2A4-40** Rational design and synthesis of non-peptidic aggregation inhibitors based on primary structure of amyloid  $\beta$  (Grad. Sch. Pharm., The Univ. of Tokyo; JST-ERATO) O ARAYA, Takushi; KINO, Ryuto; SOHMA, Youhei; KANAI, Motomu

Chair: HIRANO, Tomoya (15 : 50~16 : 50)

- \* 15:40-15:50: interval for laptop PC connection.(2A4-42, 2A4-43, 2A4-44, 2A4-45, 2A4-46, 2A4-47)
- 2A4-42** Tracking of the PKC folding by fluorescence (IBB, Tokyo Med. and Dental Univ.) O HASHI, Nami; NOMURA, Wataru; TAMAMURA, Hirokazu
- 2A4-43** Development of bivalent ligands of protein kinase C based on cyclic diacylglycerol derivatives (IBB, Tokyo Med. and Dental Univ.) O TSUKINOKI, Toshihiko; KOBAYASHI, Ryosuke; OHASHI, Nami; NOMURA, Wataru; TAMAMURA, Hirokazu
- 2A4-44** T1 Relaxivity of Manganese Porphyrins Having Oligo(oxyethylene) Tails (Fac. Sci. Eng., Doshisha Univ.) O KOIKE, Takuma; MIYACHI, Ryosuke; KODERA, Masahito; HITOMI, Yutaka
- 2A4-45** Development of Novel Cationic Porphyrin with Cell Membrane Permeability (Fac. Sci. Eng., Doshisha Univ.) O SANNO, Ayana; OHASHI, Natsumi; KODERA, Masahito; HITOMI, Yutaka
- 2A4-46** Tumor cell-selective targeting by heterogeneous glycoclusters (Bio. Syn. Chem. Lab., RIKEN; RIKEN CLST) O OGURA, Akihiro; URANO, Sayaka; TAHARA, Tsuyoshi; NOZAKI, Satoshi; WATANABE, Yasuyoshi; TANAKA, Katsunori
- 2A4-47** Design of functional nanoparticle having the ability to trap glutathione (Coll. Sci. Eng., Aoyama Gakuin Univ.) O ITO, Midori; KURIHARA, Ryosuke; TANABE, Kazuhito

Chair: TSUKIJI, Shinya (17 : 00~17 : 50)

- \* 16:50-17:00: interval for laptop PC connection.(2A4-49, 2A4-51, 2A4-53)
- 2A4-49\*\*** Discovery of TET1-inhibitory macrocyclic peptides (Grad. Sch. Sci., The Univ. of Tokyo) O NISHIO, Kosuke; KATOH, Takayuki; SUGA, Hiroaki
- 2A4-51\*** Reactive Tag System (1): Selective Covalent Labeling Method for Proteins and its Application for Visualization of Proteins by Transmission Electron Microscopy (Grad. Sch. Pharm., Kyushu Univ.) O TABATA, Shigekazu; KIDO, Munetsugu; FUCHIDA, Hirokazu; SHIGEMOTO, Ryuichi; HAMACHI, Itaru; OJIDA, Akio
- 2A4-53** Reactive Tag System (2): Development of the Third Generation Peptide Tag/Zinc Complex Probe Pair based on Rational Design (Grad. Sch. Pharm., Kyushu Univ.) O KURASHIGE, Nobutaka; FUCHIDA, Hirokazu; TABATA, Shigekazu; HAMACHI, Itaru; OJIDA, Akio

## Saturday, March 26, AM

Chair: TAMURA, Tomonori (9 : 00~10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(3A4-01, 3A4-02, 3A4-03, 3A4-04, 3A4-05)
- 3A4-01** Imaging of Local  $Mg^{2+}$  Concentration in Cells Using Protein-Conjugated  $Mg^{2+}$  Probe (Grad. Sch. Eng., Osaka Univ.) O MATSUI, Yusuke; MIZUKAMI, Shin; FUNATO, Yosuke; MIKI, Hiroaki; KIKUCHI, Kazuya
- 3A4-02** Single-Molecule Analysis of Intracellular Proteins Labeled by Fluorescent Probes (Grad. Sch. Eng., Osaka Univ.) O SUZUKI, Shunsuke; SATO, Ryota; KOZUKA, Jun; KUMAGAI, Yutaro; MIZUKAMI, Shin; KIKUCHI, Kazuya
- 3A4-03** Synthesis and Properties of pH-Responsive Near-Infrared Cyanine Dyes (Grad. Sch. Eng., Kyoto Univ.; Grad. Sch. Med., Kyoto Univ.) O KOJIMA, Kentaro; MIKI, Koji; TAKAHASHI, Yuki; HARADA, Hiroshi; HIRAOKA, Masahiro; OHE, Kouichi
- 3A4-04** Stimuli-responsive Molecular Glues for Modulating Biomolecular Functions (1): Molecular Design Strategy (Grad. Sch. Eng., The Univ. of Tokyo) O MOGAKI, Rina; OKURO, Kou; AIDA, Takuzo
- 3A4-05\*** Stimuli-responsive Molecular Glues for Modulating Biomolecular Functions (2): Modulation of Protein Functions (Grad. Sch. Eng., The Univ. of Tokyo) MOGAKI, Rina; OKURO, Kou; AIDA, Takuzo

Chair: MIZUKAMI, Shin (10 : 10~11 : 00)

- \* 10:00-10:10: interval for laptop PC connection.(3A4-08, 3A4-09, 3A4-10, 3A4-12)
- 3A4-08** Efficient total synthesis of masu salmon's pheromone L-kynurenine and its analogs for their SAR study. (Fac. Textile Sci. Technol., Shinshu Univ.) O SASAZAWA, Kazuya; SAKUMA, Daichi; YAMBE, Hidenobu;

NISHII, Yoshinori

- 3A4-09** Development of novel fluorescence probes for glutathione S-transferase based on pterin derivatives (Nagahama Institute of Bio-Science and Technology) ○MATSUMOTO, Minako; KAWAI, Yasushi
- 3A4-10\*\*** Organelle-selective chemical proteomics (1): Mitochondrial proteome analysis with mitochondria-localizable reactive molecules. (Grad. Sch. Eng., Kyoto Univ.) ○TAMURA, Tomonori; YASUEDA, Yuki; KIYONAKA, Shigeki; HAMACHI, Itaru
- 3A4-12** Organelle-selective chemical proteomics (2) : nuclear protein profiling. (Grad. Sch. Eng., Kyoto Univ.) ○FUJISAWA, Alma; YASUEDA, Yuki; TAMURA, Tomonori; KIYONAKA, Shigeki; HAMACHI, Itaru

Chair: KIYONAKA, Shigeki (11 : 10~11 : 30)

\* 11:00-11:10: interval for laptop PC connection.(3A4-14, 3A4-15)

- 3A4-14** Fluorescent Probes for Intracellular Lipid Droplets Based on a Thiophene Dioxide Scaffold (Grad. Sch. Sci., Nagoya Univ.; WPI-ITbM, Nagoya Univ.) ○YAMAGUCHI, Eriko; WANG, Chenguang; ITO, Yusuke; SATO, Yoshikatsu; TAKI, Masayasu; HIGASHIYAMA, Tetsuya; YAMAGUCHI, Shigehiro
- 3A4-15** Synthesis and evaluation of three-substituted macrocyclic hexaaxazoles as G-quadruplex stabilizing ligands. (Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○SASAKI, Shogo; SAKUMA, Mai; MA, Yue; NAGASAWA, Kazuo

## Saturday, March 26, PM

Chair: TANAKA, Hiroshi (14 : 30~15 : 30)

\* 14:20-14:30: interval for laptop PC connection.(3A4-34, 3A4-36, 3A4-37, 3A4-39)

- 3A4-34\*** Importance of chirality and position of methyl group on serinol scaffold for design of acyclic artificial nucleic acid (Grad. Sch. Eng., Nagoya Univ.) ○MURAYAMA, Keiji; KASHIDA, Hiromu; ASANUMA, Hiroyuki
- 3A4-36** Development of signal amplification circuit composed of acyclic D-threosinol nucleic acid (D-aTNA) for detection of nucleic acids (Grad. Sch. Eng., Nagoya Univ.) ○NAGAO, Ryuya; MURAYAMA, Keiji; KASHIDA, Hiromu; ASANUMA, Hiroyuki
- 3A4-37\*\*** Design and Synthesis of  $\kappa$  Opioid Receptor Selective Ligand with a Propellane Skeleton (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) ○NAKAJIMA, Ryo; YAMAMOTO, Naoshi; HIRAYAMA, Shigetoshi; IWAI, Takashi; SAITOH, Akiyoshi; NAGUMO, Yasuyuki; FUJII, Hideaki; NAGASE, Hiroshi
- 3A4-39** Elucidation of the distance dependence of single electron transfer Tyr residue modification reaction (Chem. Res. Lab., Tokyo Tech) ○HATANO, Kensuke; SATO, Shinichi; NAKAMURA, Hiroyuki

Chair: TAKAOKA, Yousuke (15 : 40~16 : 40)

\* 15:30-15:40: interval for laptop PC connection.(3A4-41, 3A4-43, 3A4-44, 3A4-45, 3A4-46)

- 3A4-41\*\*** Acrolein detection by unrecognized reactivity of alkylazide (Bio. Syn. Chem. Lab., RIKEN; Nanoscience and Nanotechnology Research Center, Osaka Pref. Univ.; Kazan Univ.; PRESTO, JST) ○PRADIPTA, Ambara Rachmat; TAICHI, Misako; NAKASE, Ikuhiko; TANAKA, Katsunori
- 3A4-43** Modification of Epigallocatechin-3-O-gallate using 6-azide-6-deoxy-L-idose as a heterobifunctional spacer and Evaluation of a synthesized chemical probe (Grad. Sch. Sci., Eng., Tokyo Tech) ○HAMAGAMI, Hiroki; HATASU, Yukinori; YAMAGUCHI, Yoshiki; SHIBATA, Takahiro; TACHIBANA, Hirofumi; UCHIDA, Koji; TANAKA, Hiroshi
- 3A4-44** Synthesis of [18F]PET tracers Using a neopentyl-type linker (Tokyo Tech) ○INADA, Shinnosuke; SHIRAIISHI, Nana; KIRIU, Masato; DEGUCHI, Hikaru; KAWAUCHI, Susumu; TANAKA, Hiroshi
- 3A4-45** Anthraquinone-Enzyme-Peptide Hybrid as a Photo-Switchable Enzyme (Grad. Sch. Sci. Tech., Keio Univ.) ○SOTOKAWA, Shota; TAKAHASHI, Daisuke; TOSHIMA, Kazunobu
- 3A4-46** Study on the binding site of aplyronine A on target proteins using fluorescent probes (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba; PRESTO, JST) ○SEGUUCHI, Yu; YAMAGISHI, Kota; KITA, Masaki; KIGOSHI, Hideo

Chair: TAKAHASHI, Daisuke (16 : 50~17 : 40)

\* 16:40-16:50: interval for laptop PC connection.(3A4-48, 3A4-50, 3A4-52)

- 3A4-48\*\*** Development of Residue-Selective Bioconjugation Targeting Native Proteins Using Organoradicals (Grad. Sch. Pharm., The Univ. of Tokyo) ○SEKI, Yohei; ISHIYAMA, Takashi; SASAKI, Daisuke; ABE, Junpei; SOHMA, Youhei; OISAKI, Kounosuke; KANAI, Motomu
- 3A4-50\*** Tyrosine-Specific Chemical Modification using Luminol Derivatives (Chem. Res. Lab., Tokyo Tech) ○SATO, Shinichi; NAKAMURA, Kosuke; NAKAMURA, Hiroyuki
- 3A4-52** Ligand-tethered Calcium Green-1 for localization control and calcium imaging in plant cells (Sch. Sci., Tohoku Univ.) ○IMAI, Masaki; SHIGENAGA, Miyuki; NUKADZUKA, Yuuki; ISHIMARU, Yasuhiro; SAITO, Kei; YOKOYAMA, Ryusuke; NISHITANI, Kazuhiko; TAKAOKA, Yousuke; UEDA, Minoru

## Sunday, March 27, AM

Chair: SHIMOYAMA, Atsushi (9 : 00~10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(4A4-01, 4A4-02, 4A4-04)

- 4A4-01** Femto-second laser excitation two-photon fluorescence imaging by employing a pyrene derivative (Grad. Sch. Med., Yamaguchi Univ.) ○MORITOMO, Hiroki; SUZUKI, Yasutaka; NIKO, Yosuke; KONISHI, Gen-ichi; KAWAMATA, Jun
- 4A4-02\*\*** Signal-off electrochemiluminescence of enzyme modified magnetic nanoparticles in multi chamber electrode (Grad. Sch. Eng., Osaka Univ.) ○INOUE, Yuki; ARAKI, Akiko; ISMAIL, Nur Syakimah; YOSHIKAWA, Hiroyuki; SAITO, Masato; TAMIYA, Eiichi
- 4A4-04\*** CSJ Award for Outstanding Young Women Chemists  
Elucidation of Molecular Mechanism of Receptor Activation using Fluorine-containing Aromatic Ligands (Fac. Sci., Kyushu Univ.) ○MATSUSHIMA, Ayami

Chair: TSUKIJI, Shinya (10 : 10~11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(4A4-08, 4A4-10, 4A4-12, 4A4-13)

- 4A4-08\*\*** Development of non-peptidic orexin receptor agonists for controlling sleep/wake cycle (Univ. of Tsukuba, WPI-IIIS) ○SAITOH, Tsuyoshi; NAGAHARA, Takashi; KUTSUMURA, Noriki; IRUKAYAMA, Yoko; OGAWA, Yasuhiro; KURODA, Daisuke; GOUDA, Hiroaki; FUJII, Hideaki; YANAGISAWA, Masashi; NAGASE, Hiroshi
- 4A4-10\*\*** Design and synthesis of alpha-galactosyl ceramides as CD1d ligands for precise binding mode investigation (Grad. Sch. Sci., Osaka Univ.) ○HOSSAIN, Md. Imran; HANASHIMA, Shinya; TSUCHIKAWA, Hiroshi; LETHU, Sebastian; MURATA, Michio; KUSAKA, Hiroki; KITA, Shunsuke; MAENAKA, Katsumi
- 4A4-12\*** Development of rebody for clathrin coated pit (Grad. Sch. Sci., The Univ. of Tokyo) ○ETO, Kazuma; OZAWA, Takeaki; YOSHIMURA, Hideaki; FUKUDA, Kazuki
- 4A4-13** Development of subtype-selective PPI agonist based on phytohormone (Sch. Sci., Tohoku Univ.) ○IWAHASHI, Mana; EGOSHI, Shusuke; IWASHITA, Toshiki; ISHIMARU, Yasuhiro; SAITO, Hiroaki; TAKAOKA, Yousuke; UEDA, Minoru

Chair: TAKAOKA, Yousuke (11 : 20~12 : 20)

\* 11:10-11:20: interval for laptop PC connection.(4A4-15, 4A4-17, 4A4-19, 4A4-20)

- 4A4-15\*\*** Chemical biology of strigolactone receptor (Grad. Sch. Sci., Nagoya Univ.; WPI-ITbM, Nagoya Univ.; PRESTO, JST) ○YOSHIMURA, Masahiko; TSUCHIYA, Yuichiro; SATO, Yoshikatsu; SATO, Ayato; KUWATA, Keiko; KINOSHITA, Toshinori; ITAMI, Kenichiro; HAGIHARA, Shinya
- 4A4-17\*** ON-OFF control of intracellular Ras/Erk signaling by self-localizing-ligand-mediated protein translocation (Grad. Sch. Eng., Nagoya Inst. of Tech.; Grad. Sch. Eng., Nagaoka Univ. of Tech.; Grad. Sch. Med., Kyoto Univ.) ○NAKAMURA, Akinobu; ISHIDA, Manabu; OKI, Choji; MATSUDA, Michiyuki; TSUKIJI, Shinya
- 4A4-19** Development of plasma-membrane-selective inducible protein translocation system for SNAP-tag-fusion proteins (Grad. Sch. Eng., Nagaoka Univ. of Tech.; Grad. Sch. Eng., Nagoya Inst. of Tech.) ○FUJINUMA, Satoko; OKI, Choji; NAKAMURA, Akinobu; ISHIKAWA, Eisuke; ISHIDA, Manabu; TSUKIJI, Shinya
- 4A4-20** Development of synthetic ligands that induce protein translocation from cytosol to ER/Golgi membranes (Grad. Sch. Eng., Nagaoka Univ. of Tech.; Grad. Sch. Eng., Nagoya Inst. of Tech.) ○KATAHIRA, Rika; SHINODA, Eri; FUJINUMA, Satoko; ISHIDA, Manabu; TSUKIJI, Shinya

## Sunday, March 27, PM

Chair: HAGIHARA, Shinya (13 : 30~14 : 30)

\* 13:20-13:30: interval for laptop PC connection.(4A4-28, 4A4-29, 4A4-30, 4A4-31, 4A4-32, 4A4-33)

- 4A4-28** Studies on Transport of Oligonucleotide to Cell Nucleus (Grad. Sch. Eng., The Univ. of Tokyo; RCAST, The Univ. of Tokyo) ○KITAGAWA, Mai; OKAMOTO, Akimitsu
- 4A4-29** Chemical synthesis of poly(ADP-ribose) (Grad. Sch. Eng., The Univ. of Tokyo; RCAST, The Univ. of Tokyo) ○HAYASHI, Kyohei; OKAMOTO, Akimitsu
- 4A4-30** Construction of the glycan display system on living cell surface using the HaloTag technology and functional analysis of Gb3 (Sch. Sci., Osaka Univ.; NIID) ○MIYAKE, Shuto; KABAYAMA, Kazuya; MANABE, Yoshiyuki; CHEN, Siyu; YAMAJI, Toshiyuki; HANADA, Kentaro; FUKASE, Koichi
- 4A4-31** Multispectral imaging using highly sensitive <sup>19</sup>F MRI contrast agent (Grad. Sch. Eng., Osaka Univ.) ○ARIZONO, Satoshi; SUGIHARA, Fuminori; AKAZAWA, Kazuki; YOSHIOKA, Yoshichika; MUKAI, Hiroaki; MIZUKAMI, Shin; KIKUCHI, Kazuya
- 4A4-32** Development of <sup>19</sup>F MRI Contrast Agents for Monitoring in Vivo Caspase-1 Activity (Grad. Sch. Eng., Osaka Univ.) ○AKAZAWA, Kazuki; SUGIHARA, Fuminori; YOSHIOKA, Yoshichika; MIZUKAMI, Shin;

KIKUCHI, Kazuya

**4A4-33** Mesoporous silica nanoparticles for drug delivery and multimodal imaging (Grad. Sch. Eng., Osaka Univ.) ○ISHIDA, Kenichiro; SUGIHARA, Fuminori; MATSUSHITA, Hisashi; NAKAMURA, Tatsuya; YOSHIOKA, Yoshichika; MIZUKAMI, Shin; KIKUCHI, Kazuya

Chair: SAITOH, Tsuyoshi (14 : 40~15 : 40)

\* 14:30-14:40: interval for laptop PC connection.(4A4-35, 4A4-36, 4A4-37, 4A4-39)

**4A4-35** Development of the Novel Chemical Probes to Analyze Protein-ligand Interactions (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba; PRESTO, JST) ○YONEDA, Kozo; HU, Yaping; WATANABE, Rei; KITA, Masaki; KIGOSHI, Hideo

**4A4-36** Development of the ligand-dissociated-type amidopyrene probes to analyze protein-ligand interactions (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba; PRESTO, JST) ○HU, Yaping; YONEDA, Kozo; WATANABE, Rei; KITA, Masaki; KIGOSHI, Hideo

**4A4-37**<sup>#</sup> Anti-Amyloid Activity of Peptide Metal Complex Arrays (MANA, NIMS) SUKUL, Pradip; ○TASHIRO, Kentaro

**4A4-39**<sup>#</sup> Synthesis of photocaged arginine for epigenetic control (Grad. Sch. Eng., The Univ. of Tokyo) ○SAKAMOTO, Ryosuke; HAYASHI, Gosuke; OKAMOTO, Akimitsu

Chair: KABAYAMA, Kazuya (15 : 50~16 : 50)

\* 15:40-15:50: interval for laptop PC connection.(4A4-42, 4A4-43, 4A4-44, 4A4-45, 4A4-46, 4A4-47)

**4A4-42** Development and application of photocleavable DNA-peptide conjugate (Grad. Sch. Eng., The Univ. of Tokyo) ○YANASE, Masafumi; HAYASHI, Gosuke; OKAMOTO, Akimitsu

**4A4-43** Chemical synthesis of histone H2B for nucleosome stability assay (Grad. Sch. Eng., The Univ. of Tokyo) ○SAKAKIBARA, Daisuke; HAYASHI, Gosuke; OKAMOTO, Akimitsu

**4A4-44** Tailored Iron Oxide Nanoparticles for High-Performance MRI Contrast Agent (Fac. Eng., The Univ. of Tokyo; RIKEN CEMS) ○TAKEUCHI, Toshiaki; SIM, Seunghyun; MIYAJIMA, Daigo; AIDA, Takuzo

**4A4-45** Design, Synthesis, and Reaction of New Caged Compounds with Two Photon Absorption Character (Fac. Sci., Hiroshima Univ.) ○CHITOSE, Youhei; ABE, Manabu

**4A4-46** Development of HDAC detection method using fluorescent probe and DNA (Grad. Sch. Eng., Osaka Univ.) ○TATEMATSU, Yuka; MINOSHIMA, Masafumi; KIKUCHI, Kazuya

**4A4-47** Real-Time Intravital Imaging of Osteoclasts Dynamics Using pH-Activatable Fluorescence Probe (Grad. Sch. Eng., Osaka Univ.) ○OMORI, Yuta; MAEDA, Hiroki; KOWADA, Toshiyuki; KIKUCHI, Kazuya

## Room B1

Chishinkan1 Building 110

### Catalysts and Catalysis

Thursday, March 24, AM

Chair: HIGASHI, Masanobu (10 : 00~11 : 00)

\* 9:50-10:00: interval for laptop PC connection.(1B1-07, 1B1-08, 1B1-09, 1B1-10, 1B1-11, 1B1-12)

**1B1-07** Enhanced photocatalytic performances of visible-light-responsive  $Al_{1/3}Ti_{2/3}O_2$  (A = Ag, Cu) by doping with metal cations with various valencies (Fac. Sci., Tokyo Univ. of Sci.) ○WATANABE, Kenta; ASAKO, Norihiro; IWASE, Akihide; KUDO, Akihiko

**1B1-08** Z-schematic water splitting under visible light irradiation using metal sulfides as a  $H_2$ -evolving photocatalyst and a reduced graphene oxide/BiVO<sub>4</sub> composite (Fac. Sci., Tokyo Univ. of Sci.) ○YOSHINO, Shunya; IWASE, Akihide; KUDO, Akihiko

**1B1-09** Photocatalytic and photoelectrochemical properties of metal ion-doped BiVO<sub>4</sub> fine particles prepared by an aqueous acetic acid solution (Fac. Sci., Tokyo Univ. of Sci.; Res. Inst. Sci. Technol., Tokyo Univ. of Sci.) ○IWASE, Akihide; YOSHINO, Shunya; KUDO, Akihiko

**1B1-10** Photocatalytic activities of  $Cu_{3x}Y_{1-x}Ta_7O_{19}$  solid solutions under visible light irradiation. (IMRAM, Tohoku Univ.) ○KAMEMURA, Naohiro; KATO, Hideki; KOBAYASHI, Makoto; KAKIHANA, Masato

**1B1-11**<sup>#</sup> Contact layer modifications of Ta<sub>3</sub>N<sub>5</sub> thin films for photoelectrochemical water splitting (Grad. Sch. Eng., The Univ. of Tokyo) ○WANG, Chizhong; HISATOMI, Takashi; MINEGISHI, Tsutomu; KATAYAMA, Masao; DOMEN, Kazunari

**1B1-12**<sup>#</sup> A photocatalyst sheet consisting of LaMg<sub>1/3</sub>Ta<sub>2/3</sub>O<sub>2</sub>N and BiVO<sub>4</sub> for Z-scheme water splitting (Grad. Sch. Eng., The Univ. of Tokyo) ○PAN, Zhenhua; HISATOMI, Takashi; WANG, Qian; TAKATA, Tsuyoshi; KUDO, Akihiko; DOMEN, Kazunari

Chair: KATO, Hideki (11 : 10~12 : 10)

\* 11:00-11:10: interval for laptop PC connection.(1B1-14, 1B1-16, 1B1-17, 1B1-18, 1B1-19)

**1B1-14**<sup>\*</sup> Interplay between valence band position and O/N anion order in perovskite oxynitrides (Grad. Sch. Eng., The Univ. of Tokyo) ○KUBO, Ayako; GIORGI, Giacomo; YAMASHITA, Koichi

**1B1-16** Development of novel oxysulfides  $La_2M^{5+}_2M^{4+}_2S_2O_2$  ( $M^{5+}$  = Ta, Nb;  $M^{4+}$  = Zr, Ti) as visible-light driven photocatalysts for water splitting (Grad. Sch. Eng., The Univ. of Tokyo) ○GOTO, Yosuke; HISATOMI, Takashi; MIZUGUCHI, Yoshikazu; KAMIHARA, Yoichi; KATAYAMA, Masao; MINEGISHI, Tsutomu; DOMEN, Kazunari

**1B1-17** Visible-light-response and photocatalytic activity of layered KTiNbO<sub>5</sub> doped with nitrogen (Sch. Sci., Tokyo Tech) ○TOKUNAGA, Yuki; OSHIMA, Takayoshi; MAEDA, Kazuhiko

**1B1-18** Development of water oxidation cocatalysts based on a simultaneous photodeposition method (Grad. Sch. Sci., Eng., Tokyo Tech) ○KANAZAWA, Tomoki; ISHITANI, Osamu; MAEDA, Kazuhiko

**1B1-19** The effects of OH groups in sacrificial reagent on photocatalytic hydrogen evolution from aqueous solution (Grad. Sch. Eng., Osaka Pref. Univ.) ○NAKANISHI, Hodaka; MIZUKOSHI, Yoshiteru; OKITU, Kenji; HORI, Fuminobu; IWASE, Akihiro; MASAHASHI, Naoya

Thursday, March 24, PM

Chair: IWASE, Akihide (13 : 20~14 : 20)

\* 13:10-13:20: interval for laptop PC connection.(1B1-27, 1B1-28, 1B1-29, 1B1-31, 1B1-32)

**1B1-27** Effects of preparation conditions of ZnSe-CIGS thin film photocathodes on its photoelectrochemical properties (Grad. Sch. Eng., The Univ. of Tokyo; PRESTO, JST) ○KANEKO, Hiroyuki; MINEGISHI, Tsutomu; DOMEN, Kazunari

**1B1-28**<sup>#</sup> Effect of surface modifications on photoelectrochemical hydrogen evolution on La<sub>5</sub>Ti<sub>2</sub>Cu<sub>1-x</sub>Ag<sub>x</sub>S<sub>5</sub>O<sub>7</sub> photoelectrodes (Grad. Sch. Eng., The Univ. of Tokyo) ○LIU, Jingyuan; HISATOMI, Takashi; SHINOHARA, Yuki; HIGASHI, Tomohiro; KATAYAMA, Masao; MINEGISHI, Tsutomu; DOMEN, Kazunari

**1B1-29**<sup>\*</sup> Light-induced hydrogen production systems constructed in nanoporous environments that work under aerobic conditions (OCARINA) ○NOJI, Tomoyasu; SUZUKI, Takanao; KONDO, Masaharu; JIN, Tetsuro; KAMIYA, Nobuo; DEWA, Takehisa

**1B1-31** Preparation of strontium titanate photocatalysts by flux method and its photocatalytic activity for hydrogen production (Grad. Sch. Human and Environ. Stud., Kyoto Univ.) ○FUKUMOTO, Kaori; YAMAMOTO, Akira; YOSHIDA, Hisao

**1B1-32**<sup>#</sup> Enhancement of hydrogen evolution from ammonia borane over Pd imbedded Ce doped Metal-organic frameworks (Grad. Sch. Eng., Osaka Univ.; ESICB Kyoto Univ.) ○WEN, Meicheng; KUWAHARA, Yasutaka; MORI, Kohsuke; YAMASHITA, Hiromi

Chair: YOSHIDA, Hisao (14 : 30~15 : 30)

\* 14:20-14:30: interval for laptop PC connection.(1B1-34, 1B1-35, 1B1-36, 1B1-37, 1B1-39)

**1B1-34**<sup>#</sup> Design of supported Pd/Ag bimetallic nanoparticles as an efficient plasmonic catalyst under visible light irradiation (Grad. Sch. Eng., Osaka Univ.; ESICB, Kyoto Univ.) ○VERMA, Priyanka; KUWAHARA, Yasutaka; MORI, Kohsuke; YAMASHITA, Hiromi

**1B1-35**<sup>#</sup> La<sub>5</sub>Ti<sub>2</sub>Cu(S<sub>1-x</sub>Se<sub>x</sub>)<sub>5</sub>O<sub>7</sub> solid solutions for photocatalytic H<sub>2</sub> production under visible light irradiation longer than 660 nm (Grad. Sch. Eng., The Univ. of Tokyo) ○NANDY, Swarnava; GOTO, Yosuke; MORIYA, Yosuke; LIU, Jingyuan; HISATOMI, Takashi; KATAYAMA, Masao; MINEGISHI, Tsutomu; DOMEN, Kazunari

**1B1-36**<sup>#</sup> Dye-sensitized photo-electrochemical cells for hydrogen production from water (Grad. Sch. Urban Environmental Sci., TMU) ○SURYANI, Okta; MULYANA, Yan; KUBO, Yuji; KANEKO, Masayoshi; HOSHI, Takayuki; SHIGAKI, Koichiro

**1B1-37**<sup>#</sup> Dye/catalyst hybrids for light-powered hydrogen production from water (Grad. Sch. Urban Environmental Sci., TMU) ○PURNAMA, Indra; MULYANA, Yan; KUBO, Yuji

**1B1-39** Study on improvement of La<sub>0.5</sub>Sr<sub>0.5</sub>Ta<sub>0.5</sub>Ti<sub>0.5</sub>O<sub>2</sub>N photocatalyst (IMRAM, Tohoku Univ.) ○YAMADA, Shuhei; KATO, Hideki; KOBAYASHI, Makoto; KAKIHANA, Masato

Chair: MINEGISHI, Tsutomu (15 : 40~16 : 40)

\* 15:30-15:40: interval for laptop PC connection.(1B1-41, 1B1-42, 1B1-43, 1B1-44, 1B1-45)

**1B1-41**<sup>#</sup> Hematite Homojunctions without Foreign Element Doping for Efficient and Stable Overall Water Splitting (Grad. Sch. Sci., Hokkaido Univ.) ○YU, Qing; YE, Jinhua

**1B1-42**<sup>#</sup> Nature-Inspired Environmental "Phosphorylation" for Efficient Photocatalytic H<sub>2</sub> Production over Carbon Nitride Nanosheets (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.; MANA, NIMS) ○LIU, Guigao; WANG, Tao; ZHANG, Huabin; MENG, Xianguang; HAO, Dong; CHANG, Kun; LI, Peng; KAKO, Tetsuya; YE, Jinhua

**1B1-43** Solar Hydrogen Production using Photoelectrochemically Reduced Graphene Oxide-incorporated Metal Sulfide Photoelectrodes (Fac. Sci.,

Tokyo Univ. of Sci.) ○HONMA, Ikko; IWASE, Akihiko; IKEDA, Satoru; TAKAYAMA, Tomoaki; KUDO, Akihiko

**1B1-44** Effect of Modification of Polypyrrole on Active Metal Sulfide Photoelectrodes for CO<sub>2</sub> Reduction under Visible Light Irradiation (Fac. Sci., Tokyo Univ. of Sci.) ○TAKAYAMA, Tomoaki; IWASE, Akihiko; KUDO, Akihiko

**1B1-45\*** Photoelectrochemical Water Splitting and CO<sub>2</sub> Reduction using p-type Fe<sub>2</sub>O<sub>3</sub> based Photocathode with Multi-heterojunction (Toyota Central R&D Labs., Inc.) ○SEKIZAWA, Keita; SATO, Shunsuke; ARAI, Takeo; MORIKAWA, Takeshi

Chair: YOSHIDA, Hisao (16 : 50~17 : 40)

\* 16:40-16:50: interval for laptop PC connection.(1B1-48, 1B1-49, 1B1-50, 1B1-51, 1B1-52)

**1B1-48** Hybrid system of Rhenium complex/ zinc porphyrin on p-type semiconductor for CO<sub>2</sub> reduction by visible light (Grad. Sch. Urban Environmental Sci., TMU) ○YAMAMOTO, Daisuke; KOU, Youki; NAIR, V. Pratheesh; NABETANI, Yu; TACHIBANA, Hiroshi; INOUE, Haruo

**1B1-49** Photochemical CO<sub>2</sub> Reduction using various semiconductor-Binuclear Ru(II) Complex Hybrids as Z-Scheme Photocatalysts (Grad. Sch. Sci., Eng., Tokyo Tech) ○NAKASHIMA, Takuya; IWASHINA, Katsuya; KATO, Hideki; KUDO, Akihiko; MAEDA, Kazuhiko; ISHITANI, Osamu

**1B1-50<sup>#</sup>** Electrostatic Self-assembly of Nano-sized Carbon Nitride Nanosheet onto a Zirconium Metal-organic Framework for Enhanced Photocatalytic CO<sub>2</sub> Reduction (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) ○SHI, Li; YE, Jinhua

**1B1-51** Screening of photocatalysts for CO<sub>2</sub> photoreduction using H<sub>2</sub> as a reductant and the dependence on reactant pressure and thickness of photocatalyst film (Grad. Sch. Sci., Chiba Univ.) ○KAWAMURA, Shogo; ZHANG, Hongwei; IZUMI, Yasuo

**1B1-52** Screening of Photocatalysts for CO<sub>2</sub> using water as a reductant and the dependence on reactant pressure (Grad. Sch. Sci., Chiba Univ.) ○ZHANG, Hongwei; KAWAMURA, Shogo; IZUMI, Yasuo

### Friday, March 25, AM

Chair: SHIRAIISHI, Yasuhiro (9 : 00 ~ 9 : 50)

\* 8:50-9:00: interval for laptop PC connection.(2B1-01, 2B1-02, 2B1-03, 2B1-04, 2B1-05)

**2B1-01** Visible light induced water splitting based on two-step photoexcitation using carbazole type dye sensitized layered niobate for hydrogen evolution (Grad. Sch. Eng., Kyoto Univ.) ○YOKOTA, Takayuki; HIGASHI, Masanobu; OTSUBO, Takahide; TOMITA, Osamu; OGASAWARA, Masamichi; ABE, Ryu

**2B1-02** Z-scheme Water Splitting under visible light over Photocatalyst Panels consisting of Rh-doped SrTiO<sub>3</sub> and BiVO<sub>4</sub> Fine Particles (Res. Inst., TOTO Ltd.; Grad. Sch. Eng., Kyoto Univ.) ○OKUNAKA, Sayuri; TOKUDOME, Hiromas; ABE, Ryu

**2B1-03** Preparation of Fe-based metal-organic framework photocatalysts for water oxidation and their photoelectrochemical properties. (Sch. Eng., Osaka Pref. Univ.) ○KAMATA, Yusuke; MIYAHARA, Kenta; TOYAO, Takashi; HORIUCHI, Yu; MATSUOKA, Masaya

**2B1-04** Visible-light-induced water oxidation on tungsten acid photocatalysts loaded with Ru species in the presence of iodate electron acceptor (Grad. Sch. Eng., Kyoto Univ.) ○SUZUKI, Hajime; HIGASHI, Masanobu; ABE, Ryu

**2B1-05** Highly Efficient Decomposition of Organic Compounds on Titanium Oxide-Tungsten Oxide Hybrid Photocatalysts under Visible Light Irradiation (Sch. Eng., Kyoto Univ.) ○SHIGEMITSU, Masaya; TOMITA, Osamu; HIGASHI, Masanobu; ABE, Ryu

Chair: HORIUCHI, Yuu (10 : 00~11 : 00)

\* 9:50-10:00: interval for laptop PC connection.(2B1-07, 2B1-08, 2B1-09, 2B1-11, 2B1-12)

**2B1-07** XFEL-based pump-probe XAFS Studies on the excited states of the WO<sub>3</sub> photocatalyst (Grad. Sch. Eng., Hokkaido Univ.) ○KIDO, Daiki; UEMURA, Yohei; WAKISAKA, Yuki; NIWA, Yasuhiro; NOZAWA, Shunsuke; ADACHI, Shin-ichi; KATAYAMA, Tetsuo; YABASHI, Makina; ARIGA, Hiroko; TKAKUSAGI, Satoru; YOKOYAMA, Toshihiko; OHTANI, Bunsho; ASAKURA, Kiyotaka

**2B1-08** Synthesis of gold nanorods-TiO<sub>2</sub> photocatalyst (Fac. Sci. Eng., Kinki Univ.) ○YAGI, Ryosuke; HASHIMOTO, Keiji; KOMINAMI, Hiroshi

**2B1-09<sup>#</sup>** Ultraviolet to Near-Infrared Light-Driven Photocatalysis using Au Nanorod-Doped Mesoporous Oxide (Toyohashi Univ. of Tech.) ○OKUNO, Teruhisa; KAWAMURA, Go; MUTO, Hiroyuki; MATSUDA, Atsunori

**2B1-11** Mechanism for Hot Electron Injection in the Plasmonic Photocatalysis on Gold Nanoparticles/Titanium Dioxide System (RCSE, Osaka Univ.; Grad. Sch. Eng. Sci., Osaka Univ.) ○YASUMOTO, Naoki; SAKAMOTO, Hirokatsu; SHIRAIISHI, Yasuhiro; OHTANI, Bunsho; HIRAI, Takayuki

**2B1-12** Enhanced photocatalytic activity of ZnSe-AgInS<sub>2</sub> heterojunction quantum dots (Grad. Sch. Eng., Nagoya Univ.) ○KISHI, Marino; KAMEYAMA, Tatsuya; KUWABATA, Susumu; TORIMOTO, Tsukasa

Chair: AMANO, Fumiaki (11 : 10~12 : 10)

\* 11:00-11:10: interval for laptop PC connection.(2B1-14, 2B1-15, 2B1-17, 2B1-18, 2B1-19)

**2B1-14** Highly efficient hydrogen peroxide production by carbon nitride/mellitic triimide composite photocatalyst (RCSE, Osaka Univ.) ○OHKITA, Satoshi; KOFUJI, Yusuke; SHIRAIISHI, Yasuhiro; HIRAI, Takayuki

**2B1-15\*** Sporadic activity induced by photocatalytic production of peroxide over visible-light-driven photocatalyst (Fac. Sci. Technol., Tokyo Univ. of Sci.; Res. Inst. Sci. Technol., Tokyo Univ. of Sci.) ○YAMAGUCHI, Yuichi; SHIMODO, Takahito; CHIKAMORI, Noriyasu; USUKI, Sho; KANAI, Yoshihiro; TERASHIMA, Chiaki; KATSUMATA, Kenichi; TORIGOE, Kanjiro; SAKAI, Kenichi; SAKAI, Hideki; SUZUKI, Tomonori; FUJISHIMA, Akira; NAKATA, Kazuya

**2B1-17** Preferential oxidation of CO in H<sub>2</sub> rich atmosphere over Ti-based metal-organic framework photocatalysts under UV light irradiation (Sch. Eng., Osaka Pref. Univ.) ○OTA, Tomohiro; HORIUCHI, Yu; MATSUOKA, Masaya

**2B1-18** Photocatalytic Oxidative Decomposition of Dimethylsulfoxide (DMSO) over WO<sub>3</sub> Mixed with Plant Ashes (Grad. Sch. Fac. Sci. Technol., Tokyo Univ. of Sci.; Res. Inst. Sci. Technol., Tokyo Univ. of Sci.) ○MOTEGI, Maki; YAMAGUCHI, Yuichi; TERASHIMA, Chiaki; KATSUMATA, Kenichi; IKEKITA, Masahiko; FUJISHIMA, Akira; NAKATA, Kazuya

**2B1-19** Complete hydrogen release from ammonia-borane in water on Pt/TiO<sub>2</sub> photocatalyst (Nanoscience and Nanotechnology Research Center, Osaka Pref. Univ.) ○NAKAUE, Takayuki; KAMEGAWA, Takashi

### Friday, March 25, PM

Chair: KOMINAMI, Hiroshi (14 : 30~15 : 30)

\* 14:20-14:30: interval for laptop PC connection.(2B1-34, 2B1-37, 2B1-38, 2B1-39)

**2B1-34\*** Young Scholar Lectures of CSJ Enhancement of photocatalytic activity of rutile titanium dioxide by incorporation of crystalline defects (Fac. Env. Eng., The Univ. of Kitakyushu) ○AMANO, Fumiaki

**2B1-37** Development of Tantalum Oxynitride Photoanode modified with Polyoxometalate as Water Oxidation Cocatalyst (Grad. Sch. Eng., Kyoto Univ.) ○IWASE, Yukari; TOMITA, Osamu; HIGASHI, Masanobu; ABE, Ryu

**2B1-38** Synthesis and photoelectrochemical properties of tin-based mixed anion semiconductors (Sch. Eng., Kyoto Univ.) ○MITANI, Kenta; HIGASHI, Masanobu; ABE, Ryu

**2B1-39** In-situ FT-IR investigation on the CO<sub>2</sub> adsorbed species on the surface of Ag-loaded Zn-modified Ga<sub>2</sub>O<sub>3</sub> (Grad. Sch. Eng., Kyoto Univ.; ESICB, Kyoto Univ.) ○TERAO, Yousuke; IGUCHI, Shoji; TERAMURA, Kentaro; HOSOKAWA, Saburo; TANAKA, Tsunehiro

Chair: KAMEGAWA, Takashi (15 : 40~16 : 40)

\* 15:30-15:40: interval for laptop PC connection.(2B1-41, 2B1-42, 2B1-43, 2B1-44, 2B1-45, 2B1-46)

**2B1-41<sup>#</sup>** Flux method fabrication of KA<sub>2</sub>Ta<sub>5</sub>O<sub>15</sub> (A = Ca, Sr, Ba) for photocatalytic conversion of CO<sub>2</sub> by using H<sub>2</sub>O as an electron donor (Grad. Sch. Eng., Kyoto Univ.; ESICB, Kyoto Univ.) ○HUANG, Zeai; TERAMURA, Kentaro; HOSOKAWA, Saburo; TANAKA, Tsunehiro

**2B1-42** Photocatalytic hydrogenation of unsaturated hydrocarbons in a flow-type reactor (Fac. Sci. Eng., Kinki Univ.) ○KOUDA, Hideki; NAKANISHI, Akira; HASHIMOTO, Keiji; KOMINAMI, Hiroshi

**2B1-43** Photocatalytic synthesis of aromatic alcohols having other reducible groups (Kinki Univ.) ○FUKUI, Makoto; HASHIMOTO, Keiji; KOMINAMI, Hiroshi

**2B1-44** Selective photooxidation of hydrocarbons on Nb<sub>2</sub>O<sub>5</sub> under visible light irradiation. (Grad. Sch. Eng., Kyoto Univ.; ESICB, Kyoto Univ.) ○MURAKAMI, Kazuho; TAMAI, Kazuki; HOSOKAWA, Saburo; TERAMURA, Kentaro; TANAKA, Tsunehiro

**2B1-45** Reaction mechanism for selective photooxidation of hydrocarbons via photoexcitation from surface complex over Nb<sub>2</sub>O<sub>5</sub>. (Grad. Sch. Eng., Kyoto Univ.; ESICB, Kyoto Univ.) ○TAMAI, Kazuki; MURAKAMI, Kazuho; HOSOKAWA, Saburo; TERAMURA, Kentaro; TANAKA, Tsunehiro

**2B1-46** Photocatalytic selective cleavage of C-O bond over supported titanium (IV) oxide photocatalyst (Fac. Eng., Oita Univ.) ○KATO, Hiroko; IMAMURA, Kazuya; WADA, Yuichiro; SATO, Katsutoshi; NAGAOKA, Katsutoshi

Chair: HOSOKAWA, Saburo (16 : 50~17 : 40)

\* 16:40-16:50: interval for laptop PC connection.(2B1-48, 2B1-49, 2B1-50, 2B1-51, 2B1-52)

**2B1-48** Partial oxidation of cyclohexane on titanium dioxide/graphene composite photocatalyst (RCSE, Osaka Univ.; Grad. Sch. Eng. Sci., Osaka Univ.) ○SHIOTA, Shingo; HIRAKAWA, Hiroaki; SHIRAIISHI, Yasuhiro; HIRAI, Takayuki

**2B1-49** Ammonia Formation from Water and Dinitrogen on the Surface Defects of Titanium Dioxide (RCSE, Osaka Univ.; Grad. Sch. Eng. Sci., Osaka Univ.) ○HIRAKAWA, Hiroaki; SHIRAIISHI, Yasuhiro; HIRAI, Takayuki



- 2B1-50<sup>#</sup>** Photocatalytic Steam Reforming of Methane on Calcium Titanate (Grad. Sch. Human and Environ. Stud., Kyoto Univ.) ○FUJIWARA, Kenji; MIZUBA, Shota; YAMAMOTO, Akira; YOSHIDA, Hisao
- 2B1-51** Partial Oxidation of Alcohols on Noble Metal-loaded Tungsten Oxide Photocatalysts (Sch. Eng., Kyoto Univ.) ○SATO, Kyosuke; TOMITA, Osamu; HIGASHI, Masanobu; ABE, Ryu
- 2B1-52** Photocatalytic hydrogen evolution with composite catalysts of an electron donor-acceptor linked dyad and metal nanoparticles assembled in mesospaces of silica-alumina nanoparticles (Grad. Sch. Eng., Osaka Univ.; Grad. Sch. Eng., Osaka City Univ.; Graduate School of Science and Technology; ALCA&SENTAN, JST) ○TADOKORO, Hideyuki; YAMADA, Yusuke; SUENOBU, Tomoyoshi; FUKUZUMI, Shunichi

Saturday, March 26, AM

Chair: TAKASE, Mai (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(3B1-01, 3B1-02, 3B1-03, 3B1-04, 3B1-05, 3B1-06)
- 3B1-01** Effects of preparation condition of Pt deposited restacked  $KCa_2Nb_3O_{10}$  on photocatalytic water splitting (Grad. Sch. Sci., Eng., Tokyo Tech) ○OSHIMA, Takayoshi; ISHITANI, Osamu; MAEDA, Kakuhiro
- 3B1-02** Effect of pH value on photocatalytic activity for conversion of  $CO_2$  by  $H_2O$  as an electron donor over Ag-loaded  $ZnGa_2O_4$ -modified  $Ga_2O_3$  (Grad. Sch. Eng., Kyoto Univ.; ESICB, Kyoto Univ.) ○HORI, Kazutaka; HUANG, Zeai; IGUCHI, Shoji; TERAMURA, Kentaro; HOSOKAWA, Saburo; TANAKA, Tsunehiro
- 3B1-03** Addition effect of Rh species into Ag-loaded  $ZnGa_2O_4$ -modified  $Ga_2O_3$  for photocatalytic conversion of  $CO_2$  in water (Grad. Sch. Eng., Kyoto Univ.; ESICB) ○KIKKAWA, Soichi; TERAMURA, Kentaro; HOSOKAWA, Saburo; TANAKA, Tsunehiro
- 3B1-04** Evaluation of the photocatalytic conversion of  $CO_2$  by  $H_2O$  as an electron donor over a  $Ga_2O_3$  photocatalyst modified with layered double hydroxide (LDH) (Grad. Sch. Eng., Kyoto Univ.; ESICB, Kyoto Univ.) ○HASEGAWA, Yudai; IGUCHI, Shoji; TERAMURA, Kentaro; HOSOKAWA, Saburo; TANAKA, Tsunehiro
- 3B1-05** Photocatalytic hydrogenation of furans over metal-loaded titanium (IV) oxide (Kinki Univ.) ○NAKANISHI, Kousuke; HASHIMOTO, Keiji; KOMINAMI, Hiroshi
- 3B1-06<sup>#</sup>** Hetero cyclic synthesis using amines and carbonyl compounds by acid catalytic and photocatalytic reaction on titanium oxide (Grad. Sch. Human and Environ. Stud., Kyoto Univ.; ESICB, Kyoto Univ.) ○MATSUMOTO, Tomoya; YAMAMOTO, Akira; YOSHIDA, Hisao

Chair: MAEDA, Kazuhiko (10 : 10 ~ 11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(3B1-08, 3B1-10, 3B1-12, 3B1-13)
- 3B1-08<sup>#</sup>** Direct activation of  $sp^3C-H$  bonds in ethers for successive C-C bond formation by metal loaded titanium oxide photocatalysts (Grad. Sch. Human and Environ. Stud., Kyoto Univ.) ○TYAGI, Akanksha; MATSUMOTO, Tomoya; KATO, Tatsuhisa; YOSHIDA, Hisao
- 3B1-10<sup>\*</sup>** Analysis of Energy Distribution of Electron-trap Density as a Key Factor of Heterogeneous Photocatalytic Reaction (Grad. Sch. Env. Sci., Hokkaido Univ.) ○NITTA, Akio; TAKASE, Mai; MURAKAMI, Nagoya; TAKASHIMA, Mai; OHTANI, Bunsho
- 3B1-12** Photocatalytic cross-coupling reaction between cyclohexane and benzene over palladium-loaded titanium oxide (Grad. Sch. Human and Environ. Stud., Kyoto Univ.; ESICB, Kyoto Univ.) ○OHARA, Tomoyuki; YAMAMOTO, Akira; YOSHIDA, Hisao
- 3B1-13** Synthesis of phenol using a  $WO_3$  with plant ashes (Grad. Sch. Fac. Sci. Technol., Tokyo Univ. of Sci.; Res. Inst. Sci. Technol., Tokyo Univ. of Sci.) ○CHIKAMORI, Noriyasu; YAMAGUCHI, Yuichi; MOTEGI, Maki; TERASHIMA, Chiaki; KATSUMATA, Kenichi; SAKAI, Kenichi; SAKAI, Hideki; FUJISHIMA, Akira; NAKATA, Kazuya

Chair: YAMAMOTO, Akira (11 : 20 ~ 12 : 10)

- \* 11:10-11:20: interval for laptop PC connection.(3B1-15, 3B1-16, 3B1-17, 3B1-18, 3B1-19)
- 3B1-15** Photocatalytic Decomposition of Monosaccharide Ketose Toward Production of Rare Sugars (Fac. Sci. Technol., Tokyo Univ. of Sci.) ○TSUTSUMI, Tomoe; YAMAMOTO, Yasuhiro; KANAI, Yoshihiro; TERASHIMA, Chiaki; KATSUMATA, Kenichi; ABE, Masahiko; SAKAGUCHI, Kengo; IKEKITA, Masahiko; FUJISHIMA, Akira; NAKATA, Kazuya
- 3B1-16** Generation of rare sugars by photocatalytic decomposition of monosaccharides. (Grad. Sch. Fac. Sci. Technol., Tokyo Univ. of Sci.) ○YAMAMOTO, Yasuhiro; NAKATA, Kazuya; KANAI, Yoshihiro; TERASHIMA, Chiaki; KATSUMATA, Kenichi; ABE, Masahiko; SAKAGUCHI, Kengo; IKEKITA, Masahiko; FUJISHIMA, Akira
- 3B1-17** Decomposition of Disaccharide by Photocatalysis Toward Production of Disaccharide Rare Sugars (Fac. Sci. Technol., Tokyo Univ. of Sci.) ○TAKEUCHI, Tamami; YAMAMOTO, Yasuhiro; KANAI, Yoshihiro; TERASHIMA, Chiaki; KATSUMATA, Kenichi; ABE, Masahiko; SAKAGUCHI, Kengo; IKEKITA, Masahiko
- 3B1-18** Dehydrogenation on  $Fe_3O_4$  catalyst under microwaves (Grad. Sch. Sci., Eng., Tokyo Tech) ○ABE, Eriko; HANEISHI, Naoto; YOSHIMURA,

Takeo; TSUBAKI, Shuntaro; MAITANI, Masato; SUZUKI, Eiichi; FUJII, Satoshi; WADA, Yuji

- 3B1-19** Thermogravimetric analysis of the microwave effects on thermal decomposition of silver oxide under microwave (Grad. Sch. Sci., Eng., Tokyo Tech) ○YAMAMOTO, Masahiro; HANEISHI, Naoto; YOSHIMURA, Takeo; TSUBAKI, Syuntaro; MAITANI, Masato; SUZUKI, Eiichi; WADA, Yuji

Room B2  
Chishinkan1 Building 113

Catalysts and Catalysis

Thursday, March 24, AM

Chair: TANAKA, Masashi (9 : 20 ~ 10 : 00)

- \* 9:10-9:20: interval for laptop PC connection.(1B2-03, 1B2-04, 1B2-06)
- 1B2-03** Studies on the preparation of silica supported PVP-Ni nanoparticles and behavior of the stabilizer by heat treatment. (Grad. Sch. Eng., Chiba Univ.) ○TAKEISHI, Yuya; ICHIKUNI, Nobuyuki; HARA, Takayoshi; SHIMAZU, Shogo
- 1B2-04<sup>\*</sup>** Facile synthesis of a core-gold/shell-ceria nanoparticle catalyst for highly selective semihydrogenation of alkynes (Sch. Eng. Sci., Osaka Univ.) ○MITSUDOME, Takato; MAENO, Zen; MIZUGAKI, Tomoo; JITSUKAWA, Koichiro; KANEDA, Kiyotomi
- 1B2-06** Chelate size effect of amino acid gold complexes on preparation of silica supported Au nanoparticle catalysts (Fac. Sci., Kyushu Univ.) ○MURAYAMA, Haruno; HASEGAWA, Takayuki; TONE, Misaki; YAMAMOTO, Yusuke; ISHIDA, Tamao; HONMA, Testuo; TOKUNAGA, Makoto

Chair: WADA, Yuji (10 : 10 ~ 10 : 50)

- \* 10:00-10:10: interval for laptop PC connection.(1B2-08, 1B2-09, 1B2-10, 1B2-11)
- 1B2-08** Study on the preparation conditions of mesoporous alumina supported Mo catalysts active for propane photo-oxidation reaction (Grad. Sch. Eng., Chiba Univ.) ○ASANO, Ryo; ICHIKUNI, Nobuyuki; HARA, Takayoshi; SHIMAZU, Shogo
- 1B2-09** Evaluation of carburization degree of silica supported niobium carbide catalyst prepared in a closed circulating system (Grad. Sch. Eng., Chiba Univ.) ○MAJIMA, Yuki; ICHIKUNI, Nobuyuki; HARA, Takayoshi; SHIMAZU, Shogo
- 1B2-10** Computational study of structure properties relationship and solvation effects for gold clusters. (Sch. Mat. Sci., JAIST) ○SUZUKI, Masato; TANIIE, Toshiaki
- 1B2-11** *In-Situ* XAFS Investigation of Redox Reactions for Cu Species Supported on Silica (Coll. Life Sci., Ritsumeikan Univ.) ○NAKAMURA, Koki; MARUYAMA, Karen; WATANABE, Toshiki; YAMAMOTO, Yusaku; KATAYAMA, Misaki; INADA, Yasuhiro

Chair: YUMURA, Takashi (11 : 00 ~ 12 : 00)

- \* 10:50-11:00: interval for laptop PC connection.(1B2-13, 1B2-14, 1B2-15, 1B2-17)
- 1B2-13** Catalytic synthesis of ammonia from  $N_2$  and  $H_2$  in atmospheric-pressure non-thermal plasma. (3) Quantum chemical calculation for estimation of factors determining catalytic activity (Research and Development Initiative, Chuo Univ.) ○DEGUCHI, Takashi; AKIYAMA, Mao; AIHARA, Keigo; TANAKA, Masashi; IWAMOTO, Masakazu
- 1B2-14** Catalytic Synthesis of Ammonia from  $N_2$  and  $H_2$  in Atmospheric-pressure Non-thermal Plasma. (4) Spectroscopic Characterization of Active Nitrogen Species (Research and Development Initiative, Chuo Univ.) ○TANAKA, Masashi; AIHARA, Keigo; AKIYAMA, Mao; DEGUCHI, Takashi; IWAMOTO, Masakazu
- 1B2-15<sup>\*</sup>** An anchor effect on suppression of aggregation of Ni doped Pt clusters on supports: A Car-Parrinello molecular dynamics study (TCMS, IMS) ○KOIZUMI, Kenichi; NOBUSADA, Katsuyuki; BOERO, Mauro
- 1B2-17<sup>\*</sup>** Influence of Orbital Interactions on Brønsted Acid Strength of Zeolites: A Theoretical Investigation (Interdisciplinary Grad. Sch. Sci. and Eng., Tokyo Tech) ○HAYASHI, Yoshihiro; MIYAJI, Akimitsu; BABA, Toshihide

Thursday, March 24, PM

Chair: MOTOKURA, Ken (13 : 10 ~ 14 : 10)

- \* 13:00-13:10: interval for laptop PC connection.(1B2-26, 1B2-27, 1B2-28, 1B2-29, 1B2-30, 1B2-31)
- 1B2-26** Quantum chemistry calculations of methane activation by Fe complexes having nitrogen ligands (KIT) ○MATSUI, Misaki; YUMURA, Takashi; WAKASUGI, Takashi
- 1B2-27** CO oxidation over Ru-loaded  $12CaO \cdot 7Al_2O_3$  electrode (Interdisciplinary Grad. Sch. Sci. and Eng., Tokyo Tech)

- YAMAGATA, Kyousuke; JAFAR, Sharuf; KITANO, Masaaki; INOUE, Yasunori; YOKOYAMA, Toshiharu; HARA, Michikazu; HOSONO, Hideo
- 1B2-28** Microwave effects on oxidation catalysis of heteropoly acid catalyst (Grad. Sch. Sci., Eng., Tokyo Tech; RISH, Kyoto Univ.; Fac. Sci., Kochi Univ.) ○HAYAKAWA, Shogo; TSUBAKI, Shuntaro; MITANI, Tomohiko; UEDA, Tadaharu; FUJII, Satoshi; MAITANI, Masato; WADA, Yuji
- 1B2-29** Supported Gold Nanoparticles-Catalyzed Aerobic Formal  $\alpha$ -Oxygenation of Amines (Grad. Sch. Eng., The Univ. of Tokyo) ○KATAOKA, Kengo; JIN, Xiongjie; YAMAGUCHI, Kazuya; MIZUNO, Noritaka
- 1B2-30** Supported Gold Nanoparticles-Catalyzed Aerobic Oxidative Dehydrogenation of Saturated Ketones to  $\alpha, \beta$ -Unsaturated Ketones (Grad. Sch. Eng., The Univ. of Tokyo) ○YOSHII, Daichi; YATABE, Takafumi; JIN, Xiongjie; YAMAGUCHI, Kazuya; MIZUNO, Noritaka
- 1B2-31** Environmentally-Friendly Flavones One-Pot Synthesis Enabled by Oxidative Dehydrogenation as the Key Transformation (Grad. Sch. Eng., The Univ. of Tokyo) ○YATABE, Takafumi; JIN, Xiongjie; YAMAGUCHI, Kazuya; MIZUNO, Noritaka

Chair: KAMATA, Keigo (14 : 20~15 : 20)

- \* 14:10-14:20: interval for laptop PC connection.(1B2-33, 1B2-35, 1B2-37)
- 1B2-33**\* Highly Selective Direct Synthesis of Phenol from Benzene and O<sub>2</sub> Regulated by NH<sub>3</sub> on Alkali and Alkaline Earth Metals/Zeolites (Innovation Res. Ctr. for Fuel Cells, The Univ. of Electro-Communications; Grad. Sch. Frontier Sci., The Univ. of Tokyo) ○ACHARYYA, Shankha Shubhra; GHOSH, Shilpi; YAMAMOTO, Sadaaki; HAYASHIZAKI, Kenichiro; WANG, Linsheng; KANEKO, Takuma; HIGASHI, Kotaro; SASAKI, Takehiko; IWASAWA, Yasuhiro
- 1B2-35**\* Synthesis of N-Substituted Anilines through Supported Gold-Palladium Nanoparticles-Catalyzed Tandem Oxidative Aromatization (Grad. Sch. Eng., The Univ. of Tokyo) ○TANIGUCHI, Kento; JIN, Xiongjie; YAMAGUCHI, Kazuya; MIZUNO, Noritaka
- 1B2-37**\* Au-Pd Alloy Nanoparticles-Catalyzed Aerobic Oxidative Dehydrogenation of Cyclohexanols to Phenols (Grad. Sch. Eng., The Univ. of Tokyo) ○JIN, Xiongjie; YAMAGUCHI, Kazuya; MIZUNO, Noritaka

Chair: MIZUGAKI, Tomoo (15 : 30~16 : 30)

- \* 15:20-15:30: interval for laptop PC connection.(1B2-40, 1B2-41, 1B2-42, 1B2-44)
- 1B2-40** Oxidation of 5-hydroxymethyl furfural by transition metal oxide catalyst (MSL, Tokyo Tech) ○HAYASHI, Eri; KOMANOYA, Tasuku; KAMATA, Keigo; HARA, Michikazu
- 1B2-41** Oxidation of alkylarenes with a hexagonal perovskite-type BaRuO<sub>3</sub> catalyst (MSL, Tokyo Tech) ○KATO, Yuki; KAMATA, Keigo; HARA, Michikazu
- 1B2-42**\* Selective Oxidation by a Hexagonal Strontium Manganate Catalyst (MSL, Tokyo Tech) KAWASAKI, Shuma; ○KAMATA, Keigo; HARA, Michikazu
- 1B2-44**\* Ion-Pair Organocatalysis - Asymmetric Baeyer-Villiger oxidation mediated by a Flavinium-Cinchona Alkaloid Dimer (U Toledo ChE) ○YAMAMOTO, Kana; POUDEL, Pramod; ARIMITSU, Kenji

Chair: SASAKI, Takehiko (16 : 40~17 : 30)

- \* 16:30-16:40: interval for laptop PC connection.(1B2-47, 1B2-48, 1B2-50)
- 1B2-47** Hydrothermal stability of CHA-type zeolite prepared by an interzeolite conversion method (Fac. Eng., Iwate Univ.) ○YOSHIDA, Kurumi; SUZUKI, Rina; KAWAMURA, Hiroaki; NANAHO, Hidetaka; SATO, Osamu; SATO, Koichi; YAMAGUCHI, Aritomo; KIYOZUMI, Yoshimichi; SHIRAI, Masayuki
- 1B2-48**\* Design of highly active titanosilicate catalyst utilizing several silica supports (Fac. Eng., Hiroshima Univ.) ○TSUNOJI, Nao; YAGENJI, Yuya; IDE, Yusuke; SADAKANE, Masahiro; SANO, Tsuneji
- 1B2-50**\* Pd Nanoparticles Encapsulated in Hollow Titanosilicate Spheres as an Ideal Catalyst for One-pot Oxidation Reaction (Grad. Sch. Eng., Osaka Univ.) ○KUWAHARA, Yasutaka; ANDO, Takahiro; YAMASHITA, Hiromi

Chair: NAO, Tsunoji (17 : 40~18 : 20)

- \* 17:30-17:40: interval for laptop PC connection.(1B2-53, 1B2-54, 1B2-55)
- 1B2-53**\* Immobilized palladium ion containing ionic liquids on SBA-15 (Grad. Sch. Sci., The Univ. of Tokyo) ○KUSUMAWATI, Ety Nurlia; BHANAGE, Bhalchandra Mahadeo; SASAKI, Takehiko
- 1B2-54** Production of  $\gamma$ -valerolactone from levulinic acid derivative using sulfonic acid-functionalized Zr-MOF (Sch. Eng., Osaka Univ.) ○KANGO, Hiroto; KUWAHARA, Yasutaka; YAMASHITA, Hiromi
- 1B2-55**\* Solid photocatalyst system of metal complexes integrated-periodic mesoporous organosilica (Toyota Central R&D Labs., Inc.) ○WAKI, Minoru; MAEGAWA, Yoshifumi; YAMADA, Yuri; INAGAKI, Shinji

## Friday, March 25, AM

Chair: MURAYAMA, Haruno (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(2B2-01, 2B2-02, 2B2-03, 2B2-04, 2B2-05, 2B2-06)
- 2B2-01** Effect of Scandium Amount and Calcination Temperature on

- Catalytic Activity of Sc/In<sub>2</sub>O<sub>3</sub> for Propene Synthesis from Ethanol (Research and Development Initiative, Chuo Univ.) ○SHIMANO, Kaori; MURAKAMI, Maki; TANAKA, Masashi; IWAMOTO, Masakazu
- 2B2-02**\* Fabrication of an octahedral frame-structured PtNi catalyst with remarkable fuel cell performances (Innovation Res. Ctr. for Fuel Cells, The Univ. of Electro-Communications) ○ZHAO, Xiao; TAKAO, Shinobu; HIGASHI, Kotaro; KANEKO, Takuma; SAMJESKE, Gabor; SEKIZAWA, Oki; URUGA, Tomoya; IWASAWA, Yasuhiro
- 2B2-03**\* Catalytic activities of metal oxide (M = Y and La) promoted Ni catalysts in 1,5-pentanediol production from hydrogenolysis furfural (Grad. Sch. Eng., Chiba Univ.) ○WIJAYA, Husni Wahyu; HARA, Takayoshi; ICHIKUNI, Nobuyuki; SHIMAZU, Shogo
- 2B2-04** Selective hydrogenolysis of glycerol to 1,2-propanediol over Pd/L-Nb<sub>2</sub>O<sub>3</sub> catalysts (Urban Environmental Sci., TMU; ESICB Kyoto Univ.) ○AIHARA, Takeshi; KOBAYASHI, Hayato; MIURA, Hiroki; SHISHIDO, Tetsuya
- 2B2-05** Synthesis of Allyl Alcohol from Glycerol over Rhenium-oxide-based Catalyst (Grad. Sch. Eng., Tohoku Univ.) ○TAZAWA, Shuhei; OTA, Nobuhiko; TAMURA, Masazumi; NAKAGAWA, Yoshinao; TOMISHIGE, Keiichi
- 2B2-06** Selective hydrodeoxygenation of methyl mannosides over ReOx-Pd/CeO<sub>2</sub> catalyst (Grad. Sch. Eng., Tohoku Univ.) ○YUASA, Naoto; TAMURA, Masazumi; NAKAGAWA, Yoshinao; TOMISHIGE, Keiichi

Chair: TAMURA, Masazumi (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(2B2-08, 2B2-09, 2B2-10, 2B2-11)
- 2B2-08** Enantioselective hydrogenation of olefins on supported ruthenium catalysts with chiral ligands (Grad. Sch. Sci., Kyushu Univ.) ○NAKASHIMA, Hiroshi; MURAYAMA, Haruno; HONMA, Tetsuo; TOKUNAGA, Makoto
- 2B2-09**\* Enantioselective Hydrogenation of  $\beta$ -ketoester over Tartaric Acid-modified Raney Nickel Catalyst: Kinetic Analysis (Grad. Sch. Mat. Sci., Univ. of Hyogo) ○CHOLIQ, Azka Azkiya; YAMAMOTO, Shota; NAKAGAWA, Satoshi; WATANABE, Junya; KAMATA, Naoya; MISAKI, Tomonori; SUGIMURA, Takashi; OKAMOTO, Yasuaki
- 2B2-10** Hydrogen generation from ammonia borane by using highly efficient RuNi/TiO<sub>2</sub> catalyst (Grad. Sch. Eng., Osaka Univ.) ○MIYAWAKI, Kohei; MORI, Kohsuke; YAMASHITA, Hiromi
- 2B2-11** Young Scholar Lectures of CSJ Ammonia synthesis over 12CaO 7Al<sub>2</sub>O<sub>3</sub> electrode catalyst and its electronic properties (MCES, Tokyo Tech) ○KITANO, Masaaki

Chair: ICHIKUNI, Nobuyuki (11 : 20~12 : 10)

- \* 11:10-11:20: interval for laptop PC connection.(2B2-15, 2B2-16, 2B2-18)
- 2B2-15**\* XAFS investigation of the effect of metal particle size on propylene hydrogenation over supported platinum catalysts (Grad. Sch. Human and Environ. Stud., Kyoto Univ.) ○WATANABE, Taiki; TANAKA, Syojiro; OGAWA, Syota; YAMAMOTO, Akira; YOSHIDA, Hisao
- 2B2-16**\* Design of a novel core-Pd/shell-Ag nanoparticle catalyst for selective semihydrogenation of alkynes to alkenes (Grad. Sch. Eng. Sci., Osaka Univ.) ○URAYAMA, Teppei; MITSUDOME, Takato; YAMAZAKI, Kenji; MAEHARA, Yosuke; YAMASAKI, Jun; GOHARA, Kazutoshi; MAENO, Zen; MIZUGAKI, Tomoo; JITSUKAWA, Koichiro; KANEDA, Kiyotomi
- 2B2-18**\* Chitin-supported Ruthenium Nanoparticles as an Arene Hydrogenation Catalyst (Grad. Sch. Sci., Nagoya Univ.; Univ. of Cambridge; RCMS, Nagoya Univ.) MORIOKA, Yuna; MATSUOKA, Aki; KNAPPETT, Benjamin R.; WHEATLEY, Andrew E. H.; ○NAKA, Hiroshi

## Friday, March 25, PM

Chair: YAMAZOE, Seiji (14 : 20~15 : 10)

- \* 14:10-14:20: interval for laptop PC connection.(2B2-33, 2B2-34, 2B2-35, 2B2-36, 2B2-37)
- 2B2-33**\* Cerium oxide nanorods with unprecedented low-temperature oxygen storage capacity (WPI-AIMR, Tohoku Univ.) ISHIKAWA, Yoshifumi; TAKEDA, Maiki; ZHANG, Man; TSUKIMOTO, Susumu; NAKAYAMA, Koji; ○ASAO, Naoki
- 2B2-34** Three way catalytic reaction over noble metal catalysts supported on Sr<sub>3</sub>Fe<sub>2</sub>O<sub>7-d</sub> having oxygen storage capacity (Grad. Sch. Eng., Kyoto Univ.; ESICB, Kyoto Univ.) ○BEPPU, Kosuke; HOSOKAWA, Saburo; TERAMURA, Kentaro; TANAKA, Tsunehiro
- 2B2-35** Oxygen storage capacity of SrFe<sub>1-x</sub>Ti<sub>x</sub>O<sub>3</sub> synthesized by polymerized complex method (Grad. Sch. Eng., Kyoto Univ.; ESICB, Kyoto Univ.) ○DEMIZU, Akito; BEPPU, Kosuke; HOSOKAWA, Saburo; TERAMURA, Kentaro; TANAKA, Tsunehiro
- 2B2-36**\* size effect on catalytic reactions of PdRu solid-solution nanoparticles (Dep. Chem., Sch. Sci., Kyoto Univ.) ○WU, Dongshuang; KUSADA, Kohei; KITAGAWA, Hiroshi
- 2B2-37** The influence of copper state on CO oxidation reaction in Cu/CeO<sub>2</sub>-ZrO<sub>2</sub> catalyst (ACRC, Nagoya Inst. of Tech.) ○HATTORI, Masatomo; HANEDA, Masaaki

Chair: HANEDA, Masaaki (15 : 20~16 : 10)

- \* 15:10-15:20: interval for laptop PC connection.(2B2-39, 2B2-40, 2B2-41, 2B2-42, 2B2-43)
- 2B2-39** Novel Catalyst for Direct Decomposition of Nitrous Oxide Based on C-type Cubic Rare Earth Oxides (Grad. Sch. Eng., Osaka Univ.)  
○NUNOTANI, Naoyoshi; WATANABE, Yuka; IMANAKA, Nobuhito
- 2B2-40** Precious metal free automobile exhaust remediation catalyst using Nanophase-separation as active sites (Environment and Energy Mater. Div., NIMS; Grad. Sch. Sci., Eng., Saitama Univ.; Grad. Sch. Eng., The Univ. of Tokyo; WPI-AIMR, Tohoku Univ.) ○IMAI, Tsubasa; TANABE, Toyokazu; ABE, Hideki
- 2B2-41** Selective reduction from nitrate to nitrite ions with electrocatalysts (Fac. Sci. Eng., Kinki Univ.) ○YAMADA, Hiroki; KAWAGUCHI, Taisuke; HASHIMOTO, Keiji; KOMINAMI, Hiroshi
- 2B2-42** Selective reduction of NO over Cu-based catalyst (Grad. Sch. Eng., Kyoto Univ.; ESICB, Kyoto Univ.) ○MATSUKI, Kazuya; HOSOKAWA, Saburo; TERAMURA, Kentaro; TANAKA, Tsunehito
- 2B2-43** NO selective reduction over Pd catalyst supported on Mn-modified hexagonal YbFeO<sub>3</sub> (Grad. Sch. Eng., Kyoto Univ.; ESICB, Kyoto Univ.)  
○SHIBANO, Takuya; TADA, Ryohei; HOSOKAWA, Saburo; TERAMURA, Kentaro; TANAKA, Tsunehito

Chair: YAMADA, Yusuke (16 : 20~17 : 00)

- \* 16:10-16:20: interval for laptop PC connection.(2B2-45, 2B2-46, 2B2-47, 2B2-48)
- 2B2-45** Synthesis of Palladium nanoparticle Using Phenylazomethine Dendrimer and catalytic activity. (Chem. Res. Lab., Tokyo Tech) ○KOFUKU, Taku; KITAZAWA, Hirokazu; ALBRECHT, Ken; CHUN, Wang Jae; IMAOKA, Takane; YAMAMOTO, Kimihisa
- 2B2-46** Carbon-fluorine bond activation at room temperature by bimetallic platinum/palladium alloy nanoclusters (Sch. Eng., Osaka Univ.)  
○NOMURA, Keigo; DHITAL, Raghu Nath; HAESUWANNAKIJ, Setsiri; EHARA, Masahiro; SAKURAI, Hidehiro
- 2B2-47** Synthesis of Pt Nanocluster Catalysts Using a Dendrimer Reactor (Chem. Res. Lab., Tokyo Tech) ○KORI, Makoto; KOIZUMI, Hiromu; IMAOKA, Takane; YAMAMOTO, Kimihisa
- 2B2-48** Oxidation of Hydrocarbons Catalyzed by Multi-metallic Clusters (Chem. Res. Lab., Tokyo Tech) ○KOIZUMI, Hiromu; TAKAHASHI, Masaki; IMAOKA, Takane; YAMAMOTO, Kimihisa

Chair: SAKURAI, Hidehiro (17 : 10~17 : 50)

- \* 17:00-17:10: interval for laptop PC connection.(2B2-50, 2B2-52, 2B2-53)
- 2B2-50\*** Hydrogen evolution and hydrogenation activities on copper cathode surface assisted by organic 2D frameworks (Fac. Sci., Hiroshima Univ.)  
○KUME, Shoko
- 2B2-52** Enhancement of catalytic reactivity of cobalt-substituted Prussian blue analogs in photocatalytic water oxidation by substitution with redox-inactive metal ions (Grad. Sch. Eng., Osaka Univ.; Grad. Sch. Eng., Osaka City Univ.; Graduate School of Science and Technology; ALCA&SENTAN, JST)  
○OYAMA, Kohei; YAMADA, Yusuke; SUENOBU, Tomoyoshi; FUKUZUMI, Shunichi
- 2B2-53** Hydrogen peroxide generation from water and dioxygen, catalyzed by heteropolynuclear complexes composed of (2,2'-bipyridine)tetracyanoruthenate(II) and divalent metal ions (Grad. Sch. Eng., Osaka Univ.; Grad. Sch. Eng., Osaka City Univ.; Faculty of Science and Technology; UNISOKU Co., Ltd.; ALCA&SENTAN, JST) ○ARATANI, Yusuke; YAMADA, Yusuke; NAKAGAWA, Tatsuo; SUENOBU, Tomoyoshi; FUKUZUMI, Shunichi

### Saturday, March 26, AM

Chair: MIURA, Hiroki (9 : 10 ~9 : 50)

- \* 9:00-9:10: interval for laptop PC connection.(3B2-02, 3B2-03, 3B2-04, 3B2-05)
- 3B2-02** Fluoride-catalyzed silyl formate and formamide synthesis from carbon dioxide and hydrosilane (Interdisciplinary Grad. Sch. Sci. and Eng., Tokyo Tech) ○MOTOKURA, Ken; NAIJO, Masaki; YAMAGUCHI, Sho; MIYAJI, Akimitsu; BABA, Toshihide
- 3B2-03** Fluoride catalyzed transformation of carbon dioxide to formic acid with disilanes as reducing agents (Interdisciplinary Grad. Sch. Sci. and Eng., Tokyo Tech) ○NAIJO, Masaki; MOTOKURA, Ken; YAMAGUCHI, Sho; MIYAJI, Akimitsu; BABA, Toshihide
- 3B2-04** Synthesis of aromatic compounds through depolymerization of polyether catalyzed by cation-exchanged montmorillonites (Sch. Eng. Sci., Osaka Univ.) ○TORII, Hiroyuki; MAENO, Zen; MITSUDOME, Takato; MIZUGAKI, Tomoo; JITSUKAWA, Koichiro
- 3B2-05** Reductive amination of aldehydes by supported metal catalysts (MSL, Tokyo Tech) ○KINEMURA, Takashi; KOMANOYA, Tasuku; KAMATA, Keigo; HARA, Michikazu

Chair: JITSUKAWA, Koichiro (10 : 00~10 : 30)

- \* 9:50-10:00: interval for laptop PC connection.(3B2-07)
- 3B2-07** CSJ Award for Young Chemists Development of Multi-Active Site Catalysts for Surface Concerted Catalysis Aimed at One-Pot Synthesis (Interdisciplinary Grad. Sch. Sci. and Eng., Tokyo Tech) ○MOTOKURA, Ken

Chair: TOKUNAGA, Makoto (10 : 40~11 : 10)

- \* 10:30-10:40: interval for laptop PC connection.(3B2-11, 3B2-12)
- 3B2-11** The specific reactivity of PdO nanoparticles for Hiyama cross-coupling reaction in water (Fac. Eng., OIT) OHTAKA, Atsushi; ○SAKON, Akira; KOTERA, Takamasa; SHIMOMURA, Osamu; NOMURA, Ryoki
- 3B2-12\*** Development of Dinuclear Cu Catalyst Immobilized within Nanospace of Magadiite and Its Applications to Regioselective Coupling of Phenols and Azide-alkyne cycloaddition (Grad. Sch. Eng. Sci., Osaka Univ.)  
○MAENO, Zen; MITSUDOME, Takato; MIZUGAKI, Tomoo; JITSUKAWA, Koichiro

Chair: MITSUDOME, Takato (11 : 20~12 : 10)

- \* 11:10-11:20: interval for laptop PC connection.(3B2-15, 3B2-16, 3B2-17, 3B2-18, 3B2-19)
- 3B2-15** Oxidation of alkenes to primary alcohols by supported palladium catalysts (Fac. Sci., Kyushu Univ.) ○MANBA, Tetsuya; ZHANG, Zhenzhong; MURAYAMA, Haruno; HONMA, Tetsuo; TOKUNAGA, Makoto
- 3B2-16** Decarbonylation of benzaldehydes catalyzed by montmorillonite supported iridium complexes (Grad. Sch. Sci., Kyushu Univ.) ○MOURI, Takahiro; ISHIDA, Tamao; MURAYAMA, Haruno; TOKUNAGA, Makoto
- 3B2-17** Ring-Opening Reaction of  $\epsilon$ -Decalactone Catalyzed by B(C6F5)<sub>3</sub> (Hiroshima Univ.) ○YAMAGUCHI, Kentaro; TANAKA, Ryo; NAKAYAMA, Yuushou; SHIONO, Takeshi
- 3B2-18** Hydrosilylation of Internal Alkynes by Supported PdAu alloy Catalysts (Urban Environmental Sci., TMU; ESICB Kyoto Univ.)  
○OGAWA, Ryoichi; ENDO, Keisuke; MIURA, Hiroki; SHISHIDO, Tetsuya
- 3B2-19** Immobilization of Ag nanoparticles for C-H carboxylation of terminal alkynes with CO<sub>2</sub> (Grad. Sch. Eng., Kyoto Univ.; ESICB, Kyoto Univ.)  
○USHIO, Tomoya; TERAMURA, Kentaro; HOSOKAWA, Saburo; TANAKA, Tsunehito

### Saturday, March 26, PM

Chair: SATO, Katsutoshi (13 : 20~13 : 50)

- \* 13:10-13:20: interval for laptop PC connection.(3B2-27, 3B2-28, 3B2-29)
- 3B2-27** Selective dehydrocyclization-cracking of fat using zeolite-alumina composite-supported PtNiMo catalysts (Grad. Sch. Eng., Mie Univ.)  
○ISHIHARA, Atsushi; KOYABU, Shunsuke; NASU, Hiroyuki; HASHIMOTO, Tadanori
- 3B2-28** Hydrogen production by steam reforming of acetic acid with acid and base catalysts (Grad. Sch. Sci. and Eng., Kansai Univ.) ○MAKI, Tomohito; IKENAGA, Naoki
- 3B2-29** Adsorptive removal of methanethiol from hydrocarbon gas on Porous Coordination Polymer at ambient temperature (Advanced Research Div., Panasonic Corp.; WPI-iCeMS, Kyoto Univ.) ○MORITA, Masashi; WAKITA, Hidenobu; NOMURA, Takaiki; HIGUCHI, Masakazu; KITAGAWA, Susumu

Chair: KITANO, Masaaki (14 : 00~14 : 50)

- \* 13:50-14:00: interval for laptop PC connection.(3B2-31, 3B2-32, 3B2-33, 3B2-34, 3B2-35)
- 3B2-31** Influence of the crystallite structure of titanium oxide on catalytic activity of Rh/TiO<sub>2</sub> for steam reforming of propane (Grad. Sch. Eng., Oita Univ.) ○YU, Lin; SATO, Katsutoshi; NAGAOKA, Katsutoshi
- 3B2-32** Decomposition of CH<sub>3</sub>OH into CO and H<sub>2</sub> on metal supported catalyst (I<sub>2</sub>CNER, Kyushu Univ.) ○NAGASHIMA, Yoshika; HAGIWARA, Hidehisa; IDA, Shintaro; ISHIHARA, Tatsumi
- 3B2-33** Investigation of factors affecting the selectivity of nitrate reduction using formic acid as the reductant over Pd-In catalyst. (Sch. Sci., Tokai Univ.) ○SATO, Yuki; MIKAMI, Ikko; HORI, Masayuki; FUJIO, Katsuhiko
- 3B2-34** Development of the nanorod MnOx/CeO<sub>2</sub> as an efficient catalyst for the PM combustion reaction. (Grad. Sch. Eng., Osaka Univ.)  
○MIYAUCHI, Yusuke; MORI, Kohsuke; KUWAHARA, Yasutaka; YAMASHITA, Hiromi
- 3B2-35** Catalytic Synthesis of Ammonia from N<sub>2</sub> and H<sub>2</sub> in Atmospheric-pressure Non-thermal Plasma. (1) Effects of Partial Pressures and co-supplied gas on a Wool-like Copper Electrode (Research and Development Initiative, Chuo Univ.) ○AIHARA, Keigo; DEGUCHI, Takashi; AKIYAMA, Mao; TANAKA, Masashi; IWAMOTO, Masakazu

Chair: MORI, Kohsuke (15 : 00~16 : 00)

- \* 14:50-15:00: interval for laptop PC connection.(3B2-37, 3B2-38, 3B2-39, 3B2-41, 3B2-42)
- 3B2-37** Catalytic synthesis of ammonia from N<sub>2</sub> and H<sub>2</sub> in atmospheric-pressure non-thermal plasma. (2) Great Dependence of Catalytic Activity on Electrode Materials (Research and Development Initiative, Chuo Univ.)  
○AKIYAMA, Mao; AIHARA, Keigo; TANAKA, Masashi; DEGUCHI, Takashi; IWAMOTO, Masakazu
- 3B2-38** Kinetics study of ammonia synthesis over lanthanoid oxide supported Ru catalysts (Fac. Eng., Oita Univ.) ○KAWANO, Yukiko; IMAMURA, Kazuya; MIYAHARA, Shin-itirou; SATO, Katsutoshi; NAGAOKA, Katsutoshi
- 3B2-39\*** Adsorption Properties of Ammonia on Supported Ruthenium

Catalyst and their Application for Triggering Oxidative Decomposition from Room Temperature (ESICB, Kyoto Univ.; Fac. Eng., Oita Univ.) ○SATO, Katsutoshi; TASAKI, Ryo; TAKEISHI, Yuma; EBOSHI, Takaaki; NAGAOKA, Katsutoshi

**3B2-41** Dependence of the microwave effects on the intensity of electromagnetic field in the reduction reaction of methyl viologen on metal nickel surface (Grad. Sch. Sci., Eng., Tokyo Tech) ○MATSUHISA, Masayuki; KISHIMOTO, Fuminao; ANO, Taishi; TSUBAKI, Shuntaro; MAITANI, Masato; SUZUKI, Eiichi; WADA, Yuji

**3B2-42** Demonstration of Non-equilibrium Local Heating in Layered Nano Guest Space under Microwave Irradiation Using Luminescent Lifetime Measurement (Grad. Sch. Sci., Eng., Tokyo Tech) ○ANO, Taishi; KISHIMOTO, Fuminao; TSUBAKI, Shuntaro; MAITANI, Masato; SUZUKI, Eiichi; WADA, Yuji

Chair: TAKAGAKI, Atsushi (16 : 10~17 : 00)

\* 16:00-16:10: interval for laptop PC connection.(3B2-44, 3B2-46, 3B2-47, 3B2-48)

**3B2-44\*** One-pot conversion of glycerol into lactic acid by a combined catalyst of Pt nanoparticles and TiO<sub>2</sub> (MSL, Tokyo Tech) ○KOMANOYA, Tasuku; NAKAJIMA, Kiyotaka; KITANO, Masaaki; KAMATA, Keigo; HARA, Michikazu

**3B2-46** Heterogeneous synergistic catalysis of a Pd-phosphine complex and organic base on SiO<sub>2</sub> surface for efficient allylation of nucleophiles (Interdisciplinary Grad. Sch. Sci. and Eng., Tokyo Tech; Coll. of Liberal Arts, ICU) ○SAITOH, Koki; MOTOKURA, Ken; NODA, Hiroto; CHUN, Wang-jae; MIYAJI, Akimitsu; YAMAGUCHI, Sho; BABA, Toshihide

**3B2-47** Depolymerization of Polyethers to Esters Using Proton-exchanged Montmorillonite as a Solid Acid Catalyst (Grad. Sch. Eng. Sci., Osaka Univ.) ○YAMADA, Shota; MAENO, Zen; MITSUDOME, Takato; MIZUGAKI, Tomoo; JITSUKAWA, Koichiro

**3B2-48** Direct estimation of surface distance between immobilized functional groups for concerted catalysis using a probe molecule (Interdisciplinary Grad. Sch. Sci. and Eng., Tokyo Tech) ○NODA, Hiroto; MOTOKURA, Ken; MIYAJI, Akimitsu; YAMAGUCHI, Sho; BABA, Toshihide

Chair: ZEN, Maeno (17 : 10~17 : 50)

\* 17:00-17:10: interval for laptop PC connection.(3B2-50, 3B2-51, 3B2-52, 3B2-53)

**3B2-50<sup>#</sup>** Base Catalysis of Decaniobate Cluster [Nb<sub>10</sub>O<sub>28</sub>]<sup>6-</sup>: Effect of Counter Cation (Grad. Sch. Sci., The Univ. of Tokyo; ESICB, Kyoto Univ.) ○HAYASHI, Shun; YAMAZOE, Seiji; KOYASU, Kiichirou; TSUKUDA, Tatsuya

**3B2-51<sup>#</sup>** Utilization of Hexagonal-Boron Nitride as a New Solid Acid-Base Catalyst (Grad. Sch. Eng., The Univ. of Tokyo) ○TORII, Shusaku; TAKAGAKI, Atsushi; HAYASHI, Shigenobu; KIKUCHI, Ryuji; OYAMA, S. Ted

**3B2-52** Acid-base catalysis of lanthanum phosphate synthesized by hydrothermal method (MSL, Tokyo Tech) ○NAGAHARA, Ippei; KAMATA, Keigo; HARA, Michikazu

**3B2-53** Solid base catalysis derived from the cage structure of 12CaO7Al<sub>2</sub>O<sub>3</sub> with various anions (MSL, Tokyo Tech) ○KIMURA, Atsushi; INOUE, Yasunori; KITANO, Masaaki; KAMATA, Keigo; HARA, Michikazu

## Room B3

Chishinkan1 Building 114

### Analytical Chemistry

Thursday, March 24, AM

#### Bioanalysis

Chair: KAJI, Noritada (9 : 30 ~ 10 : 30)

\* 9:20-9:30: interval for laptop PC connection.(1B3-04, 1B3-05, 1B3-06, 1B3-07, 1B3-08)

**1B3-04** Chemical Modifications of Kenaf with Polyamine and Its Adsorption Characterization for Living Substance (Coll. Eng., Chubu Univ.) ○SUZUKI, Masashi; MAEDA, Kouhei; IINUMA, Satoru; MIYAUCHI, Toshiyuki

**1B3-05** The effect of salt on the Bactericidal effects of electrolyzed water containing hypochlorous acid (Fac. Sci., Kanagawa Univ.) ○KUNO, Teruaki; IWASAWA, Atsuo; NISHIMOTO, Yuko

**1B3-06** Fluorescent-based Highly Sensitive Cortisol Detection using Oriented Molecularly Imprinted Cavities Bearing Multiple binding sites (Grad. Sch. Eng., Kobe Univ.) ○SUDA, Narito; TAKEUCHI, Toshifumi; KITAYAMA, Yukiya; SUNAYAMA, Hirobumi

**1B3-07** State Analysis of Methyl Cellulose Thermo Reversible Hydrogels containing Salt and Polyethylene Glycol (Fac. Sci., Kanagawa Univ.) ○EGUCHI, Hiroki; NISHIMOTO, Yuko

**1B3-08\*** Effect of Temperature on Ultra-Sensitive Assay of Enzymatic Activity

on Nanofibrous Substrates (JAMSTEC) ○TSUDOME, Mikiko; DEGUCHI, Shigeru

Chair: NISHINO, Tomoaki (10 : 40~11 : 40)

\* 10:30-10:40: interval for laptop PC connection.(1B3-11, 1B3-12, 1B3-13, 1B3-15)

**1B3-11** Development of a selective adsorption/detection medium for glycoproteins via a complexation with boronic acids (Grad. Sch. Eng., Kyoto Univ.) ○FURUTA, Hayato; NAITO, Toyohiro; KUBO, Takuya; OTSUKA, Koji

**1B3-12** Self-Priming Creation Technique of Monodisperse Water-in-Oil Droplets Using a PDMS Microfluidic Chip for Droplet Digital PCR (Fac. Sci. Eng., Doshisha Univ.) ○NAKASHOJI, Yuta; TSUKAGOSHI, Kazuhiko; HASHIMOTO, Masahiko

**1B3-13\*** Colorization of electrochemical bioimaging using a large-scale integration device (Grad. Sch. Environmental Studies, Tohoku Univ.) ○INO, Kosuke; KANNO, Yusuke; SUDA, Atsushi; KUKATA, Ryota; MATSUDAIRA, Masahiko; SHIKU, Hitoshi; MATSUE, Tomokazu

**1B3-15\*** Live cell imaging and analysis for bioluminescence reaction in a high-throughput manner (Grad. Sch. Sci., The Univ. of Tokyo) ○HATTORI, Mitsuru; OZAWA, Takeaki

### Thursday, March 24, PM

Chair: TSUKAGOSHI, Kazuhiko (14 : 40~15 : 30)

\* 14:30-14:40: interval for laptop PC connection.(1B3-35, 1B3-36, 1B3-38)

**1B3-35** Specific capture of C-reactive protein using surface coated nanowire devices (Grad. Sch. Eng., Nagoya Univ.) ○YOKOYAMA, Asami; YASUI, Takao; GODA, Tatsuro; YANAGIDA, Takeshi; KAJI, Noritada; KANAI, Masaki; NAGASHIMA, Kazuki; MIYAHARA, Yuji; KAWAI, Tomoji; BABA, Yoshinobu

**1B3-36\*** in vivo deep-tissue imaging with cadmium-free quantum dots. (Grad. Sch. Eng., Nagoya Univ.) ○OGIHARA, Yusuke; YUKAWA, Hiroshi; ONOSHIMA, Daisuke; KAMETAMA, Tatsuya; HAYASHI, Yumi; TORIMOTO, Tsukasa; ISHIKAWA, Tetsuya; BABA, Yoshinobu

**1B3-38<sup>#</sup>** Development of a Bioluminescent Indicator for Highly Sensitive and Rapid Detection of Estrogenic Activity in Living Cells (Grad. Sch. Sci., The Univ. of Tokyo) ○TAKENOUCHE, Osamu; KANNO, Akira; TAKAKURA, Hideo; HATTORI, Mitsuru; OZAWA, Takeaki

Chair: NISHIMOTO, Yuko (15 : 40~16 : 30)

\* 15:30-15:40: interval for laptop PC connection.(1B3-41, 1B3-43, 1B3-44, 1B3-45)

**1B3-41<sup>#</sup>** Analysis of single molecule dynamic to reveal the functional mechanism of telomeric repeat-containing RNA (Grad. Sch. Sci., The Univ. of Tokyo) ○YOSHIMURA, Hideaki; YAMADA, Toshimichi; OZAWA, Takeaki

**1B3-43** Detection of influenza virus using sialic acid-, oligonucleotide-modified nano particles (Grad. Sch. Human Dev. Env., Kobe Univ.) ○AKAMATSU, Daichi; YAMABE, Miyuki; EBARA, Yasuhito

**1B3-44** Kinetics and thermodynamic analysis of triplex formation between Peptide nucleic acid and double-stranded RNA (Grad. Sch. Sci., Tohoku Univ.) ○SAKAMOTO, Naonari; SATO, Takaya; SATO, Yusuke; NISHIZAWA, Seiichi

**1B3-45** Fluorescence Screening for HCV RNA binding ligand utilizing thiazole orange (Sch. Sci., Tohoku Univ.) ○YAMADA, Naoki; NISHIZAWA, Seiichi

Chair: OZAWA, Takeaki (16 : 40~17 : 30)

\* 16:30-16:40: interval for laptop PC connection.(1B3-47, 1B3-49, 1B3-50, 1B3-51)

**1B3-47\*** Specific single-molecule detection of glucose based on molecular conductance measurements (Grad. Sch. Sci., Eng., Tokyo Tech) ○NISHINO, Tomoaki

**1B3-49** High-Resolution Imaging of Amyloid Fibrils in Liquid by Frequency Modulation Atomic Force Microscopy (Grad. Sch. Sci., Kobe Univ.) ○KATAOKA, Hiroyuki; KIMURA, Kenjiro; CHATANI, Eri; MASUDA, Yuki; YAMASITA, Kazuto

**1B3-50** Enhancement of SPR sensitivity based on the RCA reaction activated by surface plasmon heating (Grad. Sch. of Life and Env. Sci., Kyoto Pref. Univ.) ○KAWAHARA, Yuki; ISHIDA, Akito

**1B3-51** Structural analysis of  $\alpha$ -humulene by means of the crystalline sponge method: identification of an oxidized site by the difference method (Grad. Sch. Eng., The Univ. of Tokyo; ACCEL, JST) ○SAKURAI, Fumie; HOSHINO, Manabu; FUJITA, Makoto

### Friday, March 25, AM

#### Chromatography

Chair: HISAMOTO, Hideaki (9 : 00 ~ 10 : 10)

\* 8:50-9:00: interval for laptop PC connection.(2B3-01, 2B3-02, 2B3-03, 2B3-04, 2B3-05, 2B3-06)

**2B3-01** Development of the determination system for ppt level boron by Microwave Heating Pre column derivatization High-Performance Liquid

Chromatography and improvement of its sensitivity (Univ. of Fukui)  
 ○DEJIMA, Shinya; TAKAHASHI, Toru

**2B3-02** Development of novel through-porous particles as separation media for chromatography (YMC Co., Ltd.; Emaus Kyoto Inc.) ○TAKAHASHI, Ryosuke; KANEZAKI, Hiroki; YUKIYAMA, Takashi; MIYASHITA, Moemi; TSUTSUI, Ken; KOBAYASHI, Masahide; KURODA, Noritaka; KURIYAMA, Naohiro; ISHIZUKA, Norio

**2B3-03** Preparation of a C<sub>60</sub>-fullerene bonded silica monolithic capillary and its application for the separation of carbohydrates (Grad. Sch. Eng., Kyoto Univ.) ○TSUZUKI, Madoka; MURAKAMI, Yoshiki; NAITO, Toyohiro; KUBO, Takuya; OTSUKA, Koji

**2B3-04** Consideration of capillary chromatography based on phase separation multi-phase flow from heigh equivalent to a theoretical plate (Fac. Sci. Eng., Doshisha Univ.) ○SUGAWA, Yuki; HATANO, Syogo; HUIJINAGA, Satoshi; HASHIMOTO, Masahiko; TSUKAGOSHI, Kazuhiko

**2B3-05** Development of slug flow-based capillary chromatography with two-phase separation mixed solvent solution (Fac. Sci. Eng., Doshisha Univ.) ○YAMADA, Kento; MURAKAMI, Shunpei; HUIJINAGA, Satoshi; HASHIMOTO, Masahiko; TSUKAGOSHI, Kazuhiko

**2B3-06\*** Development of flow path joint-based capillary chromatography with two-phase separation mixed solvent solution (Grad. Sch. Eng., Doshisha Univ.) ○FUJINAGA, Satoshi; HASHIMOTO, Masahiko; TSUKAGOSHI, Kazuhiko

## Electrophoresis

Chair: TSUKAGOSHI, Kazuhiko (10 : 20~11 : 20)

\* 10:10-10:20: interval for laptop PC connection.(2B3-09, 2B3-10, 2B3-11, 2B3-13)

**2B3-09** Development of a sampling method for minimal amounts of biosamples using an alginate hydrogel (Sch. Eng., Osaka Pref. Univ.) ○NINOMIYAZ, Nozomi; SUEYOSHI, Kenji; ENDO, Tatsuro; HISAMOTO, Hideaki

**2B3-10** Development of a novel digital electrophoresis device containing customized capillary cartridges (Sch. Eng., Osaka Pref. Univ.) ○AOKI, Yuta; KANAOKA, Tadamasa; MATSUDA, Keita; SUEYOSHI, Kenji; ENDO, Tatsuro; HISAMOTO, Hideaki

**2B3-11\*** Development of a Novel Isoelectric Focusing Device for a Highly Sensitive Assay of a Two-step Enzyme Reaction (Grad. Sch. Eng., Osaka Pref. Univ.) SUGAWARA, Kasumi; ○SUEYOSHI, Kenji; ENDO, Tatsuro; HISAMOTO, Hideaki

**2B3-13\*** Highly Sensitive Capillary Electrophoresis of Small Volume Biological Sample (RIKEN QBiC) ○KAWAI, Takayuki; OTA, Nobutoshi; TANAKA, Yo

Chair: KUBO, Takuya (11 : 30~12 : 30)

\* 11:20-11:30: interval for laptop PC connection.(2B3-16, 2B3-18, 2B3-20, 2B3-21)

**2B3-16\*** Stain-Free DNA Electrophoresis Imaging using Near-Infrared Spectroscopy (Sch. Sci. Tech., Kwansei Gakuin Univ.) ○YASUDA, Mitsuru; KOKEGUCHI, Yuka; AKIMOTO, Takuo; OZAKI, Yukihiko

**2B3-18\*** Development of membrane protein separation method with lipid nanomembrane (Sch. Eng. Sci., Osaka Univ.) ○OKAMOTO, Yukihiko; TSUJIMOTO, Yusuke; SUGA, Keishi; UMAKOSHI, Hiroshi

**2B3-20** Concentration effect of surfactant in supramolecular gel electrophoresis (Fac. Sci., Shizuoka Univ.) ○KOBAYASHI, Kazuhiko; TAZAWA, Shouhei; YAMANAKA, Masamichi

**2B3-21** Capillary electrophoresis for identification of Escherichia coli strains (Toyama Inst. Health) ○YASUKAWA, Kazuyuki; YAMASHITA, Tomohisa; TAKADA, Hiroshi

## Friday, March 25, PM

### Mass Spectrometry/ Probe Microscope

Chair: MINAMI, Tsuyoshi (13 : 40~14 : 40)

\* 13:30-13:40: interval for laptop PC connection.(2B3-29, 2B3-30, 2B3-31, 2B3-32)

**2B3-29** Development of Chemoselective Derivatization for Enhancing Detection Sensitivity in Matrix-Assisted Laser Desorption/Ionization Imaging Mass Spectrometry (Grad. Sch. Sci. Technol., Shizuoka Univ.) ○OKAMURA, Takuma; SETOU, Mitsutoshi; SATO, Kohei; NARUMI, Tetsuo; WATANABE, Naoharu; MASE, Nobuyuki

**2B3-30** Analysis for impurities in hydrogen by soft ionization mass spectrometry (Tokyo Gas) TAKIMOTO, Isao; ○KUME, Takao; KOMORI, Mitsunori

**2B3-31** Ab Initio Study on Fragmentation Mechanisms in ESI MS/MS Spectra of a Hindered Amine Light Stabilizer. (Grad. Sch. Human. Sci., Nara Women's Univ.) ○KAWAI, Shikiho; TAKEUCHI, Takae

**2B3-32\*** Young Scholar Lectures of CSJ Development of Nano Electrochemical Microscopy for Chemical Mapping (Coll. Sci. Eng., Kanazawa Univ.) ○TAKAHASHI, Yasufumi

## Sensor

Chair: HIBARA, Akihide (14 : 50~15 : 50)

\* 14:40-14:50: interval for laptop PC connection.(2B3-36, 2B3-39, 2B3-41)

**2B3-36\*** Young Scholar Lectures of CSJ Development of Chemical Sensors based on Organic Thin Film Transistors Functionalized with Molecular Recognition Materials (Grad. Sch. Sci., Eng., Yamagata Univ.) ○MINAMI, Tsuyoshi

**2B3-39\*** Newly Developed Chemical Sensors based on an Extended-Gated Organic Transistor Functionalized by Dipicolylamine Derivatives (Grad. Sch. Sci., Eng., Yamagata Univ.) ○MINAMI, Tsuyoshi; SASAKI, Yui; TOKITO, Shizuo

**2B3-41** Investigation of antibody immobilization method on the nanoimprint lithography-based photonic crystal surface for biosensing application (Sch. Eng., Osaka Pref. Univ.) ○OKANO, Daiki; HUKUDA, Maki; ENDO, Tatsuro; SUEYOSHI, Kenji; HISAMOTO, Hideaki

## Electrochemistry

Chair: TAKAHASHI, Yasufumi (16 : 00~16 : 50)

\* 15:50-16:00: interval for laptop PC connection.(2B3-43, 2B3-45, 2B3-46, 2B3-47)

**2B3-43\*\*** Electrochemical Detection of Nereistoxin-related Pesticides (Grad. Sch. Sci. & Tech., Kumamoto Univ.; Forensic Sci. Lab., Nagasaki Pref. Police H. Q.) ○SHIMADA, Hiroshi; NOGUCHI, Shiori; YOSHIMURA, Keisuke; KITAMURA, Yusuke; NISHIYAMA, Katsuhiko; IHARA, Toshihiro

**2B3-45** Voltammetry for ion transfer at the micro-interface between aqueous solution and toluene (Fac. Sci. Tech., Ryukoku Univ.) ○KASUNO, Megumi; MATSUYAMA, Yuki; IJIMA, Misaki

**2B3-46** Fabrication of full screen-printed three-electrode sensor chip having long-term stable reference electrode (Grad. Sch. Fac. Sci. Technol., Tokyo Univ. of Sci.) ○KOMODA, Masato; HOSHI, Yoshinao; SHITANDA, Isao; ITAGAKI, Masayuki

**2B3-47** Biocompatibility and Ion Sensor Properties of Sol-Gel Derived Membranes Combined with Oligoethylene Glycol Derivative by Chemical Modification. (Fac. Sys. Eng., Wakayama Univ.) ○ISHIGAKI, Hiromasa; YAJIMA, Setsuko; TANAKA, Mutsuo; KIMURA, Keiichi

## Saturday, March 26, AM

### Micro/nano analysis

Chair: FUKUYAMA, Mao (9 : 00 ~ 10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(3B3-01, 3B3-02, 3B3-03, 3B3-05)

**3B3-01** Absorption of biopolymer solution with ternary mixed solvent solution and its flow behavior in the phase separation multi-phase flow (Grad. Sch. Eng., Doshisha Univ.) ○ITO, Yuki; NOGAMI, Takahiro; HASHIMOTO, Masahiko; TSUKAGOSHI, Kazuhiko

**3B3-02** Development of mRNA expression assay from a single cell by microchamber array devices (Grad. Sch. Eng., Nagoya Univ.) ○ITO, Shiori; KAJI, Noritada; YASUI, Takao; BABA, Yoshinobu

**3B3-03\*** Electrical and optical sensing system for bacteria discrimination (Grad. Sch. Eng., Nagoya Univ.) ○YASAKI, Hiroto; YASUI, Takao; YANAGIDA, Takeshi; KAJI, Noritada; KANAI, Masaki; NAGASHIMA, Kazuki; KAWAI, Tomoji; BABA, Yoshinobu

**3B3-05\*** Nanospaces for exosome analysis in body fluids (Grad. Sch. Eng., Nagoya Univ.) ○YASUI, Takao; TAKESHITA, Daiki; KONAKADE, Yuki; ITO, Satoru; YANAGIDA, Takeshi; KAJI, Noritada; KANAI, Masaki; NAGASHIMA, Kazuki; KAWAI, Tomoji; BABA, Yoshinobu

### Micro/nano analysis

Chair: SUWA, Masayori (10 : 10~11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(3B3-08, 3B3-09, 3B3-10, 3B3-11, 3B3-12)

**3B3-08** Analysis of fluidic behavior at the interface of micro- and nanospace (Grad. Sch. Eng., Nagoya Univ.) ○HATTORI, Yuya; KAJI, Noritada; YASUI, Takao; BABA, Yoshinobu

**3B3-09** Evaluation of potential responsiveness of the sample concentration in electrokinetic trapping (Grad. Sch. Eng., Kyoto Univ.) ○YOSHIDA, Yukiko; NAITO, Toyohiro; KUBO, Takuya; OTSUKA, Koji

**3B3-10** Development of microchip separation device used at a room temperature by using phase separation multi-phase flow (Grad. Sch. Eng., Doshisha Univ.) ○NAKATA, Yuko; SUZUKI, Naomichi; HASHIMOTO, Masahiko; TSUKAGOSHI, Kazuhiko

**3B3-11** Investigation of novel fluidic behavior of mixed solvent solution in a microchannel and application to analytical chemistry (Fac. Sci. Eng., Doshisha Univ.) ○YAMAWAKI, Bun; MURAKAMI, Shunpei; HASHIMOTO, Masahiko; TSUKAGOSHI, Kazuhiko

**3B3-12\*** Investigation of the mechanism of the spontaneous emulsification by using fluorescent dyes (KIT) ○FUKUYAMA, Mao; YOSHIDA, Yumi; MAEDA, Kohji; HIBARA, Akihide

# Room B4

## Chishinkan1 Building 115

### Theoretical Chemistry, Chemoinformatics, and Computational Chemistry

Thursday, March 24, PM

#### Dynamics

Chair: OKUMURA, Mitutaka (13 : 30~14 : 10)

\* 13:20-13:30: interval for laptop PC connection.(1B4-28, 1B4-29, 1B4-30, 1B4-31)

**1B4-28** Local Structure Analysis at Aqueous Solution / Graphite Electrode Interface by Molecular Dynamics Simulation (Grad. Sch. Eng. Sci., Osaka Univ.) ○IMAI, Masaya; YOKOTA, Yasuyuki; MORIKAWA, Yoshitada; INAGAKI, Koji; FUKUI, Ken-ichi

**1B4-29** Strand break processes in short model DNAs: Chemical reaction dynamics analysis (Sch. Sci., Tohoku Univ.; Grad. Sch. Sci., Tohoku Univ.; IMRAM, Tohoku Univ.) ○OIKAWA, Keita; HISHINUMA, Naoki; KANNO, Manabu; KINO, Yasushi; AKIYAMA, Kimio; KONO, Hirohiko

**1B4-30** A study of pulse sequences of quantum state control toward molecular spin based quantum computers (Fac. Sci., Osaka City Univ.) ○YAMAMOTO, Satoru; SHIBATA, Taiki; SUGISAKI, Kenji; NAKAZAWA, Shigeaki; SATO, Kazunobu; TOYOTA, Kazuo; SHIOMI, Daisuke; TAKUI, Takeji

**1B4-31** Molecular optimization for molecular-spin based quantum computers: Simulations of multiple quantum gates only by microwave pulses (Grad. Sch. Sci., Osaka City Univ.) ○SHIBATA, Taiki; YAMAMOTO, Satoru; NAKAZAWA, Shigeaki; HOSSEINI, Elham; SUGISAKI, Kenji; MARUYAMA, Koji; TOYOTA, Kazuo; SHIOMI, Daisuke; SATO, Kazunobu; TAKUI, Takeji

#### Chemical Reaction

Chair: IUCHI, Satoru (14 : 20~15 : 10)

\* 14:10-14:20: interval for laptop PC connection.(1B4-33, 1B4-34, 1B4-36, 1B4-37)

**1B4-33** Theoretical Investigation of Role of Water on Au/TiO<sub>2</sub> Catalysts (Grad. Sch. Sci., Osaka Univ.) ○KONDO, Yudai; KOGA, Hiroaki; TADA, Kohei; SAKATA, Kohei; OGUNI, Atsushi; KAWAKAMI, Takashi; YAMANAKA, Shusuke; OKUMURA, Mitsutaka

**1B4-34\*** Theoretical Study of Methane Activation at the Dicopper Site of pMMO (IMCE, Kyushu Univ.) ○SHIOTA, Yoshihito; ITOYAMA, Shuhei; YOSHIZAWA, Kazunari

**1B4-36** Theoretical studies on Fe-zeolites catalyst for direct NO decomposition (Fac. Eng., The Univ. of Tokyo) ○ISHIDA, Soichiro; USHIYAMA, Hiroshi; YAMASHITA, Koichi

**1B4-37\*** Entropy barrier in potential energy curve: a quantum chemical study (RISE, Waseda Univ.) ○ISHIKAWA, Atsushi; NAKAI, Hiromi

#### Mathematical Chemistry

Chair: KAWAI, Shinnosuke (15 : 20~16 : 10)

\* 15:10-15:20: interval for laptop PC connection.(1B4-39, 1B4-40, 1B4-41, 1B4-42, 1B4-43)

**1B4-39** DFT calculations of conformation-modulated intermolecular interactions: Effect of the BSSE on the calculations (Fac. Eng., Tottori Univ.) ○HAYASE, Shuichi; NOKAMI, Toshiki; ITOH, Toshiyuki

**1B4-40** A theoretical study on transition intensities of Morse oscillators (Fac. Sci. Tech., Keio Univ.) ○NISHI, Takanori; TAKAHASHI, Hirokazu; YABUSHITA, Satoshi

#### Electronic Structure

**1B4-41** Theoretical prediction for the vibrational-rotational spectra of the fundamental band of the lowest bending mode of the linear polyynes (Grad. Sch. Sci. Tech., Keio Univ.) ○TSUYUKI, Masafumi; KANAMORI, Hideto; YABUSHITA, Satoshi

**1B4-42** An accurate calculation for the lowest autoionizing state of the hydrogen molecule by the combination of the complex basis function method and free-complement method (Grad. Sch. Sci. Tech., Keio Univ.) ○ITO, Yo; WATANABE, Teruhiko; YABUSHITA, Satoshi

**1B4-43** Theoretical study on the photodissociation of ICN in the asymptotic region (Grad. Sch. Sci. Tech., Keio Univ.) ○KASHIMURA, Tatsuhiko; IKEZAKI, Tomoya; OHTA, Yusuke; YABUSHITA, Satoshi

#### Micro/nano analysis

Chair: KUWAHARA, Shota (11 : 20~12 : 20)

\* 11:10-11:20: interval for laptop PC connection.(3B3-15, 3B3-16, 3B3-17, 3B3-18, 3B3-19)

**3B3-15** Evaluation of the tolerance on the flow rate variance in the continuous titration chip with a microfluidic pyramidal network (Toyohashi Univ. of Tech.) ○MURAKAMI, Yuji; HIGUCHI, Shunichi; KOYAMA, Eri; TAKESAKO, Yoshiki; KAKIMOTO, Hiroki; MIYAKE, Ryo

**3B3-16** Particulate matter trapping device (Grad. Sch. Eng., Nagoya Univ.) ○SHIMADA, Taisuke; YASUI, Takao; HIBARA, Akihito; YANAGIDA, Takeshi; KAJI, Noritada; KANAI, Masaki; NAGASHIMA, Kazuki; KAWAI, Tomoji; BABA, Yoshinobu

**3B3-17** Magnetization measurement of micro-volume magnetic nanoparticle solution by transverse magnetic Kerr effect (Osaka Univ.) ○WATARAI, Hitoshi; CHEN, Zhijun; YU, Ting Hui

**3B3-18** Faraday rotation image of silica gel particle adsorbed by paramagnetic ion (Grad. Sch. Sci., Osaka Univ.) KAWAMURA, Yu; MORITA, Kazuo; ○SUWA, Masayori; TSUKAHARA, Satoshi

**3B3-19\*** Ultratrace extraction analysis by laser-induced single picolitter microparticles (Fac. Sci., Hokkaido Univ.; Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) NOHARA, Riku; ○MIURA, Atsushi; KITAMURA, Noboru

Saturday, March 26, PM

#### Spectrometry

Chair: YASUI, Takao (13 : 40~14 : 50)

\* 13:30-13:40: interval for laptop PC connection.(3B3-29, 3B3-30, 3B3-31, 3B3-32, 3B3-33, 3B3-34)

**3B3-29** Direct measurement of the propagation of the phase transition in a liquid crystal due to photochemical effect measured using transient grating method (Grad. Sch. Sci. Eng., Chuo Univ.) ○SATO, Takahiro; KUWAHARA, Shota; KATAYAMA, Kenji

**3B3-30** The examination of mechanism of the laser ablation in liquid of perylene microcrystals by the time-resolved spectral (Grad. Sch. Sci., Eng., Ehime Univ.) SHIKAMA, Kohta; KIHARA, Ryo; ISHIBASHI, Yukihito; ○ASAHI, Tsuyoshi

**3B3-31** Integration of thermal lens detection device with Mach-Zehnder interferometer (Grad. Sch. Eng., The Univ. of Tokyo) ○MORITA, Hiroki; SHIMIZU, Hisashi; SAKAKURA, Masaaki; SIMOTSUMA, Yasuhiko; MIURA, Kiyotaka; HIRAO, Kazuyuki; MAWATARI, Kazuma; KITAMORI, Takehiko

**3B3-32** Study of UV differential interference contrast thermal lens microscopy toward single cell analysis (Grad. Sch. Eng., The Univ. of Tokyo) ○MIYAWAKI, Naoya; SHIMIZU, Hisashi; MAWATARI, Kazuma; KITAMORI, Takehiko

**3B3-33** Analysis of Amino Acid Phenylthiohydantoin Derivative by Gas Chromatography/Laser Ionization Mass Spectrometry (Fac. Eng., Kyushu Univ.) ○YUAN, Luyang; TANG, Yuanyuan; LI, Adan; IMASAKA, Totaro

**3B3-34\*** A study of development of atomic emission spectrometry using a pyroelectric crystal (Fac. Eng., Tokyo Univ. of Sci.) ○KUNIMURA, Shinsuke; ONO, Yuya; SAKAMOTO, Takuya

#### Reagents for analysis · FIA

Chair: KUNIMURA, Shinsuke (15 : 00~15 : 50)

\* 14:50-15:00: interval for laptop PC connection.(3B3-37, 3B3-38, 3B3-39, 3B3-40, 3B3-41)

**3B3-37** The stability assessment of certain aromatic amine standard solutions. (MCM, AIST) ○MIYAMOTO, Ayano; HANARI, Nobuyasu; NUMATA, Masahiko

**3B3-38** Investigation of phase separation multi-phase flow with PEG/Dextran mixed aqueous solution and application to separation technology (Fac. Sci. Eng., Doshisha Univ.) ○IMANISHI, Fumiya; FUJINAGA, Satoshi; KAN, Hyou; HASHIMOTO, Masahiko; TSUKAGOSHI, Kazuhiko

**3B3-39** Investigation of phase separation multi-phase flow with ternary mixed solvent solution containing N-isopropylacrylamide and application to separation technology (Grad. Sch. Eng., Doshisha Univ.) ○UEDA, Shungo; KAN, Hyou; HASHIMOTO, Masahiko; TSUKAGOSHI, Kazuhiko

**3B3-40** Investigation of phase separation multi-phase flow with micelle mixed aqueous solution and application to separation technology (Grad. Sch. Eng., Doshisha Univ.) ○KANEMATSU, Hiroshi; HANAMURA, Naoya; HASHIMOTO, Masahiko; TSUKAGOSHI, Kazuhiko

**3B3-41** Investigation of flow path diameters and solution sending methods in phase separation multi-phase flow (Grad. Sch. Eng., Doshisha Univ.; Grad. Sch. Eng., Doshisha Univ.) ○NAKAYAMA, Yukari; FUJINAGA, Satoshi; HASHIMOTO, Masahiko; TSUKAGOSHI, Kazuhiko

Friday, March 25, AM

## Electronic Structure

Chair: HIGASHI, Masahiro (9 : 00 ~ 9 : 50)

\* 8:50-9:00: interval for laptop PC connection.(2B4-01, 2B4-03, 2B4-04, 2B4-05)

- 2B4-01\*\*** Theoretical study of atomic and molecular systems by electronic stress tensor density and kinetic energy density (Kyoto Univ.) ○ICHIKAWA, Kazuhide; NOZAKI, Hiroo; TACHIBANA, Akitomo
- 2B4-03** DFT calculations of the zero-field splitting tensors of multinuclear transition metal complexes (Grad. Sch. Sci., Osaka City Univ.) ○SUGISAKI, Kenji; TOYOTA, Kazuo; SATO, Kazunobu; SHIOMI, Daisuke; TAKUI, Takeji
- 2B4-04** Theoretical Study on Carbon-Carbon Short Contact of ~2.3 Å (RIKEN RINC) ○HATAKEYAMA, Makoto; OGATA, Koji; ISHIDA, Toshimasa; KITAMURA, Kunihiro; NAKAMURA, Shinichiro
- 2B4-05** Exchange-correlation functionals for relativistic density functional theory (Sch. Advanced Sci. Eng., Waseda Univ.) ○OYAMA, Takuro; IKABATA, Yasuhiro; NAKAI, Hiromi

## Simulation

Chair: ISHIZUKA, Ryosuke (10 : 00 ~ 11 : 00)

\* 9:50-10:00: interval for laptop PC connection.(2B4-07, 2B4-08, 2B4-09, 2B4-10, 2B4-11, 2B4-12)

- 2B4-07** Ab initio molecular dynamics simulation of sum frequency generation spectra (Grad. Sch. Eng. Sci., Osaka Univ.) ○OHTO, Tatsuhiko; BONN, Mischa; NAGATA, Yuki
- 2B4-08** Theoretical investigation on photoexcitation dynamics of Cu(I) complexes with molecular dynamics simulation (Grad. Sch. Eng. Sci., Univ. of Ryukyus) ○AGENA, Asaka; HIGASHI, Masahiro
- 2B4-09** A theoretical study on solution structure of ionic liquids by molecular dynamics simulation using effective fragment potential (Grad. Sch. Of Humanities and Sci., Ochanomizu Univ.) ○KUROKI, Nahoko; MORI, Hirotoshi
- 2B4-10** All-atom molecular dynamics calculation of an electrode interface with the method of images (Sch. Eng., Kyoto Univ.) ○MATSUMI, Yusuke; NAKANO, Hiroshi; SATO, Hirofumi
- 2B4-11** Calculation of the reaction mechanism of the benzoic acid dissociation using QM/MM molecular dynamics method (Grad. Sch. Sci., Osaka Univ.) ○MITSUTA, Yuki; YAMANAKA, Shusuke; KAWAKAMI, Takashi; SAITO, Toru; OKUMURA, Mitsutaka
- 2B4-12** Theoretical study of PQQ, the rate of dissolution and equilibrium state in water (RIKEN RINC) ○SAKAMOTO, Yuki; TANAKA, Rikako; OGATA, Kouji; IKEMOTO, Kazuto; MATSUSHITA, Nobuyuki; NAKAMURA, Shinichiro

## Electronic Structure

Chair: TORII, Hajime (11 : 10 ~ 12 : 10)

\* 11:00-11:10: interval for laptop PC connection.(2B4-14)

- 2B4-14 CSJ Award for Creative Works** Linear-Scaling Relativistic Quantum Chemistry for Encompassing the Periodic Table (Fac. Sci. Eng., Waseda Univ.) ○NAKAI, Hiromi

Sunday, March 27, AM

Chair: SATO, Hirofumi (9 : 00 ~ 10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(4B4-01, 4B4-03, 4B4-05)

- 4B4-01\*\*** Effect of f-orbital on the chemical separation of Am(III) from Eu(III) (Grad. Sch. Sci., Hiroshima Univ.; N-BARD, Hiroshima Univ.) ○KANEKO, Masashi; MIYASHITA, Sunao; NAKASHIMA, Satoru
- 4B4-03\*** Theoretical study on effects of open-shell singlet nature and  $\sigma$ -/ $\pi$ -conjugation on the third-order nonlinear optical properties of Si chains (Faculty of Engineering Science, Osaka University) ○MATSUI, Hiroshi; FUKUDA, Kotaro; ITO, Soichi; FUJIYOSHI, Jun-ya; NAGAMI, Takanori; NAKANO, Masayoshi
- 4B4-05\*** Automatic parameter optimization scheme based on swarm intelligence toward accurate and efficient relativistic quantum chemical calculations (RISE, Waseda Univ.) ○SEINO, Junji; HAYAMI, Masao; NAKAI, Hiromi

## Electronic Structure

Chair: SUGIMOTO, Manabu (10 : 10 ~ 11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(4B4-08, 4B4-10, 4B4-12)

- 4B4-08\*** Acceleration of non-local excitation calculations by using dynamical polarizability based on divide-and conquer method (Sch. Advanced Sci. Eng., Waseda Univ.) ○YOSHIKAWA, Takeshi; YOSHIHARA, Jyunya; NAKAI, Hiromi
- 4B4-10\*** H/D isotope effect in the molecular structure and spectroscopy of Photoactive Yellow Protein (Grad. Sch. Info. Sci., Hiroshima City Univ.) ○KANEMATSU, Yusuke; TACHIKAWA, Masanori; TAKANO, Yu

## Bio-related

- 4B4-12\*** A QM/MM Study of the Catalytic Mechanism of Nitrile Hydratase (Univ. of Tsukuba) ○KAYANUMA, Megumi; SHOJI, Mitsuo; SHIGETA, Yasuteru

Chair: MATUBAYASI, Nobuyuki (11 : 20 ~ 12 : 20)

- \* 11:10-11:20: interval for laptop PC connection.(4B4-15, 4B4-16, 4B4-18, 4B4-19)
- 4B4-15** QM/MM Study on Sialyltransferase Reaction Mechanism (Grad. Sch. Nanobiosci., Yokohama City Univ.) ○HAMADA, Yojiro; KANEMATSU, Yusuke; TACHIKAWA, Masanori
- 4B4-16\*** Theoretical analysis on the synthetic model (Mn4CaO4) of the photosynthetic oxygen evolving complex (Div. of Chem., Fac. Pure Appl. Sci., Univ. of Tsukuba) ○SHOJI, Mitsuo; ISOBE, Hiroshi; SHEN, Jian-ren; YAMAGUCHI, Kizashi
- 4B4-18** Elucidation of the self-organization process of the light-harvesting complexes with molecular dynamics simulation (Grad. Sch. Eng. Sci., Univ. of Ryukyus) ○YAMAUCHI, Marie; SAITO, Shinji; HIGASHI, Masahiro
- 4B4-19\*** A theoretical analysis of the excitation energies and their fluctuations of pigments in light-harvesting antennas (Fac. Sci., Univ. of Ryukyus) ○HIGASHI, Masahiro; SAITO, Shinji

Sunday, March 27, PM

## Materials

Chair: TACHIKAWA, Masanori (13 : 30 ~ 14 : 30)

\* 13:20-13:30: interval for laptop PC connection.(4B4-28, 4B4-30, 4B4-31, 4B4-32, 4B4-33)

- 4B4-28\*\*** Molecular design for highly efficient delayed fluorescence emitters by visualizing radiative and nonradiative decays (ICR, Kyoto Univ.) ○SHIZU, Katsuyuki; UEJIMA, Motoyuki; SATO, Tohru; TANAKA, Kazuyoshi; ADACHI, Chihaya; KAJI, Hironori
- 4B4-30** Theoretical Design for Dye sensitizers Using Spin-forbidden Excitation (Grad. Sch. Sci. Eng., TMU) ○KANNO, Shohei; IMAMURA, Yutaka; HADA, Masahiko
- 4B4-31** How to Improve the Conductivity of Porous Coordination Polymer (Dep. Chem., Sch. Sci., Kyoto Univ.) ○KOMATSU, Tokutaro; SUGIURA, Tasuku; KITAGAWA, Hiroshi
- 4B4-32\*** Ab-initio Calculations of Voltage Profile and Phase Stability in Li<sub>x</sub>C<sub>6</sub> (Grad. Sch. Eng., Kyoto Univ.) ○OTA, Wataru; SHISHIKIN, Maxim; SATO, Hirofumi
- 4B4-33** The charge transfer dynamics at the interface and the charge separation at the Diketopyrrolopyrrole donor and PCBM (Fac. Eng., The Univ. of Tokyo) ○KODA, Shohei; FUJII, Mikiya; YAMASHITA, Koichi

## Chemical Information

Chair: GOTO, Hitoshi (14 : 40 ~ 15 : 20)

\* 14:30-14:40: interval for laptop PC connection.(4B4-35, 4B4-36, 4B4-37, 4B4-38)

- 4B4-35** A validity for the scaling factor in computing pKa value (Div. of Chem., Fac. Pure Appl. Sci., Univ. of Tsukuba) ○MATSUI, Toru; MORIHASHI, Kenji; SHIGETA, Yasuteru
- 4B4-36** Development of chemical-reaction prediction scheme of organic molecules by using quantum chemical calculation and machine learning (Sch. Advanced Sci. Eng., Waseda Univ.) ○FUJINAMI, Mikito; SEINO, Junji; NAKAI, Hiromi

## Electronic Structure

- 4B4-37** Inclusion of the anharmonic effect into harmonic solvation model (Sch. Advanced Sci. Eng., Waseda Univ.) ○IMAI, Minoru; ISHIKAWA, Atsushi; NAKAI, Hiromi
- 4B4-38** Method Developments for Time-Dependent Density-Functional Tight-Binding Method (FIFC, Kyoto Univ.) ○NISHIMOTO, Yoshio

## Electronic Structure

Chair: SHIGETA, Yasuteru (15 : 30 ~ 16 : 10)

\* 15:20-15:30: interval for laptop PC connection.(4B4-40, 4B4-41, 4B4-42, 4B4-43)

- 4B4-40** DFT calculations on excited states of TADF molecular systems (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) ○IWASAKI, Toya; MORIHASHI, Kenji
- 4B4-41** Analysis of the Behavior of Electrons and Infrared Intensities in Low-Barrier Hydrogen Bonding and Proton-Coupled Electron Transfer Using Out-of-Plane Dipole Derivatives (Fac. Edu., Shizuoka Univ.) ○TORII, Hajime
- 4B4-42** Theoretical study of H/D isotope effect on <sup>35</sup>Cl NQR frequency on pyrrolidinium *p*-chlorobenzoate (Grad. Sch. Nanobiosci., Yokohama City Univ.) ○HIDAKA, Ai; KANEMATSU, Yusuke; KITA, Yukiuni; TACHIKAWA, Masanori
- 4B4-43** Theoretical study about light-absorbing wavelength and electronic

state of phenolphthalein in a solution. (Sch. Eng., Kyoto Univ.)  
 ○TANAHASHI, Yuta; SATO, Hirofumi

## Room B5

### Chishinkan1 Building 119

#### Polymer

#### Thursday, March 24, AM

Chair: SAWADA, Shinichi (10 : 00~11 : 00)

\* 9:50-10:00: interval for laptop PC connection.(1B5-07, 1B5-08, 1B5-09, 1B5-10, 1B5-12)

**1B5-07** Synthesis of Chitin Long Fatty Acid Esters in Ionic Liquid (Grad. Sch. Sci., Eng., Kagoshima Univ.) ○KADOKAWA, Jun-ichi; ENDO, Ryo; YAMAMOTO, Kazuya

**1B5-08** Synthesis of Non-Natural Mannoglucan by Phosphorylase-Catalyzed Enzymatic Copolymerization (Grad. Sch. Sci., Eng., Kagoshima Univ.) ○BABA, Ryotaro; YAMAMOTO, Kazuya; KADOKAWA, Jun-ichi

**1B5-09** Preparation of partially carboxylated xanthan gum using ionic liquids and its nanoparticles formation (Grad. Sch. Sci., Eng., Kagoshima Univ.) ○IIMORI, Keisho; YAMAMOTO, Kazuya; KADOKAWA, Jun-ichi

**1B5-10\*** Morphology control of wrinkled surface prepared by the bio-based surface wrinkling system inspired by wood (Grad. Sch. Eng., Tottori Univ.; Grad. Sch. Eng., Tottori Univ.) ○IZAWA, Hironori; OKUDA, Noriko; MORIYAMA, Arisu; IFUKU, Shinsuke; MORIMOTO, Minoru; SAIMOTO, Hiroyuki

**1B5-12** Enzymatic Synthesis of Thiol-Functionalized Sugar Chains by Phosphorylase Catalysis (Grad. Sch. Sci., Eng., Kagoshima Univ.) ○JODOI, Taiji; YAMAMOTO, Kazuya; KADOKAWA, Jun-ichi

Chair: EBARA, Yasuhito (11 : 10~12 : 10)

\* 11:00-11:10: interval for laptop PC connection.(1B5-14, 1B5-15, 1B5-16, 1B5-17, 1B5-19)

**1B5-14** Synthesis of the novel chimeric PRNA derivative with 3'-LNA moiety and its application for antisense oligonucleotide therapeutics (IMRAM, Tohoku Univ.) ○UNABARA, Daisuke; INAGAKI, Masahito; UEMATSU, Ryohei; ARAKI, Yasuyuki; SAKAMOTO, Seiji; ISHIBASHI, Satoru; TOKOTA, Takanori; WADA, Takehiko

**1B5-15** Synthesis and Fluorescence Property of Amphiphilic Pentablock Polymer with GFP-based FSYGV Peptide as Core Segment (Grad. Sch. Eng., Doshisha Univ.) ○NISHIMURA, Shin-nosuke; KOGA, Tomoyuki; HIGASHI, Nobuyuki

**1B5-16** Construction of target-directed proteoliposomes using cell-free synthesis/liposome system (Grad. Sch. Eng., Kyoto Univ.) ○MIURA, Risako; ANDOU, Mitsuru; SAWADA, Shinichi; SASAKI, Yoshihiro; AKIYOSHI, Kazunari

**1B5-17\*\*** Controlled Synthesis of Polysaccharides in Porous Coordination Polymers (Grad. Sch. Eng., Kyoto Univ.; CREST, JST; WPI-iCeMS, Kyoto Univ.) ○KOBAYASHI, Yuichiro; HORIE, Yuhki; HONJOU, Kayako; UEMURA, Takashi; KITAGAWA, Susumu

**1B5-19** Preparation and function of nanogel-crosslinked materials based on the formations of dispersive structures (Grad. Sch. Eng., Kyoto Univ.) ○FUJIMOTO, Tatsuya; MUKAI, Sada-atsu; SAWADA, Shinichi; SASAKI, Yoshihiro; AKIYOSHI, Kazunari

#### Thursday, March 24, PM

Chair: AKITAYA, Tatsuo (13 : 30~14 : 20)

\* 13:20-13:30: interval for laptop PC connection.(1B5-28, 1B5-29, 1B5-30, 1B5-32)

**1B5-28** Design and function of polysaccharide grafted with thermo-responsive polymers (Grad. Sch. Eng., Kyoto Univ.) ○SHEN, Sishi; NISHIMURA, Tomoki; SAWADA, Shinichi; MUKAI, Sada-atsu; SASAKI, Yoshihiro; AKIYOSHI, Kazunari

**1B5-29** Synthesis of mannose-modified oligonucleotide that has high affinity to mannose binding protein (Grad. Sch. Human Dev. Env., Kobe Univ.) ○MATSUDA, Mika; YAMABE, Miyuki; EBARA, Yasuhito

**1B5-30\*** Control of protein refolding by amphiphilic glucan dendrimers (Grad. Sch. Eng., Kyoto Univ.) ○TAKEDA, Shigeo; SAWADA, Shinichi; SASAKI, Yoshihiro; AKIYOSHI, Kazunari

**1B5-32** Supramolecular Asymmetric Photochirogenesis of 2-Anthracenecarboxylate with Proteins & Polymer Hybrids as Chiral Reaction Media-12 -PEGylation of HSA in the Presence of Substrates- (IMRAM, Tohoku Univ.; Office for University-Industry Collaboration, Osaka Univ.; Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba; Grad. Sch. Eng., Osaka Univ.) ○OKUGI, Mitsuru; SASAKI, Haruhiko; TOYOOKA, Souta; NISHIJIMA, Masaki; ARAKI, Yasuyuki; SAKAMOTO, Seiji; IKEDA, Yutaka; NAGASAKI, Yukio; INOUE, Yoshihisa; WADA, Takehiko

Chair: KADOKAWA, Jun-ichi (14 : 30~15 : 10)

\* 14:20-14:30: interval for laptop PC connection.(1B5-34, 1B5-35, 1B5-36)

**1B5-34** Supramolecular Asymmetric Photochirogenesis (SMAP) of 2-Anthracene Carboxylate and 2,6-Anthracene Dicarboxylate mediated by Serum Albumin (IMRAM, Tohoku Univ.; Office for University-Industry Collaboration, Osaka Univ.; Grad. Sch. Eng., Osaka Univ.) ○TOYOOKA, Sota; NISHIJIMA, Masaki; SAKAMOTO, Seiji; ARAKI, Yasuyuki; INOUE, Yoshihisa; WADA, Takehiko

**1B5-35** Mechanical properties of single biopolymer chain with super high elasticity (Dept. of Chem., Asahikawa Med. Univ.; Fac. Sci., Hokkaido Univ.) ○MAYAMA, Hiroyuki; KABIR, Arif; INOUE, Daisuke; KAKUGO, Akira

**1B5-36\*** Ion conditions and properties of DNA-binding protein and polymers that induce compaction of a single giant duplex DNA chain (Dept. of Chem., Asahikawa Med. Univ.) ○AKITAYA, Tatsuo; MAYAMA, Hiroyuki; MUROSAKI, Takayuki; MAKITA, Naoko; HAZEMOTO, Norio; KANBE, Toshio; YAMAGUCHI, Hideaki; KUBO, Koji; ZINCHENKO, Anatoly; MURATA, Shizuaki; DEMURA, Makoto; YOSHIKAWA, Kenichi

Chair: NAGAI, Daisuke (15 : 20~16 : 10)

\* 15:10-15:20: interval for laptop PC connection.(1B5-39, 1B5-41, 1B5-42)

**1B5-39\*** Fast Radical Polymerization under Extreme Conditions Mimicking Deep-Sea Hydrothermal Vent (JAMSTEC) ○KINOSHITA, Keigo; DEGUCHI, Shigeru

**1B5-41** Sequence-controlled radical copolymerization utilizing the periodic frameworks of a porous metal complex (Grad. Sch. Eng., Kyoto Univ.) ○MOCHIZUKI, Shuto; OGIWARA, Naoki; UEMURA, Takashi; KITAGAWA, Susumu

**1B5-42\*** RAFT polymerization of polyphenol-inspired polymer and its anti-oxidant activity (IIS, The Univ. of Tokyo) ○EJIMA, Hirotaka; KAN, Zhan; YOSHIE, Naoko

Chair: HIRAI, Tomoyasu (16 : 20~17 : 10)

\* 16:10-16:20: interval for laptop PC connection.(1B5-45, 1B5-46, 1B5-48, 1B5-49)

**1B5-45** Synthesis and properties of polystyrene derivatives bearing acylhydrazide moiety (Grad. Sch. Sci. Tech., Gunma Univ.) ○NAKAMURA, Kento; NAGAI, Daisuke

**1B5-46\*** Preparation and chiroptical study of polyactides with vanillin at end terminus (Grad. Sch. Mat. Sci., NAIST; Inst. Res. Initi., NAIST) ○KAN, Kai; AJIRO, Hiroharu; FUJIKI, Michiya; AKASHI, Mitsuru

**1B5-48** Polymerization of styrene by radical is formed aerobic oxidation of alkylboran (Sch. Env. Sci. Eng., KUT) ○NARUOKA, Yusuke; SUGIMOTO, Ryuichi

**1B5-49** Graft polymerization of Methyl methacrylate onto Polyolefin film (Sch. Env. Sci. Eng., KUT) ○MATSUKUMA, Hirotosugu; SUGIMOTO, Ryuichi

Chair: EJIMA, Hirotaka (17 : 20~18 : 10)

\* 17:10-17:20: interval for laptop PC connection.(1B5-51, 1B5-53, 1B5-54)

**1B5-51\*** Molecular Dynamics Investigation of the Nucleophilic Attack Mechanism for the Ring-Opening Reaction of Cyclodextrin Included Lactone (Grad. Sch. Info. Sci., Nagoya Univ.; CREST, JST; ESICB, Kyoto Univ.) ○TAKAYANAGI, Masayoshi; ITO, Shoko; MATSUMOTO, Kentaro; NAGAOKA, Masataka

**1B5-53** Polymerization and characterization of Poly(itaconic acid) and its derivatives. (Sch. Env. Sci. Eng., KUT) ○ABE, Takamasa; SUGIMOTO, Ryuichi

**1B5-54\*\*** Preparation of PMMA brush with helical structure using surface initiated living anionic polymerization and its evaluation properties. (Grad. Sch. Eng., Kyushu Univ.) ○SATO, Masanao; HIRAI, Tomoyasu; TAKAHARA, Atsushi

#### Friday, March 25, AM

Chair: FUKUMOTO, Hiroki (10 : 00~11 : 00)

\* 9:50-10:00: interval for laptop PC connection.(2B5-07, 2B5-08, 2B5-09, 2B5-11)

**2B5-07** Synthesis of toothbrush-like double hydrophilic copolymer (Grad. Sch. Eng., Kanagawa Univ.) ○KUBOSAWA, Hiroki; YAO, Dong-dong; KAIKAKE, Katsuya; JIN, Ren-hua

**2B5-08** Synthesis of poly(oxazoline) on polystyrene type microgel and its structure transformation (Grad. Sch. Eng., Kanagawa Univ.) ○SOUMA, Daiki; KAIKAKE, Katsuya; JIN, Ren-hua

**2B5-09\*** Living Coordination Polymerization of Allene Derivatives Accompanying Spontaneous Formation of Nanostructures -Synthesis and Applications of Cross-linked Polymer Nanostructures- (Interdisciplinary Grad. Sch. Sci. and Eng., Tokyo Tech) ○YAMAUCHI, Akira; OGUCHI, Yoshiyuki; WAKIYA, Takeshi; YAMAUCHI, Hiroshi; NISHIYAMA, Hiroki; INAGI, Shinsuke; TOMITA, Ikuyoshi

**2B5-11\*** Synthesis of Grafted Conjugated Polymers with Well-Defined Poly(vinyl ether) Bearing a Thiophene Group at the Terminus (KIT) ○MOTOYANAGI, Jin; ISHIKAWA, Taketo; MINODA, Masahiko



Chair: MOTOYANAGI, Jin (11 : 10~12 : 10)

\* 11:00-11:10: interval for laptop PC connection.(2B5-14, 2B5-15, 2B5-16, 2B5-18, 2B5-19)

**2B5-14** Preparation of Polymer Particles Having Specific Microphase-separated Structure Based on Living Coordination Dispersion Block Copolymerization of Allene Derivatives (Interdisciplinary Grad. Sch. Sci. and Eng., Tokyo Tech) ○TANAKA, Shiho; OGUUCHI, Yoshiyuki; WAKIYA, Takeshi; YAMAUCHI, Hiroshi; NISHIYAMA, Hiroki; INAGI, Shinsuke; TOMITA, Ikuyoshi

**2B5-15** Synthesis and Applications of pH-Responsive Polymer Nanostructures by Living Coordination Copolymerization of Functional Allen Derivatives (Interdisciplinary Grad. Sch. Sci. and Eng., Tokyo Tech) ○YAMAMOTO, Miho; OGUUCHI, Yoshiyuki; WAKIYA, Takeshi; YAMAUCHI, Hiroshi; NISHIYAMA, Hiroki; INAGI, Shinsuke; TOMITA, Ikuyoshi

**2B5-16\*\*** Synthesis and topology transformation of mechanically linked ABC terpolymer (Grad. Sch. Sci., Eng., Tokyo Tech) ○SATO, Hiroki; AOKI, Daisuke; TAKATA, Toshikazu

**2B5-18** Synthesis and arm-number change of rotaxane-linked star polymers (Grad. Sch. Sci., Eng., Tokyo Tech) ○HIROSE, Takuma; AOKI, Daisuke; TAKATA, Toshikazu

**2B5-19#** Reversible linear-cyclic transformation of polymer topology utilizing the dynamic nature of rotaxane (Grad. Sch. Sci., Eng., Tokyo Tech) ○STEPHANIE, Valentina; NAKAZONO, Kazuko; TAKATA, Toshikazu

## Friday, March 25, PM

Chair: MOTOYANAGI, Jin (13 : 20~14 : 20)

\* 13:10-13:20: interval for laptop PC connection.(2B5-27, 2B5-28, 2B5-29, 2B5-31)

**2B5-27** Controlled Photo-curing from Glycidyl-Containing Polymeric Dormant and Post-cfunctionalization of Evolved Microdomains. (Sch. Advanced Sci. Eng., Waseda Univ.) ○ANDO, Eigo; MINAMIBAYASHI, Kenta; SUGA, Takeo; NISHIDE, Hiroyuki

**2B5-28** Synthesis of optically active polyamide using post-modifications of polymer (Grad. Sch. Sci., Osaka Univ.; Grad. Sch. Sci., Osaka Univ.) ○ISHIDOU, Yuuki; KANBAYASHI, Naoya; OKAMURA, Taka-aki; ONITSUKA, Kiyotaka

**2B5-29\*** Preparation and polymerization of phenanthroline derivatives with perfluorocyclopentene unit (Coll. Eng., Ibaraki Univ.) ○FUKUMOTO, Hiroki; IZUMIYA, Hirokazu; KUBOTA, Toshio

**2B5-31\*** Development of Cross-Linked Core-Shell Semiconducting Nanoparticles Based on RAFT Polymerization (Grad. Sch. Sci., Eng., Yamagata Univ.) ○NAKABAYASHI, Kazuhiro; WATANABE, Yu; MORI, Hideharu

Chair: OCHIAI, Bungo (14 : 30~15 : 30)

\* 14:20-14:30: interval for laptop PC connection.(2B5-34, 2B5-35, 2B5-37, 2B5-38)

**2B5-34#** Syntheses of tough cross-linked polymers using by rotaxane cross-linkers (Grad. Sch. Sci., Eng., Tokyo Tech) ○SAWADA, Jun; AOKI, Daisuke; TAKATA, Toshikazu

**2B5-35\*\*** Synthesis of macromolecular [2]rotaxane having a hydrophilic axle polymer chain and its application to rotaxane cross-linkers (Grad. Sch. Sci., Eng., Tokyo Tech) ○AOKI, Daisuke; SUZUKI, Daisuke; TAKATA, Toshikazu

**2B5-37** Synthesis and clickreaction of nitrile N-oxide moiety-containing rotaxane linker (Grad. Sch. Sci., Eng., Tokyo Tech) ○TANI, Misako; SOGAWA, Hiromitsu; TAKATA, Toshikazu

**2B5-38\*\*** Construction of Cardio-Structure in BODIPYs and Development of Functional Conjugated Polymers (Grad. Sch. Eng., Kyoto Univ.) ○YAMANE, Honami; ITO, Shunichiro; TANAKA, Kazuo; CHUJO, Yoshiki

Chair: TOMITA, Ikuyoshi (15 : 40~16 : 40)

\* 15:30-15:40: interval for laptop PC connection.(2B5-41, 2B5-42, 2B5-44, 2B5-46)

**2B5-41** Synthesis and efficient catalyst-free 1,3-dipolar cycloaddition of amino acid moiety- containing nitrile N-oxide. (Grad. Sch. Sci., Eng., Tokyo Tech) ○TAKAMATSU, Shohei; TSUTSUBA, Toyokazu; SOGAWA, Hiromitsu; TAKATA, Toshikazu

**2B5-42\*** Synthesis of Polymer Nitrile N-Oxides directed toward Efficient Catalyst-free Polymer Linking (Grad. Sch. Sci., Eng., Tokyo Tech) ○TSUTSUBA, Toyokazu; SOGAWA, Hiromitsu; TAKATA, Toshikazu

**2B5-44\*\*** Synthesis and characterization of block copolymer consisting of phase transitionable macromolecular [2]rotaxane from crystal to amorphous (Grad. Sch. Sci., Eng., Tokyo Tech) ○CHEN, Zhen; AOKI, Daisuke; TAKATA, Toshikazu

**2B5-46** Synthesis of macromolecular [2]rotaxane bearing Pd-containing macrocycles and evaluation of the component mobility. (Grad. Sch. Sci., Eng., Tokyo Tech) ○HIROI, Miya; AOKI, Daisuke; SOGAWA, Hiromitsu; TAKATA, Toshikazu

Chair: SOGAWA, Hiromitsu (16 : 50~17 : 50)

\* 16:40-16:50: interval for laptop PC connection.(2B5-48, 2B5-49, 2B5-50, 2B5-51, 2B5-52, 2B5-53)

**2B5-48** Synthesis of polyurethane bearing kojic acid copper complex structure (Grad. Sch. Sci., Eng., Yamagata Univ.) ○ISHIDA, Kouki; OCHIAI, Bungo

**2B5-49** Synthesis and Properties of Poly(phenylene sulfide) Derivative by Oxidation Polymerization Using Vanadyl Catalysts (Sch. Advanced Sci. Eng., Waseda Univ.) ○YAMAZAKI, Tomoya; AOKI, Minato; TANI, Shota; OYAIZU, Kenichi; NISHIDE, Hiroyuki

**2B5-50** Synthesis and Properties of High Refractive Index Polymer by Oxidative Polymerization of Methyl Substituted Diphenyl Disulfide (Sch. Advanced Sci. Eng., Waseda Univ.) ○TANAKA, Yoko; TAKASU, Naoto; SHINOMIYA, Keisuke; OYAIZU, Kenichi; NISHIDE, Hiroyuki

**2B5-51** Synthesis and property of 3-alkylthiophene and fullerene (C60) copolymers. (Grad. Sch. Eng., KUT) ○TAKAGI, Yurika; SUGIMOTO, Ryuichi

**2B5-52** Synthesis and characterization of 1,4-diphenoxybenzene/aromatic compounds copolymers. (Grad. Sch. Eng., KUT) ○OHSHIMA, Kazumasa; SUGIMOTO, Ryuichi

**2B5-53#** Synthesis and characterization of copolymer based on 9-ethyl carbazole and 3-hexyl thiophene (Sch. Env. Sci. Eng., KUT) ○HAI THIEN AN, Phung; RYUICHI, Sugimoto

## Saturday, March 26, AM

Chair: NAKAYAMA, Yuushou (9 : 30 ~10 : 20)

\* 9:20-9:30: interval for laptop PC connection.(3B5-04, 3B5-06, 3B5-08)

**3B5-04\*** Anionic Polymerization of Protected  $\alpha$ -(hydroxymethyl)acrylates (Grad. Sch. Eng. Sci., Osaka Univ.; Fac. Textile Sci. Technol., Shinshu Univ.) YAMAMOTO, Kazuki; ○KOHSAKA, Yasuhiro; KITAYAMA, Tatsuki

**3B5-06\*\*** Stereospecific copolymerization of propylene and polar monomers by palladium/phosphine-sulfonate catalysts (Grad. Sch. Eng., The Univ. of Tokyo; JPC Corp.) ○OTA, Yusuke; ITO, Shingo; KOBAYASHI, Minoru; TAYANO, Takao; NOZAKI, Kyoko

**3B5-08** Synthesis of an octasilicate-core dendrimer having alkyl and perfluoroalkyl units at the terminals (KIT) ○YUASA, Sota; IRIE, Yasuyuki; IMOTO, Hiroaki; NAKA, Kensuke

Chair: OHISHI, Tomoyuki (10 : 30~11 : 20)

\* 10:20-10:30: interval for laptop PC connection.(3B5-10, 3B5-11, 3B5-13, 3B5-14)

**3B5-10** Synthesis and Helical Structure of Poly(m-phenylenevinylene) Derivatives Bearing Carboxybetaine Moiety. (Grad. Sch. Mat. Sci., NAIST) ○NANAURA, Kokichi; TERADA, Kayo; KOBAYASHI, Mime; ANDO, Tsuyoshi; TANIHARA, Masao

**3B5-11\*** The development of BMAO as a cocatalyst of olefin polymerization (Fac. Eng., Hiroshima Univ.) ○TANAKA, Ryo; HIROSE, Takaaki; NAKAYAMA, Yuushou; SHIONO, Takeshi

**3B5-13** Synthesis of Donor-Acceptor Polymers Containing Thiazolothiazole Units via Direct Arylation Polymerization (ICR, Kyoto Univ.) ○WAKIOKA, Masayuki; ISHIKI, Satoru; OZAWA, Fumiyuki

**3B5-14** Mixed-Ligand Approach to Direct Arylation Polymerization: Synthesis of Donor-Acceptor Polymers with Diketopyrrolopyrrole Units (ICR, Kyoto Univ.) ○TAKAHASHI, Rina; WAKIOKA, Masayuki; OZAWA, Fumiyuki

Chair: KOHSAKA, Yasuhiro (11 : 30~12 : 20)

\* 11:20-11:30: interval for laptop PC connection.(3B5-16, 3B5-17, 3B5-18, 3B5-19, 3B5-20)

**3B5-16** Synthesis and Application of Polymers Containing Phosphines in Main Chain by a P-C Cross-Coupling Reaction (Grad. Sch. Sci., Eng., Ehime Univ.) ○KUBOTA, Naoko; KARIYAMA, Shinnosuke; OHTA, Hidetoshi; WATANABE, Yutaka; HAYASHI, Minoru

**3B5-17** Synthetic Study of Helical Polyphenylene Folded by Intramolecular Hydrogen-Bonding (Fac. Sci. and Technol., Seikei Univ.) ○ICHIKAWA, Sae; SUZUKI, Miku; OHISHI, Tomoyuki; YOKOYAMA, Akihiro

**3B5-18** Study of Reaction Conditions for Efficient Synthesis of Cyclic Oligophenylene Assisted by Intramolecular Hydrogen-Bonding. (Fac. Sci. and Technol., Seikei Univ.) ○FUJIWARA, Kaori; SUZUKI, Miku; OHISHI, Tomoyuki; YOKOYAMA, Akihiro

**3B5-19** Synthesis of Oligophenylenes with Hydrogen-Bonding-Assisted Curved Structure (Fac. Sci. and Technol., Seikei Univ.) ○IJIMA, Arisa; OHISHI, Tomoyuki; YOKOYAMA, Akihiro

**3B5-20** Polymerization of Squaramide: Optimization of Polymerization Conditions (Fac. Sci. and Technol., Seikei Univ.) ○SONE, Takuma; OHISHI, Tomoyuki; YOKOYAMA, Akihiro

## Saturday, March 26, PM

Chair: ITO, Shingo (13 : 30~14 : 30)

\* 13:20-13:30: interval for laptop PC connection.(3B5-28, 3B5-29, 3B5-30, 3B5-32)

**3B5-28** Nucleophilic aromatic substitution reaction of a fluorine-containing  $\pi$ -conjugated polymer with pyridine derivatives (Interdisciplinary Grad. Sch. Sci. and Eng., Tokyo Tech) ○MANABE, Yoshihisa; NISHIYAMA, Hiroki; TOMITA, Ikuyoshi; INAGI, Shinsuke

- 3B5-29** Synthesis of Polymers Having Cyclohexadiene Units in Main Chain by Reactions of Organometallic Polymers Having Palladacycle Units and Electron-deficient Alkenes (Interdisciplinary Grad. Sch. Sci. and Eng., Tokyo Tech) ○SUGIHARA, Masato; NISHIYAMA, Hiroki; INAGI, Shinsuke; TOMITA, Ikuoyoshi
- 3B5-30\*** Synthesis of novel orthogonal linkers bearing of nitrile *N*-oxide moiety and their application to polymer modification and cross-linking (Grad. Sch. Sci., Eng., Tokyo Tech) ○CHEAWCHAN, Sumitra; SOGAWA, Hiromitsu; TAKATA, Toshikazu
- 3B5-32\*** Synthesis of multi-functional nitrile *N*-oxides and catalyst-free click reaction (Grad. Sch. Sci., Eng., Tokyo Tech) ○SOGAWA, Hiromitsu; TSUTSUBA, Toyokazu; MONJIYAMA, Shunsuke; TAKATA, Toshikazu

## Room B6

### Chishinkan1 Building 120

#### Polymer

Thursday, March 24, AM

Chair: ANDO, Tsuyoshi (10 : 00~11 : 00)

- \* 9:50-10:00: interval for laptop PC connection.(1B6-07, 1B6-08, 1B6-09, 1B6-10, 1B6-11)
- 1B6-07** Synthesis of Subnano-size Typical Metal Clusters using a Dendrimer Template. (Chem. Res. Lab., Tokyo Tech) ○WATANABE, Aiko; KAMBE, Tetsuya; IMAOKA, Takane; YAMAMOTO, Kimihisa
- 1B6-08** Supramolecular Polymer-type Template for Metal Cluster Arrangement (Chem. Res. Lab., Tokyo Tech) ○TOBARI, Yuta; ALBRECHT, Ken; MENDORI, Shin; YAMAMOTO, Kimihisa
- 1B6-09** Effect on side chain of poly(trimethylene carbonate) due to changing of degradation behaviors (Grad. Sch. Mat. Sci., NAIST) ○HARAMIISHI, Yoshiaki; KAN, Kai; AJIRO, Hiroharu; AKASHI, Mitsuru
- 1B6-10\*** An Efficient Chirality Transfer from Chiral Solvent to Achiral Poly(quinoxaline-2,3-diyl)s (Grad. Sch. Eng., Kyoto Univ.) NAGATA, Yuuya; ○TAKEDA, Ryohei; SUGINOME, Michinori
- 1B6-11\*** Control of Microphase-Separated Structures of Block Copolymers via Aggregation of Ionic Group at the Chain End (Fac. Eng., Gifu Univ.; Grad Sch. Eng., Nagoya Inst. of Tech.) ○MIWA, Yohei; KAWAMURA, Shogo; YAMAMOTO, Katsuhiro; KUTSUMIZU, Shoichi

Chair: ALBRECHT, Ken (11 : 10~12 : 10)

- \* 11:00-11:10: interval for laptop PC connection.(1B6-14, 1B6-15, 1B6-16, 1B6-17, 1B6-18, 1B6-19)
- 1B6-14** Formation of crystalline nanofiber of diamide derivatives with two-chains in organized molecular films and its morphological control (Fac. Eng., Saitama Univ.; Grad. Sch. Sci., Eng., Saitama Univ.; Kusumoto Chemicals Co. Ltd.) ○SUZUKI, Manami; OHMURA, Kyohei; SATO, Eiichi; FUJIMORI, Atsuhiko
- 1B6-15** Aggregation Property of Amphiphilic Polymers Bearing Fe/Zn Porphyrins as Side Chain and Their Complexation Abilities in Solution (Grad. Sch. Sys. Eng., Wakayama Univ.) ○TSUCHIYA, Mizuki; ATARASHI, Hironori; OSUGA, Hideji; SAKAMOTO, Hidefumi
- 1B6-16** Synthesis and optical properties of chemically functionalized graphene quantum dots (Grad. Sch. Sci., Hiroshima Univ.) ○SUZUKI, Kaho; SEKIYA, Ryo; HAINO, Takeharu
- 1B6-17** Study on the Packing Ability of Block Copolymers of Aromatic Polyamides in Organized Molecular Films (Fac. Eng., Saitama Univ.; Grad. Sch. Sci., Eng., Saitama Univ.; Fac. Eng., Iwate Univ.) ○SHIDARA, Yusaku; MIURA, Shuntaro; SHIBASAKI, Yuji; FUJIMORI, Atsuhiko
- 1B6-18** Effect on Surface modification of Nanodiamond with Different Diameters and Surface Composition -Formation of Monolayer and Nano Hybridization with Polymer- (Fac. Eng., Saitama Univ.; Grad. Sch. Sci., Eng., Saitama Univ.; Grad. Sch. Sci., Eng., Tokyo Tech) ○TASAKI, Taira; KASAHARA, Yusuke; AKASAKA, Shuichi; FUJIMORI, Atsuhiko
- 1B6-19** Study on the phase separation dynamics of aqueous stereo-controlled poly(*N,N*-diethylacrylamide) solution by using a laser temperature-jump technique (Grad. Sch. Sci., Osaka City Univ.) ○MATSUMOTO, Mitsuhiro; TADA, Takanori; ASOH, Taka-aki; SHOJI, Tatsuya; TSUBOI, Yasuyuki

Thursday, March 24, PM

Chair: AJIRO, Hiroharu (13 : 20~14 : 30)

- \* 13:10-13:20: interval for laptop PC connection.(1B6-27, 1B6-28, 1B6-30, 1B6-31)
- 1B6-27** Study in polypropylene crystal structure of biaxially oriented polypropylene film (Toray Industries, Inc.) ○OKADA, Kazuma
- 1B6-28\*** Proton transport property and molecular structure in organized sulfonated polyimides (Sch. Mat. Sci., JAIST) ○ONO, Yutaru; TSUYUKI, Shinya; GOTO, Ryosuke; HARA, Mitsuo; NAGANO, Shusaku; NAGAO, Yuki

- 1B6-30** Helical structure and structural change of poly(*m*-phenylenevinylene) bearing oligo(ethylene glycol) via ester group (Grad. Sch. Mat. Sci., NAIST) ○FUJIOKA, Yuko; TERADA, Kayo; ANDO, Tsuyoshi; KABAYASHI, Mimi; TANIHARA, Masao
- 1B6-31\*** Evaluation of the hierarchical structure in polymer thin film having perylene diimide on the basis of synchrotron radiation (IMCE, Kyushu Univ.) ○HIRAI, Tomoyasu; KIDO, Makoto; TAKAHARA, Atsushi

Chair: TANAKA, Kazuo (14 : 30~15 : 30)

- \* 14:20-14:30: interval for laptop PC connection.(1B6-34, 1B6-35, 1B6-36, 1B6-38, 1B6-39)
- 1B6-34** Photopolymerization-Induced Molecular Reorientation of Liquid Crystal Monomer Aligned by Rubbing Treatment (Chem. Res. Lab., Tokyo Tech) ○ISHIZU, Masaki; HISANO, Kyohei; SHISHIDO, Atsushi
- 1B6-35** Crystalization behavior of Fluorinated Copolymers by Control of Higher-order Structure (Grad. Sch. Sci., Eng., Saitama Univ.; Fac. Eng., Saitama Univ.) ○KASAHARA, Yusuke; MUHAMMAD ABDULLAH AL, Mamun; TASAKI, Taira; FUJIMORI, Atsuhiko
- 1B6-36\*** Bidirectional Control of Helical Chirality of Poly(quinoxaline-2,3-diyl)s Based on Abnormal Sergeants-and-Soldiers Effect (Grad. Sch. Eng., Kyoto Univ.) NAGATA, Yuuya; ○NISHIKAWA, Tsuyoshi; SUGINOME, Michinori
- 1B6-38** Poly(quinoxaline-2,3-diyl)s bearing Boronyl Pendants: Induction of Helical Chirality by Chiral Guests toward Catalytic Asymmetric Synthesis (Grad. Sch. Eng., Kyoto Univ.) ○KOMATSU, Satoko; MURAKAMI, Ryo; YAMAMOTO, Takeshi; SUGINOME, Michinori
- 1B6-39** G-quadruplex formation promoted by photoionization of copolymer carrying a malachite green moiety (Dept. of Chem. Eng., NNCT) ○MATSUI, Takashi; UDA, Ryoko

Chair: UMEYAMA, Tomokazu (15 : 40~16 : 40)

- \* 15:30-15:40: interval for laptop PC connection.(1B6-41, 1B6-42, 1B6-44, 1B6-46)
- 1B6-41** Photomobile Behavior of Crosslinked Liquid-crystalline Polymers at Cryogenic Temperatures (Grad. Sch. Sci. Eng., Chuo Univ.; Research and Development Initiative, Chuo Univ.; CIMoS, IMS) ○HASHIMOTO, Gaku; TAKADO, Kiyohide; UBE, Toru; SUDA, Masayuki; YAMAMOTO, Hiroshi; IKEDA, Tomiki
- 1B6-42\*** Development and application of dendritic thermally activated delayed fluorescence materials having aggregation-induced emission enhancement property (IMCE, Kyushu Univ.) ○MATSUOKA, Kenichi; ALBRECHT, Ken; YAMAMOTO, Kimihisa; FUJITA, Katsuhiko
- 1B6-44\*** Synthesis of aggregation-induced emission-active conjugated compounds based on diiminate complexes with group 13 elements (Grad. Sch. Eng., Kyoto Univ.) ○TANAKA, Kazuo; ITO, Shunichiro; HIROSE, Amane; CHUJO, Yoshiki
- 1B6-46** Chiroptical properties of luminescent metallogel based on helical Pt(II) assembly possessing phenylisoxazoles (Grad. Sch. Sci., Hiroshima Univ.) ○HIRANO, Kyohei; IKEDA, Toshiaki; HAINO, Takeharu

Friday, March 25, AM

Chair: SASAKI, Yoshihiro (9 : 00 ~10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(2B6-01, 2B6-03, 2B6-04, 2B6-05, 2B6-06)
- 2B6-01\*** Development of Structure Regulated Redox-activity of PEG-block-Poly(pyridine) (Fac. Sci., Tokyo Univ. of Sci.) ○MATSUKUMA, Daisuke; MAEJIMA, Yukie; OTSUKA, Hidenori
- 2B6-03** Measurement of polymer-polymer interaction and selectivity evaluation using gold nanoparticle grafted polylactide. (Grad. Sch. Mat. Sci., NAIST) ○FUJISHIRO, Shinya; KAN, Kai; AJIRO, Hiroharu; AKASHI, Mitsuru
- 2B6-04** Structure regulation of porphyrin supramolecular polymer by supramolecular cross-link (Grad. Sch. Sci., Hiroshima Univ.) ○NADAMOTO, Kouhei; IKEDA, Toshiaki; HAINO, Takeharu
- 2B6-05** Association Behavior of Graphene Functionalized with Ureidopyrimidinone (Grad. Sch. Sci., Hiroshima Univ.) ○UEMURA, Yuichiro; SEKIYA, Ryo; HAINO, Takeharu
- 2B6-06** Preparation of Polymer Brush Containing a Liquid-Crystalline Phthalocyanine Moiety in the Side Chains (Grad. Sch. Sci. Eng., Chuo Univ.; Research and Development Initiative, Chuo Univ.) ○NOJIMA, Kazuma; UBE, Toru; HAGA, Masa-aki; IKEDA, Tomiki

Chair: TAKASHIMA, Yoshinori (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(2B6-08, 2B6-10, 2B6-11, 2B6-12)
- 2B6-08\*** Reshaping and Alignment Control of Photoresponsive Liquid-Crystalline Elastomers with Exchangeable Crosslinks (Research and Development Initiative, Chuo Univ.; Grad. Sch. Sci. Eng., Chuo Univ.) ○UBE, Toru; KAWASAKI, Kyohei; IKEDA, Tomiki
- 2B6-10\*** Preparation and Selective Reflection Properties of Cholesteric Liquid Crystals Containing Helical Poly(quinoxaline-2,3-diyl)s as Chiral Dopants (Grad. Sch. Eng., Kyoto Univ.) NAGATA, Yuuya; ○UNO, Makoto; SUGINOME, Michinori
- 2B6-11** Enhancement of Solvent Dependence on the Screw-sense Induction of

Poly(quinoxaline-2,3-diyl)s by Use of (S)-4-Octyloxymethyl Side Chains (Sch. Eng., Kyoto Univ.) NAGATA, Yuuya; ○KAKIHARA, Yusuke; NISHIKAWA, Tsuyoshi; SUGINOME, Michinori

**2B6-12<sup>#</sup>** A Light-Controlled Release System Based on Molecular Recognition of Cyclodextrins (Grad. Sch. Sci., Osaka Univ.) LEE, Isaac; ○HASHIDZUME, Akihito; HARADA, Akira

Chair: KOKADO, Kenta (11 : 20~12 : 10)

\* 11:10-11:20: interval for laptop PC connection.(2B6-15, 2B6-16, 2B6-18)

**2B6-15<sup>#</sup>** Synthesis and Screw-sense Induction of Poly(quinoxaline-2,3-diyl)s Bearing Chiral Ester Side Chains (Grad. Sch. Eng., Kyoto Univ.) ○NAGATA, Yuuya; KE, Yuanzhen; SUGINOME, Michinori

**2B6-16<sup>#</sup>** Development and characterizations of ON-OFF switchable <sup>19</sup>F NMR probes based on POSS (Grad. Sch. Eng., Kyoto Univ.) ○KAKUTA, Takahiro; TANAKA, Kazuo; CHUJO, Yoshiki

**2B6-18<sup>\*</sup>** Poly(propylene oxide)-binding peptides as molecular tools for controlled release (Grad. Sch. Sci., Eng., Tokyo Tech) ○SAWADA, Toshiki; FUKUTA, Hiroki; SERIZAWA, Takeshi

## Friday, March 25, PM

Chair: OYAIZU, Kenichi (13 : 30~14 : 30)

\* 13:20-13:30: interval for laptop PC connection.(2B6-28, 2B6-29, 2B6-30, 2B6-32)

**2B6-28** Formation of lipid bilayer nanodisc by fragmentation of lipid membrane using amphiphilic polymers (Grad. Sch. Mat. Sci., NAIST) ○ARAKIDA, Jin; KIKUCHI, Jun-ichi; YASUHARA, Kazuma

**2B6-29** Synthesis of hydrophobized hyaluronic acid-calcium phosphate hybrid (Dept. of Chem. and Biochem., NCT) ○YAMANE, Setsuko; MATSUSHIMA, Hiroki; OHNUMA, Kiyoshi; SAWADA, Shinichi; SASAKI, Yoshihiro; AKIYOSHI, Kazunari

**2B6-30<sup>\*</sup>** Development of free-form fabrication based on adhesion control of hydrogels (OCARINA) ○ASOH, Taka-aki; KINOSHITA, Hisayoshi; TSUBOI, Yasuyuki; KIKUCHI, Akihiko

**2B6-32<sup>#</sup>** Macroscopic actuation through microscopic sliding of [c2]daisy chain (Grad. Sch. Sci., Osaka Univ.) ○IWASO, Kazuhisa; TAKASHIMA, Yoshinori; HARADA, Akira

Chair: SUGA, Takeo (14 : 40~15 : 40)

\* 14:30-14:40: interval for laptop PC connection.(2B6-35, 2B6-36, 2B6-37, 2B6-38, 2B6-39, 2B6-40)

**2B6-35** Interaction of low molecular weight gelator with carboxyl group and oligo(ethyleneimine) (Grad. Sch. Sci. Tech., Shinshu Univ.) ○ISHIKAWA, Yasunobu; HANABUSA, Kenji

**2B6-36** Cellulose-base Physical Gels and their Functions (Fac. Textile Sci. Technol., Shinshu Univ.) ○REN, Sixiao; KIMURA, Mutsumi

**2B6-37<sup>#</sup>** Wrinkle structure formation at adhered hydrogel interface to control hydrogel adhesion (Grad. Sch. Sci., Osaka City Univ.) ○KATO, Masatoshi; TSUBOI, Yasuyuki; KIKUCHI, Akihiko; ASOH, Taka-aki

**2B6-38** Synthesis of superabsorbent polymers for organic solvents by introduction of phosphonium salt (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) ○SUNAGA, Soukurou; TANIGUCHI, Ryosuke; KOKADO, Kenta; SADA, Kazuki

**2B6-39** Biodegradable Injectable Hydrogel with IPN Structure to enhance Three-dimensionally Cultured Chondrocyte Functions (Grad. Sch. Chem. Sci. Technol., Tokyo Univ. of Sci.) ○ISHIKAWA, Shohei; MATSUKUMA, Daisuke; IJIMA, Michihiro; OTSUKA, Hidenori

**2B6-40** Catalytic Activity and their Oxidative Iron-Salen Immobilized Polynorbornene Films (Sch. Advanced Sci. Eng., Waseda Univ.) ○SERIKAWA, Takuma; SHODA, Motoharu; HISAMA, Ayako; OYAIZU, Kenichi; NISHIDE, Hiroyuki

Chair: HASHIDZUME, Akihito (15 : 50~16 : 50)

\* 15:40-15:50: interval for laptop PC connection.(2B6-42, 2B6-43, 2B6-44, 2B6-45, 2B6-46)

**2B6-42** Poly(2-acrylamide-9-fluorenone) and Its Hydrogen-storage Property (Sch. Advanced Sci. Eng., Waseda Univ.) ○NAKAJIMA, Masataka; EGASHIRA, Tatsuya; KATO, Ryo; OYAIZU, Kenichi; NISHIDE, Hiroyuki

**2B6-43** In-situ Formation of Polyterthiophene via Vapor-Phase Polymerization and Its Application to a Perovskite Solar Cell (Sch. Advanced Sci. Eng., Waseda Univ.) ○KINJO, Yudai; KONISHI, Toshihiro; SUGA, Takeo; NISHIDE, Hiroyuki

**2B6-44** Poly(6-acrylamide-quinoline) and Its Electrocatalytic Hydrogenation (Sch. Advanced Sci. Eng., Waseda Univ.) ○SUMI, Hiroki; OYAI, Takahiro; KATOU, Ryo; OYAIZU, Kenichi; NISHIDE, Hiroyuki

**2B6-45** Vapor-phase Oxidative Polymerization of Tris(terthienyl)benzene and Its Charge-Transport Property. (Sch. Advanced Sci. Eng., Waseda Univ.) ○NOGUCHI, Kanako; SUGA, Takeo; NISHIDE, Hiroyuki

**2B6-46<sup>\*</sup>** Preparation of Regenerated Chitin Nanoparticles from Ionic Liquid Solution through High-pressure Process (Grad. Sch. Sci., Eng., Kagoshima Univ.) ○YAMAMOTO, Kazuya; HASHIMOTO, Daichi; KADOKAWA, Jun-ichi

## Saturday, March 26, AM

Chair: NAKA, Kensuke (9 : 30 ~ 10 : 00)

\* 9:20-9:30: interval for laptop PC connection.(3B6-04)

**3B6-04<sup>\*</sup> CSJ Award for Outstanding Young Women Chemists** Creation of Nano-Objects from Liquid Phase by Using Block Polymers (Grad. Sch. Eng., Nagoya Univ.) ○SUGAWARA-NARUTAKI, Ayae

Chair: OGOSHI, Tomoki (10 : 10~11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(3B6-08, 3B6-09, 3B6-10, 3B6-11, 3B6-12, 3B6-13)

**3B6-08** Molecular recognition by the optically active thermoresponsive polymer incorporating a fluorescence probe site (Fac. Sci. Eng., Kinki Univ.) ○KIDO, Katsunori; ISHIFUNE, Manabu

**3B6-09** Synthesis and Chiro-optical Properties of Vinyl Polymers Containing Chiral Binaphthyl Side Group (Grad. Sch. Eng., Tokyo Denki Univ.) ○MOROFUSHI, Hayato; HIRAI, Kenta; MIYASAKA, Makoto

**3B6-10** Design of ionic liquid-derived polyelectrolytes that show thermoresponsive metal ion coordination in water (Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○OHKUMA, Takahiro; OKAFUJI, Akiyoshi; KOHNO, Yuki; OHNO, Hiroyuki

**3B6-11** Development of regioselective hydrolysis of monofunctionalized T8-caged silsesquioxanes aimed for difunctional monomers (KIT) ○MORIMOTO, Satoshi; MAEGAWA, Takayuki; IRIE, Yasuyuki; IMOTO, Hiroaki; NAKA, Kensuke

**3B6-12** Synthesis of Lithium poly(4-styrene sulfamidate) for an Electrolyte Membrane of Lithium Sulfur Battery (Sch. Advanced Sci. Eng., Waseda Univ.) ○KATOKU, Toshiki; TSUJI, Tomoyasu; KAWAI, Takuma; OYAIZU, Kenichi; NISHIDE, Hiroyuki

**3B6-13** Synthesis of Poly(TEMPO-substituted methacrylate) Particles and its application to redox flow battery (Sch. Advanced Sci. Eng., Waseda Univ.) ○NOGUCHI, Shiori; WATANABE, Rihito; TOKUE, Hiroshi; OYAIZU, Kenichi; NISHIDE, Hiroyuki

Chair: IMAE, Ichiro (11 : 20~12 : 10)

\* 11:10-11:20: interval for laptop PC connection.(3B6-15, 3B6-16, 3B6-17, 3B6-18, 3B6-19)

**3B6-15** Polycondensation of Methyl or Methoxy-Substituted Triphenylamine with Paraldehyde for Hole Transporting Materials (Sch. Advanced Sci. Eng., Waseda Univ.) ○SUWA, Koki; WATANABE, Sinichiro; MARUO, Hirofumi; OYAIZU, Kenichi; NISHIDE, Hiroyuki

**3B6-16** Synthesis of Methyl-Substituted Viologen Polymers for an Electrochromic Device and Analysis of Color Spreading Factors (Sch. Advanced Sci. Eng., Waseda Univ.) ○MIZUKAMI, Ryusuke; MIZUMA, Takahiro; SATO, Kan; OYAIZU, Kenichi; NISHIDE, Hiroyuki

**3B6-17** Electrochemical Properties of Composites Containing TEMPO-Substituted Polymers and Inorganic Cathode Materials (Sch. Advanced Sci. Eng., Waseda Univ.) ○MASUI, Tomomi; TOKUE, Hiroshi; OYAIZU, Kenichi; NISHIDE, Hiroyuki

**3B6-18** Diketopyrrolopyrrole Polymers and Perovskite Solar Cell (Sch. Advanced Sci. Eng., Waseda Univ.) ○SASAKI, Yusuke; HARADA, Kohei; MARUO, Hirofumi; OYAIZU, Kenichi; NISHIDE, Hiroyuki

**3B6-19** Preparation of PEDOT Layer by In-situ Polymerization and its Application to Perovskite Solar Cell (Sch. Advanced Sci. Eng., Waseda Univ.) ○TANAKA, Suguru; MARUO, Hirofumi; SUGA, Takeo; OYAIZU, Kenichi; NISHIDE, Hiroyuki

## Saturday, March 26, PM

Chair: IMOTO, Hiroaki (13 : 20~14 : 20)

\* 13:10-13:20: interval for laptop PC connection.(3B6-27, 3B6-28, 3B6-30, 3B6-31, 3B6-32)

**3B6-27** Synthesis of Polyphenanthrolinequinone Derivatives and their Properties as an Organic Cathode-Active Material (Sch. Advanced Sci. Eng., Waseda Univ.) ○SANO, Kouhei; KAWAI, Takuma; OYAIZU, Kenichi; NISHIDE, Hiroyuki

**3B6-28<sup>\*</sup>** Synthesis and Properties of Soluble EDOT-containing Polythiophenes (Grad. Sch. Eng., Hiroshima Univ.) ○IMAE, Ichiro; OGINO, Ryo; KOMAGUCHI, Kenji; HARIMA, Yutaka

**3B6-30** Synthesis of PEDOT:PSS using PSS with different tacticity (Coll. Sci. Eng., Kanazawa Univ.) ○TSUCHIDA, Hiromu; SENGOKU, Hiroki; OGOSHI, Tomoki; KUWABARA, Takayuki; TAKAHASHI, Kohshin; YAMAGISHI, Tada-aki

**3B6-31** Hybrid Materials using Nano-spaced Phthalocyanine Polymers (Fac. Textile Sci. Technol., Shinshu Univ.) ○TAMURA, Rei; KIMURA, Mutsumi

**3B6-32** Preparation and catalytic activity control of catalyst-supporting polymers exhibiting phase transition by addition of small molecules (Sch. Sci., Hokkaido Univ.) ○KUROSHIMA, Yoshiki; NAYA, Masami; HAMANO, Yoshimi; KOKADO, Kenta; SATA, Kazuki

# Room B7

## Chishinkan1 Building 121

### Colloid and Interface Chemistry

Thursday, March 24, AM

Chair: NISHI, Hiroyasu (9 : 00 ~ 10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(1B7-01, 1B7-02, 1B7-03, 1B7-05)

- 1B7-01** Synthesis and Characterization of Hollow Silver Nanoshell from Precursor Silver Phosphate Colloid (Fac. Sys. Eng., Wakayama Univ.)  
○FURUTANI, Yuya; KADO, Shinpei; YAJIMA, Setsuko
- 1B7-02** The pH effect of solvent on capturing of gas-born Ag nanoparticles into solutions (Toyama Nat. Coll. Technol.) ○SAKONO, Naomi; OMORI, Kazuki; NAKADA, Shoko
- 1B7-03\*\*** Helicity Control of Binaphthyl Derivatives Attached on Gold Nanoparticles (LCI, KSU) ○MORI, Taizo; HEGMANN, Torsten
- 1B7-05\*** Desorption/ionization of Gold Ions from Gold Nanoparticles in Polymer Membrane (Grad. Sch. Sci., Eng., Kagoshima Univ.) ○NIIDOME, Yasuro; MUKO, Daiki

Chair: NIIDOME, Yasuro (10 : 10 ~ 11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(1B7-08, 1B7-09, 1B7-10, 1B7-12)

- 1B7-08** Binding constants of dodecylamine and dodecanethiol bound to gold nanoparticles (KIT) ○MATSUMOTO, Ikuko; NAITOU, Yasuaki; NAKANISHI, Hideyuki; NORISUYE, Tomohisa; TRAN-CONG-MIYATA, Qui
- 1B7-09** Structural Transformation of DNA-Functionalized Gold Nanoparticle Assemblies with a Beads-on-a-String-like Structure (RIKEN Bioengineering Laboratory; Grad. Sch. Chem. Sci. Technol., Tokyo Univ. of Sci.) ○SHIRAIISHI, Shota; WANG, Guoqing; AKIYAMA, Yoshitsugu; TAKARADA, Tohru; MIYAMURA, Kazuo; MAEDA, Mizuo
- 1B7-10\*\*** Anisotropic self-assembly of DNA-modified gold nanorods regulated by terminal base pairing (RIKEN Bioengineering Laboratory) ○WANG, Guoqing; KANAYAMA, Naoki; TAKARADA, Tohru; MAEDA, Mizuo
- 1B7-12\*** Thermoresponsive gold nanoparticles coated by oligo(ethylene glycol) derivatives with an alkyl head (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) ○IIDA, Ryo; NIIKURA, Kenichi; MITOMO, Hideyuki; IJIRO, Kuniharu

Chair: KAWASAKI, Hideya (11 : 20 ~ 12 : 20)

\* 11:10-11:20: interval for laptop PC connection.(1B7-15, 1B7-16, 1B7-17, 1B7-18, 1B7-20)

- 1B7-15<sup>#</sup>** Development of Adhesive Nanoparticles for Clinical Application (Fac. Eng., The Univ. of Tokyo) ○TEI, Reika; OKURO, Kou; AIDA, Takuzo
- 1B7-16** Size-controlled Preparation of Gold/Palladium Bimetallic Nanoclusters Stabilized by Poly(N-vinyl-2-pyrrolidone) (Grad. Sch. Eng., Osaka Univ.) ○MOURI, Sachi; HAESUWANNAKI, Setsiri; SAKURAI, Hidehiro
- 1B7-17** Design criteria for the synthesis of core-shell and alloy Ni-Pd nanoparticles by alcohol reduction technique (Sch. Eng., The Univ. of Shiga Pref.) ○EGAWA, Shigehisa; CUYA, Jhon; MIYAMURA, Hiroshi; BALACHANDRAN, Jeyadevan
- 1B7-18\*** Photoinduced Dealloying of Au-Ag Alloy Nanoparticles Based on Plasmon-Induced Charge Separation (IIS, The Univ. of Tokyo) ○NISHI, Hiroyasu; TATSUMA, Tetsu
- 1B7-20** Synthesis of gold nanoparticles stabilized by  $C_{60}(OH)_{36}$  (Grad. Sch. Eng., Osaka Univ.) ○SATO, Nozomi; KOKUBO, Ken; SAKURAI, Hidehiro

Thursday, March 24, PM

Chair: KUSADA, Kohei (13 : 30 ~ 14 : 30)

\* 13:20-13:30: interval for laptop PC connection.(1B7-28, 1B7-29, 1B7-30, 1B7-31, 1B7-32, 1B7-33)

- 1B7-28** Preparation of low-melting-point metal nanoparticles /polyimide nanocomposite film and their properties (FIRST, Konan Univ.)  
○KAWAKAMI, Takaya; HATA, Manami; TAKASHIMA, Yohei; TSURUOKA, Takaaki; AKAMATSU, Kensuke
- 1B7-29** Hierarchically Functionalized Inorganic Nanocrystal/Metal-Organic Framework Core/Shell Structures (FIRST, Konan Univ.) ○OHASHI, Takashi; TSURUOKA, Takaaki; TAKASHIMA, Yohei; AKAMATSU, Kensuke
- 1B7-30** Syntheses of Metal Nanoparticles in Porous Coordination Frameworks by Hydrogen Reduction under High Pressure (FIRST, Konan Univ.)  
○SATO, Yasushi; TAKASHIMA, Yohei; TSURUOKA, Takaaki; AKAMATSU, Kensuke
- 1B7-31** Analysis for Adsorption State of Oleic Acid on the Surface of Silver

Nanoparticles Synthesized Using Vacuum Evaporation on Running Oil Substrate Method (Fac. Sys. Eng., Wakayama Univ.) ○IENAGA, Takashi; NAKAHARA, Yoshio; WATANABE, Mitsuru; TAMAI, Toshiyuki; YAJIMA, Setsuko; KIMURA, Keiichi

- 1B7-32** Double-Helical Au Nanowires Synthesized Using a Hydrogel Template Composed of Two Organogelators (Grad. Sch. Chem. Sci. Technol., Tokyo Univ. of Sci.) ○NAKAGAWA, Makoto; IMURA, Yoshiro; KAWAI, Takeshi
- 1B7-33** Improvement in morphological stability of gold nanoflowers by silica-coating and supporting method (Fac. Eng., Tokyo Univ. of Sci.)  
○KOIZUMI, Shiori; IMURA, Yoshiro; KAWAI, Takeshi

Chair: AKAMATSU, Kensuke (14 : 40 ~ 15 : 40)

\* 14:30-14:40: interval for laptop PC connection.(1B7-35, 1B7-37, 1B7-38, 1B7-39, 1B7-40)

- 1B7-35\*\*** Synthesis of Cu nanodisks adsorbed on a layered clay mineral (Fac. Sci. Eng., Chuo Univ.) ○MIYAGAWA, Masaya; YONEMURA, Mari; MAEDA, Toshiki; TOKUDA, Ryo; TANAKA, Hideki
- 1B7-37** Liquid Phase Properties in Solid-liquid Interface of Concentrated Electrolytic Solution System for the Electrolytic Solution of Lithium-ion Battery (Grad. Sch. Eng., Kobe Univ.; Center for Environ. Manage., Kobe Univ.) ○MIZUHATA, Minoru; KITANO, Hiroki; TAKEMOTO, Marie; MAKI, Hideshi
- 1B7-38** Properties of Liquid Phase in Solid-liquid Coexisting System Consists of Fumed silica/Concentrated Electrolyte Solution (Grad. Sch. Eng., Kobe Univ.; Center for Environ. Manage., Kobe Univ.) ○SOGAWA, Ren; MAKI, Hideshi; MIZUHATA, Minoru
- 1B7-39** Withdrawn
- 1B7-40** Synthesis and observation of the magnetic properties of epsilon iron oxide nanomagnets (Grad. Sch. Sci., The Univ. of Tokyo) ○YOSHIKIYO, Marie; NAMAI, Asuka; IMOTO, Kenta; TARORA, Waka; NAKAGAWA, Kosuke; KOMINE, Masaya; MIYAMOTO, Yasuto; NASU, Tomomichi; OKA, Syunsuke; TOKORO, Hiroko; OHKOSHI, Shin-ichi

Chair: MIZUHATA, Minoru (15 : 50 ~ 16 : 50)

\* 15:40-15:50: interval for laptop PC connection.(1B7-42, 1B7-44, 1B7-46)

- 1B7-42\*** Control of The Phase Transition Behavior and Ionic Conductivity of Silver Iodide Nanoparticles by High Pressure (Dep. Chem., Sch. Sci., Kyoto Univ.; JASRI/Spring-8; PRESTO, JST) ○YAMAMOTO, Takayuki; MAESATO, Mitsuhiko; OHISHI, Yasuo; HIRAO, Naohisa; KOBAYASHI, Hirokazu; KITAGAWA, Hiroshi
- 1B7-44\*** Solution Phase Synthesis and Optical Properties of ITO Nanoparticles in Ionic Liquids (Grad. Sch. Eng., Nagoya Univ.) ○SUGIOKA, Daisuke; KAMEYAMA, Tatsuya; KUWABATA, Susumu; TORIMOTO, Tsukasa
- 1B7-46\*** Phase transformation to  $\epsilon$ -Fe<sub>2</sub>O<sub>3</sub> from size-controlled FeO nanoparticles (IMRAM, Tohoku Univ.) ○NISHIDA, Ryo; MURAMATSU, Atsushi; NAKAYA, Masafumi

Chair: TORIMOTO, Tsukasa (17 : 00 ~ 18 : 00)

\* 16:50-17:00: interval for laptop PC connection.(1B7-49, 1B7-51, 1B7-53, 1B7-54)

- 1B7-49\*** Preparation of polymer particles by polymerization of O/W emulsion monomer droplets obtained by phase inversion temperature (Grad. Sch. Eng., Chiba Univ.) ○KAWAUCHI, Yumi; KOHRI, Michinari; TANIGUCHI, Tatsuo; KISHIKAWA, Keiki
- 1B7-51\*** Synthesis of Hollow Polymer Particles by Shell-region Specific Photo-Induced Cross-linking (Grad. Sch. Eng., Kobe Univ.) ○KITAYAMA, Yukiya; YOSHIKAWA, Kazuki; TAKEUCHI, Toshifumi
- 1B7-53\*** Thermal expansion of ultra thin PVAc films: Realtime X-ray reflectivity observation (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba)  
○LI, Dan; SAKURAI, Kenji
- 1B7-54** Surface property of Hb combined with O<sub>2</sub> and CO (Grad. Sch. Sci., Osaka Univ.) ○MAEHIRA, Ai; CHE, Dock-chil; SHIMOUCHI, Akitō; SAWANO, Makoto; MATSUMOTO, Takuya

Friday, March 25, AM

Chair: MAENOSONO, Shinya (9 : 00 ~ 10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(2B7-01, 2B7-02, 2B7-03, 2B7-04, 2B7-05)

- 2B7-01** Preparation of amphiphilic semiconductor nanoparticles using long-chain amide amine derivative (Fac. Eng., Tokyo Univ. of Sci.)  
○NISHIHARA, Masanori; SAITO, Yusuke; IMURA, Yoshiro; KAWAI, Takeshi
- 2B7-02** Self-assembly of semiconductor nanorods with hetero-composition (Grad. Sch. Mat. Sci., NAIST) ○TAKISHITA, Takao; TANIGUCHI, Yuki; KAWAI, Tsuyoshi; NAKASHIMA, Takuya
- 2B7-03** Construction of 3D self-assembling structure using semiconductor tetrapods (Grad. Sch. Mat. Sci., NAIST) ○TANIGUCHI, Yuki; KAWAI, Tsuyoshi; NAKASHIMA, Takuya
- 2B7-04** Synthesis and properties of quantum-sized tin oxide clusters (Chem. Res. Lab., Tokyo Tech) ○INOMATA, Yusuke; ALBRECHT, Ken; YAMAMOTO, Kimihisa
- 2B7-05\*** Size Control and Quantum Size Effect of  $\beta$ -Gallium Oxide (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) ○SUDO, Shinya; KOKADO,

Kenta; SADA, Kazuki

Chair: KAWAI, Takeshi (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(2B7-08, 2B7-10, 2B7-12)
- 2B7-08<sup>##</sup>** Exchange bias in Ag/FeCo/Ag core/shell/shell nanoparticles due to partial oxidation of FeCo intermediate shell (Sch. Mat. Sci., JAIST)  
○TAKAHASHI, Mari; MOHAN, Priyank; MOTT, Derrick; MAENOSONO, Shinya
- 2B7-10<sup>##</sup>** Molecular Orientation-Dependent Photochemical Behavior of Porphyrin Derivatives Coordinated Nanoparticles (Dep. Chem., Sch. Sci., Kyoto Univ.) ○EGUCHI, Daichi; SAKAMOTO, Masanori; TERANISHI, Toshiharu
- 2B7-12\*** Site-Selective Morphology Manipulation and Optical Property Changes of Ag Nanocubes Based on Plasmon-Induced Charge Separation (IIS, The Univ. of Tokyo) ○SAITO, Koichiro; TANABE, Ichiro; TATSUMA, Tetsu

Chair: KAWAI, Tsuyoshi (11 : 20~12 : 20)

- \* 11:10-11:20: interval for laptop PC connection.(2B7-15, 2B7-16, 2B7-17, 2B7-18)
- 2B7-15** Synthesis and optical response of Ag triangular nanoplates protected by photochromic molecules (Grad. Sch. Sci. Eng., Chuo Univ.) ○IWAI, Ken; TAKEMOTO, Syuji; MIYAGAWA, Masaya; TANAKA, Hideki
- 2B7-16** High-Performance  $L_{10}$ -FePd/ $\alpha$ -Fe Nanocomposite Magnets with Controlled Crystal Grain Size (ICR, Kyoto Univ.; Adv. Mater. Eng. Div., Toyota Motor Corp.) ○MATSUMOTO, Kenshi; SATO, Ryota; TRINH, Thang Thuy; SAKUMA, Noritsugu; TERANISHI, Toshiharu
- 2B7-17** Controlled Liquefaction of Gallium metal toward Gallium secondary battery (Grad. Sch. Eng., Kyushu Univ.) ○SHIRASHI, Kanji; YAMADA, Teppei; KIMIZUKA, Nobuo
- 2B7-18<sup>#</sup>** CSJ Award for Young Chemists Creation of Novel Metal Nanoparticles with Hydrogen Storage Function (Dep. Chem., Sch. Sci., Kyoto Univ.) ○KOBAYASHI, Hirokazu

## Friday, March 25, PM

Chair: YONEZAWA, Tetsu (13 : 30~14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(2B7-28, 2B7-29, 2B7-30, 2B7-31, 2B7-32, 2B7-33)
- 2B7-28** Investigation on Experimental Parameters for Tandem Acoustic Emulsification and Its Application to Size-Controlled Synthesis of Polymer Nanoparticles (Sch. Eng., Yokohama Natl. Univ.) ○KOSHINO, Miharuru; HIRAI, Yuki; ATOBE, Mahito
- 2B7-29** Controlled Preparation of Polymeric Nanoparticles using RGD Peptide-tagged Polystyrene (Grad. Sch. Eng., Doshisha Univ.) ○NARIMATSU, Kiyoshiro; KOGA, Tomoyuki; HIGASHI, Nobuyuki
- 2B7-30** Control of Nanoparticle Interface functionalized with Pyridine Containing Amphiphilic Block Copolymer for Biomedical Applications. (Grad. Sch. Chem. Sci. Technol., Tokyo Univ. of Sci.) ○NOGUCHI, Shuto; KOZUMA, Daisuke; MATSUKUMA, Daisuke; OTSUKA, Hidenori
- 2B7-31** Characterization of Auto-reduction Behavior of Metal Ions with Redox-active Amphiphilic Block Copolymer (Grad. Sch. Chem. Sci. Technol., Tokyo Univ. of Sci.) ○HISAMORI, Akifumi; MATSUKUMA, Daisuke; OTSUKA, Hidenori
- 2B7-32** Fluorescence of 1-phenylpyrene derivatives (Grad. Sch. Sci. Eng., Yamaguchi Univ.) ○KASATANI, Kazuo; OKOMURA, Masafumi; MORITA, Yuki; OKAMOTO, Hiroaki
- 2B7-33** Patterning to Organic Films by Ultraviolet Irradiation Used Colloid Particles as Lenses (Fac. Eng., Tokyo Univ. of Sci.) ○ICHIKAWA, Hiroto; IMURA, Yoshiro; KAWAI, Takeshi

Chair: IMURA, Yoshiro (14 : 40~15 : 40)

- \* 14:30-14:40: interval for laptop PC connection.(2B7-35, 2B7-36, 2B7-37, 2B7-38, 2B7-39, 2B7-40)
- 2B7-35** Modification of titanium oxide nanoparticles towards the visible light responsive photocatalyst by plasma in liquid method (Grad. Sch. Eng., Hokkaido Univ.; Grad. Sch. Eng., Nagoya Univ.) ○ISHIDA, Yohei; MOTOKANE, Yasutomo; YONEZAWA, Tetsu; TOKUNAGA, Tomoharu
- 2B7-36** Synthesis and kinetic analysis of Cu nanoparticles by photocatalytic activity of TiO<sub>2</sub> (Grad. Sch. Sci. Eng., Chuo Univ.) ○AOKI, Takuya; YONEMURA, Mari; MIYAGAWA, Masaya; TANAKA, Hideki
- 2B7-37** Visible-light response of BaTiO<sub>3</sub> based on interfacial charge-transfer transitions (Grad. Sch. Sci. Tech., Gunma Univ.) ○EDA, Takumi; FUJISAWA, Jun-ichi; HANAYA, Minoru
- 2B7-38** Conjugated molecule-TiO<sub>2</sub> cyclophane structures showing interfacial charge-transfer transitions (Grad. Sch. Sci. Tech., Gunma Univ.) ○MATSUMURA, Shingo; MUROGA, Ryuki; FUJISAWA, Jun-ichi; HANAYA, Minoru
- 2B7-39** Preparation of Pt-Ni bimetallic alloy nanostructure and their evaluation of electrocatalytic activity (Grad. Sch. Env. Sci., Hokkaido Univ.) ○TOKUDA, Shouichi; KATOU, Masaru; YAGI, Ichizo
- 2B7-40** Preparation of AuAg Hollow Nanoparticles Using Ag Cubes as a Template and Their Electrocatalytic Activity (Grad. Sch. Eng., Nagoya Univ.) ○OSHIMA, Takuya; SUGIOKA, Daisuke; KAMEYAMA, Tatsuya; TORIMOTO, Tsukasa

Chair: TANAKA, Hideki (15 : 50~16 : 50)

- \* 15:40-15:50: interval for laptop PC connection.(2B7-42, 2B7-43, 2B7-44, 2B7-45, 2B7-46, 2B7-47)
- 2B7-42** Fabrication of noble metals nanosheet by UV irradiation and its optical and electrical properties (Fac. Eng., Tokyo Univ. of Sci.) ○KUROIWA, Masashi; NISHIMURA, Tatsuya; IMURA, Yoshiro; KAWAI, Takeshi
- 2B7-43** Synthesis of noble metal nanoparticles supported on graphene using various excited reaction fields and these catalytic activities (Grad. Sch. Eng., Osaka Pref. Univ.) ○TOKAI, Akihiro; OKITSU, Kenji; HORI, Fuminobu; MIZUKOSHI, Yoshiteru; NISHIMURA, Yoshimi; HORIBE, Hiroshi; IWASE, Akihiro
- 2B7-44** Effect of re-construction of Pd nanowires on catalytic activity (Fac. Eng., Tokyo Univ. of Sci.) ○KATAOKA, Hiroki; IMURA, Yoshiro; KAWAI, Takeshi
- 2B7-45** Syntheses and catalytic properties of Cu-Sn alloy nanoparticles (I<sub>2</sub>CNER, Kyushu Univ.) ○KOGA, Yukari; WATANABE, Ryota; KITANO, Sho; SADAKIYO, Masaaki; YAMAUCHI, Miho
- 2B7-46** Synthesis and Catalytic Application of Gold Clusters Functionalized by Peptide Dendron Thiolates (ICR, Kyoto Univ.) ○ISHIBASHI, Kosuke; ISOZAKI, Katsuhiko; TAKAYA, Hikaru; NAKAMURA, Masaharu
- 2B7-47** A novel surface-enhanced Raman scattering on Au nanoshells using dielectrophoresis in micro-optofluidic devices (LASTI, Univ. of Hyogo) ○YAMAGUCHI, Akinobu; FUKUOKA, Takao; UTSUMI, Yuichi

Chair: TAKAYA, Hikaru (17 : 00~17 : 50)

- \* 16:50-17:00: interval for laptop PC connection.(2B7-49, 2B7-51, 2B7-52, 2B7-53)
- 2B7-49<sup>##</sup>** Thickness dependence of Liesegang pattern Explore Reaction-diffusion process in ultra thin films (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) ○JIANG, Jinxing; SAKURAI, Kenji
- 2B7-51** The microparticulation with the valence change of uranium in a weakly acid solution (NSED, JAEA) ○OUCHI, Kazuki; OTOBE, Haruyoshi; KITATSUJI, Yoshihiro
- 2B7-52** Single particle spectroscopy study on the thermophoretic movement of colloids triggered by the laser-heating of gold nanoparticle (Fac. Eng., Tokushima Univ.) ○MUKAI, Shinya; SETOURA, Kenji; HASHIMOTO, Shuichi
- 2B7-53** Preparation of nanoparticles in phosphonium ionic liquids -Effect of alkyl-chain length of cation - (Fac. Sci. Eng., Doshisha Univ.) ○OKAZOE, Shinya; YASAKA, Yoshiro; UENO, Masakatu; KIMURA, Yoshifumi

## Saturday, March 26, AM

Chair: YUMURA, Takashi (9 : 00 ~10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(3B7-01, 3B7-02, 3B7-03, 3B7-04, 3B7-05, 3B7-06)
- 3B7-01** Evaluation of photocatalytic activity of oxidized plasmonic Cu nanostructures (Coll. Sci. Tech., Nihon Univ.) ○TSUNENARI, Natsumi; SUGAWA, Kosuke; OTSUKI, Joe
- 3B7-02** Fabrication and photoelectrochemical properties of plasmonic nanoparticle-polythiophene electrochemically-polymerized composite film (Sch. Eng., The Univ. of Shiga Pref.) ○KUMAGAWA, Yu; AKIYAMA, Tsuyoshi; SUZUKI, Atsushi; OKU, Takeo
- 3B7-03** Preparation of Plasmon-Active Photoelectrodes with Multiple Metal Nanostructures (Sch. Sci., Hokkaido Univ.; Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.; Grad. Sch. Sci., Hokkaido Univ.) ○YASUDA, Kensuke; TODA, Takahiro; LI, Xiaowei; MINAMIMOTO, Hiro; YASUDA, Satoshi; MURAKOSHI, Kei
- 3B7-04** Precise tuning of the gap between Au nanoparticles in electrolyte solution (Sch. Sci., Hokkaido Univ.; Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.; Grad. Sch. Sci., Hokkaido Univ.) ○OIKAWA, Shunpei; OHNUKI, Atsuyori; KIMURA, Natsumi; MINAMIMOTO, Hiro; MURAKOSHI, Kei
- 3B7-05** surface enhanced fluorescence of TiO<sub>2</sub> microparticles and its analysis by FDTD calculation (Grad. Sch. Sci., Hiroshima Univ.; N-BARD, Hiroshima Univ.) ○YOSHIMURA, Kumi; SAITOW, Ken-ichi
- 3B7-06** Highly dispersed Au nanoparticles on the TiO<sub>2</sub>(110) surface produced by O<sub>2</sub> plasma treatment (Grad. Sch. Eng., Hokkaido Univ.) ○SEKI, Satoshi; TAKAKUSAGI, Satoru; MOKKO, Jun; ARIGA, Hiroko; ASAKURA, Kiyotaka

Chair: OTSUKI, Joe (10 : 10~11 : 00)

- \* 10:00-10:10: interval for laptop PC connection.(3B7-08, 3B7-09, 3B7-10, 3B7-11, 3B7-12)
- 3B7-08** Oxygen reduction catalytic activity evaluation of Fe coordinated to nitrogen functionalized graphitic carbon (Sch. Sci., Hokkaido Univ.) ○UCHIBORI, Yosuke; KIM, Jeheon; YASUDA, Satoshi; MURAKOSHI, Kei
- 3B7-09** Penetrability of Proton Evaluation of Graphene/Au(111) by Surface Structure Observation (Sch. Sci., Hokkaido Univ.) ○NAKASHIMA, Koji; KUMAGAI, Ryota; YASUDA, Satoshi; MURAKOSHI, Kei
- 3B7-10** Highly Sensitive Detection of Redox Analytes with Higher Standard Potential than O<sub>2</sub> Evolution by Interdigitated Array Electrodes Based on Conductive DLC (Fac. Sci., Yamaguchi Univ.) ○OHTOMO, Shinpei;

SHIMAI, Yosuke; WATANABE, Kotaro; HONDA, Kensuke

- 3B7-11** Hydrophobicity and oxygen reduction activity of Nafion-coated iron-doped carbon electrode (Grad. Sch. Env. Sci., Hokkaido Univ.) ○YANO, Shohei; KTOU, Masaru; YAGI, Ichizou
- 3B7-12** On site fabrication of fullerene-diamine adduct thin-film and its application for electron transport material (Sch. Eng., The Univ. of Shiga Pref.) ○AKIYAMA, Tsuyoshi; NISHIKAWA, Hayato; IZUMOTO, Daisuke; BANYA, Shoto; OKU, Takeo

Chair: MURAKOSHI, Kei (11 : 10~12 : 10)

- \* 11:00-11:10: interval for laptop PC connection.(3B7-14, 3B7-15, 3B7-16, 3B7-18, 3B7-19)
- 3B7-14<sup>#</sup>** Nonequilibrium Synthesis of Alloy Nanoparticles on Immiscible Ru-Cu System (Fac. Sci., Kyoto Univ.) ○HUANG, Bo; KOBAYASHI, Hirokazu; YAMAMOTO, Tomokazu; MATSUMURA, Syo; KITAGAWA, Hiroshi
- 3B7-15** Insertion of platinum chloride between graphite layers and reduction to platinum metal sheets between graphite layers (Grad. Sch. Eng., Iwate Univ.) ○TAKAHASHI, Kazuki; YOSHIHARA, Gen; NANA O, Hidetaka; HIYOSHI, Norihito; SHIRAI, Masayuki
- 3B7-16\*** Origin of single metal dispersion on a TiO<sub>2</sub>(110) surface premodified with a mercapto compound (CRC, Hokkaido Univ.) ○TAKAKUSAGI, Satoru; SIRISIT, Natee; ARIGA, Hiroko; ASAKURA, Kiyotaka
- 3B7-18** Hydrogen generation by mechanochemical method: the reaction mechanism in liquid and on the solid surface (Grad. Sch. Sci., Hiroshima Univ.; N-BARD, Hiroshima Univ.) ○OKINO, Yuki; SAITOW, Ken-ichi
- 3B7-19** Dangling bonds of Si particles generated by Mechanochemical method (Grad. Sch. Sci., Hiroshima Univ.; N-BARD, Hiroshima Univ.) ○TAIKI, Ueda; SAITO, Kenichi

### Saturday, March 26, PM

Chair: TAKAKUSAGI, Satoru (13 : 20~14 : 10)

- \* 13:10-13:20: interval for laptop PC connection.(3B7-27, 3B7-28, 3B7-29, 3B7-31)
- 3B7-27** Fabrication of palladium nanoparticle-embedded porous diamond spherical particles for Suzuki coupling reaction catalyst (Fac. Sci. Technol., Tokyo Univ. of Sci.) ○KAI, Eriko; KONDO, Takeshi; AIKAWA, Tatsuo; YUASA, Makoto
- 3B7-28** Catalytic properties platinum nanoparticle-embedded porous diamond spherical particles for cyclohexane dehydrogenation reaction (Grad. Sch. Fac. Sci. Technol., Tokyo Univ. of Sci.) ○TSUJIMOTO, Tatsumi; KONDO, Takeshi; AIKAWA, Tatsuo; YUASA, Makoto
- 3B7-29<sup>#</sup>** Fluoride ion-induced structure, interface, and reactivity change of hydroxyapatite-supported gold nanoclusters catalyst (Sch. Physical Sci., SOKENDAI) ○HAESUWANNAKIJ, Setsiri; YAKIYAMA, Yumi; SAKURAI, Hidehiro
- 3B7-31** Quantum chemistry calculations on interactions of dioxygen with a silver cluster inside a ZSM-5 zeolite (KIT) ○KUMONDAI, Mitsuhiro; ODA, Akira; YUMURA, Yukashi; WAKASUGI, Takashi; KURODA, Yasushige; KOBAYASHI, Hisayoshi

### Sunday, March 27, AM

Chair: HASHIZUME, Mineo (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(4B7-01, 4B7-02, 4B7-04, 4B7-06)
- 4B7-01<sup>#</sup>** Synthesis and Characterization of Ultrathin Films of 3-D Molecular Networks through Molecular Layer Deposition (Sch. Mat. Sci., JAIST) ○RASHED, Md. Abu; HARA, Mitsuo; NAGANO, Shusaku; NAGAO, Yuki
- 4B7-02<sup>#</sup>** Temperature Effect on Frictional Properties of Adsorbed Layers of a Triblock Copolymer Additive in d34-hexadecane (WPI-AIMR, Tohoku Univ.) ○SIVALINGAM, Yuvaraj; MIZUKAMI, Masashi; FUJIHARA, Ami; YUSA, Shin-ichi; TANIGAKI, Katsumi; KURIHARA, Kazue
- 4B7-04\*** Structural evaluation of native passive films on general stainless steel surfaces with synchrotron XPS and XAFS (DENSO CORP.) ○SHIMIZU, Sumera; ASAI, Hideo; ITO, Shinichi; MIYAKAWA, Toshihiko; KAJIKAWA, Syunji
- 4B7-06** Structures and Wettability of Mixed Films of PS and PMMA Using Spray Coating Processes (Grad. Sch. Ind. Sci. Technol., Tokyo Univ. of Sci.) ○FUJISAKI, Motoharu; WATANABE, Satoshi; MURAI, Kazuki; MATSUMOTO, Mutsuyoshi

Chair: KASUYA, Motohiro (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(4B7-08, 4B7-09, 4B7-11, 4B7-12, 4B7-13)
- 4B7-08** Preparation of biomimetic fractal surfaces with 3D printing technique (Fac. Eng., Yamagata Univ.) ○KIKEGAWA, Kana; TAKAMATSU, Kyuuchirou; KAWAKAMI, Masaru; FURUKAWA, Hidemitsu; NONOMURA, Yoshimune
- 4B7-09\*** Soft liquid phase adsorption for the fabrication of upconversion luminescent layers on wettability-patterned templates (Grad. Sch. Sci. & Tech., Kumamoto Univ.) ○WATANABE, Satoshi; ISHII, Yoshinori; MATSUMOTO, Mutsuyoshi
- 4B7-11** Immobilization of Hydrophilic Polymers on Poly(ether ether ketone)

Substrate Surfaces Using Supercritical Fluids (Fac. Eng., Tokyo Univ. of Sci.; Grad. Sch. Chem. Sci. Technol., Tokyo Univ. of Sci.) ○ZEMBA, Takashi; HURUKAWA, Akane; IJIMA, Kazutoshi; OTAKE, Katsuto; HASHIZUME, Mineo

- 4B7-12** Immobilization of Thin Layers of Ion-Conductive Polymers on Polyimide Film Surfaces by Hot Press Techniques (Fac. Eng., Tokyo Univ. of Sci.; Grad. Sch. Chem. Sci. Technol., Tokyo Univ. of Sci.) ○IWAKI, Hiroshi; OKAMOTO, Yohei; IJIMA, Kazutoshi; HASHIZUME, Mineo
- 4B7-13** Adhesion between Polyimide Films and Titanium Plates Modified with Aromatic Groups Using Hot Pressing (Fac. Eng., Tokyo Univ. of Sci.; Grad. Sch. Chem. Sci. Technol., Tokyo Univ. of Sci.) ○YAMAMOTO, Shoichi; WATANABE, Kento; IJIMA, Kazutoshi; HASHIZUME, Mineo

Chair: TANAKA, Hideki (11 : 20~12 : 10)

- \* 11:10-11:20: interval for laptop PC connection.(4B7-15, 4B7-17, 4B7-18, 4B7-19)
- 4B7-15\*** Frictional properties of slide ring gels evaluated by resonance shear measurement (WPI-AIMR, Tohoku Univ.; IMRAM, Tohoku Univ.; Grad. Sch. Frontier Sci., The Univ. of Tokyo) ○GEN, Masao; MIZUKAMI, Masashi; KATO, Kazuaki; ITO, Kohzo; KURIHARA, Kazue
- 4B7-17** Characterization of Hexadecane between Low-Friction Coatings of Zinc Oxide Using Resonance Shear Measurement (IMRAM, Tohoku Univ.; Environment and Energy Mater. Div., NIMS) ○KASUYA, Motohiro; SASAKI, Michiko; GOTO, Masahiro; TOSA, Masahiro; KURIHARA, Kazue
- 4B7-18** The recognition mechanism of "thickness of liquids" by tactile sense (Fac. Eng., Yamagata Univ.) ○NISHIKAWA, Seiji; NONOMURA, Yoshimune
- 4B7-19** Tribology during application process of powdery cosmetics on human skin (Grad. Sch. Sci., Eng., Yamagata Univ.) YAMAGUCHI, Azusa; KIKEGAWA, Kana; IMAI, Yumi; ○NONOMURA, Yoshimune

### Sunday, March 27, PM

Chair: UEDA, Takahiro (13 : 20~14 : 20)

- \* 13:10-13:20: interval for laptop PC connection.(4B7-27, 4B7-28, 4B7-29, 4B7-30, 4B7-31, 4B7-32)
- 4B7-27** Surface tension of sodium chloride solution (Fac. Eng., Shinshu Univ.) ○TSUJI, Kohei; YAMADA, Yuya; SUZUKI, Takaomi
- 4B7-28** Growing dominance and specific surface free energy of the crystal orientation in the Si single crystal (Grad. Sch. Sci. Technol., Shinshu Univ.) ○YAMANE, Shun; SUZUKI, Takaomi; TAISHI, Toshinori
- 4B7-29** Specific surface free energy of ruby single crystals studied by contact angle of liquid droplet (Fac. Eng., Shinshu Univ.) ○ENDO, Akira; NAITO, Akira; SUZUKI, Takaomi
- 4B7-30** The crystal shape of the fluorite and Periodic Bond Chain theory (Grad. Sch. Sci. Technol., Shinshu Univ.) ○TSUKAGOSHI, Ayano; SUZUKI, Takaomi
- 4B7-31** Withdrawn
- 4B7-32** Anisotropic shape-control of micro-sized gold crystals by etching and reshaping using surfactants (Grad. Sch. Sci. Eng., Chuo Univ.) ○AKIMOTO, Yoshihiro; IMURA, Clara; SHINDO, Hitoshi

Chair: TAKEI, Takashi (14 : 30~15 : 30)

- \* 14:20-14:30: interval for laptop PC connection.(4B7-34, 4B7-35, 4B7-36, 4B7-38, 4B7-39)
- 4B7-34** Effect of carbon nanopores on amyloid formation of denatured concanavalin A (Grad. Sch. Sci., Chiba Univ.) ○HANE, Daisuke; KANO, Hirofumi
- 4B7-35\*** Pore Structure of Compression-treated Porous Graphene Monolith (Grad. Sch. Sci. Technol., Shinshu Univ.; X-Breed, Shinshu Univ.) ○CHOTIMAH, Nurul; KANEKO, Katsumi; TOSHIO, Sakai; SHUWEN, Wang
- 4B7-36\*** Anomalous accumulation of iso-charged ions of ionic liquid in the nearest neighbors in carbon nanopore: Electrostatic screening on repulsive interaction by carbon pore walls. (X-Breed, Shinshu Univ.) ○FUTAMURA, Ryusuke; TAKASAKI, Yuma; IYAMA, Taku; SIMON, Patrice; KANEKO, Katsumi
- 4B7-38\*** Pore Structure Control of Hierarchically-structured Graphene Monolith by Ethanol Addition (Grad. Sch. Sci. Technol., Shinshu Univ.; X-Breed, Shinshu Univ.) ○PUTRI, Austina Dwi; WANG, Shuwen; SAKAI, Toshio; KANEKO, Katsumi
- 4B7-39** Reaction for the synthesis of cuprous oxide initiated by carbon micropore (Okayama Univ.) ○OKAMURA, Wakana; OHKUBO, Takahiro; KURODA, Yasushige

Chair: KANO, Hirofumi (15 : 40~16 : 30)

- \* 15:30-15:40: interval for laptop PC connection.(4B7-41, 4B7-42, 4B7-43, 4B7-44, 4B7-45)
- 4B7-41** Verification of pore size determination by nitrogen adsorption using shape control anodized porous alumina as a pore model (Urban Environmental Sci., TMU) ○TAKEI, Takashi; OTSUKA, Masaya; YANAGISHITA, Takashi; MASUDA, Hideki
- 4B7-42** Study of undulations in cylindrical pores by adsorption subloop (Fac. of Sci., Okayama Univ. of Sci.) ○MORISHIGE, Kunimitsu

- 4B7-43** NMR Studies on Water Molecules Strongly Adsorbed on PTFE (ICR, Kyoto Univ.) ○WAKAI, Chihiro; SHIMOAKA, Takafumi; HASEGAWA, Takeshi
- 4B7-44** Adsorption kinetics of porous coordination polymer ZIF-8 for several organic vapors (Grad. Sch. Sci., Osaka Univ.; The Museum of Osaka Univ.) ○YAMATANI, Tatsuya; NAKAI, Masako; UEDA, Takahiro
- 4B7-45** Effect of molecular adsorption on methyl rotation in ZIF-8 as studied by solid-state NMR (Grad. Sch. Sci., Osaka Univ.; The Museum of Osaka Univ.) NAKAI, Masako; YAMATANI, Tatsuya; ○UEDA, Takahiro

## Room B8

### Chishinkan1 Building 122

### Colloid and Interface Chemistry

Thursday, March 24, AM

Chair: TAKAKURA, Katsuto (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(1B8-01, 1B8-03, 1B8-05)
- 1B8-01\*\*** Location and influence of added block copolymers on oil-in-oil emulsions (Toray Industries, Inc.) ○ASANO, Itaru; LODGE, Timothy
- 1B8-03\*\*** Flexible, tough, and self-healable polymeric materials using molecular recognition (Grad. Sch. Sci., Osaka Univ.; ImPACT) ○NAKAHATA, Masaki; TAKASHIMA, Yoshinori; HARADA, Akira
- 1B8-05\*\*** Columnar liquid crystals formed by asymmetric dibenzophenazine (Sch. Sci., Kitasato Univ.; Department of Chemistry,) ○YOSHIDA, Jun; WILLIAMS, Vance

Chair: TAMARU, Shun-ichi (10 : 10 ~ 11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(1B8-08, 1B8-09, 1B8-10, 1B8-11, 1B8-12)
- 1B8-08** Liquid Crystal Phase Transition of Organic-Inorganic Nanohybrids by Concentration Change with Moisture Uptake and Removal (Grad. Sch. Eng., Nagoya Univ.) ○ORITO, Taiki; HARA, Mitsuo; NAGANO, Shusaku; SEKI, Takahiro
- 1B8-09** Migration reaction between amphiphiles based on cleavage and formation of C-C bond (Suzuka Nat. Coll. of Tech.) ○TAKAKURA, Katsuto; SHIBAHARA, Yuu; KOBAYASHI, Yuya
- 1B8-10** Synthesis and surface properties of metallosurfactant having a *N*-heterocyclic carbene moiety (RCPT, AIST) ○YANAGIMOTO, Takaya; TAIRA, Toshiaki; SAKAI, Kenichi; SAKAI, Hideki; ENDO, Akira; IMURA, Tomohiro
- 1B8-11** Lipid nanodisc formation from novel amphiphilic helical peptides (RCPT, AIST) ○IKEDA, Yuri; TAIRA, Toshiaki; SAKAI, Kenichi; SAKAI, Hideki; ENDO, Akira; IMURA, Tomohiro
- 1B8-12\*** Molecular Assembly of Amphiphiles with an Ion Pair as the Hydrophobic Part (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) ○YAMADA, Taihei; KOKADO, Kenta; SADA, Kazuki

Chair: NAGANO, Shusaku (11 : 20 ~ 12 : 20)

- \* 11:10-11:20: interval for laptop PC connection.(1B8-15, 1B8-16, 1B8-17, 1B8-19)
- 1B8-15** Protein-Renaturation Ability of Organic Nanotubes with Photoinduced Shrinkable Inner Diameters (RISC, AIST) ○KAMETA, Naohiro; AKIYAMA, Haruhisa; MASUDA, Mitsutoshi; SHIMIZU, Toshihiro
- 1B8-16** Two-Step Naked-Eye Sensing of Lectin by Hierarchical Organization of Organic Nanotubes (RISC, AIST) ○KAMETA, Naohiro; MASUDA, Mitsutoshi; SHIMIZU, Toshihiro
- 1B8-17\*\*** Fabrication of helically-coiled polydopamine nanofibers templated by organic nanotubes and their photothermal effect (RISC, AIST) ○DING, Wuxiao; MASUDA, Mitsutoshi; MIYAKO, Eijiro
- 1B8-19\*** Self-assembly Strategies for the Construction of a Hierarchical Superstructure Utilizing Curdlan Derivatives (Grad. Sch. Eng., Sojo Univ.) ○TAMARU, Shun-ichi; HONZAKI, Miyabi; SHINKAI, Seiji

Thursday, March 24, PM

Chair: KAMETA, Naohiro (13 : 30 ~ 14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(1B8-28, 1B8-29, 1B8-31, 1B8-32, 1B8-33)
- 1B8-28** Self-assembly of citrate-coated gold nanoparticles on the lipid membrane surface (Grad. Sch. Eng., Hiroshima Univ.) ○KADOTA, Tatsuya; SUGIKAWA, Kouta; IKEDA, Atsushi
- 1B8-29\*** Ion-Pairing Assemblies Based on  $\pi$ -Electronic Anions (Coll. Pharm. Sci., Ritsumeikan Univ.) ○HAKETA, Yohei; BANDO, Yuya; MAEDA, Hiromitsu
- 1B8-31** Porphyrin-Based Ion-Pairing Assemblies (Coll. Pharm. Sci., Ritsumeikan Univ.) ○BANDO, Yuya; HAKETA, Yohei; MAEDA, Hiromitsu
- 1B8-32** LCST behavior and CT complex formation of pyrene derivatives based Gallic acid derivatives bearing oligo(ethylene glycol) chains (Fac. Eng.,

Yamagata Univ.) ○ARAI, Masato; ITO, Kazuaki

- 1B8-33** Morphological control of supramolecular nanofibers as soft templates of double-helical nanowires (Fac. Eng., Tokyo Univ. of Sci.) ○MINAKAWA, Muneharu; NAKAGAWA, Makoto

Chair: IMURA, Tomohiro (14 : 40 ~ 15 : 40)

- \* 14:30-14:40: interval for laptop PC connection.(1B8-35, 1B8-36, 1B8-37, 1B8-39)
- 1B8-35** Synthesis of Photoresponsive Charged Species Providing Assembled Structures (Coll. Pharm. Sci., Ritsumeikan Univ.; Grad. Sch. Eng., Nagoya Univ.) ○KAWASHITA, Kenji; YAMAKADO, Ryohei; HARA, Mitsuo; NAGANO, Shusaku; SEKI, Takahiro; MAEDA, Hiromitsu
- 1B8-36** Control of  $\pi$ -stacking interaction utilizing microflow space (Grad. Sch. Life and Env. Sci., Kyoto Pref. Univ.) ○KITAMURA, Akitomo; NUMATA, Munenori
- 1B8-37\*** Controlled supramolecular structures in programmable microflow space (Grad. Sch. Life and Env. Sci., Kyoto Pref. Univ.) ○NUMATA, Munenori; NOGAMI, Rie; SATO, Akiko
- 1B8-39\*\*** Oriented Multilayer Nanofilm of Metal-Organic Coordination Network based on Porphyrin Architecture (Sch. Mat. Sci., JAIST) ○LAOKROEKKIAT, Salinthip; HARA, Mitsuo; NAGANO, Shusaku; NAGAO, Yuki

Chair: NUMATA, Munenori (15 : 50 ~ 16 : 50)

- \* 15:40-15:50: interval for laptop PC connection.(1B8-42, 1B8-43, 1B8-44, 1B8-45, 1B8-47)
- 1B8-42** Synthesis of Oligopyrroles That Form Dimension-Controlled Assemblies (Coll. Pharm. Sci., Ritsumeikan Univ.) ○NAKAMURA, Kazuto; MAEDA, Hiromitsu
- 1B8-43** Interaction between Porphyrin with Carboxy Groups-Cyclodextrin Complex and Liposome Surface (Fac. Eng., Hiroshima Univ.) ○TSUCHIYA, Yuki; SUGIKAWA, Kouta; IKEDA, Atsushi; YASUHARA, Kazuma
- 1B8-44** Structural change on liposomes induced by interaction of one-dimensional self-assembled porphyrines (Grad. Sch. Eng., Hiroshima Univ.) ○TAKAMATSU, Yutaro; SUGIKAWA, Kouta; IKEDA, Atsushi; YASUHARA, Kazuma
- 1B8-45\*** Anisotropic Actuation Behavior of Oriented Thin Films Based on a Tripodal Triptycene Having Rigid Paraffinic Side Chains (Chem. Res. Lab., Tokyo Tech) ○SEIKI, Noriya; ISHIWARI, Fumitaka; SHOJI, Yoshiaki; KAJITANI, Takashi; SOMEYA, Takao; FUKUSHIMA, Takanori
- 1B8-47** Dye absorption of supramolecular hydrogel constructed from an amphiphilic tris-urea (Fac. Sci., Shizuoka Univ.) ○TAKESHITA, Juri; YAMANAKA, Masamichi

Chair: YAMANAKA, Masamichi (17 : 00 ~ 17 : 50)

- \* 16:50-17:00: interval for laptop PC connection.(1B8-49, 1B8-50, 1B8-51, 1B8-53)
- 1B8-49** Physicochemical properties and supramolecular gelation of rhenium complex (Grad. Sch. Sci. & Tech., Kumamoto Univ.) ○KAMO, Aiki; KUWAHARA, Yutaka; TAKAFUJI, Makoto; IHARA, Hirotaka
- 1B8-50\*** Enzyme-Assisted Dynamic Self-assembly of Organometallic Hydrogels in Vivo (OIST) ○LI, Guanying; ZHANG, Ye
- 1B8-51\*\*** Self-sorted Supramolecular Nanofibers (1): *In situ* real-time imaging of the fiber formation and the analysis (Graduate School of Engineering, Kyoto University) ○SHIGEMITSU, Hajime; SYOJI, Onogi; YOSHII, Tatsuyuki; TANIDA, Tatsuya; IKEDA, Masato; KUBOTA, Ryou; HAMACHI, Itaru
- 1B8-53** Self-sorted supramolecular nanofibers (2): The development and function of multi-component supramolecular gel (Graduate School of Engineering, Kyoto University) ○FUJISAKU, Takahiro; SHIGEMITSU, Hajime; ONOGI, Shoji; HAMACHI, Itaru

Chair: IKEDA, Atsushi (18 : 00 ~ 18 : 30)

- \* 17:50-18:00: interval for laptop PC connection.(1B8-55, 1B8-57)
- 1B8-55\*** Stimuli-responsive Supramolecular Hydrogel (Fac. Eng., Gifu Univ.; Gifu Univ., UGS Drug Discovery and Med. Info. Sci.) ○IKEDA, Masato; KANADA, Takuro; KITADE, Yukio
- 1B8-57** Construction of Chemical Structural Polymorph of Aryloptoids (Fac. Eng., Gifu Univ.; Gifu Univ., UGS Drug Discovery and Med. Info. Sci.; Grad. Sch. Sci., Eng., Yamagata Univ.) IKEDA, Masato; ○TORII, Ryo; TSUZUKI, Tomoya; KATAGIRI, Hiroshi; KITADE, Yukio

Friday, March 25, AM

Chair: IMURA, Clara (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(2B8-01, 2B8-02, 2B8-03, 2B8-04, 2B8-05)
- 2B8-01** Synthesis and Properties of Novel Cleavable Nonionic Surfactants with Single Molecular Polyethylene Glycol (Osaka Municipal Technical Research Institute) ONO, Daisuke; ○OKUMURA, Makoto; KAWANO, Shintaro; SATO, Hirofumi; SHIZUMA, Motohiro; MASUYAMA, Araki
- 2B8-02** Adsorption Dynamics of Homogeneous Polyoxypropylene-Polyoxyethylene Type Nonionic Surfactants at Air/Water Interface (Grad. Sch. Human. Sci., Nara Women's Univ.; Cosmos Technical Center Co.,Ltd.) ○YADA, Shiho; YOSHIMURA, Tomokazu; HASHIMOTO, Satoru;

SUZUKI, Toshiyuki

- 2B8-03** Synthesis and Properties of Quaternary Ammonium Salt-type Gemini Ionic Liquids and Surface Active Properties of Homogeneous Nonionic Surfactant in the Ionic Liquid (Grad. Sch. Human. Sci., Nara Women's Univ.; Cosmos Technical Center Co., Ltd.) ○KAWAI, Risa; YADA, Shihō; YOSHIMURA, Tomokazu; HASHIMOTO, Satoru; SUZUKI, Toshiyuki
- 2B8-04** Influence of Light Irradiation on the Viscosity of Aqueous Surfactant Solutions Containing Amphiphilic Anthracene Compounds (Fac. Eng., Tokyo Univ. of Sci.) ○TAI, Shoko; TAKAHASHI, Yutaka; KONDO, Yukishige
- 2B8-05\*** Driving Photoresponsive Liquids by Light Irradiation (Fac. Eng., Tokyo Univ. of Sci.) ○TAKAHASHI, Yutaka; AYAKO, Yuya; KONDO, Yukishige

Chair: ONO, Daisuke (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(2B8-08, 2B8-09, 2B8-10, 2B8-11, 2B8-12, 2B8-13)
- 2B8-08** Aggregation Properties of Linear- and Star-type Quaternary Ammonium Salt Trimeric Surfactants in Aqueous Solution (Grad. Sch. Human. Sci., Nara Women's Univ.) ○MORITA, Tsukasa; YOSHIMURA, Tomokazu
- 2B8-09** Synthesis of shape-specific amphiphilic block copolymers using amino acid-derived vinyl monomers (Grad. Sch. Eng., Doshisha Univ.) ○MATSUBARA, Sho; KOGA, Tomoyuki; HIGASHI, Nobuyuki
- 2B8-10** Solution Properties of Polyvinyl Caprolactame-PolyvinylAcetate-Polyethylene Glycol Graft Copolymer (Soluplus<sup>®</sup>) (Fac. Eng., Shinshu Univ.) ○KATO, Hiroyoshi; SAKAI, Toshio
- 2B8-11** Surface-Active Properties of Nonionic Amphiphilic Oligomers with Low Polymerization Degree Having Non-homogeneous Polyoxyethylene Unit in Side Chain (Grad. Sch. Human. Sci., Nara Women's Univ.) ○NAGANO, Maki; YOSHIMURA, Tomokazu
- 2B8-12** Orientation control of inverse bicontinuous cubic phase by applying shear alone (Grad. Sch. Sci. Eng., TMU) ○KIRA, Natsume; KAWABATA, Youhei; KATO, Tadashi
- 2B8-13** Control of supramolecular aggregation and mesomorphism of Lemke dye bearing oligosiloxane moiety (Grad. Sch. Eng., Kagawa Univ.) ○SEIKE, Shusaku; FUNAHASHI, Masahiro

Chair: YOSHIMURA, Tomokazu (11 : 20~12 : 20)

- \* 11:10-11:20: interval for laptop PC connection.(2B8-15, 2B8-16, 2B8-17, 2B8-19, 2B8-20)
- 2B8-15** Effect of alkaline-earth salts on self-assembly of a pH-responsive surfactant. (Grad. Sch. Sci. Eng., Chuo Univ.) ○MURAYAMA, Chiaki; ZAMA, Katsuya; IMURA, Clara; SHINDO, Hitoshi
- 2B8-16** Recovery and redispersion of gold nanorods using lamellar assemblies of a stimuli-responsive long-chain amine derivative. (Grad. Sch. Sci. Eng., Chuo Univ.) ○KOBAYASHI, Takahiro; IMURA, Clara; SHINDO, Hitoshi
- 2B8-17\*** Self-assembly of nano materials on lipid membrane surface (Grad. Sch. Eng., Hiroshima Univ.) ○SUGIKAWA, Kouta; KADOTA, Tatsuya; IKEDA, Atsushi
- 2B8-19** Synthesis of Protein Microtubes Including Glucoseoxidase as an Layer Component (Fac. Sci. Eng., Chuo Univ.) ○ADACHI, Ryo; AKIYAMA, Motofusa; KOMATSU, Teruyuki
- 2B8-20** Synthesis of Self-propelled Microtubes and Its *E.coli* Trapping (Fac. Sci. Eng., Chuo Univ.) ○NAKAI, Yoko; KOBAYAKAWA, Satoshi; AKIYAMA, Motofusa; KOMATSU, Teruyuki

## Friday, March 25, PM

Chair: HARADA, Akira (13 : 30~14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(2B8-28, 2B8-31, 2B8-32)
- 2B8-28\*** Young Scholar Lectures of CSJ E-field Modulation of Molecular Assemblies and Functions by Engineering Electrostatic Interactions (Grad. Sch. Eng., The Univ. of Tokyo) ○ITO, Yoshimitsu
- 2B8-31** Development of Ferroelectric Zn Porphyrin Complexes Cross-Linked by Dipolar Axial Ligands (Grad. Sch. Eng., Kyushu Univ.; CMS, Khushu Univ.) ○UCHINO, Shinya; HUI, Joseph Ka Ho; MORIKAWA, Masa-aki; KIMIZUKA, Nobuo
- 2B8-32\*** Lipid-assisted ion-pair assembly for photon upconversion in water (Grad. Sch. Eng., Kyushu Univ.) ○ASTHANA, Deepak; YANAI, Nobuhiro; HISIMITSU, Shota; MORIKAWA, Masa-aki; KIMIZUKA, Nobuo

Chair: MORIKAWA, Masa-aki (14 : 40~15 : 40)

- \* 14:30-14:40: interval for laptop PC connection.(2B8-35, 2B8-36, 2B8-37, 2B8-38, 2B8-39, 2B8-40)
- 2B8-35** Photon upconversion properties in dye-grafted boronate gels (Grad. Sch. Urban Environmental Sci., TMU) ○MATSUMOTO, Hiroto; SATTA, Yusuke; NISHIYABU, Ryuhei; KUBO, Yuji
- 2B8-36\*** Dynamic Self-assembled Chiral Molecules for Active Liquid Crystalline Material (OIST) ○ZHANG, Shijin; ZHANG, Ye
- 2B8-37** pH-Responsive Peptide Hydrogels with Self-assembling Network Frame (Grad. Sch. Eng., Doshisha Univ.) ○OATARI, Yuta; KOGA, Tomoyuki; HIGASHI, Nobuyuki
- 2B8-38** Vibrational Circular Dichroism Application for Supramolecular Organogels by Perfluoroalkyl Chains (Grad. Sch. Sci., Eng., Ehime Univ.)

○SATO, Hisako; YAJIMA, Tomoko; YAMAGISHI, Akihiko

- 2B8-39** Synthesis and characterization of low-molecular mass gelator with short alkyl and perfluoroalkyl chain (Grad. Sch. Of Humanities and Sci., Ochanomizu Univ.) ○KONDO, Eri; SATO, Hisako; YAMAGISHI, Akihiko; YAJIMA, Tomoko
- 2B8-40** Fabrication of photo-responsive supramolecular actuator with [c2] daisy chain in the hydrogel network (Grad. Sch. Sci., Osaka Univ.) ○SAWA, Yuki; IWASO, Kazuhisa; TAKASHIMA, Yoshinori; YAMAGUCHI, Hiroyasu; HARADA, Akira

Chair: HIGASHI, Nobuyuki (15 : 50~17 : 00)

- \* 15:40-15:50: interval for laptop PC connection.(2B8-42, 2B8-43, 2B8-44, 2B8-45, 2B8-47)
- 2B8-42** Investigation on hydrogel formation of alternating amphiphilic molecules synthesized by Huisgen reaction (Grad. Sch. Arts and Sci., The Univ. of Tokyo) ○KONNO, Shota; BANNO, Taisuke; HONDA, Satoshi; TOYOTA, Taro
- 2B8-43** Color Change by External Stimuli of Supramolecular Material Based on the Interaction Between Cyclodextrin and Phenolphthalein (Grad. Sch. Sci., Osaka Univ.) ○YONEKURA, Koki; NAKAHATA, Masaki; TAKASHIMA, Yoshinori; YAMAGUCHI, Hiroyasu; HARADA, Akira
- 2B8-44** Transport of fullerenes from cyclodextrin cavity to hydrophilic gel substrate (Fac. Eng., Hiroshima Univ.) ○INOUE, Yuya; SUGIKAWA, Kouta; IKEDA, Atsushi
- 2B8-45\*\*** Single-Component, Tough and Self-Healable Supramolecular Plastics (Grad. Sch. Eng., The Univ. of Tokyo) ○YANAGISAWA, Yu; AIDA, Takuzo
- 2B8-47\*\*** Influence of the enantiomer ratio upon bulk photovoltaic effect of ferroelectric phenylterthiophene-based liquid crystals (Grad. Sch. Eng., Kagawa Univ.) ○SEKI, Atsushi; FUNATSU, Yusuke; FUNAHASHI, Masahiro

## Saturday, March 26, AM

Chair: TAKAHASHI, Yutaka (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(3B8-01, 3B8-02, 3B8-03, 3B8-04, 3B8-05, 3B8-06)
- 3B8-01** Effect of vinyl monomer on structural color of emulsions of a long-chain amidoamine derivative (Tokyo Univ. of Sci.) ○KAWASHIMA, Yumiko; KAWAI, Takeshi; IMURA, Yoshiro; AKAZAWA, Kazuki
- 3B8-02** Colloidal Stabilization of Emulsifier-free Paraffin-in-Water Emulsions Containing L-Menthol: Effect of Polar Oil (Fac. Eng., Shinshu Univ.) ○URABE, Shunsuke; YAMAMOTO, Ayumi; TAKUMI, Shinya; UNO, Akira; SAKAI, Toshio
- 3B8-03** Colloidal Stabilization of Emulsifier-free Water-in-Oil Emulsions (W/O) by Electrolyte: Effect of Oil Type, Electrolyte Type and their Combination (Grad. Sch. Sci. Technol., Shinshu Univ.) ○OISHI, Taku; SAKAI, Toshio
- 3B8-04** Construction of Hydrogels Composed of Liquid Crystalline Phages for Controlled Release of Molecules (Grad. Sch. Sci., Eng., Tokyo Tech) ○YANAGIMACHI, Miyuki; SAWADA, Toshiaki; SERIZAWA, Takeshi
- 3B8-05** Construction and Property Evaluation of Liquid Crystalline Films Composed of Filamentous Viruses (Grad. Sch. Sci., Eng., Tokyo Tech) ○MURATA, Yuta; SAWADA, Toshiaki; MARUBAYASHI, Hironori; NOJIMA, Shuichi; MORIKAWA, Junko; SERIZAWA, Takeshi
- 3B8-06** Analysis of H<sub>2</sub>O<sub>2</sub> diffusion mechanism in microcapsule by measuring chemiluminescence emission intensity (Grad. Sch. Eng. Sci., Osaka Univ.) ○KOUNO, Hiroshi; IWAI, Yosuke; HIROTA, Yuichiro; UCHIDA, Yoshiaki; NISHIYAMA, Norikazu

Chair: SAKAI, Toshio (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(3B8-08, 3B8-09, 3B8-10, 3B8-11, 3B8-12)
- 3B8-08** Clarification of hydrophobic hydration structure on nano-sized oil droplets under surfactant-free condition. (Chiba Inst. of Tech.) ○KATO, Masaya; EGUCHI, Toshihiko; YAZAWA, Yuuki
- 3B8-09** Electrochemical Demulsification of Emulsions Prepared Using a Ferrocene-Containing Surfactant (Fac. Eng., Tokyo Univ. of Sci.) ○MORITA, Naruyoshi; TAKAHASHI, Yutaka; KONDO, Yukishige
- 3B8-10** Influence of a Hybrid Surfactant on Morphology of Droplets Consisting of Hydrocarbon Oil/Fluorocarbon Oil in Water (Fac. Eng., Tokyo Univ. of Sci.) ○KURODA, Sayuri; TAKAHASHI, Yutaka; KONDO, Yukishige
- 3B8-11** Preparation of gold nanoparticles with a positive path toward virus-like self-assembly (Sch. Sci., Hokkaido Univ.) ○TORII, Yu; NIHKURA, Kenichi; SUGIMURA, Naotoshi; IIDA, Ryo; MITOMO, Hideyuki; IJIRO, Kuniharu
- 3B8-12\*** Preparation of high internal phase gel emulsions from a monosaccharide-type low molecular weight gelator (KASTEC, Kyushu Univ.; ISIT Nanotechnology Lab.; Nissan Chemical Industries, Ltd.) ○ONO, Fumiyasu; HIRATA, Osamu; ICHIMARU, Keiko; FUKUDA, Makiko; SARUHASHI, Koichiro; SHINKAI, Seiji; WATANABE, Hisayuki

Chair: IJIRO, Kuniharu (11 : 20~12 : 10)

- \* 11:10-11:20: interval for laptop PC connection.(3B8-15, 3B8-16, 3B8-17, 3B8-18)



- 3B8-15** Gelation properties of two-component L-lysine gelators cross-linked by organo-diamines (Fac. Textile Sci. Technol., Shinshu Univ.) ○SUZUKI, Takashi; HANABUSA, Kenji; SUZUKI, Masahiro
- 3B8-16** Synthesis of new gelator based on methionine and gelation property (Fac. Textile Sci. Technol., Shinshu Univ.) ○SUGA, Shunichi; HANABUSA, Kenji
- 3B8-17** Synthesis of new low molecular gelators based on cis-1,3,5-cyclohexanetricarboxylic acid and rheology property. (Shinshu Univ. Grad. Sch. Sci. and Tech) ○KASHIKAWA, Tatsuya; SUZUKI, Masahiro; HANABUSA, Kenji
- 3B8-18\*\*** Self-assembled microcapsule of interfacially adsorbed amphiphilic DNA nanoarchitecture (Interdisciplinary Grad. Sch. Sci. and Eng., Tokyo Tech) ○ISHIKAWA, Daisuke; SUZUKI, Yuki; KUROKAWA, Chikako; MORITA, Masamune; YANAGISAWA, Miho; ENDO, Masayuki; TAKINOUE, Masahiro

### Saturday, March 26, PM

Chair: UCHIDA, Yoshiaki (13 : 30~14 : 40)

- \* 13:20-13:30: interval for laptop PC connection.(3B8-28, 3B8-29, 3B8-30, 3B8-31, 3B8-33)
- 3B8-28** Attempt of driving speed improvement of the bubble propelled stacked micromotor (Grad. Sch. Fac. Sci. Technol., Tokyo Univ. of Sci.) ○ZAMA, Kentaro; SHITANDA, Isao; HOSHI, Yoshinao; HAYASE, Masanori; ITAGAKI, Masayuki
- 3B8-29** Development and driving evaluation of printed micro-motor (Grad. Sch. Fac. Sci. Technol., Tokyo Univ. of Sci.) ○ASANO, Yusuke; SHITANDA, Isao; HOSHI, Yoshinao; ITAGAKI, Masayuki
- 3B8-30\*** Ligand Induced Shape Formation of SnO Particles: from Cube to Square and Starfish-like Sheets (Grad. Sch. Eng., Hokkaido Univ.) ○NGUYEN, Thanh Mai; YONEZAWA, Tetsu; SHIRAI, Hiroaki; TIANKANON, Chondana; ISHIDA, Yohei
- 3B8-31\*\*** Self-assembly of organic semiconductor molecules at air-liquid interface in the double-shot inkjet printing (FLEC, AIST) ○YONEYA, Makoto; MINEMAWARI, Hiromi; YAMADA, Toshikazu; HASEGAWA, Tatsuo
- 3B8-33\*\*** DNA-Templated Synthesis of Metallic and Bimetallic Nanoparticles for Catalytic Applications (Nagoya Univ.) ○ZINCHENKO, Anatoly

### Sunday, March 27, AM

Chair: OKAMOTO, Yukihiko (9 : 00 ~9 : 50)

- \* 8:50-9:00: interval for laptop PC connection.(4B8-01, 4B8-02, 4B8-03, 4B8-04)
- 4B8-01** Development of polymeric materials with porous structure using W/O gel-emulsion as template (Fac. Textile Sci. Technol., Shinshu Univ.) ○HORI, Koichi; HANABUSA, Kenji
- 4B8-02** Preparation and evaluation of porous polymer prepared by gel-emulsion polymerization using ferrocene. (Fac. Textile Sci. Technol., Shinshu Univ.) ○IMASAKA, Yuda; HANABUSA, Kenji
- 4B8-03** Design principle of ionic liquids for self-organization media of amphiphiles (Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○FUJIWARA, Saki; ICHIKAWA, Takahiro; OHNO, Hiroyuki
- 4B8-04\*** Radical polymerization and polymer wrapping on micelle-encapsulated carbon nanotubes (Grad. Sch. Eng., Kyushu Univ.; I<sub>2</sub>CNER, Kyushu Univ.; PRESTO, JST) ○FUJIGAYA, Tsuyohiko; TSUTSUMI, Yusuke; NAKASHIMA, Naotoshi

Chair: KAWAKAMI, Kohsaku (10 : 00~11 : 00)

- \* 9:50-10:00: interval for laptop PC connection.(4B8-07, 4B8-08, 4B8-09, 4B8-11)
- 4B8-07** Swollen lamellar structure of long chain alkyl cationic surfactant aqueous solution (Grad. Sch. Sci. Eng., TMU) ○TAKAHASHI, Narimasa; KAWABATA, Youhei; MATHEW, Simon; TAKENAKA, Yoshiko; KATO, Tadashi
- 4B8-08** Magnetic field effects on membrane potential of bimolecular oleylamine membranes in aqueous metal salt solutions (Fac. Sci., Shinshu Univ.) ○GOZU, Takuya; HAMASAKI, Atom; OZEKI, Sumio
- 4B8-09\*** Chiral Recognition of L-Amino Acids by Utilizing Phospholipid Membrane Interface (Grad. Sch. Eng. Sci., Osaka Univ.) ISHIGAMI, Takaaki; SUGA, Keishi; OKAMOTO, Yukihiko; ○UMAKOSHI, Hiroshi
- 4B8-11\*** Membrane Surface-Enhanced Raman Spectroscopy for High-Sensitive Detection of Molecular Behavior of Lipid Membrane Surface (Grad. Sch. Eng. Sci., Osaka Univ.) ○SUGA, Keishi; YOSHIDA, Tomohiro; ISHII, Haruyuki; OKAMOTO, Yukihiko; UMAKOSHI, Hiroshi

Chair: HAMASAKI, Atom (11 : 10~11 : 50)

- \* 11:00-11:10: interval for laptop PC connection.(4B8-14, 4B8-16, 4B8-17)
- 4B8-14\*** Mesoporous solid particle composed of phospholipid (MANA, NIMS) ○KAWAKAMI, Kohsaku; ZHANG, Shaoling; FUKUSHIMA, Mayuko; SHRESTHA, Lok Kumar; ARIGA, Katsuhiko
- 4B8-16** Development of a microfluidic device for observing liposome colony dynamics (Grad. Sch. Arts and Sci., The Univ. of Tokyo) ○SUGIYAMA, Hironori; KAZAYAMA, Yuki; OSAKI, Toshihisa; TAKEUCHI, Shoji; TOYOTA, Taro
- 4B8-17** Synthesis and characterization of membrane properties of terminally

fluorinated dipalmitoylphosphatidylcholine (Grad. Sch. Sci. Tech., Gunma Univ.; AIST) ○YANAGI, Tamami; TAKAGI, Toshiyuki; TAKAHASHI, Hiroshi; AMII, Hideki; KANAMORI, Toshiyuki; SONOYAMA, Masashi

### Sunday, March 27, PM

Chair: OTSUKA, Hidenori (13 : 00~14 : 00)

- \* 12:50-13:00: interval for laptop PC connection.(4B8-25, 4B8-26, 4B8-27, 4B8-28, 4B8-29)
- 4B8-25** Difference of the aggregation structure of a perfluoroalkyl compound involving aggregative groups on the water surface from that in an aqueous solution (ICR, Kyoto Univ.) ○UKAI, Hironori; SHIMOAKA, Takafumi; NODA, Takumu; YAMADA, Norihiro; HASEGAWA, Takeshi
- 4B8-26** Characteristic responses of a phospholipid membrane to fatty acids with different hydrophobic structure (Grad. Sch. Sci., Hiroshima Univ.) ○SEKI, Yota; DEGUCHI, Ayano; FUKUHARA, Koichi; DENDA, Mitsuhiro; GOTO, Makiko; NAKATA, Satoshi
- 4B8-27** Control of Molecular Arrangement in Organized Molecular Films of Functional Polymer with Cyclic Parts and Multiple Hydrogen Bonds (Grad. Sch. Sci., Eng., Saitama Univ.; Fac. Eng., Saitama Univ.; Fac. Eng., Iwate Univ.) ○MIURA, Shuntaro; SHIDARA, Yusaku; SHIBASKAI, Yuji; FUJIMORI, Atsuhiko
- 4B8-28** Creation of Two-dimensional Patterns by Method of Formation of Mixed Particle Film of Organo-magnetic Nanoparticle with Different Particle Size (Grad. Sch. Sci., Eng., Saitama Univ.; Fac. Eng., Saitama Univ.) ○OHMURA, Kyohei; SUZUKI, Manami; FUJIMORI, Atsuhiko
- 4B8-29\*** Dynamic behaviors of spiropyran-introduced photo-responsive soft interface enabling reversible and long-term sustained cell patterning (Sch. Advanced Sci. Eng., Waseda Univ.) ○TAKEDA, Naoya; HE, Di; ARISAKA, Yoshinori

Chair: FUJIMORI, Atsuhiko (14 : 10~15 : 00)

- \* 14:00-14:10: interval for laptop PC connection.(4B8-32, 4B8-33, 4B8-34, 4B8-35, 4B8-36)
- 4B8-32** Polystyrene Grafted with Amino Acid-derived Vinyl Polymers for Thermo-responsive Surfaces. (Grad. Sch. Eng., Doshisha Univ.) ○HIRATA, Ayaha; KOGA, Tomoyuki; HIGASHI, Nobuyuki
- 4B8-33** The density effect of poly[oligo(ethylene glycol)] brush on their hydration properties and non-fouling ability (Grad. Sch. Chem. Sci. Technol., Tokyo Univ. of Sci.) ○AKAMINE, Kazutoshi; SATO, Ryutaro; MATSUKUMA, Daisuke; OTSUKA, Hidenori
- 4B8-34** Reversible formation of the standing thin-film using perfluoroborate. (Yonago Nat. Coll. of Tech.) ○TANAKA, Susumu; WATANABI, Hinako; TAGUCHI, Atsutoshi; MUHAMMAD, Fadhil; ODAWARA, Taeko
- 4B8-35** Suppression of Bimolecular Decay of Triplet Carbene by Immobilization on a Au(111) Surface Using Tripod-shaped Trithiol (Grad. Sch. Eng., Mie Univ.; Community-University Research Cooperation Center, Mie Univ.) ○UEDA, Kazunori; HIRAI, Katsuyuki; KITAGAWA, Toshikazu
- 4B8-36** The impact of another molecule that inhibit the adsorption to the silver surface of trithiocyanuric acid (Coll. Industrial Tech., Nihon Univ.) ○ISHITSUKA, Megumi; OSAKA, Naoki

## Room C1

Chishinkan1 Building 124

### Natural Products Chemistry

#### Thursday, March 24, AM

Chair: SAIKAWA, Yoko (11 : 10~12 : 10)

- \* 11:00-11:10: interval for laptop PC connection.(1C1-14, 1C1-15, 1C1-16, 1C1-17, 1C1-18, 1C1-19)
- 1C1-14** Total Synthesis of a Possible Stereoisomer of Laurenidifcin and Prediction of the Absolute Stereochemistry of the Natural Product (OIT) ○HORI, Yutaka; SAKA, Tomoaki; MASUYAMA, Araki; KOBAYASHI, Shoji
- 1C1-15** Total synthesis of a marine macrolide koshikalide and determination of absolute configuration (Fac. Sci. Tech., Keio Univ.) ○KUNIFUDA, Kazuki; NAGAMOTO, Masashi; IWASAKI, Arihiro; SUENAGA, Kiyotake
- 1C1-16** Synthetic Study of the C31-C67 Part of Amphidinol 3 (Fac. Sci., Kyushu Univ.) ○WAKAMIYA, Yuma; EBINE, Makoto; OISHI, Tohru
- 1C1-17** Improved total synthesis of beside A, a marine polyketide (Div. of Chem., Fac. Pure Appl. Sci., Univ. of Tsukuba) ○OKAMURA, Masami; SUZUKI, Kazuaki; OCHIAI, Yumi; SHIMANUKI, Mami; KIMURA, Kizuku; HAYAKAWA, Ichiro; OHYOSHI, Takayuki; KIGOSHI, Hideo
- 1C1-18** Synthetic study of marine products polyketides biselide E (Div. of Chem., Fac. Pure Appl. Sci., Univ. of Tsukuba) ○SUZUKI, Kazuaki; OKAMURA, Masami; FUNAKUBO, Shota; HAYAKAWA, Ichiro; OHYOSHI, Takayuki; KIGOSHI, Hideo
- 1C1-19** Synthesis of (2R,4R,6R,8R)-2,4,6,8-tetramethyldecanoic acid by one-

step construction of the deoxypropionate motif (Grad. Sch. Eng., The Univ. of Tokyo) ○MURAYAMA, Toshiki; OTA, Yusuke; NOZAKI, Kyoto

### Thursday, March 24, PM

Chair: KOBAYASHI, Shoji (13 : 20~14 : 20)

- \* 13:10-13:20: interval for laptop PC connection.(1C1-27, 1C1-28, 1C1-29, 1C1-30, 1C1-31, 1C1-32)
- 1C1-27** Synthetic studies on mycalolide B through ring-closing metathesis (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) ○WATANABE, Shun; OKA, Hirota; KITA, Masaki; KIGOSHI, Hideo
- 1C1-28** Synthetic Studies of Botcinin D Derivatives Using Ring Closing Metathesis (Fac. Sci., Tokyo Univ. of Sci.) SHIINA, Isamu; YOSHINAGA, Yutaka; ○MATSUMOTO, Yuhei; TONOI, Takayuki
- 1C1-29** Synthetic Studies of PM181110 by the Asymmetric Aldol Reaction and the MNBA-mediated Dehydration Condensations (Fac. Sci., Tokyo Univ. of Sci.) SHIINA, Isamu; ○KAWAHARA, Ryo
- 1C1-30** Synthetic study on meshimakobnol A (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) ○ICHIMURA, Fumitaka; OHYOSHI, Takayuki; KIGOSHI, Hideo
- 1C1-31** Synthetic study on Antibiotic Resistoflavin (Grad. Sch. Sci., Eng., Tokyo Tech) ○ISHIKAWA, Hiroki; NOZUE, Ami; TAKIKAWA, Hiroshi; SUZUKI, Keisuke
- 1C1-32** Total synthesis of atrovenetinone (Grad. Sch. Sci., Eng., Tokyo Tech) ○MATSUSHITA, Kyohei; OHMORI, Ken; SUZUKI, Keisuke

Chair: HAYAKAWA, Ichiro (14 : 30~15 : 30)

- \* 14:20-14:30: interval for laptop PC connection.(1C1-34, 1C1-35, 1C1-36, 1C1-37, 1C1-38, 1C1-39)
- 1C1-34** Asymmetric Total Synthesis of 5,7-DidemethylAMF-26 by the Computer-assisted Predictive Stereoselective Intramolecular Diels-Alder (CAPS-IMDA) reaction (Fac. Sci., Tokyo Univ. of Sci.) SHIINA, Isamu; ○TANAKA, Anna; TASAKI, Yasutaka; SUZUKI, Kyouhei
- 1C1-35** Asymmetric Total Synthesis of Tanzawaic Acid B by the Computer-assisted Predictive Stereoselective Intramolecular Diels-Alder (CAPS-IMDA) reaction (Fac. Sci., Tokyo Univ. of Sci.) SHIINA, Isamu; TANAKA, Anna; ○TASAKI, Yasutaka
- 1C1-36** Synthetic Study of Antibiotic Acremoxanthone A (Interdisciplinary Grad. Sch. Sci. and Eng., Tokyo Tech) ○TOKUDOME, Kensei; HIRANO, Yoichi; TAKIKAWA, Hiroshi; SUZUKI, Keisuke
- 1C1-37** Facile Construction of Type-II Polyketide Scaffolds via Benzyne Acyl-Alkylation with Keto-Dioxinones (Grad. Sch. Sci., Eng., Tokyo Tech) ○NISHII, Arata; TAKIKAWA, Hiroshi; SUZUKI, Keisuke
- 1C1-38** Aromatic Oxy-Cope Rearrangement for Prenyl Modification of Xanthenes: Application to Geranylation and Nerylation (Sch. Pharm., TUPLS) ○TAKAHASHI, Kanae; FUJIMOTO, Yuuki; WATABE, Yu; YOKOJIMA, Satoshi; YANAI, Hikaru; MATSUMOTO, Takashi
- 1C1-39** Aromatic Oxy-Cope Rearrangement for Prenyl Modification of Xanthenes: Regioselective Multi-Prenylation by Reiterative Application (Sch. Pharm., TUPLS) ○WATABE, Yu; FUJIMOTO, Yuuki; TAKAHASHI, Kanae; YOKOJIMA, Satoshi; YANAI, Hikaru; MATSUMOTO, Takashi

Chair: TAKAMURA, Hiroyoshi (15 : 40~16 : 40)

- \* 15:30-15:40: interval for laptop PC connection.(1C1-41, 1C1-42, 1C1-43, 1C1-44, 1C1-45, 1C1-46)
- 1C1-41** Synthetic Study of Taumycins Aimed for Stereochemical Determination (Grad. Sch. Sci. Tech., Keio Univ.) ○YATAGAI, Tomohiro; SATO, Chiasa; KONNO, Kazuma; SAIKAWA, Yoko; NAKATA, Masaya
- 1C1-42** Total Synthesis and Structure Revision of Ardimerin; C<sub>2</sub>-Symmetric C-Glycoside (Grad. Sch. Sci., Eng., Tokyo Tech) ○NAKAYAMA, Ryota; TANZER, Eva-maria; OHMORI, Ken; SUZUKI, Keisuke
- 1C1-43** Total Synthesis of Spiroxin A (Department of Chemistry, Tokyo Institute of Technology) ○SASAKI, Ryota; ANDO, Yoshio; OHMORI, Ken; SUZUKI, Keisuke
- 1C1-44** Synthetic studies on iriomoteolide-2a (Grad. Sch. Life Sci., Tohoku Univ.) ○SAKAMOTO, Keita; SASAKI, Makoto; FUWA, Haruhiko
- 1C1-45** Synthesis and evaluation of photoactivatable gambierol analogue (Grad. Sch. Life Sci., Tohoku Univ.) ○ONODERA, Yu; HIROTA, Kazuaki; SASAKI, Makoto; FUWA, Haruhiko
- 1C1-46** Synthetic Studies on Amphidinolide N (Grad. Sch. Life Sci., Tohoku Univ.) ○TOYOSHIMA, Atsushi; KAWASHIMA, Yuki; FUWA, Haruhiko; SASAKI, Makoto

Chair: FUWA, Haruhiko (16 : 50~17 : 50)

- \* 16:40-16:50: interval for laptop PC connection.(1C1-48, 1C1-49, 1C1-50, 1C1-51, 1C1-52, 1C1-53)
- 1C1-48<sup>#</sup>** Stereoselective Construction of 6,5,5-tricyclic bispiroacetal structure specific to spirolides (Department of Chemistry, Osaka University) ○YASUKAWA, Yoshifumi; TSUCHIKAWA, Hiroshi; MURATA, Michio
- 1C1-49** Total synthesis of (-)-dactylolide (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○TANAKA, Tokihiro; MURAI, Yuto; TAKAMURA, Hiroyoshi; KADOTA, Isao
- 1C1-50** Total synthesis and stereochemical determination of a marine polyketide, yoshinone A (Fac. Sci. Tech., Keio Univ.) ○SHINOMIYA,

Seiichi; IWASAKI, Arihiro; OHNO, Osamu; SUENAGA, Kiyotake

- 1C1-51** Synthetic studies of an aplyronine A-swinholide A hybrid compound (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) ○TAKANO, Atsuhiko; NAMIKI, Mayu; OGURA, Tomotaka; HAYAKAWA, Ichiro; OHYOSHI, Takayuki; KIGOSHI, Hideo
- 1C1-52** Synthesis and biological activity of aplyronine A analogs to induce protein-protein interaction (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) ○FUTAKI, Kentaro; TAKAHASHI, Momoko; TANABE, Kenta; YONEDA, Kozo; KITA, Masaki; KIGOSHI, Hideo
- 1C1-53** Synthetic Study on Actinorhodin; Dimeric Pyranonaphthoquinone Antibiotics (Grad. Sch. Sci., Eng., Tokyo Tech) ○NINOMIYA, Mamiko; ANDO, Yoshio; OHMORI, Ken; SUZUKI, Keisuke

Chair: TSUCHIKAWA, Hiroshi (18 : 00~18 : 40)

- \* 17:50-18:00: interval for laptop PC connection.(1C1-55, 1C1-56, 1C1-57, 1C1-58)
- 1C1-55** Synthetic study of Selligeanin A (Grad. Sch. Sci., Eng., Tokyo Tech) ○NOGUCHI, Yuka; OHMORI, Ken; SUZUKI, Keisuke
- 1C1-56** Total synthesis of Mallotusin (Sch. Sci. Tech., Kwansei Gakuin Univ.) ○YAMASHITA, Kohei; KUME, Yuji; IKEUCHI, Kazutada; YAMADA, Hidetoshi
- 1C1-57** Development of a method for synthesizing C-O digallates using a novel orthoquinone (Sch. Sci. Tech., Kwansei Gakuin Univ.) ○KONISHI, Hayato; HIROKANE, Tsukasa; IKEUCHI, Kazutada; YAMADA, Hidetoshi
- 1C1-58** Synthetic study of strictinin derivatives possessing an amino group (Sch. Sci. Tech., Kwansei Gakuin Univ.) ○IKEUCHI, Kazutada; KAWASAKI, Yuri; YAMADA, Hidetoshi

### Friday, March 25, AM

Chair: SUENAGA, Kiyotake (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(2C1-01, 2C1-02, 2C1-03, 2C1-04, 2C1-05, 2C1-06)
- 2C1-01<sup>#</sup>** Synthetic Study of Tetrodotoxin by a Furan Diels-Alder Reaction Approach (Grad. Sch. Sci., Osaka City Univ.) ○UEDA, Shota; MANABE, Atsushi; SHINADA, Tetsuro
- 2C1-02<sup>#</sup>** Synthesis of Fluorescent-Labelled Kaitocephalin (Grad. Sch. Sci., Osaka City Univ.) ○YOSHIDA, Yuya; YASUNO, Yoko; OHFUNE, Yasufumi; SHINADA, Tetsuro
- 2C1-03<sup>#</sup>** Total Synthesis of Cirratiomycin A and B (Grad. Sch. Sci., Osaka City Univ.) ○NISHIMURA, Akito; YASUNO, Yoko; SHINADA, Tetsuro
- 2C1-04** Synthetic Study of (-)-Kaitocephalin (Grad. Sch. Sci. Tech., Keio Univ.) ○SUGAI, Tomoya; USUI, Synme; HISADA, Syoko; OKUYAMA, Yuya; SATO, Takaaki; CHIDA, Noritaka
- 2C1-05** Synthetic study on Dysiherbaine employing [3+2]annulation of aldehyde-aldose derivatives (Coll. Sci. Eng., Aoyama Gakuin Univ.) ○HOTODA, Koki; SASAKI, Ikuo; SUGIMURA, Hideyuki
- 2C1-06** Synthetic study of callipeltin A (Grad. Sch. Sci., Eng., Yamagata Univ.) ○KONNO, Hiroyuki; YOSHINO, Ryo; TOKAIRIN, Yoshinori

Chair: TANAKA, Katsunori (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(2C1-08, 2C1-09, 2C1-10, 2C1-11, 2C1-12, 2C1-13)
- 2C1-08** Synthetic study of Jahanyne (Grad. Sch. Sci. Tech., Keio Univ.) ○OKAMOTO, Shimichiro; IWASAKI, Arihiro; OHNO, Osamu; SUENAGA, Kiyotake
- 2C1-09** Synthetic study for a cyclic lipopeptide "Janadolide" (Fac. Sci. Tech., Keio Univ.) ○MINE, Hitomi; SUENAGA, Kiyotake
- 2C1-10** Synthetic study of Miuraenamides, an antibacterial depsipeptide (Fac. Sci. Tech., Keio Univ.) ○OJIMA, Daisuke; YASUI, Ayano; TOHYAMA, Koh; TOKUZUMI, Keita; ITO, Kayoko; TORIIHARA, Eisuke; SUENAGA, Kiyotake
- 2C1-11** Synthesis of Ferrichrysin analogs containing D-amino acid (Grad. Sch. Life Sci. Sys. Eng., KIT) ○SHIMIZU, Yusuke; SATO, Daisuke; SUVRATHA, Krishna Murthy; KATO, Tamaki; NISHINO, Norikazu
- 2C1-12** Synthesis and conformation of cyclic hexapeptides consisting of five L-amino acids and one D-amino acid (Grad. Sch. Life Sci. Sys. Eng., KIT) ○KITAMURA, Yuji; SATO, Daisuke; SUVRATHA, Krishna Murthy; KATO, Tamaki; NISHINO, Norikazu
- 2C1-13** Development of a new carbamate type protecting group for the peptide synthesis in aqueous solution (Grad. Sch. Sci., Osaka Univ.) ○ONO, Emiko; OKAMOTO, Ryo; IZUMI, Masayuki; KAJIHARA, Yasuhiro

Chair: SHINADA, Tetsuro (11 : 20~12 : 20)

- \* 11:10-11:20: interval for laptop PC connection.(2C1-15, 2C1-17, 2C1-18, 2C1-19, 2C1-20)
- 2C1-15<sup>#</sup>** Selective C-terminal glycine conjugation based on propargyl ester reactivity (Bio. Syn. Chem. Lab., RIKEN) ○VONG, Kenward; TANAKA, Katsunori
- 2C1-17** Gold-mediated amide bond formation in water (Bio. Syn. Chem. Lab., RIKEN; Grad. Sch. Advanced Sci. Eng., Waseda Univ.; A. Butlerov Institute of Chemistry, Kazan University; PRESTO, JST) ○TSUBOKURA, Kazuki; VONG, Kenward; NAKAO, Yoichi; TANAKA, Katsunori
- 2C1-18** Development of thioacid precursor orthogonal to Boc-group. (Fac.

Sci., Toho Univ.) OHATANAKA, Toru; YUKI, Ryosuke; SAITO, Ryota; SASAKI, Kaname

- 2C1-19** Synthesis and analysis of fluorescence-labeled lipopeptides as a TLR2 ligand (Grad. Sch. Sci. Tech., Keio Univ.; Grad. Sch. Sci., Osaka Univ.) ○ARAI, Yohei; OHTA, Ipppei; YOKOYAMA, Kouhei; FENG, Qi; KABAYAMA, Kazuya; INUKI, Shinsuke; FUKASE, Koichi; FUJIMOTO, Yukari
- 2C1-20** Development of chemoenzymatic process towards saframycin: enantioselective synthesis of tyrosine derivatives and its enzymatic conversions (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.; Fac. Sci., Hokkaido Univ.) ○TANIFUJI, Ryo; KOUKETSU, Kento; TAKAKURA, Michiko; MINAMI, Atsushi; OGURI, Hiroki; OIKAWA, Hideaki

### Friday, March 25, PM

Chair: TAKIKAWA, Hiroshi (13 : 30~14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(2C1-28, 2C1-29, 2C1-30, 2C1-31, 2C1-32, 2C1-33)
- 2C1-28** Kinetic Studies of the Rapid Esterification and Lactonization Using Aromatic Acid Anhydrides or Aromatic Acid Halides with a Catalytic Amount of DMAP and DMAPO (Fac. Sci., Tokyo Univ. of Sci.) SHIINA, Isamu; ○TONOI, Takayuki
- 2C1-29** Asymmetric Total Synthesis of Naturally Occurring (3S,16E,20E,23S)-Eushearilide (Fac. Sci., Tokyo Univ. of Sci.) TONOI, Takayuki; KAWAHARA, Ryo; ○INOHANA, Takehiko; SATOH, Teruyuki; SHIINA, Isamu
- 2C1-30** Synthetic Studies of Astakolactin Derivatives by the MNBA-mediated Lactonization (Fac. Sci., Tokyo Univ. of Sci.) TONOI, Takayuki; ○YOSHINAGA, Yutaka; SHIINA, Isamu
- 2C1-31** Synthetic study of HETE derivative (Grad. Sch. Biosci. Biotech., Tokyo Tech) ○SUGIHARA, Yusuke; CHEN, Bo; OGAWA, Narihito; KOBAYASHI, Yuichi
- 2C1-32** Total Synthesis of 14S,21R-diHDHA (Grad. Sch. Biosci. Biotech., Tokyo Tech) ○NISHIMURA, Keita; SAKAGUCHI, Tsuyoshi; OGAWA, Narihito; KOBAYASHI, Yuichi
- 2C1-33** Synthetic Study of Protectin D1 (Sch. Biosci. Biotech., Tokyo Tech; Grad. Sch. Biosci. Biotech., Tokyo Tech) ○SUGANUMA, Yuta; OGAWA, Narihito; KOBAYASHI, Yuichi

Chair: TONOI, Takayuki (14 : 40~15 : 40)

- \* 14:30-14:40: interval for laptop PC connection.(2C1-35, 2C1-36, 2C1-37, 2C1-38, 2C1-39, 2C1-40)
- 2C1-35** Synthetic Study of the LM Ring of Maitotoxin (Fac. Sci., Kyushu Univ.) ○KISHIGAMI, Hayato; TORIKAI, Kohei; EBINE, Makoto; OISHI, Tohru
- 2C1-36** Synthetic Study of the C1-C15 Part of Maitotoxin (Fac. Sci., Kyushu Univ.) ○KAKIYAMA, Kazuteru; TORIKAI, Kohei; EBINE, Makoto; OISHI, Tohru
- 2C1-37** The diastereoselectivity of Au-catalyzed cyclization reaction (Grad. Sch. Sci. Eng. For Edu., Univ. of Toyama) YOKOYAMA, Hajime; ○MATSUO, Megumi; MIYAZAWA, Masahiro; HIRAI, Yoshiro
- 2C1-38** Synthetic Studies of Yessotoxin JK ring system (Grad. Sch. Sci. Eng. For Edu., Univ. of Toyama) YOKOYAMA, Hajime; ○NISHIDA, Kazuki; MIYAZAWA, Masahiro; HIRAI, Yoshiro
- 2C1-39** Total synthesis of Trilobatin B (Fac. Textile Sci. Technol., Shinshu Univ.) ○MURAMATSU, Yuta; IWABUCHI, Tatsuya; ISIDA, Natsuki; NISII, Yosinori
- 2C1-40** Synthetic study of natural lignan lactones using highly stereoselective oxy-homo-Michael addition of nucleophiles to optically active donor-acceptor cyclopropanes. (Fac. Textile Sci. Technol., Shinshu Univ.) ○SONE, Yoshitomo; NISII, Yosinori

Chair: OHISHI, Tohru (15 : 50~16 : 50)

- \* 15:40-15:50: interval for laptop PC connection.(2C1-42, 2C1-44, 2C1-45, 2C1-46)
- 2C1-42\*\*** Total Syntheses of The Tetracenomycins (Grad. Sch. Sci., Eng., Tokyo Tech) ○SATO, Shogo; TAKIKAWA, Hiroshi; SUZUKI, Keisuke
- 2C1-44** Synthesis and reactivity of novel *o*-quinone cyclic monoacetal (Grad. Sch. Sci., Eng., Tokyo Tech) ○SAKATA, Keiichi; SATO, Shogo; TAKIKAWA, Hiroshi; SUZUKI, Keisuke
- 2C1-45** Synthesis of Optically Active Gallocatechin Gallate Derivatives by Oxidative Cyclization (Grad. Sch. Sci., Eng., Tokyo Tech) ○SHIRAI, Nana; KUMAZOE, Motofumi; TACHIBANA, Hirofumi; TANAKA, Hiroshi
- 2C1-46\*** Synthesis and biological evaluation of TLR2 agonists possessing a branched lipid (Grad. Sch. Sci., Eng., Tokyo Tech) KOINUMA, Hirotsugu; SUGIYAMA, Hirotaka; IWATA, Kousuke; KIYOHARA, Hideyasu; MATSUO, Kazuhiko; SUNAGAWA, Makoto; ○TANAKA, Hiroshi

Chair: TANAKA, Hiroshi (17 : 00~17 : 50)

- \* 16:50-17:00: interval for laptop PC connection.(2C1-49, 2C1-51, 2C1-52)
- 2C1-49\*\*** Asymmetric total synthesis of (+)-engelharquinone via thiol-mediated reductive cyclization (Grad. Sch. Sci., Eng., Tokyo Tech) ○FUKAZAWA, Takumi; HORI, Subaru; ANDO, Yoshio; OHMORI, Ken; SUZUKI, Keisuke
- 2C1-51** Synthetic study on the granaticin by using thiolate-mediated reductive cyclization. (Grad. Sch. Sci., Eng., Tokyo Tech) ○SUZUKI, Yuji;

FUKAZAWA, Takumi; ANDO, Yoshio; OHMORI, Ken; SUZUKI, Keisuke

**2C1-52\*** Synthetic Study of Biselyngbyasides (Fac. Sci. Tech., Keio Univ.) ○SATO, Eisuke; TANABE, Yurika; NAKAJIMA, Naoya; OHKUBO, Akifumi; SUENAGA, Kiyotake

Chair: OHMORI, Ken (18 : 00~18 : 50)

- \* 17:50-18:00: interval for laptop PC connection.(2C1-55, 2C1-56, 2C1-57, 2C1-58, 2C1-59)
- 2C1-55** Synthetic Study of Coriariin B (Grad. Sch. Sci. Eng. For Edu., Univ. of Toyama) ○KATO, Yoshiyasu; ISHIKURA, Shingo; SHIOE, Kazuma; HORINO, Yoshikazu; ABE, Hitoshi
- 2C1-56** Synthetic Studies of 5-Epi-6-epipseudomajucinone Using Reductive Cyclization Reaction (Fac. Sci., Tokyo Univ. of Sci.) ○MURATA, Takatsugu; UOSAKI, Takatsugu; YONEKURA, Keita; SHIINA, Isamu
- 2C1-57** Construction of Bicyclo[4.3.0]nonanone Skeleton Using Reductive Cyclization Reaction and Ring Closing Metathesis (Fac. Sci., Tokyo Univ. of Sci.) SHIINA, Isamu; MURATA, Takatsugu; ○UOSAKI, Kosuke
- 2C1-58** Asymmetric total synthesis of (-)-dehydro-exo-brevicomine by sequential photoisomerization/cyclization reactions (Sch. Advanced Sci. Eng., Waseda Univ.) ○MIYOSHI, Yuusuke; KANOMATA, Nobuhiro
- 2C1-59<sup>#</sup>** Total synthesis of (±)-azaspirene and racemization in aqueous media (Sch. Advanced Sci. Eng., Waseda Univ.; Sch. Sci. Eng., Meiji Univ.) ○HASEGAWA, Takahiro; SAKAI, Shinnosuke; NAKAZONO, Katsuhito; SOUMA, Kazunori; HIRASAWA, Shun; KANOMATA, Nobuhiro

### Saturday, March 26, AM

Chair: OHNO, Osamu (9 : 00~10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(3C1-01, 3C1-03, 3C1-04, 3C1-05, 3C1-06)
- 3C1-01\*\*** Absolute Configuration Determination of a Pseudo-achiral Natural Product, Elatynene, by the Crystalline Sponge Method (Grad. Sch. Eng., The Univ. of Tokyo; ACCEL, JST; App. Sci., RMIT) ○LEE, Shoukou; HOSHINO, Manabu; BRKLJACA, Robert; URBAN, Sylvia; FUJITA, Makoto
- 3C1-03** Bioactive Compounds from Marine sponges (Grad. Sch. Sci., Eng., Ehime Univ.; ADRES, Ehime Univ.) ○SAKAMOTO, Motomu; KURAMOTO, Makoto; KUROKAWA, Yoshihiko; YOKOO, Yoshitaka; MORI, Shigeki; UNO, Hidemitsu
- 3C1-04** Biosynthetic study of phospholipase A2 inhibitor cinatrin (2) (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.; Fac. Sci., Hokkaido Univ.; Grad. Sch. Agric. Sci., Tohoku Univ.) ○TAKEUCHI, Ichiro; MINAMI, Atsushi; GOMI, Katsuya; OIKAWA, Hideaki
- 3C1-05** Search for new polyketides by genome mining using *Aspergillus oryzae* heterologous expression system (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.; Fac. Sci., Hokkaido Univ.; Grad. Sch. Agric. Sci., Tohoku Univ.) ○UGAI, Takahiro; MINAMI, Atsushi; GOMI, Katsuya; OIKAWA, Hideaki
- 3C1-06<sup>#</sup>** Biosynthetic study of ustiloxin B (1) (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.; Fac. Sci., Hokkaido Univ.; BRI, AIST; Grad. Sch. Agric. Sci., Tohoku Univ.) ○YE, Ying; MINAMI, Atsushi; UMEMURA, Myco; IGARASHI, Yuya; MACHIDA, Masayuki; GOMI, Katsuya; OIKAWA, Hideaki

Chair: KUDO, Fumitaka (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(3C1-08, 3C1-09, 3C1-10, 3C1-11, 3C1-12, 3C1-13)
- 3C1-08** Biosynthetic Study of antibiotic Agent Pleuromutilin(2) (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.; Fac. Sci., Hokkaido Univ.; Grad. Sch., Akita Pref. Univ.; Grad. Sch. Agric. Sci., Tohoku Univ.) ○YAMANE, Momoka; TSUKAGOSHI, Tae; MINAMI, Atsushi; TOKIYANO, Tetsuo; GOMI, Katsuya; OIKAWA, Hideaki
- 3C1-09** Biosynthetic studies of bioactive sesterterpenoids with the *Aspergillus oryzae* expression system (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.; Grad. Sch. Sci., Hokkaido Univ.; FATU; Grad. Sch. Agric. Sci., Tohoku Univ.) ○NARITA, Koji; CHIBA, Ryota; MINAMI, Atsushi; KODAMA, Motochiro; GOMI, Katsuya; OIKAWA, Hideaki
- 3C1-10** Biochemical characterization of modification enzymes in the biosynthesis of indole diterpenes (Fac. Sci., Hokkaido Univ.; Massey University; Grad. Sch. Agric. Sci., Tohoku Univ.; Grad. Sch. Eng., Hokkaido Univ.) ○LIU, Chengwei; MINAMI, Atsushi; SCOTT, Barry; GOMI, Katsuya; DAIRI, Tohru; OIKAWA, Hideaki
- 3C1-11** Functional analysis of a marine polyketide with selective cytotoxicity under nutrient starvation conditions (Sch. Adv. Eng., Kogakuin Univ.) OHNO, Osamu; ○ITO, Ami; IWASAKI, Arihiro; SUENAGA, Kiyotake; MATSUNO, Kenji
- 3C1-12** Studies on the search for bioactive substances from marine organisms. (Fac. Sci., Kanagawa Univ.) ○KOBAYASHI, Satomi; INUZUKA, Toshiyasu; NAKANISHI, Fumika; KAWAZOE, Yoshinori; KANAZAWA, Kenichi; UEMURA, Daisuke
- 3C1-13** Studies on the Search for Natural Products from Hydrosphere Organisms (Grad. Sch. Fac. Sci., Kanagawa Univ.) ○SUZUKI, Tomoya; UEMURA, Daisuke

## Saturday, March 26, PM

Chair: KIGOSHI, Hideo (14 : 30~15 : 20)

- \* 14:20-14:30: interval for laptop PC connection.(3C1-34, 3C1-36, 3C1-38)
- 3C1-34\*** Interaction of Yessotoxin with glycephorin A in phospholipid membrane" (Sch. Sci., Osaka Univ.) OHARA, Toshiaki; HUANG, Yue; SATAKE, Masayuki; MURATA, Michio
- 3C1-36\*** Total syntheses of all stereoisomers of monomeric spectomycins and their inhibitory activity against protein SUMOylation (Syn. Org. Chem. Lab., RIKEN; Grad. Sch. Life Sci., Hokkaido Univ.; RIKEN CSRS; CREST, AMED) ONOMURA, Yusaku; FREDERIC, Thuaud; SEKINE, Daisuke; HIRAI, Go; MAEDA, Satoko; ITO, Akihiro; YOSHIDA, Minoru; ICHIKAWA, Satoshi; MATSUDA, Akira; SODEOKA, Mikiko
- 3C1-36#** Stereochemical Analysis of Glycerophospholipids by VCD Exciton Chirality Method (Grad. Fac. Life Sci., Hokkaido Univ.) OTANIGUCHI, Tohru; MANAI, Daisuke; SHIBATA, Masataka; MONDE, Kenji

Chair: SATAKE, Masayuki (15 : 30~16 : 20)

- \* 15:20-15:30: interval for laptop PC connection.(3C1-40, 3C1-41, 3C1-42, 3C1-43, 3C1-44)
- 3C1-40** Chemical Studies on Pigments from Seed Coat of Red Adzuki Bean (Grad. Sch. Info. Sci., Nagoya Univ.) OICHIKAWA, Yoshiki; KONISHI, Kaori; KAWAI, Kana; GOTO, Miki; KOND, Tadao; YOSHIDA, Kumi
- 3C1-41** Study on Synthetic Route of Polyacylated Anthocyanin via Flavonol Glycoside (Grad. Sch. Info. Sci., Nagoya Univ.) OHASHIMOTO, Mayu; OYAMA, Kin-ichi; KONDO, Tadao; YOSHIDA, Kumi
- 3C1-42** Theoretical Study of Collision Cross Sections of Li<sup>+</sup> or Na<sup>+</sup> adducts of Sesamin, Episesamin and Diasesamin Using Ion Mobility Mass Spectrometry (Grad. Sch. Human Sci., Nara Women's Univ.; Bio. Research Inst., Suntory Foundation for Life Sciences; Fac. Sci., Nara Women's Univ.) OONO, Sayaka; YAMAGAKI, Tohru; TAKEUCHI, Takae
- 3C1-43** Synthesis and biological evaluation of fluorinated bafilomycin derivative towards the conformational analysis by solid-state NMR (Grad. Sch. Sci., Osaka Univ.) OHAYASHI, Tatsuru; SHIBATA, Hazime; TSUCHIKAWA, Hiroshi; MURATA, Michio; USUI, Takeo
- 3C1-44** Synthesis of phosphatidylinositol for the elucidation of endogenous CD1d ligand (Grad. Sch. Sci., Osaka Univ.) ONAKAGAWA, Sho; SHIMOYAMA, Atsushi; AIBA, Toshihiko; FUJIMOTO, Yukari; FUKASE, Koichi

Chair: MANABE, Yoshiyuki (16 : 30~17 : 20)

- \* 16:20-16:30: interval for laptop PC connection.(3C1-46, 3C1-47, 3C1-48, 3C1-49, 3C1-50)
- 3C1-46** Structure-Activity Relationship Study of Glaziovianin A for the Development of  $\gamma$ -Tubulin-Specific Inhibitor (Grad. Sch. Nat. Sci. Technol., Okayama Univ.; Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba; Grad. Sch. Life and Env. Sci., Univ. of Tsukuba) OHATANAKA, Taisei; SHIODA, Shuya; CHINEN, Takumi; EBISU, Haruna; USUI, Takeo; KIGOSHI, Hideo; HAYAKAWA, Ichiro; SAKAKURA, Akira
- 3C1-47** Development of Intramolecular Transesterification of 3,5-Diketooesters for Synthesis of  $\alpha$ -methoxy- $\gamma$ -pyrone compounds (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) OONDA, Kai; SAKAKURA, Akira
- 3C1-48** Simple Synthesis and Physiological Activities of Acerogenins (Fac. Eng., Kinki Univ.) OKADA, Yoshiharu; OKAMURA, Mayu; NOMURA, Masato
- 3C1-49** Synthesis of Unusual Fatty Acids Isolated from Limpets in Sanriku Coastal Area (Grad. Sch. Eng., Iwate Univ.; Miyako College, Iwate Prefectural University) SHIMADA, Kazuaki; OSUGAWARA, Ayako; KORENAGA, Tashinobu; KAWASHIMA, Hideki
- 3C1-50** Construction of Pyrrole- $\gamma$ -butyrolactone Skeleton of Leupyrrins (Fac. Sci. Tech., Keio Univ.) OKIRYU, Shoichiro; MATSUSUE, Shintaro; TAKAYAMA, Tomoko; MAEDA, Chihiro; JIKAN, Tetsuhiko; TAKEDA, Kazutaka; SAIKAWA, Yoko; NAKATA, Masaya

## Room C2

Chishinkan1 Building 125

## Natural Products Chemistry

## Thursday, March 24, AM

Chair: SHOJI, Mitsuru (11 : 20~12 : 20)

- \* 11:10-11:20: interval for laptop PC connection.(1C2-15, 1C2-16, 1C2-17, 1C2-18, 1C2-19, 1C2-20)
- 1C2-15** Concise asymmetric total synthesis of (+)-Grandisol based on the characteristic properties of the nitrile  $\alpha$ -anion (Sch. Sci. Tech., Kwansei Gakuin Univ.) OFUJIWARA, Tetsuya; NAKATSUJI, Hidefumi; TANABE, Yoo
- 1C2-16** Synthetic studies on cristaxenicin A (Fac. Sci. Eng., Waseda Univ.) OFUMIYAMA, Hitoshi; HOSOKAWA, Seijiro

- 1C2-17** Synthetic Studies of Zeylanidine (Fac. Sci. Tech., Keio Univ.) OSUGIMOTO, Yasunori; YASUDA, Naohiko; YOSHIDA, Keisuke; TAKAO, Ken-ichi
- 1C2-18** Synthetic Studies of Aquatolide (Fac. Sci. Tech., Keio Univ.) OYAMADA, Ai; FUKUSHIMA, Yuuki; YOSHIDA, Keisuke; TAKAO, Ken-ichi
- 1C2-19** Synthetic Studies of (-)-Hyphenrone A (Fac. Sci. Tech., Keio Univ.) OINOUE, Haruna; ITO, Aya; YOSHIDA, Keisuke; TAKAO, Ken-ichi
- 1C2-20** Research on the Total Synthesis of Antitumor Antibiotic Bruceantin via 1,6-enyne Cyclization with Gold Catalyst (Grad. Sch. Advanced Sci. Eng., Waseda Univ.) OOKI, Yuta; NAKADA, Masahisa

## Thursday, March 24, PM

Chair: TAKAMURA, Hiroyoshi (13 : 30~14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(1C2-28, 1C2-29, 1C2-30, 1C2-31, 1C2-32, 1C2-33)
- 1C2-28** Structure of a new halogenated diterpene from *Dolabella auricularia*. (Grad. Sch. Advanced Sci. Eng., Waseda Univ.; Grad. Sch. Advanced Sci. Eng., Waseda Univ.) OMACHIDA, Koshi; NAKAO, Yoichi
- 1C2-29** Evaluating quantification of enantiomeric excess by infrared and vibrational circular dichroism spectroscopies (Coll. Sci. Eng., Aoyama Gakuin Univ.) ONUMATA, Kazuya; FUJITA, Keigo; OKAJIMA, Hajime; SAKAMOTO, Akira
- 1C2-30** Synthetic study of phytotoxic natural product foeniculoxin (Sci. Tec., Sophia Univ.) OYAMAGISHI, Akane; EGOSHI, Yuki; SUZUKI, Noriyuki; SUZUKI, Yumiko; MASUYAMA, Yoshiro; USUKI, Toyonobu
- 1C2-31** Synthetic study of A ring moiety of cynaropicrin (Sci. Tec., Sophia Univ.) OUCHIYAMA, Tomoya; MORI, Takaya; YOSHIMOTO, Yukiko; KONDO, Ryosuke; USUKI, Toyonobu
- 1C2-32** Synthetic study of terpenoid containing  $\gamma$ -isopropenyl- $\gamma$ -lactone (Fac. Pharm., Keio Univ.) OSATO, Soichiro; HANAYA, Kengo
- 1C2-33** Synthetic study of Mangromicin A (Fac. Pharm., Keio Univ.) OYASHIRO, Kazuki; HANAYA, Kengo; SUGAI, Takeshi; SHOJI, Mitsuru

Chair: TAKAO, Ken-ichi (14 : 40~15 : 40)

- \* 14:30-14:40: interval for laptop PC connection.(1C2-35, 1C2-36, 1C2-37, 1C2-38, 1C2-39)
- 1C2-35** Modified Synthetic Study of Taxol (Fac. Sci. Tech., Keio Univ.) OFUKAYA, Keisuke; YAMAGUCHI, Yu; WATANABE, Ami; YAMAMOTO, Hiroaki; SUGAI, Tomoya; SATO, Takaaki; CHIDA, Noritaka
- 1C2-36** Development of the Methodology to Construct ABC-rings of Physalins Utilizing Enyne Metathesis (Syn. Org. Chem. Lab., RIKEN; CREST, AMED; RIKEN CSRS) OMORITA, Masaki; HIRAI, Go; SODEOKA, Mikiko
- 1C2-37** Total Synthesis and Structural Revision of Isosarcophytonolide D (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) OKIKUCHI, Takahiro; TAKAMURA, Hiroyoshi; KADOTA, Isao
- 1C2-38** Synthetic study of alysiasecoesterol A (Div. of Chem., Fac. Pure Appl. Sci., Univ. of Tsukuba) OHYOSHI, Takayuki; TANO, Hikaru; KIGOSHI, Hideo
- 1C2-39\*** Asymmetric Total Synthesis of ent-Pyripyropene A via Tandem Radical Cyclization Catalyzed by Titanocene(III) Chloride. (Chem. Res. Lab., Tokyo Tech) OFUSE, Shinichiro; IKEBE, Ayako; OOSUMI, Kazuya; KARASAWA, Tomoya; MATSUMURA, Keisuke; IZUMIKAWA, Miho; JOHMO, Kohei; UEKUSA, Hidehiro; SHIN-YA, Kazuo; DOI, Takayuki; TAKAHASHI, Takashi

## alkaroid

Chair: SATO, Takaaki (15 : 50~16 : 50)

- \* 15:40-15:50: interval for laptop PC connection.(1C2-42, 1C2-43, 1C2-44, 1C2-45, 1C2-46, 1C2-47)
- 1C2-42** Synthetic Study of Manzacidin B Based on Diastereoselective Hydroxymethylation (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) OMIYOSHI, Natsumi; ARAKI, Yuya; KUDOH, Takayuki; SAKAKURA, Akira
- 1C2-43** Synthetic Study of a Heterocyclic Portion of Yuzurimine-Type Alkaloids (Grad. Sch. Nat. Sci. Technol., Okayama Univ.; Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) OIKEDA, Masaki; NOMURA, Saki; SAITOH, Keita; KIGOSHI, Hideo; HAYAKAWA, Ichiro; SAKAKURA, Akira
- 1C2-44** Bioinspired indole prenylation reaction in aqueous media (Grad. Sch. Sci. & Tech., Kumamoto Univ.) OTANAKA, Satomi; SHIOMI, Shinya; ISHIKAWA, Hayato
- 1C2-45** Synthetic Study of Dihydrocolucine (Grad. Sch. Sci. & Tech., Kumamoto Univ.) OGOSHI, Kei; MORINAGA, Yuka; ISHIKAWA, Hayato
- 1C2-46** Synthetic Study of Geissochizal (Grad. Sch. Sci. & Tech., Kumamoto Univ.) OFUKUNAGA, Aki; NAKASHIMA, Rie; USHIJIMA, Daisuke; ISHIKAWA, Hayato
- 1C2-47** Synthetic study on Xylapyrosid B1 employing [3+2] annulation of aldehyde-aldose derivatives (Coll. Sci. Eng., Aoyama Gakuin Univ.) OOGAWA, Yuya; SASAKI, Ikuo; SUGIMURA, Hideyuki

Chair: MANABE, Yoshiyuki (17 : 00~18 : 00)

- \* 16:50-17:00: interval for laptop PC connection.(1C2-49, 1C2-51, 1C2-52, 1C2-53, 1C2-54)
- 1C2-49\*** Photo-induced Glycosylation Using a Thiourea as an Organophotoacid (Fac. Sci. Tech., Keio Univ.) ○KIMURA, Tomoya; ETO, Takahiro; TAKAHASHI, Daisuke; TOSHIMA, Kazunobu
- 1C2-51** Stereoselective 1,2-*cis*-Glycosylation Using Glycosyl-Acceptor-Derived Borinic Ester (Fac. Sci. Tech., Keio Univ.) ○TANAKA, Masamichi; NASHIDA, Junki; TAKAHASHI, Daisuke; TOSHIMA, Kazunobu
- 1C2-52** Synthetic study on quinochalones, pigments in safflower petals (Grad. Sch. Sci., Eng., Tokyo Tech) ○HAYASHI, Taiki; OHMORI, Ken; SUZUKI, Keisuke
- 1C2-53** Synthetic studies on deoxyaminosugars using photochemical reaction (Grad. Sch. Sci. Tech., Keio Univ.) ○SATO, Keisuke; FUKUYAMA, Takahide; RYU, Ilhyong; INUKI, Shinsuke; FUJIMOTO, Yukari
- 1C2-54** Synthetic study of cyclodextrin bearing 3,6-O-[bibenzyl-2,2'-bis(methylene)]-bridge (Sch. Sci. Tech., Kwansai Gakuin Univ.) ○IKUTA, Daiki; TOMABECHI, Yusuke; IKEUCHI, Kazutada; YAMADA, Hidetoshi

Chair: MASATO, Noguchi (18 : 10~18 : 50)

- \* 18:00-18:10: interval for laptop PC connection.(1C2-56, 1C2-57, 1C2-58, 1C2-59)
- 1C2-56** Synthesis of *N*-glycan containing bisecting GlcNAc by efficient construction of branching structure (Grad. Sch. Sci., Osaka Univ.) ○SHOMURA, Hiroki; MANABE, Yoshiyuki; MINAMOTO, Naoya; NAGASAKI, Masahiro; FUKASE, Koichi
- 1C2-57** Synthesis of the glyco-clusters as possible inhibitors for influenza infection (Grad. Sch. Sci., Osaka Univ.) ○ICHIKAWA, Hiroaki; MANABE, Yoshiyuki; FUKASE, Koichi
- 1C2-58** Synthesis and biological function of peptidoglycan fragment photo-affinity probe (Grad. Sch. Sci., Osaka Univ.) ○TOMIZAWA, Kazumi; SHIMOYAMA, Atsushi; WANG, Qianqian; FUJIMOTO, Yukari; FUKASE, Koichi
- 1C2-59** Systematic Synthesis of Sulfated Oligofucosides and Their Binding Affinities toward Influenza Virus Hemagglutinin (Fac. Sci. Tech., Keio Univ.) ○KASAI, Akihiro; ARAFUKA, Shinsuke; MATSUBARA, Teruhiko; SATO, Toshinori; TAKAHASHI, Daisuke; TOSHIMA, Kazunobu

## Friday, March 25, AM

Chair: TAKIKAWA, Hiroshi (9 : 00 ~9 : 50)

- \* 8:50-9:00: interval for laptop PC connection.(2C2-01, 2C2-02, 2C2-03, 2C2-04, 2C2-05)
- 2C2-01\*** Sterol recognition mechanism of saponins deduced from membrane-permeabilizing activities and spectroscopic evidence (Grad. Sch. Sci., Osaka Univ.) ○MALABED, Raymond; HANASHIMA, Shinya; MURATA, Michio; SAKURAI, Kaori
- 2C2-02** Diverse transannular reaction of bromozetronone (Grad. Sch. Agr. Sci., Kinki Univ.) ○UTAKA, Yoshimi; FUKUSHIMA, Miyuki; TAKAHASHI, Issei; IFUKU, Masashi; KAWAI, Yasushi; KITAYAMA, Takashi
- 2C2-03** Synthetic study of optically active valeric acid and its analogues. (Grad. Sch. Agr. Sci., Kinki Univ.) ○YATO, Shoji; KIM, Seongwoo; IZU, Yukako; SHIRAI, Takashi; TSUMAGATA, Hiroki; KITAYAMA, Takashi
- 2C2-04\*** Total Synthesis of Paracentrone (Grad. Sch. Sci., Osaka City Univ.) ○NISHIOKA, Yuto; YANO, Yo; KINASHI, Naoto; OKU, Natsumi; TORIYAMA, Yohei; KATSUMURA, Shigeo; SHINADA, Tetsuro; SAKAGUCHI, Kazuhiko
- 2C2-05** Synthetic Study on 6,7-fused ring system by Using Ring Expansion Reaction and Synthesis of Schiglaunone A (Fac. Sci., Univ. of Toyama) MIYAZAWA, Masahiro; ○YAMASAWA, Hiroki; YOKOYAMA, Hajime

Chair: YOKOYAMA, Hajime (10 : 00~10 : 50)

- \* 9:50-10:00: interval for laptop PC connection.(2C2-07, 2C2-08, 2C2-09, 2C2-10, 2C2-11)
- 2C2-07** Synthetic studies of natural products using amino acid for Ugi reaction (1) (Grad. Sch. Integrated Arts Sci., Kochi Univ.) ○KITAMORI, Ayumi; MIMURA, Rika; MATSUKAWA, Akihito; ICHIKAWA, Yoshiyasu
- 2C2-08** Synthetic studies of natural products using amino acid for Ugi reaction (2) (Grad. Sch. Integrated Arts Sci., Kochi Univ.) ○MIMURA, Rika; KITAMORI, Ayumi; MATSUKAWA, Akihito; ICHIKAWA, Yoshiyasu
- 2C2-09** Synthetic Studies on the C-ring Fragment of Cotylenin A (Sch. Advanced Sci. Eng., Waseda Univ.) ○HOSHINO, Yunosuke; NAGATANI, Kotaro; TEZUKA, Haruka; NAKADA, Masahisa
- 2C2-10** Studies on the Asymmetric Total Synthesis of Cotylenin A (Grad. Sch. Advanced Sci. Eng., Waseda Univ.) ○NAGATANI, Kotaro; HOSHINO, Yunosuke; TEZUKA, Haruka; NAKADA, Masahisa
- 2C2-11** Synthetic Studies on Highly Fused Polycyclic Natural Product; itol A (Grad. Sch. Life Sci., Tohoku Univ.) ○MINOTA, Yoshinobu; XU, Shu; ITTO, Kaori; ARIMOTO, Hirokazu

Chair: SAKAGUCHI, Kazuhiko (11 : 00~11 : 40)

- \* 10:50-11:00: interval for laptop PC connection.(2C2-13, 2C2-15)
- 2C2-13\*\*** Total Synthesis of Integrifolin (Grad. Sch. Sci., Eng., Tokyo Tech)

- SHIMOMAKI, Katsuya; KUSAMA, Hiroyuki; IWASAWA, Nobuharu
- 2C2-15\*\*** Design and *de novo* Synthesis of Anti-malarial 6-Aza-artemisinins (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.)
- BONEPALLY, Karunakar Reddy; HIRUMA, Takahisa; OCHIAI, Kyouhei; MIZOGUCHI, Haruki; SUZUKI, Shun; OIKAWA, Hideaki; ISHIYAMA, Aki; HOKARI, Rei; IWATSUKI, Masato; OTOGURO, Kazuhiko; OMURA, Satoshi; OGURI, Hiroki

## Friday, March 25, PM

## alkaroid

Chair: HAYAKAWA, Ichiro (12 : 50~13 : 50)

- \* 12:40-12:50: interval for laptop PC connection.(2C2-24, 2C2-25, 2C2-26, 2C2-27, 2C2-28)
- 2C2-24** synthetic studies of cylindradine B (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○IWATA, Makoto; KAMIJOH, Yuko; NAGASAWA, Kazuo
- 2C2-25** Synthesis of D, E-rings of Palau' amine based on Pauson-Khand Reaction (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○MATSUO, Hiroki; NAGASAWA, Kazuo
- 2C2-26** Synthesis of skipped dienes through site- and stereoselective hydroboration of allenes (Grad. Sch. Sci. Tech., Keio Univ.) ○NAGASHIMA, Yoshiyuki; SUTO, Takahiro; YANAGITA, Yuta; SATO, Takaaki; CHIDA, Noritaka
- 2C2-27** Development of unified synthetic route toward madangamine alkaloids (Grad. Sch. Sci. Tech., Keio Univ.) ○SUTO, Takahiro; YANAGITA, Yuta; MATSUO, Naoya; KUROSU, Yasuhiro; NAGASHIMA, Yoshiyuki; SATO, Takaaki; CHIDA, Noritaka
- 2C2-28\*\*** The Sequential Overman/Claisen Rearrangement: Development and Application to Total Synthesis of (+)-Neostenine (Fac. Sci. Tech., Keio Univ.) ○NAKAYAMA, Yasuaki; MAEDA, Yuichiro; KOTATSU, Masayuki; SEKIYA, Ruriko; ICHIKI, Masato; SATO, Takaaki; CHIDA, Noritaka

Chair: FUKASE, Koichi (14 : 00~15 : 00)

- \* 13:50-14:00: interval for laptop PC connection.(2C2-31, 2C2-34, 2C2-35, 2C2-36)
- 2C2-31** Young Scholar Lectures of CSJ Target-Selective Synthesis and Photodegradation of Oligosaccharides Utilizing Chemical Properties of Arylboronic Acids (Fac. Sci. Tech., Keio Univ.) ○TAKAHASHI, Daisuke
- 2C2-34** Study on long-range intramolecular aglycon delivery for *cis* glycosylation (RIKEN) ○ISHIWATA, Akihiro; ITO, Yukishige
- 2C2-35** Synthesis of sulfated glycosyl donor and its glycosylation reaction (Grad. Sch. Sci., Osaka Univ.) ○MANBO, Akihiro; OKAMOTO, Ryo; IZUMI, Masayuki; KAJIHARA, Yasuhiro
- 2C2-36** Development of  $\beta$ -stereoselective mannosylation using 2,6-lactones as donors. (Fac. Sci., Toho Univ.) ○HASHIMOTO, Yusuke; TANIKAWA, Saki; SAITO, Ryota; SASAKI, Kaname

Chair: SASAKI, Kaname (15 : 10~16 : 10)

- \* 15:00-15:10: interval for laptop PC connection.(2C2-38, 2C2-39, 2C2-40, 2C2-41, 2C2-42, 2C2-43)
- 2C2-38** Efficient Derivatization of 3,6-O-o-xylylene Bridged Glucose (Sch. Sci. Tech., Kwansai Gakuin Univ.) ○ARAI, Tomoki; UCHINO, Takuya; IKEUCHI, Kazutada; YAMADA, Hidetoshi
- 2C2-39** Effect of ionic liquid tag on stereoselectivity of electrochemical glycosylation (Grad. Sch. Eng., Tottori Univ.) ○SASAKI, Norihiko; ISODA, Yuta; KITAMURA, Kei; NOKAMI, Toshiki; ITOH, Toshiyuki
- 2C2-40** VCD structural analysis and synthesis of furanosides and artificial nucleosides (Grad. Sch. Life Sci., Hokkaido Univ.) ○NAKANO, Kie; TANIGUCHI, Tohru; BABA, Ryosuke; MONDE, Kenji
- 2C2-41** Synthetic study of ABO blood type antigens utilizing the improvement of reactivity by the cleavage of hydrogen bonding network (Grad. Sch. Sci., Osaka Univ.) ○TSUTSUI, Masato; MANABE, Yoshiyuki; FUKASE, Koichi
- 2C2-42** Effects of Molecular Association in Chemical Glycosylation. (Grad. Sch. Ind. Sci. Technol., Tokyo Univ. of Sci.) ○KARIBE, Yuuki; HORITO, Shigeomi; HACHISU, Masakazu
- 2C2-43** Anomeric stereo selectivity with armed/disarmed glycosyl donors under the conditions of association between acceptor molecules (Grad. Sch. Ind. Sci. Technol., Tokyo Univ. of Sci.) ○FUJINO, Takafumi; RI, Hanbin; HACHISU, Masakazu; HORITO, Shigeomi

Chair: TAKAHASHI, Daisuke (16 : 20~17 : 20)

- \* 16:10-16:20: interval for laptop PC connection.(2C2-45, 2C2-46, 2C2-47, 2C2-48, 2C2-49, 2C2-50)
- 2C2-45** Direct formation of unprotected 1,2-anhydro sugars from free saccharides using a dehydrative condensing agent (Grad. Sch. Eng., Tohoku Univ.) ○SERIZAWA, Kazunari; NOGUCHI, Masato; SHODA, Shin-ichiro
- 2C2-46** The substituent effect of 1,6-anhydro sugars formation using formamidinium-type dehydrative condensation agent (Grad. Sch. Eng., Tohoku Univ.) ○MEGURO, Yasuhiro; SHODA, Shin-ichiro
- 2C2-47** Chemo-enzymatic Synthesis of Oligosaccharide Using Microflow Reactor (Grad. Sch. Eng., Tohoku Univ.) ○SHODA, Shin-ichiro;

NOGUCHI, Masato; SAIKI, Ryohei

- 2C2-48** Synthesis of  $\alpha$  (2,9) disialic acids using N-acetyl/glycolyl sialyl donors and evaluation of biological activity. (Grad. Sch. Sci., Eng., Tokyo Tech) ○AOYAGI, Taku; GOSHIMA, Ami; UZAWA, Jun; OHIRA, Shuichi; YAMAGUCHI, Yoshiki; KITAJIMA, Ken; SATO, Chihiro; TANAKA, Hiroshi
- 2C2-49** Synthesis of Multibranching Oligomannosides and Evaluation of Activity (Grad. Sch. Sci., Eng., Tokyo Tech) ○SUGIYAMA, Hirota; NAKAYAMA, Hitoshi; IWABUCHI, Kazuhisa; TANAKA, Hiroshi
- 2C2-50** Synthesis of glycolipid by one-pot Suzuki-Miyaura coupling using a cyclic borane (Grad. Sch. Sci., Eng., Tokyo Tech) ○SATO, Ko; SUZUKI, Ryota; TANAKA, Hiroshi

Chair: MURATA, Michio (17 : 30~18 : 00)

\* 17:20-17:30: interval for laptop PC connection.(2C2-52)

- 2C2-52 CSJ Award for Young Chemists** Synthesis of Biologically Active Natural Products by Harnessing the Enzymatic Assembly Lines (Fac. Sci., Hokkaido Univ.) ○MINAMI, Atsushi

Chair: MINAMI, Atsushi (18 : 10~18 : 50)

- \* 18:00-18:10: interval for laptop PC connection.(2C2-56, 2C2-58, 2C2-59)
- 2C2-56<sup>#</sup>** Synthetic Study on Oxirapentyn D (Grad. Sch. Sci., Eng., Tokyo Tech) ○SAKAI, Takahiro; OHMORI, Ken; SUZUKI, Keisuke
- 2C2-58** Photo-induced cyclopropanol formation from  $\alpha$ -ketoamides (Syn. Org. Chem. Lab., RIKEN; Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.; Fac. Sci. Tech., Keio Univ.; RIKEN CSRS; CREST, AMED) ○MIKAME, Yu; OTA, Eisuke; HIRAI, Go; NAGASAWA, Kazuo; NISHIYAMA, Shigeru; SODEOKA, Mikiko
- 2C2-59** Photoinduced coupling reaction of  $\alpha$ -ketoester via intermolecular hydrogen transfer (Syn. Org. Chem. Lab., RIKEN; Fac. Sci. Tech., Keio Univ.; Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.; RIKEN CSRS; CREST, AMED) ○OTA, Eisuke; MIKAME, Yu; HIRAI, Go; NISHIYAMA, Shigeru; SODEOKA, Mikiko

## Saturday, March 26, AM

## alkaloid

Chair: ISHIKAWA, Hayato (9 : 00 ~10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(3C2-01, 3C2-02, 3C2-03, 3C2-04, 3C2-05)
- 3C2-01** Synthetic Study of Indolizidine Alkaloids using Organic Azides. (Grad. Sch. Mat. Sci., NAIST) ○YOKOI, Taiki; TANIMOTO, Hiroki; KAKIUCHI, Kiyomi
- 3C2-02<sup>#</sup>** Examination of the New Synthetic Strategy for Tetrodotoxins on the Basis of Mercury(II) Triflate-catalyzed Cycloisomerization (Grad. Sch. Sci., Osaka City Univ.) ○MARUYAMA, Takahiro; KIKUCHI, Seiho; KOYAMA, Tomoyuki; NISHIKAWA, Keisuke; TACHI, Yoshimitsu; MORIMOTO, Yoshiki
- 3C2-03** Synthesis of 6,6-spiro compounds using mercury(II)triflate-catalyzed cycloisomerization (Fac. Sci., Osaka City Univ.) ○YOSHIDA, Hiroaki; MARUYAMA, Takahiro; KOYAMA, Tomoyuki; NISHIKAWA, Keisuke; TACHI, Yoshimitsu; MORIMOTO, Yoshiki
- 3C2-04** Studies on total synthesis of lepadiformine C (Grad. Sch. Sci., Osaka City Univ.) ○YAMAUCHI, Kengo; KIKUCHI, Seiho; EZAKI, Sinnosuke; KOYAMA, Tomoyuki; NISHIKAWA, Keisuke; TACHI, Yoshimitsu; MORIMOTO, Yoshiki
- 3C2-05<sup>\*</sup>** Synthetic study on (+)-saxitoxin (Grad. Sch. Bioagr. Sci., Nagoya Univ.) ○UENO, Sohei; NAKAZAKI, Atsuo; NISHIKAWA, Toshio

Chair: TANIMOTO, Hiroki (10 : 10~11 : 00)

- \* 10:00-10:10: interval for laptop PC connection.(3C2-08, 3C2-09, 3C2-10, 3C2-11, 3C2-12)
- 3C2-08** Reduction of nitro groups by oxidative stress products, FDP (Bio. Syn. Chem. Lab., RIKEN; Grad. Sch. Sci., Osaka Univ.) ○TAKAMATSU, Masayuki; FUKASE, Koichi; TANAKA, Katsunori
- 3C2-09** Development of synthetic strategy for unified total synthesis of stemona alkaloids (Grad. Sch. Sci. Tech., Keio Univ.) ○YORITATE, Makoto; TAKAHASHI, Yoshito; TAJIMA, Hayato; YOKOYAMA, Takashi; SATO, Takaaki; CHIDA, Noritaka
- 3C2-10** Synthetic study of aplaminal (Div. of Chem., Fac. Pure Appl. Sci., Univ. of Tsukuba) ○TANIGUCHI, Ayaka; KANEKO, Takahiro; OHYOSHI, Takayuki; KIGOSHI, Hideo
- 3C2-11<sup>#</sup>** Formal synthesis of ezetimibe using a proline-mediated, asymmetric, three-component Mannich reaction (Sch. Sci., Tohoku Univ.) ○KOSHINO, Seitaro; SHIMASAKI, Yasuharu; HAYASHI, Yujiro
- 3C2-12** Synthetic Studies of Fasmierianamine A (Grad. Sch. Sci. Tech., Keio Univ.) ○YOKOO, Ryosuke; MASUMURA, Kensuke; OKAWA, Hiroki; MIYAZAWA, Fumiaki; SAIKAWA, Yoko; NAKATA, Masaya

## Saturday, March 26, PM

Chair: NAKAO, Yoichi (14 : 30~15 : 30)

- \* 14:20-14:30: interval for laptop PC connection.(3C2-34, 3C2-36, 3C2-37, 3C2-38, 3C2-39)

- 3C2-34<sup>\*</sup>** Isolation, structure determination of a novel enamide, isolated from the uncultured marine cyanobacterium. (Fac. Sci. Tech., Keio Univ.) ○SUMIMOTO, Shinpei; IWASAKI, Arihiro; OHNO, Osamu; KUDO, Fumitaka; SUENAGA, Kiyotake
- 3C2-36** Isolation and determination of the structure of a new cyclic peptide from the marine cyanobacterium collected at Okinawa (Fac. Sci. Tech., Keio Univ.) ○KANAMORI, Yuki; SUMIMOTO, Shinpei; IWASAKI, Arihiro; SUENAGA, Kiyotake
- 3C2-37** Synthetic efforts to develop the ligands for neuronal receptor via stereoselective Prins-Ritter reaction (Grad. Sch. Nanobiosci., Yokohama City Univ.) ○CHIBA, Manami; FUJIMOTO, Chikako; ISHIKAWA, Yuichi; OIKAWA, Masato
- 3C2-38** Synthetic studies on protoaculeine B (Grad. Sch. Nanobiosci., Yokohama City Univ.) ○SUGAHARA, Hajime; ISHIKAWA, Yuichi; OIKAWA, Masato
- 3C2-39** Isolation and structure of a novel linear peptide from the marine cyanobacterium *Okeania* sp. (Fac. Sci. Tech., Keio Univ.) ○TADENUMA, Takato; SUMIMOTO, Shinpei; IWASAKI, Arihiro; SUENAGA, Kiyotake

Chair: OIKAWA, Masato (15 : 40~16 : 40)

- \* 15:30-15:40: interval for laptop PC connection.(3C2-41, 3C2-43, 3C2-44, 3C2-45, 3C2-46)
- 3C2-41<sup>#</sup>** Examination of a possible mechanism for the membrane translocation of the marine sponge-derived bioactive metabolite TNM-A (Grad. Sch. Sci., Osaka Univ.) ○CORNELIO, Kimberly; ESPIRITU, Rafael; TODOKORO, Yasuto; MATSUMORI, Nobuaki; MURATA, Michio; NISHIMURA, Shinichi; KAKEYA, Hideaki; YOSHIDA, Minoru; MATSUNAGA, Shigeki
- 3C2-43** Structure-activity relationship studies and the target identification of stylissatin A, an anti-inflammatory cyclic peptide (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) ○SUNABA, Taiki; KITA, Masaki; KIGOSHI, Hideo
- 3C2-44** Determination of the Absolute Configuration of Janadolide, a Novel Cyclic Lipopeptide Possessing a t-butyl Group from the Marine Cyanobacterium *Okeania lorea* (Fac. Sci. Tech., Keio Univ.) ○OGAWA, Hidetoshi; IWASAKI, Arihiro; SUMIMOTO, Shinpei; KANAMORI, Yuki; OHNO, Osamu; SUENAGA, Kiyotake
- 3C2-45** Structure and biological activity of a new cyclic peptide, kurahamide, from the marine cyanobacterial assemblage (Fac. Sci. Tech., Keio Univ.) ○IWASAKI, Arihiro; SUMIMOTO, Shinpei; OHNO, Osamu; SUENAGA, Kiyotake
- 3C2-46** Isolation and structure elucidation of a new cyclic peptide from the marine cyanobacteria (Sch. Advanced Sci. Eng., Waseda Univ.; Sch. Advanced Sci. Eng., Waseda Univ.) ○NAKAMURA, Fumiaki; MAEJIMA, Hiroshi; NAKAO, Yoichi

## Room C3

Chishinkan1 Building 126

## Biofunctional Chemistry ; Biotechnology

Thursday, March 24, AM

## Cell

Chair: HARA, Masayuki (9 : 30 ~10 : 20)

- \* 9:20-9:30: interval for laptop PC connection.(1C3-04, 1C3-06, 1C3-07, 1C3-08)
- 1C3-04<sup>#</sup>** A novel pathway involved in pentose metabolism in halophiles (Grad. Sch. Eng., Kyoto Univ.) ○ATOMI, Haruyuki; YOSHII, Yuuta; HODO, Sanae; NOGUCHI, Ayako; MANABE, Yoshiyuki; FUKASE, Koichi; SATO, Takaaki
- 1C3-06** Raman microspectroscopic study of osteoblastic mineralization (Grad. Sch. Eng., Osaka Univ.) ○HASHIMOTO, Aya; MORIMOTO, Chiaki; TAKEDACHI, Masahide; YAMAGUCHI, Yoshinori; MURAKAMI, Shinya; TAMIYA, Eiichi
- 1C3-07** Analysis of nanoneedle penetration efficiencies under the conditions that plasma membrane fluidity was lowered (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○SHIMIZU, Keita; KAWAMURA, Ryuzo; IJIMA, Masumi; KURODA, Shunichi; HUKAZAWA, Kyoko; ISHIIHARA, Kazuhiko; NAKAMURA, Chikashi
- 1C3-08** Influence of medium temperature on cell adhesion force of biocompatible anchor for cell membrane (Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○MATSUMOTO, Yuta; SHIMIZU, Keita; NAKAMURA, Chikashi

Chair: NAKAMURA, Chikashi (10 : 30~11 : 20)

- \* 10:20-10:30: interval for laptop PC connection.(1C3-10, 1C3-11, 1C3-13, 1C3-14)
- 1C3-10** Effects of oxidative stress induced by photodynamic reaction on survival and differentiation of mesenchymal stem cells (Grad. Sch. Sci., Osaka Pref. Univ.) ○SHIROTA, Yusuke; MORI, Hideki; HARA, Masayuki
- 1C3-11<sup>\*</sup>** Effects of zinc group elements on survival and differentiation of mouse

neural stem/progenitor cells (Grad. Sch. Sci., Osaka Pref. Univ.) ○MORI, Hideki; NISHIKAWA, Mayu; HARA, Masayuki

**1C3-13** Molecular breeding of a hydrogen-hyperproducing strain of the hyperthermophilic archaeon, *Thermococcus kodakarensis* (Grad. Sch. Eng., Kyoto Univ.; CREST, JST) ○KANAI, Tamotsu; SIMONS, Jan-robert; TSUKAMOTO, Ryohei; NAKAJIMA, Akihito; OMORI, Yoshiyuki; MATSUOKA, Ryoji; BEPPU, Haruki; IMANAKA, Tadayuki; ATOMI, Haruyuki

**1C3-14<sup>#</sup>** Development of a chitin-assimilating strain of the hyperthermophilic archaeon, *Thermococcus kodakarensis* (Grad. Sch. Eng., Kyoto Univ.; CREST, JST) ○ASLAM, Mehwhish; HORIUCHI, Ayumi; TAKAHASHI, Naoya; SIMONS, Jan-robert; JHA, Savyasachee; KANAI, Tamotsu; ATOMI, Haruyuki

Chair: ATOMI, Haruyuki (11 : 30~12 : 20)

\* 11:20-11:30: interval for laptop PC connection.(1C3-16, 1C3-17, 1C3-19)

**1C3-16** Influence of a cooling agent, menthol, on T cell signal transduction (Sch. Mat. Sci., JAIST) ○YABUUCHI, Satomi; OKUBO, Yufu; BAEK, Keangok; HOSHINO, Kunihide; TSUJINO, Yoshio; SHIMOKAWA, Naofumi; TAKAGI, Masahiro

**1C3-17<sup>#</sup>** Development of bioluminescent probes to analyze integral role of heat-shock factor 1 in the synchronization of circadian clock. (Grad. Sch. Sci., The Univ. of Tokyo) ○KAWAMURA, Genki; HATTORI, Mitsuru; TAMARU, Teruya; OZAWA, Takeaki

**1C3-19\*** Study on extracellular electron transfer toward a deeper understanding of relationship between intracellular redox state and circadian clock (Grad. Sch. Eng., The Univ. of Tokyo; RCSE, Osaka Univ.) ○ISHIKAWA, Masahito; TUNANUNKUL, Pornpitra; TANAKA, Kenya; ITO, Yuri; KANEKO, Masahiro; KATO, Souichiro; HASHIMOTO, Kazuhito; NAKANISHI, Shuji

## Thursday, March 24, PM

### Protein(Peptide)

Chair: HORI, Yuichiro (13 : 30~14 : 30)

\* 13:20-13:30: interval for laptop PC connection.(1C3-28, 1C3-30, 1C3-31, 1C3-32, 1C3-33)

**1C3-28<sup>#</sup>** Development of stapled peptide HIV-1 inhibitors derived from HIV-1 gene products. (IBB, Tokyo Med. and Dental Univ.) NOMURA, Wataru; OHASHI, Nami; MIZUGUCHI, Takaaki; ○TAMAMURA, Hirokazu

**1C3-30** Cytotoxicity and tumor accumulation of PEG-modified EGFR2R-lytic hybrid peptide as an anticancer agent for drug-resistant cancer (Coll. Sci. Eng., Aoyama Gakuin Univ.) ○KURIHARA, Ryohsuke; HORIBE, Tomohisa; KOHNO, Masayuki; TANABE, Kazuhito; KAWAKAMI, Koji

**1C3-31** Development of cross-linked helical peptides containing D-amino acid residues and their exopeptidase-resistance and intracellular stability (Grad. Sch. Pharm. Sci., Univ. of Toyama) ○TOKUMARU, Hiroshi; OKUSHIMA, Ayako; FUJIMOTO, Kazuhisa; OYOSHI, Takanori; INOUE, Masahiko

**1C3-32** Synthesis of helical peptides cross-linked at three points aiming for intracellular stability and their functions (Grad. Sch. Med. Pharm. Sci. Edu., Univ. of Toyama) ○NOGAMI, Kagayaki; OKUSHIMA, Ayako; FUJIMOTO, Kazuhisa; OYOSHI, Takanori; INOUE, Masahiko

**1C3-33** Site-selective chemical modification of Lys175 in chymotrypsin: Design of dipeptidyl moiety for the site-selectivity (Appl. Chem. Kanazawa Inst. of Tech.) ○ONO, Shin; NAKAI, Takahiko; SAWAI, Yusuke; HORINO, Yoshikazu; KURODA, Hirofumi; OYAMA, Hiroshi; ABE, Hitoshi; UMEZAKI, Masahito

### Environmental biotechnology, food biotechnology, biosensor

Chair: FUNABASHI, Hisakage (14 : 40~15 : 40)

\* 14:30-14:40: interval for laptop PC connection.(1C3-35, 1C3-36, 1C3-37, 1C3-38, 1C3-40)

**1C3-35<sup>#</sup>** Altering the physico-chemical characteristics of bacterial cells' surface using chitosan (Fac. Sci., Mahidol Univ.) ○WONGKONGKATEP, Jirarut; HANPANICH, Orakan

**1C3-36** Inorganic nanocrystal synthesis on the functional peptide-displaying diatom frustules (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○NIWA, Yuta; MAEDA, Yoshiaki; KISAILUS, David; YOSHINO, Tomoko; TANAKA, Tsuyoshi

**1C3-37** Evaluation for physical interactions between nanostructures and cell membrane (Grad. Sch. Eng., Nagoya Univ.) ○YONESE, Akihiro; YASUI, Takao; YANAGIDA, Takeshi; KAJI, Noritada; KANAI, Masaki; NAGASHIMA, Kazuki; KAWAI, Tomoji; BABA, Yoshinobu

**1C3-38<sup>#</sup>** Single bacterial cell detection based on the efficient DNA recovery technique with charge-reversible magnetic nanoparticles (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○MAEDA, Yoshiaki; TOYODA, Takahiro; YOSHINO, Tomoko; MATSUNAGA, Tadashi; TSUYOSHI, Tanaka

**1C3-40** Self-heater nanowire devices for absorption and desorption of molecular (Grad. Sch. Eng., Nagoya Univ.) ○NARUSE, Reina; YASUI, Takao; YANAGIDA, Takeshi; KAJI, Noritada; KANAI, Masaki; NAGASHIMA, Kazuki; KAWAI, Tomoji

Chair: OKAMOTO, Ryo (15 : 50~16 : 50)

\* 15:40-15:50: interval for laptop PC connection.(1C3-42, 1C3-44, 1C3-46, 1C3-47)

**1C3-42\*** Development of insulin sensor cells that exhibit BRET response against insulin (Hiroshima Univ. I.S.S.D.) ○SHIGETO, Hajime; KURODA, Akio; FUNABASHI, Hisakage

### Sugar

**1C3-44\*** Expanding glycoconjugate library on DNAs and its enhanced affinity to lectins (Kobe Univ.) ○EBARA, Yasuhito; MATSUDA, Mika; YAMABE, Miyuki

**1C3-46** Stereocontrolled Synthesis of P-Modified N-Acetyl Mannosamine  $\alpha$ -1-Phosphate Analogs (Fac. Pharm. Sci., Tokyo Univ. of Sci.) ○OGAWA, Yuki; NORO, Mihoko; IWATA, Rintaro; WADA, Takeshi

**1C3-47** Stereoselective synthesis of glycosyl phosphate analogues derived from Leishmania (Fac. Pharm. Sci., Tokyo Univ. of Sci.) ○SANO, Michi; NORO, Mihoko; IWATA, Rintaro

Chair: IWATA, Rintaro (17 : 00~17 : 50)

\* 16:50-17:00: interval for laptop PC connection.(1C3-49, 1C3-50, 1C3-52)

**1C3-49** Sialic acid-modified 3-way junction DNAs that bind to all kinds of influenza viruses (Grad. Sch. Human Dev. Env., Kobe Univ.; ISIR, Osaka Univ.) ○YAMABE, Miyuki; KAIHATSU, Kunihiko; EBARA, Yasuhito

**1C3-50\*** Solution Structure and Hydration of Monosaccharides Characterized by Vacuum-Ultraviolet Circular-Dichroism Spectroscopy (HiSOR, Hiroshima Univ.) ○MATSUO, Koichi; NAMATAME, Hirofumi; TANIGUCHI, Masaki; GEKKO, Kunihiko

**1C3-52<sup>#</sup>** Chemical Synthesis of Homogeneous Erythropoietin Analogs Bearing High Mannose-type Oligosaccharides for the Elucidation of Glycoprotein Quality Control System (Sch. Sci., Osaka Univ.; ASI, RIKEN; JSTERATO) ○KIUCHI, Tatsuto; IZUMI, Masayuki; OKAMOTO, Ryo; TAKEDA, Yoichi; SAKONO, Masafumi; ITO, Yukishige; KAJIHARA, Yasuhiro

Chair: TANAKA, Katsunori (18 : 00~18 : 50)

\* 17:50-18:00: interval for laptop PC connection.(1C3-55, 1C3-57, 1C3-58, 1C3-59)

**1C3-55<sup>#</sup>** Specific and Gradient <sup>15</sup>N isotope-labeling method for synthetic proteins towards NMR analysis (Grad. Sch. Sci., Osaka Univ.) ○NGUYEN, Minh Hien; IZUMI, Masayuki; OKAMOTO, Ryo; KAJIHARA, Yasuhiro

**1C3-57** Mineral-catalyzed partial synthesis of saccharide (Fac. Eng., The Univ. of Tokyo) ○USAMI, Kaho; OKAMOTO, Akimitsu

**1C3-58** Preparation and NMR conformational analyses of stable isotope-labeled high-mannose-type oligosaccharides with terminal glucosylation (Sch. Mat. Sci., JAIST) ○YAMAGUCHI, Takumi; ZHU, Tong; SATOH, Tadashi; KATO, Koichi

**1C3-59** An efficient synthesis of antifreeze glycoprotein having GalNAc by using a peptidyl-N-pivaloylguanidine derivative (Grad. Sch. Sci., Osaka Univ.) ○ORII, Ryo; OKAMOTO, Ryo; IZUMI, Masayuki; KAJIHARA, Yasuhiro

## Friday, March 25, AM

### Biocatalysis

Chair: ITOH, Toshiyuki (9 : 00 ~ 10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(2C3-01, 2C3-02, 2C3-03, 2C3-04, 2C3-05, 2C3-06)

**2C3-01** Synthesis of Optically Active 2-Nitro Alcohols via Biocatalytic Reactions (Sch. Sci. Eng., Meisei Univ.) MATSUMOTO, Kazutsugu; HARADA, Norimasa; ○LYU, Ji Young; SHIMODA, Toshiya; IGAWA, Yuuta

**2C3-02** An HASApf-Redoxin Complex causing Asymmetric Catalytic Oxidation via the Regenerative Formation of a Reactive Oxygen Species (SanCat-R) (Sanyo Shokuhin Co., Ltd. R & D) ○NAGAOKA, Hiroyuki

**2C3-03** Electron injection to living cells by using a biocompatible redox-active polymer (Grad. Sch. Eng., The Univ. of Tokyo) ○KANEKO, Masahiro; ISHIKAWA, Masahito; KATO, Souichiro; HASHIMOTO, Kazuhito; NAKANISHI, Shuji

**2C3-04** The biotransformation of amines using plant cultured cells (Okayama Univ. of Sci.) ○KAWAMURA, Shogo; UESUGI, Daisuke; ONO, Tsubasa; MANABE, Koichi; OZAKI, Shinichi; SHIMODA, Kei; HAMADA, Hiroki

**2C3-05** The biotransformation of curcumin derivative using plant cultured cells (Fac. of Sci., Okayama Univ. of Sci.) ○NAKAYAMA, Noriyuki; UESUGI, Daisuke; OKADA, Shota; ARAKI, Minami; SIMODA, Kei; OZAKI, Shinichi; HAMADA, Hiroki

**2C3-06** The biotransformation of stilbene derivative using plant cultured cells (Fac. of Sci., Okayama Univ. of Sci.) SIMODA, Kei; ○DOI, Shota; UESUGI, Daisuke; OONISI, Tatuya; OZAKI, Shinichi; HAMADA, Hiroki

Chair: HAMADA, Hiroki (10 : 10~11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(2C3-08, 2C3-09, 2C3-10,

2C3-11, 2C3-12, 2C3-13)

- 2C3-08** Kinetic Resolution of Ibuprofen Ethyl Ester Using Lipase and its Recycle (Grad. Sch. Sci. and Eng., Kansai Univ.) OYAMADA, Rei; KAWASAKI, Hideya; ARAKAWA, Ryuichi; SATO, Hirohumi
- 2C3-09<sup>#</sup>** Remarkable acceleration and increased enantioselectivity of lipase-catalyzed asymmetric acylation in liquid carbon dioxide (Sch. Biosci. Biotech., Tokyo Tech) OHOANG, Hai Nam; NAGASHIMA, Yoshihiro; MATSUDA, Tomoko
- 2C3-10** Coating Effect of Lipase PS by Novel Triaminocyclopropenium Ionic Liquids (Grad. Sch. Eng., Tottori Univ.) OKADOTANI, Shihou; NOKAMI, Toshiki; ITOH, Toshiyuki
- 2C3-11** Activation of lipase by the coating with triazolium type alkylPEG sulfate ionic liquids (Grad. Sch. Eng., Tottori Univ.) ONISHIHARA, Takashi; NOKAMI, Toshiki; ITOH, Toshiyuki
- 2C3-12** Kinetic analysis of microwave assisted invertase (Grad. Sch. Life Sci. Sys. Eng., KIT) AOKI, Fujiko; HARAGUCHI, Kenshi; OHUCHI, Shokichi
- 2C3-13** Reaction characteristics of trypsin digestion by Use of Cavity Resonant-Type Microwave Reactor (Grad. Sch. Life Sci. Sys. Eng., KIT; Grad. Sch. Sci., Eng., Tokyo Tech) SHIRAIISHI, Arata; YOSHIMURA, Takeo; AOKI, Fujiko; HARAGUCHI, Kenshi; OHUCHI, Shokichi

Chair: ABE, Satoshi (11 : 20~12 : 20)

- \* 11:10-11:20: interval for laptop PC connection.(2C3-15, 2C3-17, 2C3-19)
- 2C3-15<sup>#</sup>** Artificial transfer hydrogenases: New mode of action and applications in multienzymatic cascades (Univ. of Basel) OKAMOTO, Yasunori; KOEHLER, Valentin; WARD, Thomas
- 2C3-17\*** Photocatalytic Hydrogen Production Using Recombinant *Escherichia coli* Cells Expressing [FeFe]-Hydrogenase and Its Maturases Genes ( $I_2CNER$ , Kyushu Univ.) OHONDA, Yuki; HAGIWARA, Hidehisa; IDA, Shintaro; ISHIIHARA, Tatsumi
- 2C3-19<sup>#</sup>** The effect of the binding of cyclic ethers on the catalytic activity of alcohol dehydrogenase (Fac. Sci. Tech., Keio Univ.) OKAWAKAMI, Norifumi; MINAMIGUCHI, Tomohiro; MIYAMOTO, Kenji

## Friday, March 25, PM

### Medical

Chair: KAJI, Noritada (13 : 30~14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(2C3-28, 2C3-29, 2C3-30, 2C3-31, 2C3-32, 2C3-33)
- 2C3-28** Multivalent Effect of Transition Metal Complex for Efficient DNA Cleavage and Its Anticancer Activity (Fac. Sci., Tokyo Univ. of Sci.) OKOZUMA, Daisuke; SHIMADA, Hiroaono; FUJIKURA, Hirofumi; MATSUKUMA, Daisuke; OTSUKA, Hidenori
- 2C3-29** Analysis for mechanism of cell transfection by gene/polysaccharide complexes (Fac. Sci. Tech., Keio Univ.) OSHIMATANI, Akihiro; SATO, Toshinori
- 2C3-30** Cell transfection of gene/polysaccharide complexes using solid-phase reverse transfection method. (Fac. Sci. Tech., Keio Univ.) OAIKI, Yu; ARAI, Takahiro; SATO, Toshinori
- 2C3-31** Synthesis and Oxygen-Binding Properties of (Hemoglobin-Recombinant Feline Serum Albumin) Cluster (Fac. Sci. Eng., Chuo Univ.) OYOKOMAKU, Kyoko; AKIYAMA, Motofusa; KOMATSU, Teruyuki
- 2C3-32** Synthesis and Oxygen-Binding Property of (Hemoglobin-Bovine Serum Albumin) Cluster (Fac. Sci. Eng., Chuo Univ.) OYAMADA, Taiga; SHINOHARA, Ryuichi; KOMATSU, Teruyuki
- 2C3-33** Synthesis and Oxygen-Binding Property of Intramolecularly Cross-linked Hemoglobin Combined with Poly(ethylene glycol) (Fac. Sci. Eng., Chuo Univ.) OSADA, Kazuki; SHINOHARA, Ryuichi; KOMATSU, Teruyuki

Chair: SATO, Toshinori (14 : 40~15 : 30)

- \* 14:30-14:40: interval for laptop PC connection.(2C3-35, 2C3-36, 2C3-37, 2C3-38)
- 2C3-35** Synthesis and evaluation of psoralen linked water-soluble fullerene in vitro (Grad. Sch. Eng., KAIT) OHASHIMOTO, Akiko; TAKAMURA, Takeji
- 2C3-36** Supramolecular crosslinked hydrogel for ultrasound-responsive protein release (RCAST, The Univ. of Tokyo; Grad. Sch. Eng., The Univ. of Tokyo) OHIGASHI, Kotaro; YAMAGUSHI, Satoshi; AZUMA, Takashi; OKAMOTO, Akimitsu
- 2C3-37** Cell analysis by mechanotyping devices (Grad. Sch. Eng., Nagoya Univ.) SANO, Mamiko; OKAJI, Noritada; YASUI, Takao; BABA, Yoshinobu
- 2C3-38<sup>#</sup>** Ru(II) Complex for Photo-induced Endosome/Lysosome Escape (Bioinspired soft matter unit) ODU, Enming; ZHANG, Ye

Chair: OKAMOTO, Akimitsu (15 : 40~16 : 30)

- \* 15:30-15:40: interval for laptop PC connection.(2C3-41, 2C3-42, 2C3-43, 2C3-44)
- 2C3-41** Preparation of 2D and 3D Polystyrene Substrates Coated with Hydroxyapatite via Protein Adsorption Layers in Simulated Body Fluid (Fac. Eng., Tokyo Univ. of Sci.; Grad. Sch. Chem. Sci. Technol., Tokyo Univ. of Sci.; Natl. Cent. For Child Health and Dev.) OIIZUKA, Ayako;

IIJIMA, Kazutoshi; SUZUKI, Ryo; KIYOKAWA, Nobutaka; HASHIZUME, Mineo

- 2C3-42** Development of a cell chip system for detection of circulating tumor cells (Health Research Inst., AIST) OYAMAMURA, Shohei; HASHIMOTO, Yoshiko; YATSUSHIRO, Shouki; BABA, Yoshinobu; KATAOKA, Masatoshi
- 2C3-43** Construction of 3D arterial wall model containing vasa vasorum by layer-by-layer techniques and its application for regenerative medicine (Osaka Univ.) OSHIMA, Fumiaki; MATSUSAKI, Michiya; AKASHI, Mitsuru
- 2C3-44\*** Methodology of Selective Conjugate Drugs to Antibody (RIKEN; Tokyo Chemical Industry Co., LTD.) OMANABE, Shinou; HABU, Masato; ISHIIHARA, Mikio; MATSUZAKI, Yuji; ITO, Yukishige

Chair: KIKUCHI, Jun-ichi (16 : 40~17 : 40)

- \* 16:30-16:40: interval for laptop PC connection.(2C3-47, 2C3-49, 2C3-51)
- 2C3-47\*** Fabrication of Antigen-coated Triangular Gold Nanoplates and Vaccine Activity (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) ONAMBARA, Katsuyuki; NIKURA, Kenichi; MITOMO, Hideyuki; SUZUKI, Tadaki; AINAI, Akira; OHARA, Yuki; IJIRO, Kuniharu

### Lipid

- 2C3-49<sup>#</sup>** Decrease of thermo stability of membrane phase-separation induced by addition of local anesthetics (Sch. Mat. Sci., JAIST) OSUGAHARA, Ko; SHIMOKAWA, Naofumi; TAKAGI, Masahiro
- 2C3-51\*** Construction of an Efficient Light Harvesting System Based on Membrane Domains of Liposome (Grad. Sch. Sci., Kyushu Univ.) OHATAE, Tatsuru; KOSHIYAMA, Tomomi; OHBA, Masaaki

Chair: TAKAGI, Masahiro (17 : 50~18 : 40)

- \* 17:40-17:50: interval for laptop PC connection.(2C3-54, 2C3-55, 2C3-56, 2C3-57, 2C3-58)
- 2C3-54** Creation of Cerasome-Redox Molecule Nanohybrids (Grad. Sch. Mat. Sci., NAIST; Grad. Sch. Eng., Kyushu Univ.; Liaoning Univ.) OHORIUCHI, Yoshiyuki; MORII, Takuya; YAMAZAKI, Taku; TAHARA, Keishiro; SONG, Xi-ming; HISAEDA, Yoshio; KIKUCHI, Jun-ichi
- 2C3-55** Synthesis of new series of ceramide derivatives having three hydrophobic chain attached with an environment-sensitive fluorophore (Grad. Sch. Ind. Sci. Technol., Tokyo Univ. of Sci.) OKAWAMURA, Ryota; MAEDA, Shinichiro; NKAJIMA, Yasuyuki; HACHISU, Masakazu; HORITO, Shigeomi
- 2C3-56<sup>#</sup>** Topological effect on self-assembly of bola- and cyclic amphiphiles containing PEG units (IMRAM, Tohoku Univ.) OLI, Rui; MURAOKA, Takahiro; KINBARA, Kazushi
- 2C3-57** Solid state  $^2H$ -NMR analysis of synthetic deuterium-labeled glycosphingolipids in membrane (Grad. Sch. Sci., Osaka Univ.) ONANKAKU, Takumi; HANASHIMA, Shinya; MURATA, Michio
- 2C3-58<sup>#</sup>** Microdomain formation in sphingomyelin antipode-containing membrane for investigating lipid-lipid interactions (Grad. Sch. Sci., Osaka Univ.) OYANO, Yo; HANASHIMA, Shinya; TSUCHIKAWA, Hiroshi; YASUDA, Tomokazu; KINOSHITA, Masanao; MATUMORI, Nobuaki; MURATA, Michio; SUZUKI, Kenichi; KUSUMI, Akihiro

## Saturday, March 26, AM

### Bioinformatics

Chair: MATSUSAKI, Michiya (9 : 10 ~9 : 40)

- \* 9:00-9:10: interval for laptop PC connection.(3C3-02, 3C3-03, 3C3-04)
- 3C3-02** Selective oxidation of 5-hydroxymethylcytosine with micelle incarcerated oxidants to determine it at single base resolution (Grad. Sch. Sci., The Univ. of Tokyo; IPR, Osaka Univ.; JEOL, Ltd.) OFUKUZAWA, Seketsu; TAKAHASHI, Saori; TACHIBANA, Kazuo; TAJIMA, Shoji; SUETAKE, Isao

### Nucleic Acid

- 3C3-03** Analysis of metagenomic library from marine sponge Halichondria okadae. (Fac. Sci., Kanagawa Univ.) OABE, Takahiro; MIYAMOTO, Kenji; SAKAKIBARA, Yasubumi; NAITO, Takayuki; UEMURA, Daisuke

### Protein

- 3C3-04** Effects of the receptor conformations in estimation of estrogen receptor binding affinity of chemicals by using docking calculation (Fac. Arts and Sci., Kyushu Univ.) OKESAMARU, Hitoshi; SUYAMA, Keitaro; NOSE, Takeru

## Saturday, March 26, PM

### Molecular recognition

Chair: HIRAKAWA, Kazutaka (13 : 00~13 : 50)

- \* 12:50-13:00: interval for laptop PC connection.(3C3-25, 3C3-26, 3C3-27,



3C3-28, 3C3-29)

- 3C3-25** Synthesis of chlorophyll derivatives bearing a porphyrin  $\pi$ -skeleton and their self-aggregation (Coll. Life Sci., Ritsumeikan Univ.) TAMIAMI, Hitoshi; ○MATSUBARA, Shogo; SHOJI, Sunao
- 3C3-26** Synthesis of Zinc 20-Alkylated Chlorophyll Derivatives and Their Self-aggregation (Grad. Sch. Life Sci., Ritsumeikan Univ.) ○WADA, Ayaka; TAMIAMI, Hitoshi
- 3C3-27** *In vitro* enzymatic assays of two hydratases for chlorosomal chlorophyllous biosynthesis in green sulfur bacteria (Grad. Sch. Life Sci., Ritsumeikan Univ.) ○TERAMURA, Misato; HARADA, Jiro; TAMIAMI, Hitoshi
- 3C3-28** Self-assembly of zinc chlorophyll derivatives in micelles of amphiphilic copolymers (Fac. Sci. Tech., Ryukoku Univ.) MIYATAKE, Tomohiro; ○ODA, Tomoya; OKI, Hisato
- 3C3-29** Optical properties of lipid membranes containing various chlorophyll derivatives (Fac. Sci. Tech., Ryukoku Univ.) MIYATAKE, Tomohiro; ○NISHIMURA, Noriaki; NAKAYAMA, Souichi

Chair: TAMIAMI, Hitoshi (14 : 00~14 : 50)

- \* 13:50-14:00: interval for laptop PC connection.(3C3-31, 3C3-33, 3C3-34, 3C3-35)
- 3C3-31\*\*** Analysis of photosensitized oxidative damage of biomolecules by phosphorus(V) porphyrins and speculation of their binding states (Grad. Sch. Sci. Technol., Shizuoka Univ.) ○OUYANG, Dongyan; HIRAKAWA, Kazutaka
- 3C3-33** Synthesis of Face-to-Face Cyclodextrin Dimers Having an Amino Acid Linker and Its Inclusion Complexes with Iron Porphyrin (Grad. Sch. Eng., Doshisha Univ.) ○SUGIE, Yuta; KITAGISHI, Hiroaki
- 3C3-34** Photosensitized protein oxidation and cytotoxicity via long wavelength visible-light assisted electron transfer by P(V)porphyrins (Fac. Eng., Shizuoka Univ.) ○HIRAKAWA, Kazutaka; OUYANG, Dongyan; IBUKI, Yuko; HIROHARA, Shihou; OKAZAKI, Shigetoshi
- 3C3-35** Synthesis of platinum porphyrin-dendrimer and application for intracellular oxygen concentration imaging (Grad. Sch. Biosci. Biotech., Tokyo Tech) ○ODAI, Shunsuke; MATSUZAKI, Mai; YABA, Akira; ITO, Hidehiro; KAMACHI, Toshiaki

Chair: KAMACHI, Toshiaki (15 : 00~15 : 50)

- \* 14:50-15:00: interval for laptop PC connection.(3C3-37, 3C3-39, 3C3-40, 3C3-41)
- 3C3-37\*\*** Control of formate dehydrogenase catalytic activity by chemical structure of co-enzyme (Osaka City Univ.) ○IKEYAMA, Shusaku; AMAO, Yutaka
- 3C3-39\*** Development of Photooxygenation Catalyst Targeting Higher-Order Amyloid Structure (Grad. Sch. Pharm., The Univ. of Tokyo) ○NI, Jizhi; TANIGUCHI, Atsuhiko; SOHMA, Youhei; KANAL, Motomu
- 3C3-40** Exploration of High-affinity Peptide Sequences for a Self-assembled Cage (Grad. Sch. Eng., The Univ. of Tokyo) ○ADACHI, Kiyohiro; SAWADA, Tomohisa; FUJITA, Makoto
- 3C3-41** The NMR Observation of Inclusion Phenomena in vivo using <sup>13</sup>C-labeled Methylated Cyclodextrin (Fac. Sci. Eng., Doshisha Univ.) SAITO, Mai; ○KITAGISHI, Hiroaki; KANO, Koji

Chair: MIKATA, Yuji (16 : 00~16 : 50)

- \* 15:50-16:00: interval for laptop PC connection.(3C3-43, 3C3-44, 3C3-45, 3C3-46, 3C3-47)
- 3C3-43** Synthesis of Biotinylated Cyclophanes and Their Conjugation Behavior with Avidin. (Fac. Sci., Fukuoka Univ.) ○KOJIMA, Miwa; NAKAMURA, Kazuhiro; KUSANO, Shuhei; HAYASHIDA, Osamu
- 3C3-44** Synthesis and Reduction-responsible Degradation of Fluorescent-type Cyclophane Dimers Bearing A Disulfide Bond (Fac. Sci., Fukuoka Univ.) ○NISHINO, Kana; KUSANO, Shuhei; HAYASHIDA, Osamu
- 3C3-45** Cation Recognition by Salen Complexes Having a Cyclic Oligo (oxyethylene)s (Fac. Sci. Eng., Doshisha Univ.) ○YAMAMURA, Ryo; KODERA, Masahito; HITOMI, Yutaka
- 3C3-46** Cyclic Thioester-containing Polymethine NIR Dyes: Synthesis and Evaluation as a Molecular Probe for Photoacoustic Imaging (Grad. Sch. Sci., Nagoya Univ.; WPI-ITbM, Nagoya Univ.) ○NAKAZAKI, Tomohiro; KAWAUCHI, Hiroaki; TAKI, Masayasu; FUKAZAWA, Aiko; YAMAGUCHI, Shigehiro
- 3C3-47** Superoxide radical scavenging activity of vegetables as studied by HPLC-ESR spin-trapping measurements (KIT) ○YAMAGUCHI, Tomoko; MIYAKE, Yusuke; KANAORI, Kanji; TAJIMA, Kunihiko

Chair: NAGAO, Satoshi (17 : 00~17 : 40)

- \* 16:50-17:00: interval for laptop PC connection.(3C3-49, 3C3-50, 3C3-51, 3C3-52)
- 3C3-49\*** Mechanism for Specific Fluorescent Response of TQEN-Based Heptadentate Ligands toward Cadmium Ion (Grad. Sch. Human. Sci., Nara Women's Univ.; Fac. Sci., Nara Women's Univ.) ○KIZU, Asako; MIKATA, Yuji
- 3C3-50** Cadmium-Specific Fluorescent Response of TQEN Derivatives Containing Sugar Moiety (Grad. Sch. Human. Sci., Nara Women's Univ.; Fac. Sci., Nara Women's Univ.) ○NOZAKI, Kana; MIKATA, Yuji
- 3C3-51** Mechanistic investigation on the reaction occurring between super-

oxide anion radical and phenolic compounds (KIT) ○YAMASHITA, Tomoyuki; YAMAGUCHI, Tomoko; MIYAKE, Yusuke; KANAORI, Kanji; TAJIMA, Kunihiko

- 3C3-52** SF-ESR study on the reaction occurring between superoxide anion radical and phenolic compounds in organic solvents. (KIT) ○KUWABARA, Keiko; YAMASHITA, Tomoyuki; YAMAGUCHI, Tomoko; MIYAKE, Yusuke; KANAORI, Kanji; TAJIMA, Kunihiko

Sunday, March 27, AM

## Cell

Chair: TAKEYAMA, Haruko (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(4C3-01, 4C3-02, 4C3-03, 4C3-04, 4C3-05, 4C3-06)
- 4C3-01** Characterization of *Synechocystis* sp. high PHB productive mutant harboring green-light inducible lytic system (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○YONEMOTO, Kyoko; ABE, Koichi; OSANAI, Takashi; SODE, Koji
- 4C3-02** Glycogen production using mutant *Synechocystis* sp. PCC 6803 strain transformed with green-light inducible lytic system (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) FUSE, Saori; ○TAKAMASTU, Shohei; HIHARA, Yukako; FERRI, Stefano; SODE, Koji
- 4C3-03** Green-light regulated gene expression in *Synechocystis* sp. PCC 6803 Olive mutant strain (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○FUSE, Saori; ABE, Koichi; ROEGNER, Matthias; SODE, Koji
- 4C3-04** The induction of self-aggregation of cyanobacteria by regulating pilus gene (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ITO, Akiko; ○NAGATA, Madoka; NAKAMURA, Mayumi; ABE, Koichi; KOJIMA, Kazuhiro; FERRI, Stefano; SODE, Koji
- 4C3-05** Photo-responsive microgel arrays for single-cell sorting (Grad. Sch. Eng., The Univ. of Tokyo) ○TAKAGI, Risa; YAMAGUCHI, Satoshi; SAKAKIHARA, Shouichi; TABATA, Kazuhito; IINO, Ryota; NOJI, Hiroyuki; OKAMOTO, Akimitsu
- 4C3-06** Study of cell adhesion dynamics with DNA-PEG-lipid (Grad. Sch. Sci., Eng., Saitama Univ.) ○SATO, Ken; TERAMURA, Yuji; KOBAYASHI, Naritaka; KAWAMURA, Ryuzo; NAKABAYASHI, Seiichi; YOSHIKAWA, Hiroshi

Chair: KAWAMURA, Ryuzo (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(4C3-08, 4C3-09, 4C3-11, 4C3-13)
- 4C3-08** Translational regulation of transcriptional regulator cyAbrB2 using riboregulator in *Synechocystis* sp. PCC 6803 (Fac. Eng., Tokyo Univ. of Agri. and Technol.) SAKAI, Yuta; ○UENO, Kinuko; SHONO, Chika; SAKAMOTO, Ipppei; HIHARA, Yukako; SODE, Koji; IKEBUKURO, Kazunori
- 4C3-09\*\*** Droplet microfluidics for massively parallel and accurate single-cell genome amplification (Waseda Univ.; PRESTO, JST) ○HOSOKAWA, Masahito; NISHIKAWA, Yohei; KOGAWA, Masato; TAKEYAMA, Haruko
- 4C3-11\*\*** The engineering of the green-light sensor protein CcaS derived from *Synechocystis* sp. PCC 6803 (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○NAKAJIMA, Mitsuharu; FERRI, Stefano; SODE, Koji
- 4C3-13** Regulation of gene expression in marine cyanobacterium *Synechococcus* sp. NKBG15041c using engineered green-light sensor protein (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) NAKAJIMA, Mitsuharu; ○KOBAYASHI, Shunichi; SODE, Koji

Chair: ASANO, Ryutaro (11 : 20~12 : 00)

- \* 11:10-11:20: interval for laptop PC connection.(4C3-15, 4C3-17)
- 4C3-15\*** Development of techniques for manipulation of a single circulating tumor cell using a photopolymerized hydrogel toward single cell analysis (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○NEGISHI, Ryo; NAKAMURA, Seita; MATSUNAGA, Tadashi; TANAKA, Tsuyoshi; YOSHINO, Tomoko
- 4C3-17\*** Caged PEG-Lipid surface for patterning of multi-types of cells (Grad. Sch. Eng., The Univ. of Tokyo) ○YAMAHIRA, Shinya; YAMAGUCHI, Satoshi; NAGAMUNE, Teruyuki

Sunday, March 27, PM

## Protein

Chair: YAMAGUCHI, Takumi (13 : 30~14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(4C3-28, 4C3-29, 4C3-30, 4C3-31, 4C3-32)
- 4C3-28** Investigation of the mechanism of protein folding assisted by chaperonin GroEL by using single molecule FRET measurements (Grad. Sch. Sci., Tohoku Univ.; IMRAM, Tohoku Univ.) ○MATSUDA, Chisa; YOSHIDA, Aya; MOTOJIMA, Fumihiko; OIKAWA, Hiroyuki; KAMAGATA, Kiyoto; YOSHIDA, Masasuke; TAKAHASHI, Satoshi
- 4C3-29** DNA binding dynamics of light dependent transcription factor, Aureochrome1 (Dep. Chem., Sch. Sci., Kyoto Univ.) ○AKIYAMA, Yuki; NAKASONE, Yusuke; HISATOMI, Osamu; NAKATANI, Yoichi;

TERAZIMA, Masahide

**4C3-30** Thermal stability of protein in 1-Alkyl-3-methylimidazolium iodide and Cyclodextrin aqueous solution. (Kinki Univ.) ○OKABE, Madoka; MIKI, Toshiki; KAMURA, Takayoshi; KAMIYAMA, Tadashi

**4C3-31** Effect of Ionic liquid to compressibility of protein (Kinki Univ.) ○SHIMOTANI, Kazuki; KAMIYAMA, Tadashi

## Lipid

**4C3-32\*** Reconstitution of membrane proteins expressed by cell-free synthesis into lipid asymmetric giant liposomes (KAST; PRESTO, JST; IIS, The Univ. of Tokyo) ○KAMIYA, Koki; OSAKI, Toshihisa; TAKEUCHI, Shoji

## Lipid/Biomembrane

Chair: OKAMOTO, Akimitsu (14 : 40~15 : 40)

\* 14:30-14:40: interval for laptop PC connection.(4C3-35, 4C3-36, 4C3-37, 4C3-38, 4C3-40)

**4C3-35** Evaluation of irritation caused by surfactant based on membrane dynamics (Sch. Mat. Sci., JAIST) ○SHIMOKAWA, Shinji; SHIMOKAWA, Shinji; TSUJINO, Yoshio; TAKAGI, Masahiro

**4C3-36** Molecular design of membrane-active calixarene antimicrobial agent (Grad. Sch. Mat. Sci., NAIST) ○NAKANO, Takuto; KIKUCHI, Jun-ichi; YASUHARA, Kazuma

**4C3-37** Effect of GMI on lipid domains formation characterized by fluorescent-labeled lipidic probes (Grad. Sch. Sci., Osaka Univ.) ○TAKADA, Misa; HANASHIMA, Shinya; TSUCHIKAWA, Hiroshi; YASUDA, Tomokazu; MURATA, Michio; KINOSHITA, Masanao; MATSUMORI, Nobuaki; ANDO, Hiromune; KISO, Makoto; SUZUKI, Kenichi; KUSUMI, Akihiro; SLOTTE, J. Peter

**4C3-38\*** Microfluidity of the lipid membrane of liposomes (artificial red cells) tolerating a high transmembrane difference in colloid osmotic pressure (Dept. Chem., Nara Med. Univ.) ○SAKAI, Hiromi; KURE, Tomoko

**4C3-40** Observation of depth-dependent melting of sphingomyelin acyl chain (Sch. Sci., Osaka Univ.) ○MONJI, Mami; TSUCHIKAWA, Hiroshi; HANASHIMA, Shinya; YASUDA, Tomokazu; MURATA, Michio; MATSUMORI, Nobuaki

Chair: YASUHARA, Kazuma (15 : 50~16 : 40)

\* 15:40-15:50: interval for laptop PC connection.(4C3-42, 4C3-43, 4C3-44, 4C3-45, 4C3-46)

**4C3-42** Cell membrane sheets for analyzing the intracellular domain of plasma membranes (Fac. Eng., The Univ. of Tokyo) ○IZUTA, Shin; YAMAGUCHI, Satoshi; MISAWA, Ryuji; YAMAHIRA, Shinya; NAGAMUNE, Teruyuki; OKAMOTO, Akimitsu

**4C3-43** Effect of Membrane Fluidity on the Motility of Kinesin-Microtubule Systems (Fac. Sci., Saitama Univ.) ○TOGO, Shodai; KAWAMURA, Ryuzo; KOBAYASHI, Naritaka; NAKABAYASHI, Seiichiro; YOSHIKAWA, Hiroshi

**4C3-44** Uptake Behavior of Nanogel Particles into Cell-sized Liposomes (Grad. Sch. Eng., Kobe Univ.) ○ICHIKAWA, Shoko; SHIMOKAWA, Naofumi; TAKAGI, Masahiro; KITAYAMA, Yukiya; TAKEUCHI, Toshifumi

**4C3-45** Phase transition of lipid bilayer induced by nanomaterial adhesion (WPI-iCeMS, Kyoto Univ.; Fac. Sci., Kyoto Univ.) ○NOBEYAMA, Tomohiro; NAKATSUJI, Hirotaka; SHIGYO, Kazuki; HAMADA, Tsutomu; MURAKAMI, Tatsuya; SUGIYAMA, Hiroshi

**4C3-46#** Synthesis of purple membrane lipid PGP-Me for investigating bacteriorhodopsin-lipid interactions (Grad. Sch. Sci., Osaka Univ.) ○YAMAGAMI, Masaki; JIN, Cui; TUCHIKAWA, Hiroshi; UMEGAWA, Yuichi; HANASHIMA, Shinya; KAWATAKE, Satoshi; SATO, Fuminori; MURATA, Michio

**Room C4**  
Chishinkan1 Building 131

## Biofunctional Chemistry ; Biotechnology

Thursday, March 24, AM

## Quadruplexes

Chair: BANDO, Toshikazu (9 : 30 ~ 10 : 20)

\* 9:20-9:30: interval for laptop PC connection.(1C4-04, 1C4-06, 1C4-08)

**1C4-04\*\*** Nucleic Acids Chemistry beyond the Watson-Crick Double Helix (16) : Replication reaction of DNA regulated by the formation of i-motif structure (FIBER, Konan Univ.; FIBER, Konan Univ.) ○TAKAHASHI, Shuntaro; BRAZIER A., John; SUGIMOTO, Naoki

**1C4-06\*\*** Nucleic Acids Chemistry beyond the Watson-Crick Double Helix (17) : Quantitative analysis of helicase function regulated by polymorphism of guanine quadruplexes (FIBER, Konan Univ.) ○OKURA, Hiromichi;

TAKAHASHI, Shuntaro; SUGIMOTO, Naoki

**1C4-08** Binding analysis of tetraplex DNA with cyclic naphthalene diimide linking with alkyl chain (Grad. Sch. Eng., KIT) ESAKI, Yugo; ○SATO, Shinobu; FUJII, Satoshi; TAKENAKA, Shigeori

Chair: SATO, Shinobu (10 : 30~11 : 20)

\* 10:20-10:30: interval for laptop PC connection.(1C4-10, 1C4-11, 1C4-13)

**1C4-10** Highly Selective G-quadruplex Recognition By a Cyclic Imidazole/Lysine Polyamide (Dep. Chem., Sch. Sci., Kyoto Univ.) ○ASAMITSU, Sefan; LI, Yue; BANDO, Toshikazu; SUGIYAMA, Hiroshi

**1C4-11\*\*** Nucleic Acids Chemistry beyond the Watson-Crick Double Helix (18): Quantitative analyses of molecular environment effects on G-quadruplex formation during transcription (FIBER, Konan Univ.; Grad. Sch. Sci. Tech., Gunma Univ.) ○ENDO, Tamaki; RODE, Ambadas; TAKAHASHI, Shuntaro; KATAOKA, Yuka; KUWAHARA, Masayasu; SUGIMOTO, Naoki

**1C4-13\*\*** Nucleic Acids Chemistry beyond the Watson-Crick Double Helix (20): Quantitative analysis for effects of cellular condition on the transcription in G-rich sequences of cancer genes (FIBER, Konan Univ.) ○TATEISHI, Hisae; KAWAUCHI, Keiko; PLAVEC, Janez; SUGIMOTO, Naoki

Chair: OYOSHI, Takanori (11 : 30~12 : 20)

\* 11:20-11:30: interval for laptop PC connection.(1C4-16, 1C4-17, 1C4-18, 1C4-20)

**1C4-16** Nucleic Acids Chemistry beyond the Watson-Crick Double Helix (24) : A new structural motif of DNA G-quadruplex ligands selected by a screening system using a fluorescent probe (FIRST, Konan Univ.) ○TERADA, Kosuke; IMAGAWA, Yoshiki; MAEDA, Ryuichi; SUGIMOTO, Naoki; MIYOSHI, Daisuke

**1C4-17** Creation of N3-modified thioflavin T derivatives for functional expansions (Grad. Sch. Sci. Tech., Gunma Univ.) ○KATAOKA, Yuka; FUJITA, Hiroto; KUWAHARA, Masayasu

**1C4-18\*** Convenient mRNA detection method using a Thioflavin T analog (Sch. Sci. Tech., Gunma Univ.) ○FUJITA, Hiroto; KARAOKA, Yuka; KUWAHARA, Masayasu

**1C4-20** Interaction of tetraplex DNA with cyclic naphthalene diimide carrying pyridine moiety (Grad. Sch. Eng., KIT) ○MINEMATSU, Hiroki; SATO, Shinobu; TAKENAKA, Shigeori

## Thursday, March 24, PM

Chair: KUWAHARA, Masayasu (13 : 30~14 : 30)

\* 13:20-13:30: interval for laptop PC connection.(1C4-28, 1C4-29, 1C4-30, 1C4-31, 1C4-32, 1C4-33)

**1C4-28** Characterization of heme coordination structures in complexes between hemes and G-quadruplex DNAs (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) KINOSHITA, Masashi; KATAHIRA, Yuya; SHIBATA, Tomokazu; ○YAMAMOTO, Yasuhiko; HEMMI, Hikaru; NEYA, Saburo; SUZUKI, Akihiro

**1C4-29** Effect of DNA sequence alterations on functional properties of heme-DNA complexes (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) KATAHIRA, Yuya; KINOSHITA, Masashi; ○SHIBATA, Tomokazu; YAMAMOTO, Yasuhiko

**1C4-30** Mechanism of chromatin structures regulated by G-quadruplex binding protein TLS (Grad. Sch. Sci., Shizuoka Univ.) ○HAYANO, Takahiro; MIYAWAKI, Arisa; OYOSHI, Takanori

**1C4-31** Mechanism of epigenetics regulated by G-quadruplex binding protein TAF15 (Grad. Sch. Sci., Shizuoka Univ.) ○OKUSHIMA, Ayako; TAKAHAMA, Kentaro; OYOSHI, Takanori

**1C4-32** Target gene detection by the peroxidase activity of the complex between split quadruplex DNA and hemin (Fac. Sci., Tokyo Univ. of Sci.) ○AKIBA, Ryo; YAGUCHI, Ayami; HASHIZUME, Yukiko; TORIGOE, Hidetaka

**1C4-33** Nucleic Acids Chemistry beyond the Watson-Crick Double Helix (21) : Investigation of stabilizing mechanism for G-quadruplexes by tetraethylene glycol (FIBER, Konan Univ.; Grad. Sch. Sys. Info., Kobe Univ.; Grad. Sch. Biosci. Biotech., Tokyo Tech) ○OHYAMA, Tatsuya; TATEISHI, Hisae; TANAKA, Shigenori; MURAOKA, Takahiro; KINBARA, Kazushi; SUGIMOTO, Naoki

## Protein

Chair: DEWA, Takehisa (14 : 40~15 : 40)

\* 14:30-14:40: interval for laptop PC connection.(1C4-35, 1C4-37, 1C4-39)

**1C4-35\*** Molecular mechanism of successive two-photon DNA repair by the (6-4) photolyase (Grad. Sch. Eng. Sci., Osaka Univ.; iBiTec-S, CEA Saclay, France) ○YAMAMOTO, Junpei; SHIMIZU, Kohji; BRETTEL, Klaus; IWAI, Shigenori

**1C4-37\*\*** Unique hydrogen bonding structure of cation binding site in light-driven sodium pumping rhodopsin (Grad Sch. Eng., Nagoya Inst. of Tech.) ○ITO, Shota; SUGITA, Shinya; YOSHIKAWA, Rei; INOUE, Keiichi; IWATA, Tatsuya; IWAKI, Masayo; KANDORI, Hideki

**1C4-39\*\*** Characterization of Disulfide Intermediates in the Oxidative Folding of  $\alpha$ -Lactalbumin (Sch. Sci., Tokai Univ.) ○SHINOZAKI, Reina; IWAOKA, Michio

## Protein (Metal)

Chair: YAMAMOTO, Junpei (15 : 50~16 : 50)

- \* 15:40-15:50: interval for laptop PC connection.(1C4-42, 1C4-44, 1C4-46, 1C4-47)
- 1C4-42\*** How does the Cyanobacterial Phytochrome (Cph1) transduce the light signal? (Dep. Chem., Sch. Sci., Kyoto Univ.) ○TAKEDA, Kimitoshi; TERAZIMA, Masahide
- 1C4-44\*\*** Metal ion-induced absorption and thermostability changes of a photosynthetic light-harvesting complex (Grad. Sch. Sci. Eng., Ibaraki Univ.) ○KAWAKAMI, Tomoaki; YU, L.-j.; OTOMO, Seiu
- 1C4-46** Excitation energy transfer from various external fluorophores to intrinsic chromophores of photosynthetic antenna complex (LH2) (Fac. Eng. Nagoya Inst. of Tech.) ○MORI, Daiki; MIZUTANI, Naoto; YONEDA, Yusuke; KONDO, Masaharu; NOJI, Tomoyasu; KATAYAMA, Tetsuro; NANGO, Mamoru; MIYASAKA, Hiroshi; ITO, Shigeru; NAGASAWA, Yutaka; DEWA, Takehisa
- 1C4-47** Stabilization of charge separation in photosynthetic light-harvesting 1/ reaction center complexes (LH1-RC) by phospholipids (Grad. Sch. Eng., Nagoya Inst. of Tech.) ○MATSUO, Mikano; NOJI, Tomoyasu; NANGO, Mamoru; ITO, Shigeru; DEWA, Takehisa

## Protein (Protein Engineering)

Chair: YAMAGUCHI, Hiroyasu (17 : 00~17 : 50)

- \* 16:50-17:00: interval for laptop PC connection.(1C4-49, 1C4-50, 1C4-51, 1C4-52, 1C4-53)
- 1C4-49** Construction of DNA-protein hybrid molecules by using reaction of replication initiator protein (Interdisciplinary Grad. Sch. Sci. and Eng., Tokyo Tech) ○NIIMI, Takahiro; MASHIMO, Yasumasa; MIE, Masayasu; KOBATAKE, Eiry
- 1C4-50** Incorporation of organic molecules into the protein cage (Fac. Eng., Aichi Inst. of Tech.) ○KUGIMIYA, Shin-ichi
- 1C4-51** Creation of Artificial Viral Capsid having Ni-NTA on the surface. (Grad. Sch. Eng., Tottori Univ.) ○SHIOMI, Yuriko; MIZUTA, Toshihumi; MATSUURA, Kazunori
- 1C4-52** Mineralization control of calcium carbonate nanostructures using acidic peptides with microwave irradiation (FIRST, Konan University; R&D Div., Minato Medical Science Co., Ltd.; Instrumental Business Div., Seikoh Giken Co., Ltd.; Technical R&D Div., DSP Research, Inc.; Department of Materials Chemistry, Ryukoku University) ○ENDO, Natsumi; ARIMOTO, Yonejiro; URAKA, Takeshi; OSAWA, Ryuji; TOGASHI, Hiroyuki; TOMIZAKI, Kin-ya; USUI, Kenji
- 1C4-53** Synthesis of Collagen Model Peptides with a Cell Recognition Sequence and Modification of Hydroxypataite Particles (Fac. Sci. Tech., Ryukoku Univ.) GODA, Itsuki; IMAI, Takahito; ○TOMIZAKI, Kin-ya

## Protein

Chair: INABA, Hiroshi (18 : 00~18 : 50)

- \* 17:50-18:00: interval for laptop PC connection.(1C4-55, 1C4-56, 1C4-57, 1C4-58, 1C4-59)
- 1C4-55#** Development of red-shifted mutant luciferases derived from *Pyrearinus termitilluminans* (Grad. Sch. Sci., The Univ. of Tokyo) ○NISHIGUCHI, Tomoki; YAMADA, Toshimichi; NASU, Yusuke; ITO, Mashiho; YOSHIMURA, Hideaki; OZAWA, Takeaki
- 1C4-56** Effect of apoptosis-inducing compound PAC-1 on catalytic activity of mature caspase-3 (Grad. Sch. Mat. Sci., NAIST) ○MIYAKE, Teruyuki; ISHIDA, Masaya; YAMANAKA, Masaru; MATSUO, Takashi; HIROTA, Shun
- 1C4-57** Site-directed mutagenesis study of catalytic residues of fructosamine 6-kinase from *Escherichia coli* and *Bacillus subtilis* (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○SUZUKI, Keita; TSUGAWA, Wakako; KAMEYA, Miho; SODE, Koji
- 1C4-58** Preparation of Monoclonal Antibodies which can bind a Palladium Complex (Grad. Sch. Sci., Osaka Univ., Osaka Univ.) ○MURATA, Keisuke; TAKASHIMA, Yoshinori; HARADA, Akira; YAMAGUCHI, Hiroyasu
- 1C4-59** Preparation of fluorescent molecularly imprinted nanogels bearing selective binding capability toward the target protein (Grad. Sch. Eng., Kobe Univ.) ○SASAO, Reo; KITAYAMA, Yukiya; TAKEUCHI, Toshifumi

## Friday, March 25, AM

Chair: UCHIDA, Takeshi (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(2C4-01, 2C4-03, 2C4-04, 2C4-05)
- 2C4-01\*\*** Factor governing the efficiency of cascade reactions by spatially organized enzymes (IAE, Kyoto Univ.) ○NGO, Anh Tien; NAKATA, Eiji; SAIMURA, Masayuki; MORII, Takashi
- 2C4-03** The structural diversity of the constant domain of antibody light chain. (Oita Univ.) ○ITONAGA, Shogo; NAKASHIMA, Hiroki; UDA, Taizo; HIFUMI, Emi
- 2C4-04** Expression of GH10 xylanase from *Fusarium verticilloides* in

*Escherichia coli* and arabinoxylan degradation with the recombinant enzyme (Grad. Sch. Biosci. Biotech., Tokyo Tech) ○BAT-ERDENE, Undramaa; SAGARA, Ryuta; MURASE, Ayaka; SAKAGAMI, Kouichi; YATSUNAMI, Rie; FUKUI, Toshiaki; NAKAMURA, Satoshi

- 2C4-05\*** Analysis of the Self-Dimerization of Bilirubin-dependent Fluorescence Protein UnaG by Fluorescence Properties (Grad. Sch. Advanced Sci. Eng., Waseda Univ.) ○SHITASHIMA, Yoh; SHIMOZAWA, Togo; ISHIDA, Miyabi; ASahi, Toru

## Protein (Metal)

Chair: MORI, Toshiaki (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(2C4-08, 2C4-09, 2C4-10, 2C4-11, 2C4-12)
- 2C4-08** In vivo crystal engineering for solid materials by accumulation of metal complexes (Sch. Biosci. Biotech., Tokyo Tech) ○ATSUMI, Kohei; ABE, Satoshi; MORI, Hajime; UENO, Takafumi
- 2C4-09** Adsorption of palladium ion to light-harvesting protein LH2 of purple photosynthetic bacteria (Fac. Sci. Eng., Kinki Univ.; PRESTO, JST) SAGA, Yoshitaka; ○MIYAGI, Kanji
- 2C4-10** A new mechanism of metal acquisition for enzymatic activation in Cu, Zn-superoxide dismutase (Fac. Sci. Tech., Keio Univ.) ○KOKUBO, Teppei; SAKURAI, Yasuyuki; FURUKAWA, Yoshiaki
- 2C4-11** Cytoplasmic heme-binding protein: HutX: from *Vibrio cholerae* is a heme transport protein to the heme-degrading enzyme, HutZ (Fac. Sci., Hokkaido Univ.; Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) SEKINE, Yukari; ISHIMORI, Koichiro; ○UCHIDA, Takeshi
- 2C4-12\*** Functional significance of dehydrated water molecules during the formation of electron transfer complex between cytochrome c and cytochrome c oxidase (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) ○SATO, Wataru; UCHIDA, Takeshi; ITO-SHINZAWA, Kyoko; YOSHIKAWA, Shinya; ISHIMORI, Koichiro

## Protein (Protein Engineering)

Chair: KANAI, Tamotsu (11 : 20~12 : 10)

- \* 11:10-11:20: interval for laptop PC connection.(2C4-15, 2C4-16, 2C4-17, 2C4-18, 2C4-19)
- 2C4-15** Interaction between fluorescent arginine derivatives and gangliosides-containing giant liposomes (Grad. Sch. Eng., Tottori Univ.) ○TANAKA, Tomoya; ODA, Yuuki; MATSUURA, Kazunori
- 2C4-16** Intracellular delivery of antigenic peptides by mannose-modified peptide nanofibers (KIT) ○WAKU, Tomonori; SUGIMURA, Yuri; KUNUGI, Shigeru; TANAKA, Naoki
- 2C4-17** Development of glycopeptide as inhibitor of influenza virus infection (Fac. Sci. Tech., Keio Univ.) ○FUJIWARA, Yurina; ARAMI, Shunsuke; CHIBA, Shoko; MATSUBARA, Teruhiko; SATO, Toshinori
- 2C4-18** Single molecule binding analysis of chitinase and chitin binding protein on chitin surface (Grad. Sch. Biosci. Biotech., Tokyo Tech) ○KATO, Saki; NAKAGAWA, Yuko; MORI, Toshiaki
- 2C4-19** Application of chitin derivatives to functional materials (Grad. Sch. Biosci. Biotech., Tokyo Tech) ○MORI, Toshiaki; KATO, Saki; NAKAGAWA, Yuko

## Friday, March 25, PM

## Gene Regulations

Chair: PARK, Soyoun (13 : 30~14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(2C4-28, 2C4-29, 2C4-30, 2C4-31, 2C4-32, 2C4-33)
- 2C4-28** Nucleic Acids Chemistry beyond the Watson-Crick Double Helix (23) : A photocleavage of G-quadruplex in oncogenes by anionic phthalocyanine (FIRST, Konan Univ.) ○MURATA, Kohei; MATSUNO, Hitoshi; OGAWA, Keisuke; SUGIMOTO, Naoki; MIYOSHI, Daisuke
- 2C4-29#** Nucleic Acids Chemistry beyond the Watson-Crick Double Helix (27) : Effect of solution environment on G-quadruplexes elucidated by novel methodology to control their topologies (FIBER, Konan Univ.) ○FUJII, Taiga; SUGIMOTO, Naoki
- 2C4-30** Implementation of non-natural, triazole linkers in mRNA template for translation reactions (Grad. Sch. Sci., Tohoku Univ.; WPI-AIMR, Tohoku Univ.; ERATO, JST) ○SUZUKI, Takeru; FUJINO, Tomoko; OKADA, Koudai; ISOBE, Hiroyuki
- 2C4-31** Enzymatic Primer Extension with alkynyl C-Nucleotide Triphosphates by DNA polymerase (Grad. Sch. Med. Pharm. Sci. Edu., Univ. of Toyama) ○ODA, Yutaro; CHIBA, Junya; INOUE, Masahiko
- 2C4-32** Ribonuclease A as Effective Promoter for Unimolecular Invasion of Peptide Nucleic Acid to Double-stranded DNA (TARA, Univ. of Tsukuba) ○TANAKA, Makiko; SHIGI, Narumi; KOMIYAMA, Makoto
- 2C4-33** The inhibition of enzymatic DNA polymerizations by cross-linked duplex (IMRAM, Tohoku Univ.) ○YAMADA, Ken; NAGATSUGI, Fumi

## Functional Nucleic Acids

Chair: FUJINO, Tomoko (14 : 40~15 : 30)

- \* 14:30-14:40: interval for laptop PC connection.(2C4-35, 2C4-36, 2C4-37, 2C4-38, 2C4-39)
- 2C4-35** Effect of triplex DNA formation and triplex DNA binding proteins on transcriptional activity of T7 RNA polymerase (Fac. Sci., Tokyo Univ. of Sci.) ○SUGIYAMA, Kohta; KIUCHI, Kazuki; TORIGOE, Hidetaka
- 2C4-36** Simultaneous Measurement of Sequential Hybridization of Liposome-Anchored DNA by a Microfluidic Device for Liposome Size Selection and Trapping (Grad. Sch. Arts and Sci., The Univ. of Tokyo) ○KAZAYAMA, Yuki; OSAKI, Toshihisa; TAKEUCHI, Shoji; TOYOTA, Taro
- 2C4-37** Synthesis and enzymatic incorporation of highly emissive thymidine analogue (Dep. Chem., Sch. Sci., Kyoto Univ.) ○OKAMURA, Izumi; PARK, Soyung; HIRAGA, Ryota; SUGIYAMA, Hiroshi
- 2C4-38** Creation of nucleic acid aptamers containing a solvatochromic fluorophore (Grad. Sch. Sci. Tech., Gunma Univ.) ○KASHIWA, Keisuke; KUWAHARA, Masayasu
- 2C4-39** Catalytic Formation of the Luminescent Metal Complexes Using Autonomous DNA Structural Transition (Grad. Sch. Sci. & Tech., Kumamoto Univ.) NOZAKI, Akihiro; OZAKI, Rie; AZUMA, Yukina; KITAMURA, Yusuke; ○IHARA, Toshihiro

## Sugar

Chair: MANABE, Yoshiyuki (15 : 40~16 : 40)

- \* 15:30-15:40: interval for laptop PC connection.(2C4-41, 2C4-42, 2C4-43, 2C4-44, 2C4-45, 2C4-46)
- 2C4-41** Synthetic study of Fc fragment by using Boc SPPS and expression method (Sch. Sci., Osaka Univ.) ○UEDA, Minami; IMADA, Shohei; OKAMOTO, Ryo; IZUMI, Masayuki; KAJIHARA, Yasuhiro
- 2C4-42** Synthetic study of interleukin-6 having a complex-type oligosaccharide by means of a new folding-thioesterification method toward expressed peptide (Grad. Sch. Sci., Osaka Univ.) ○OTANI, Keito; KANEMITSU, Yurie; OKAMOTO, Ryo; IZUMI, Masayuki; KAJIHARA, Yasuhiro
- 2C4-43** Expansion of cavity of lectin domain by semi-synthesis (Grad. Sch. Sci., Osaka Univ.) ○OSHITA, Shogo; OKAMOTO, Ryo; IZUMI, Masayuki; KAJIHARA, Yasuhiro
- 2C4-44** Semi-synthetic study of  $\alpha$ 2,6-sialyltransferase bearing high mannose-type oligosaccharide (Grad. Sch. Sci., Osaka Univ.) ○SHIMADA, Arisa; OKAMOTO, Ryo; IZUMI, Masayuki; KAJIHARA, Yasuhiro
- 2C4-45** Design and function of enzymatically-synthesized glycopeptide nanogels (Grad. Sch. Eng., Kyoto Univ.) ○YAMADA, Akina; NISHIMURA, Tomoki; SAWADA, Shinichi; SASAKI, Yoshihiro; AKIYOSHI, Kazunari
- 2C4-46** Preparation and function of nanogel/lipid nanotube hybrid (Grad. Sch. Eng., Kyoto Univ.) ○KOSAI, Takuto; YOSHITAKE, Hiroki; SAWADA, Shinichi; MUKAI, Sada-atsu; SASAKI, Yoshihiro; AKIYOSHI, Kazunari

Chair: WAKAO, Masahiro (16 : 50~17 : 50)

- \* 16:40-16:50: interval for laptop PC connection.(2C4-48, 2C4-49, 2C4-51, 2C4-52, 2C4-53)
- 2C4-48** Design of the nanogel-crosslinked porous gel for regenerative medicine (Grad. Sch. Eng., Kyoto Univ.) ○FUJIHARA, Rie; HASHIMOTO, Yoshihide; MARUKAWA, Eriko; SAWADA, Shinichi; MUKAI, Sada-atsu; SASAKI, Yoshihiro; AKIYOSHI, Kazunari
- 2C4-49\*** Preparation of Various Polysaccharide Composite Films by Utilizing Hot Press Technique and Surface Functionalization (Fac. Eng., Tokyo Univ. of Sci.; Grad. Sch. Chem. Sci. Technol., Tokyo Univ. of Sci.; Fac. Pharm. Sci., Tokyo Univ. of Sci.) ○IIJIMA, Kazutoshi; TSUJI, Yuna; KURIKI, Izumi; KAKIMOTO, Atsushi; NINOMIYA, Rie; IYODA, Takuya; FUKAI, Fumio; HASHIZUME, Mineo
- 2C4-51** Detection of influenza virus using microparticles immobilized oligosaccharides obtained by saccharide primer method (Fac. Sci. Tech., Keio Univ.) ○KONO, Risa; OGAMI, Ayaka; SATO, Toshinori
- 2C4-52** Synthesis of Glycosaminoglycans with sulfotransferase overexpression cell by saccharide primer method (Fac. Sci. Tech., Keio Univ.; Natl. Cent. For Child Health and Dev.) ○WATANABE, Mashu; MATSUBAYASHI, Keiichi; ONODERA, Masafumi; ICHIDA, Yu; NAKAJIMA, Hideki; SATO, Toshinori
- 2C4-53** Studies on the effects of reaction conditions in keratanase II-catalyzed synthesis of tumor associated sulfated type II carbohydrate antigens (Grad. Sch. Eng., Kyoto Univ.) ○YAMAZAKI, Yuji; OHMAE, Masashi; KIMURA, Shunsaku

Chair: SASAKI, Yoshihiro (18 : 00~18 : 50)

- \* 17:50-18:00: interval for laptop PC connection.(2C4-55, 2C4-56, 2C4-57, 2C4-58, 2C4-59)
- 2C4-55\*** Synthesis of GlcA4S, GalN Derivatives as an Inhibitor against Japanese Encephalitis Virus Infection (Aichi Univ. of Educ.; The Univ. of Aizu) ○SAKURAGI, Miho; SUZUKI, Ayaka; NOTO, Mahiro; HIDARI, Kazuya; NAKANO, Hirofumi
- 2C4-56** LC/MS Analysis of mucin-type O-glycan in tumor cells by saccharide

primer method (Fac. Sci. Tech., Keio Univ.) ○SAKURA, Ryuma; TAKAHASHI, Yoshihisa; SATO, Toshinori

- 2C4-57** Analysis of sulfated glycans expressed in metastatic human cancer cells by saccharide primer method (Fac. Sci. Tech., Keio Univ.) ○SAKAKI, Katsumasa; SHIBANO, Yuki; KONNO, Yusuke; SATO, Toshinori
- 2C4-58** Synthetic study of chondroitin sulfate tetrasaccharide structures (Grad. Sch. Sci., Eng., Kagoshima Univ.) ○HARANOSONO, Tatsuki; WAKAO, Masahiro; SUDA, Yasuo
- 2C4-59** Synthesis of dermatan sulfate disaccharide partial structure containing IdoA3S (Grad. Sch. Sci., Eng., Kagoshima Univ.) ○NISHIOKA, Kyosuke; KAKITSUBATA, Yuhei; WAKAO, Masahiro; SUDA, Yasuo

## Saturday, March 26, AM

## Protein(Metal)

Chair: MIZUNO, Toshihisa (9 : 00 ~9 : 40)

- \* 8:50-9:00: interval for laptop PC connection.(3C4-01, 3C4-03)
- 3C4-01\*** Structural and Functional Aspects of the Weak Interaction in Blue Copper Proteins (Grad. Sch. Sci. Eng., Ibaraki Univ.; Frontier Research Center for Applied Atomic Sci., Ibaraki Univ.; Montana State Univ.) ○KOHZUMA, Takamitsu; SZILAGYI, Robert; YAMAGUCHI, Takahide; TAMAOKI, Saori
- 3C4-03\*** Structure and function of a cobalamin-dependent photoreceptor protein CarH. (LCCMS, IMS) ○MURAKI, Norifumi; AONO, Shigetoshi

## Saturday, March 26, PM

## Functional Nucleic Acids

Chair: ENDOH, Tamaki (13 : 00~13 : 50)

- \* 12:50-13:00: interval for laptop PC connection.(3C4-25, 3C4-26, 3C4-28, 3C4-29)
- 3C4-25** Crosslinking of DNA duplex via photodimerization of styrylpyrene (Grad. Sch. Eng., Nagoya Univ.) ○DOI, Tetsuya; KASHIDA, Hiromu; ASANUMA, Hiroyuki
- 3C4-26\*** Analysis on Gap structure in DNA duplex by using orientation dependence of FRET (Grad. Sch. Eng., Nagoya Univ.) ○KASHIDA, Hiromu; KURIHARA, Ayako; ASANUMA, Hiroyuki
- 3C4-28** Orientation analysis of the dyes in DNA duplexes by using FRET (Grad. Sch. Eng., Nagoya Univ.) ○KAWAI, Hayato; DOI, Tetsuya; KASHIDA, Hiromu; ASANUMA, Hiroyuki
- 3C4-29** Effect analysis of cytosine methylation on G-quadruplex structure and its protein binding (Fac. Eng., Tokyo Univ. of Agri. and Technol.) IKEBUKURO, Kazunori; ○SAITO, Shiori; SAITO, Taiki; NISHIO, Maui; TSUKAKOSHI, Kaori

Chair: TATEISHI, Hisae (14 : 00~14 : 50)

- \* 13:50-14:00: interval for laptop PC connection.(3C4-31, 3C4-32, 3C4-33, 3C4-34, 3C4-35)
- 3C4-31** Photochemical regulation of DNA strand displacement by DNA photo-cross-linking (Sch. Mat. Sci., JAIST) ○NAKAMURA, Shigetaka; FUJIMOTO, Kenzo
- 3C4-32** Structural optimization of pseudorotaxane-forming oligo DNA targeting on nucleic acids (IMRAM, Tohoku Univ.) ○MIYASHITA, Takuya; ONIZUKA, Kazumitsu; NAGATSUGI, Fumi
- 3C4-33** Thermal stability and enzymatic resistance of decoy DNA which forms a dumbbell-shaped structure. (Grad. Sch. Sci. Tech., Gunma Univ.) ○SATO, Kanae; MORIGUCHI, Tomohisa; SHINOZUKA, Kazuo
- 3C4-34** Creation of a novel water-soluble nucleotide analog with a flexible and cationic main chain backbone (Grad. Sch. Sci. Tech., Gunma Univ.) ○WATANABE, Yurika; KUWAHARA, Masayasu
- 3C4-35** Synthesis and properties of 3'-DNA modified chimeric PRNA derivatives (IMRAM, Tohoku Univ.) ○INAGAKI, Masahito; UEMATSU, Ryohei; ARAKI, Yasuyuki; SAKAMOTO, Seiji; ISHIBASHI, Satoru; YOKOTA, Takanori; WADA, Takehiko

Chair: ONIZUKA, Kazumitsu (15 : 00~15 : 50)

- \* 14:50-15:00: interval for laptop PC connection.(3C4-37, 3C4-38, 3C4-39, 3C4-40, 3C4-41)
- 3C4-37** Creating Intracellular Environment Responsive Therapeutics System with Peptide Ribonucleic Acids (PRNAs) - Applying PRNA-DNA Chimera for Catalytic Therapeutics System- (IMRAM, Tohoku Univ.; Hakubi Center, Kyoto Univ.; Tokyo Med. and Dental Univ.) ○UEMATSU, Ryohei; ASAI, Mitsuo; INAGAKI, Masahito; ARAKI, Yasuyuki; SAKAMOTO, Seiji; YAMAYOSHI, Asako; ISHIBASHI, Satoru; YOKOTA, Takanori; WADA, Takehiko
- 3C4-38** Remarkable Enhancement of Intracellular Uptake of Peptide Ribonucleic Acids (PRNA) by Block Type and Alternative Type Arginine Moiety Introductions (IMRAM, Tohoku Univ.) ○SUGAI, Hiroka; NAKASE, Ikuhiko; SAKAMOTO, Seiji; ARAKI, Yasuyuki; WADA, Takehiko
- 3C4-39\*** Metal-responsive DNA Strand Exchange through Base-pair Switching of 5-Hydroxyuracil Nucleobases (Grad. Sch. Sci., The Univ. of Tokyo) ○NISHIYAMA, Kotaro; TAKEZAWA, Yusuke; SHIONOYA, Mitsuhiko
- 3C4-40** Development of novel fluorescent nucleoside comprising an 8-aza-3,7-

dideazaadenine skeleton and its application to DNA probes for detection of thymine (Sch. Eng., Nihon Univ.) SUZUKI, Azusa; ○YAMAUCHI, Takumi; TAKEDA, Takuya; SAITO, Yoshio

- 3C4-41** Enantioselective hydration of  $\alpha$ ,  $\beta$ -unsaturated ketones using DNA hybrid catalysts (Dep. Chem., Sch. Sci., Kyoto Univ.) ○HIRAGA, Ryota; PARK, Soyoung; OKAMURA, Izumi; SUGIYAMA, Hiroshi

### Protein(Peptide)

Chair: YATSUNAMI, Rie (16 : 00~16 : 50)

- \* 15:50-16:00: interval for laptop PC connection.(3C4-43, 3C4-44, 3C4-45, 3C4-46, 3C4-47)
- 3C4-43** Effect of Oligomerization of PG-surfactant on solubilizing membrane proteins. (Grad Sch. Eng., Nagoya Inst. of Tech.) ○KOEDA, Shuhei; NOJI, Tomoyasu; KAWAKAMI, Keisuke; DEWA, Takehisa; KAMIYA, Nobuo; ITOH, Shigeru; MIZUNO, Toshihisa
- 3C4-44** Gelation of membrane protein PSI using the novel alkynyl group-modified solubilization surfactants for membrane proteins. (Grad Sch. Eng., Nagoya Inst. of Tech.) ○TANIGUCHI, Aki; KOEDA, Shuhei; NOJI, Tomoyasu; KAWAKAMI, Keisuke; DEWA, Takehisa; KAMIYA, Nobuo; ITO, Shigeru; MIZUNO, Toshihisa
- 3C4-45** Analysis for Mechanism of Fibril Formation of Beta-Amyloid on GM1-containing Planar Lipid Membrane (Fac. Sci. Tech., Keio Univ.) ○YASUMORI, Hanaki; NISHIHARA, Masaya; MATSUBARA, Teruhiko; SHIMOAKA, Takafumi; HASEGAWA, Takeshi; SATO, Toshinori
- 3C4-46** Inhibition of A $\beta$  fibril formation by GM1-binding peptide on the lipid bilayer (Fac. Sci. Tech., Keio Univ.) ○NAKAI, Mako; NISHIHARA, Masaya; MATSUBARA, Teruhiko; SATO, Toshinori
- 3C4-47** Fabrication and Characterization of Bandage-type Wearable Biofuel Cell Array (Grad. Sch. Fac. Sci. Technol., Tokyo Univ. of Sci.) ○MOMIYAMA, Misaki; SHITANDA, Isao; HOSHI, Yoshinao; TSUJIMURA, Seiya; ITAGAKI, Masayuki

### Protein(Metal)

Chair: MATSUBARA, Teruhiko (17 : 00~17 : 40)

- \* 16:50-17:00: interval for laptop PC connection.(3C4-49, 3C4-50, 3C4-51, 3C4-52)
- 3C4-49** Heme-regulated porphobilinogen deaminase activity in a heme synthesis enzyme, HemC (Sch. Sci., Hokkaido Univ.) ○FUNAMIZU, Takumi; ISHIMORI, Koichiro; UCHIDA, Takeshi
- 3C4-50** Heme-mediated regulation of ferrochelatase activity in HemH, a terminal enzyme of heme biosynthesis in *Vibrio cholerae* (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.; Fac. Sci., Hokkaido Univ.) ○KOBAYASHI, Noriyuki; MUNETA, Soichiro; ISHIMORI, Koichiro; UCHIDA, Takeshi
- 3C4-51** Self-regulation mechanism in HutZ from *Vibrio cholerae*: The heme degradation activity of HutZ is regulated by iron released from its own heme degradation. (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) ○DOJUN, Nobuhiko; SEKINE, Yukari; ISHIMORI, Koichiro; UCHIDA, Takeshi
- 3C4-52** A domain structure of copper chaperone realizing intracellular copper transport (Grad. Sch. Sci. Tech., Keio Univ.) ○FUKUOKA, Mami; NAGANO, Isao; FURUKAWA, Yoshiaki

### Sunday, March 27, AM

#### Synthesis of Nucleic Acids

Chair: IHARA, Toshihiro (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(4C4-01, 4C4-02, 4C4-03, 4C4-04, 4C4-05, 4C4-06)
- 4C4-01** Synthesis and properties of sulfonamide nucleoside derivatives (Sch. Biosci. Biotech., Tokyo Tech) ○KITAGAWA, Ryo; TAGO, Nobuhiro; SEKIYA, Shota; MASAKI, Yoshiaki; SEKINE, Mitsuo; SEIO, Kohji
- 4C4-02** Synthesis and properties of oligonucleotides containing 2'-O-[N-ethylcarbamoyl]ethyl moiety (Grad. Sch. Biosci. Biotech., Tokyo Tech; Nissan Chemical Industries, Ltd.) ○YAMAMOTO, Keishi; MASAKI, Yoshiaki; YOSHIDA, Keita; IRIYAMA, Yusuke; NAKAJIMA, Hiroyuki; KANAKI, Tatsuro; SEKINE, Mitsuo; SEIO, Kohji
- 4C4-03<sup>#</sup>** Development of a versatile protecting group for pro-oligonucleotides (Kanagawa Univ.) ○SANEYOSHI, Hisao; KONDO, Kazuhiko; HIYOSHI, Yuki; ONO, Akira
- 4C4-04** Synthesis and properties of pyridazin-3-one /C/-nucleoside (Grad. Sch. Biosci. Biotech., Tokyo Tech) TOMORI, Takahito; ○NAGAOKA, Kento; MIYATAKE, Yuya; MASAKI, Yoshiaki; SEKINE, Mitsuo; SEIO, Kohji
- 4C4-05** Synthesis of oligonucleotides containing photocaged pseudodeoxyuridine derivative for UV dependent regulation of DNA-protein interactions. (Grad. Sch. Biosci. Biotech., Tokyo Tech) ○TAKESHITA, Leo; OHNO, Kentaro; MASAKI, Yoshiaki; SEKINE, Mitsuo; SEIO, Kohji
- 4C4-06** Synthesis and properties of new modified oligonucleotides containing amino groups at the 5' -positions of ribose moieties. (Grad. Sch. Biosci. Biotech., Tokyo Tech) ○MUTO, Kosuke; AOYAMA, Tomohiro; KANAMORI, Takashi; YUASA, Hideya; OHKUBO, Akihiro

Chair: MASAKI, Yoshiaki (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(4C4-08, 4C4-09, 4C4-10, 4C4-11, 4C4-13)
- 4C4-08** Solid phase synthesis of base-unprotect DNA using 2'-deoxyribonucleosides 5'-phosphites as monomer units. (Fac. Pharm. Sci., Tokyo Univ. of Sci.) ○SHINODA, Takaaki; NAKADA, Takuya; MIZUSHIMA, Yuki; ITO, Hiroaki; NUKAGA, Yohei; WADA, Takeshi
- 4C4-09** Stereocontrolled synthesis and properties of phosphorothioate DNA containing C-5 modified deoxyuridine derivatives (Fac. Pharm. Sci., Tokyo Univ. of Sci.) ○YOSHINO, Reijiro; NUKAGA, Yohei; IWATA, Rintaro; WADA, Takeshi
- 4C4-10** Stereocontrolled synthesis of boranophosphate DNA by the boranophosphotriester method utilizing silicon-based chiral auxiliaries (Fac. Pharm. Sci., Tokyo Univ. of Sci.) ○ABE, Takuma; SAITO, Keita; UCHIYAMA, Naoki; WADA, Takeshi
- 4C4-11<sup>#\*</sup>** Synthesis and properties of oligonucleotides containing isophthalic acid derivatives (Grad. Sch. Biosci. Biotech., Tokyo Tech) ○KAEWSOMBOON, Tanasak; KANAMORI, Takashi; YUASA, Hideya; OHKUBO, Akihiro
- 4C4-13** Synthesis of oligonucleotides possessing azobenzene unit and their reductive activation by X-irradiation (Coll. Sci. Eng., Aoyama Gakuin Univ.) ○ITAGAKI, Takuma; KURIHARA, Ryohsuke; TANABE, Kazuhito

### Functional Nucleic Acids

Chair: OHKUBO, Akihiro (11 : 20~12 : 20)

- \* 11:10-11:20: interval for laptop PC connection.(4C4-15, 4C4-16, 4C4-17, 4C4-19, 4C4-20)
- 4C4-15** Electrochemical evaluation of correlation between the lengths of ferrocene-modified DNA duplexes immobilized onto electrodes and their electron transfer rates (Grad. Sch. Med. Pharm. Sci. Edu., Univ. of Toyama) ○AOKI, Shun; CHIBA, Junya; INOUE, Masahiko
- 4C4-16** Development of Small Molecular Probes for Selective Chemical Modification to U-U Mismatched Structure (IMRAM, Tohoku Univ.) ○USAMI, Akira; KOBAYASHI, Tomohito; SATO, Norihiro; ONIZUKA, Kazumitsu; NAGATSUGI, Fumi
- 4C4-17\*** Simultaneous analysis of single-nucleotide polymorphisms in DNA using <sup>19</sup>F NMR (Sch. Mat. Sci., JAIST) ○SAKAMOTO, Takashi; HASEGAWA, Daisaku; FUJIMOTO, Kenzo
- 4C4-19** Synthesis and fluorescence properties of 4-(diarylmethylene)imidazo-*le*inones (DAIN) conjugated new fluorescent nucleic acid (Sch. Pharm., Osaka Univ.) ○OKUDA, Takumi; MORI, Shohei; KASAHARA, Yuya; MORIHIRO, Kunihiko; IKEJIRI, Masahiro; MIYASITA, Kazuyuki; OBIKA, Satoshi
- 4C4-20** Synthesis and optical evaluation of novel photochromic nucleotides with imidazolone derivatives (KIT) ○SUGITA, Takayuki; NAKAMURA, Kazuki; ARAI, Taichiro; YAMAYOSHI, Asako; MURAKAMI, Akira; KOBORI, Akio

### Sunday, March 27, PM

#### Protein

Chair: TAKAOKA, Yousuke (13 : 30~14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(4C4-28, 4C4-29, 4C4-30, 4C4-31, 4C4-32, 4C4-33)
- 4C4-28** Thermal denaturation of protein reveals molecular pathomechanism of a neurodegenerative disease (Grad. Sch. Sci. Tech., Keio Univ.) ○ANZAI, Itsuki; MUKAIYAMA, Atushi; AKIYAMA, Shuji; FURUKAWA, Yoshiaki
- 4C4-29** Binding behavior of protein needles reconstructed from bacteriophage T4 to lipid bilayer membrane (Grad. Sch. Biosci. Biotech., Tokyo Tech) ○TSUBOKAWA, Daisho; FUKAI, Toshihiro; HIRATANI, Moe; KAWANO, Ryuji; UENO, Takafumi
- 4C4-30** Crystal structure of fructosyl peptide oxidase from *Phaeosphaeria modorum* (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○SHIMASAKI, Tomohisa; YOSHIDA, Hiromi; KOJIMA, Katsuhiko; TSUGAWA, Wakako; SODE, Koji
- 4C4-31** Coacervation properties of elastin-derived synthetic peptide (FPGVG)<sub>n</sub> analogs in various inorganic salt solutions (Fac. Arts and Sci., Kyushu Univ.) ○KODAMA, Misako; SUYAMA, Keitaro; MAEDA, Iori; NOSE, Takeru
- 4C4-32** Self-assembly properties and structural analyses of fluorescent-labeled analogs of elastin-derived synthetic peptide (FPGVG)<sub>5</sub> (Fac. Arts and Sci., Kyushu Univ.) ○SUYAMA, Keitaro; KESAMARU, Hitoshi; TATSUBO, Daiki; NOSE, Takeru
- 4C4-33<sup>#</sup>** Effect of Linker Elongation in the DNA-binding of Tumor Suppressor p53 (Grad. Sch. Sci., Tohoku Univ.; IMRAM, Tohoku Univ.) ○SUBEKTI, Dwiky Rendra Graha; MURATA, Agato; ITOH, Yuji; IGARASHI, Chihiro; TAKAHASHI, Satoshi; KAMAGATA, Kiyoto

## Protein(Metal)

Chair: TAKAHASHI, Satoshi (14 : 40~15 : 40)

- \* 14:30-14:40: interval for laptop PC connection.(4C4-35, 4C4-36, 4C4-37, 4C4-38, 4C4-39, 4C4-40)
- 4C4-35** Functional analysis of glucoside 3-dehydrogenase from *Rhizobium radiobacter* (Fac. Eng., Tokyo Univ. of Agri. and Technol.) SODE, Koji; OMIYAZAKI, Ryota; SUZUKI, Nanoha; SHIOTA, Masaki; KOJIMA, Katsuhiko; TSUGAWA, Wakako
- 4C4-36** Proton transfer associated with microbial extracellular electron transfer (Grad. Sch. Eng., The Univ. of Tokyo) OTOKUNOU, Yoshihide; OKAMOTO, Akihiro; HASHIMOTO, Kazuhito
- 4C4-37<sup>#</sup>** Rate enhancement of extracellular electron transport triggered by redox dependent secondary structural change in outer-membrane cytochromes (Fac. Eng., The Univ. of Tokyo) OCHINOTAIKUL, Punthira; OKAMOTO, Akihiro; HASHIMOTO, Kazuhito
- 4C4-38<sup>#</sup>** Time-resolved IR spectroscopic studies for proton pumping mechanisms of cytochrome c oxidase (Grad. Sch. Life Sci., Univ. of Hyogo) OLI, Chen; NISHIGUCHI, Tatsuhito; YAMAICHI, Shun; ITO-SHINZAWA, Kyoko; YOSHIKAWA, Shinya; NAKASHIMA, Satoru; OGURA, Takashi
- 4C4-39** Ultraviolet Resonance Raman Spectroscopy of Cytochrome c Oxidase P intermediate (Grad. Sch. Life Sci., Univ. of Hyogo) OWATANABE, Shoko; YANAGISAWA, Sachiko; NAKASHIMA, Satoru; SHINZAWA-ITOH, Kyoko; YOSHIKAWA, Shinya; OGURA, Takashi
- 4C4-40** Time-resolved resonance Raman (TR<sup>2</sup>) study of the dynamics of CO photodissociation of cytochrome c oxidase (Grad. Sch. Life Sci., Univ. of Hyogo) ONAKAGAWA, Yoshiyuki; SHINZAWA-ITOH, Kyoko; YOSHIKAWA, Shinya; NAKASHIMA, Satoru; OGURA, Takashi

## Protein

Chair: TERAZIMA, Masahide (15 : 50~16 : 30)

- \* 15:40-15:50: interval for laptop PC connection.(4C4-42, 4C4-43, 4C4-44, 4C4-45)
- 4C4-42** Thermodynamic properties of sorbitol-induced molten globule state of  $\alpha$ -Lactalbumin. (Kinki Univ.) OMARUTANI, Tomokazu; ISHIDA, Masatada; KAMIYAMA, Tadashi
- 4C4-43** Correlation of structure change and flexibility of the  $\alpha$  lactalbumin (Fac. Sci. Eng., Kinki Univ.) OISHIDA, Masatada; MARUTANI, Tomokazu; KAMIYAMA, Tadashi
- 4C4-44<sup>#</sup>** Conformational and stoichiometric characterization of protein complexes by small-angle neutron scattering in conjunction with native mass spectrometry (Grad. Sch. Pharm. Sci., Nagoya City Univ.) OYUNOKI, Yasuhiro; ISHII, Kentaro; MURAKAMI, Reiko; NODA, Masanori; YAGI, Hirokazu; INOUE, Rintaro; SUGIYAMA, Masaaki; UCHIYAMA, Susumu; KATO, Koichi
- 4C4-45** Structural insight into the catalytic mechanism of aspartate aminotransferase obtained by using substrate analogues (Osaka Med. Coll.) OMURAKAWA, Takeshi; MIYAHARA, Ikuko; YANO, Takato; HAYASHI, Hideyuki

## Room C5

Chishinkan1 Building 132

## Biofunctional Chemistry ; Biotechnology

Thursday, March 24, AM

## Protein (Metal)

Chair: OOHORA, Koji (9 : 30 ~ 10 : 20)

- \* 9:20-9:30: interval for laptop PC connection.(1C5-04, 1C5-06, 1C5-07, 1C5-08)
- 1C5-04<sup>\*\*</sup>** Development of an Artificial Metalloenzyme Bearing Datively Anchored Osmium Catalytic Center (Grad. Sch. Eng., Osaka Univ.) OFUJIEDA, Nobutaka; NAKANO, Takumi; ICHIHASHI, Haruna; SUGIMOTO, Hideki; ITOH, Shinobu
- 1C5-06** Development of Artificial Oxidative Enzymes Containing a Late Transition-Metal Active Center (Grad. Sch. Eng., Osaka Univ.) OICHIHASHI, Haruna; FUJIEDA, Nobutaka; ITOH, Shinobu
- 1C5-07** Photocatalytic Activities of Titania Nanoarchitectures Synthesized by Self-Assembled Peptides as Templates. (Fac. Sci. Tech., Ryukoku Univ.) OWADA, Tsubasa; IMAI, Takahito; TOMIZAKI, Kin-ya
- 1C5-08** Synthesis of Gold Nanocrystals with Self - Assembled Peptides as Templates with Reducing Activity (Fac. Sci. Tech., Ryukoku Univ.) OYAMADA, Naoki; IMAI, Takahito; TOMIZAKI, Kin-ya

Chair: FUJIEDA, Nobutaka (10 : 30~11 : 20)

- \* 10:20-10:30: interval for laptop PC connection.(1C5-10, 1C5-11, 1C5-13, 1C5-14)

- 1C5-10** Complexation of Peptide Carriers and Polyaniions for Intracellular Drug Delivery (Fac. Sci. Tech., Ryukoku Univ.) OKATAOKA, Shunsuke; KISHIOKA, Kohei; IMAI, Takahito; TOMIZAKI, Kin-ya
- 1C5-11<sup>\*\*</sup>** Construction of a DNA-Hemoprotein Complex by Protein Reconstruction with a Modified Iron Porphyrin (Grad. Sch. Eng., Osaka Univ.) OTABA, Fargol; KOGA, Satoe; OSHITA, Kaori; ONODA, Akira; HAYASHI, Takashi
- 1C5-13** Preparation of de Novo Hemoprotein with Acrylamide Groups on the two N-terminals as a Cross-linking Unit of Gel (Grad. Sch. Eng., Osaka Univ.; PRESTO, JST) OURAYAMA, Takahiro; KOGAWA, Taisuke; OOHORA, Koji; HAYASHI, Takashi
- 1C5-14** Supramolecular Assembly of Hexameric Hemoprotein by Pyrene-Pyrene Interaction (Grad. Sch. Eng., Osaka Univ.; PRESTO, JST) OHIRAYAMA, Shota; OOHORA, Koji; HAYASHI, Takashi

Chair: ONODA, Akira (11 : 30~12 : 20)

- \* 11:20-11:30: interval for laptop PC connection.(1C5-16, 1C5-17, 1C5-19)
- 1C5-16<sup>#</sup>** Engineering of Butyl Group Specific Binding Pocket of Geotrichum candidum Acetophenone Reductase : Enantioselective Reduction of Challenging Bulky-bulky Ketones (Grad. Sch. Biosci. Biotech., Tokyo Tech; IFRcC, Osaka Univ.; IVR, Kyoto Univ.; KEK) OKOESOEMA, Afifa Ayu; SUGIYAMA, Yosuke; MATSUDA, Tomoko; SCHRITT, Dimitri; YAMASHITA, Kazuo; STANDLEY, Daron M.; SENDA, Miki; SENDA, Toshiya
- 1C5-17<sup>\*\*</sup>** Correlation between the reactivity of a metal complex in a protein core and the global flexibility of the protein: Mechanistic study using thiol-subtilisin as a model protein (Grad. Sch. Mat. Sci., NAIST) O MATSUO, Takashi; ISHIDA, Masaya; KONO, Takamasa; HIROTA, Shun
- 1C5-19<sup>\*\*</sup>** Characterization of the interaction of cytochrome c with cardiolipin-incorporated lipid bicelle (Grad. Sch. Mat. Sci., NAIST) KOBAYASHI, Hisashi; ONAGAO, Satoshi; HIROTA, Shun

Thursday, March 24, PM

## Protein

Chair: TOMIZAKI, Kin-ya (13 : 30~14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(1C5-28, 1C5-29, 1C5-31, 1C5-33)
- 1C5-28** Development of thyroid stimulating hormone receptor-magnetic nanoparticle complexes towards autoantibody detection (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) OHAGIHARA, Yuri; HONDA, Toru; TANAKA, Tsuyoshi; YOSHINO, Tomoko
- 1C5-29<sup>\*\*</sup>** GTP-Responsive Hollow Sphere Prepared by Tubulin Origami (RIKEN CEMS) OUCHIDA, Noriyuki; OKURO, Kou; PAVAN, Giovanni; TOMISHIGE, Michio; AIDA, Takuzo
- 1C5-31<sup>\*</sup>** Spontaneous Mechanical Oscillation of Microtubule Vortices formed beneath Air-Buffer Interface (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) OITO, Masaki; ARIF MD., Rashedul Kabir; MD., Sirajul Islam; INOUE, Daisuke; WADA, Shoki; SADA, Kazuki; KONAGAYA, Akihiko; KAKUGO, Akira
- 1C5-33** Synthesis and Self-assembly of  $\beta$ -Annulus peptide bearing coiled-coil forming sequence. (Grad. Sch. Eng., Tottori Univ.) OFUJITA, Seiya; YAMAMOTO, Syoya; MATSUURA, Kazunori

## Nucleic Acids (molecular recognition)

Chair: NAKANO, Shuichi (14 : 40~15 : 40)

- \* 14:30-14:40: interval for laptop PC connection.(1C5-35, 1C5-36, 1C5-38, 1C5-39, 1C5-40)
- 1C5-35<sup>#</sup>** Nucleosome formation influence alkylating efficiency of duocarmycin B2 in duplex-DNA (Dep. Chem., Sch. Sci., Kyoto Univ.) OZOU, Tingting; KIZAKI, Seiichirou; SUGIYAMA, Hiroshi
- 1C5-36<sup>\*\*</sup>** High Sequence Specificity DNA Interstrand Cross-Links by Single molecule Pyrrole-Imidazole Polyamide seco-CBI Conjugate. (Dep. Chem., Sch. Sci., Kyoto Univ.) OGUO, Chuanxin; KASHIWAZAKI, Gengo; ASAMITSU, Sefan; SATO, Shinsuke; BANDO, Toshikazu; SUGIYAMA, Hiroshi
- 1C5-38** The synthesis of novel DNA-binding ligands having hydrophobic functional groups (ISIR, Osaka Univ.) OYAMAUCHI, Kazuaki; DOHNO, Chikara; NAKATANI, Kazuhiko
- 1C5-39** Synthesis of biomolecular-modified naphthyridines and evaluation of binding to DNA/RNA. (ISIR, Osaka Univ.) OITO, Hiroshi; AIKAWA, Haruo; NAKATANI, Kazuhiko
- 1C5-40<sup>#</sup>** Synthesis and properties of DNA mismatch binding molecules having thiol functional group (ISIR, Osaka Univ.) OYAMADA, Takeshi; MICHIKAWA, Akiko; NAKATANI, Kazuhiko

Chair: NAKATANI, Kazuhiko (15 : 50~16 : 50)

- \* 15:40-15:50: interval for laptop PC connection.(1C5-42, 1C5-44, 1C5-45, 1C5-46)
- 1C5-42<sup>\*\*</sup>** Comparison of DNA-Binding Selectivities of PI Polyamides with Different Designs by a Next-Generation Sequencer (Dep. Chem., Sch. Sci., Kyoto Univ.) OKASHIWAZAKI, Gengo; BANDO, Toshikazu; SUGIYAMA, Hiroshi

- 1C5-44** Pyrrole-Imidazole Polyamides Targeting 24 bp in Telomere Repeats (Dep. Chem., Sch. Sci., Kyoto Univ.; Sch. Life Sci., SOKENDAI) ○KAWAMOTO, Yusuke; SASAKI, Asuka; HASHIYA, Kaori; IDE, Satoru; BANDO, Toshikazu; MAESHIMA, Kazuhiro; SUGIYAMA, Hiroshi
- 1C5-45<sup>#</sup>** DNA sequence motif-targeted synthetic molecules for directed differentiation of pluripotent stem cells (Dep. Chem., Sch. Sci., Kyoto Univ.) ○TANIGUCHI, Junichi; NAMASIVAYAM, Ganesh Pandian; SATO, Shinsuke; BANDO, Toshikazu; SUGIYAMA, Hiroshi
- 1C5-46<sup>#</sup>** Development of a DNA aptamer-enzyme conjugate for a solid substrate (Fac. Eng., Kyushu Univ.) ○TAKAHARA, Mari; BUDINOVA, Geisa A. L. G.; NAKAZAWA, Hikaru; MORI, Yutaro; UMETSU, Mitsuo; KAMIYA, Noriho

Chair: KOBORI, Akio (17 : 00~17 : 50)

- \* 16:50-17:00: interval for laptop PC connection.(1C5-49, 1C5-50, 1C5-51, 1C5-52, 1C5-53)
- 1C5-40<sup>#</sup>** Circular Mismatch Binding Ligand CMBL4 Binds to the 5' -T-3' / 5' -GG-3' Site by Inducing the Flipping out of Thymine Base (ISIR, Osaka Univ.) ○MUKHERJEE, Sanjukta; DOHNO, Chikara; NAKATANI, Kazuhiko
- 1C5-50** Searching of the binding ligand for CUG repeat sequence (ISIR, Osaka Univ.) ○MATSUMOTO, Jun; LI, Jinxing; NAKATANI, Kazuhiko
- 1C5-51** Nucleic Acids Chemistry beyond the Watson-Crick Double Helix (22) : Elucidation for adsorption of structured DNAs onto graphene oxide (FIRST, Konan Univ.; FIBER, Konan Univ.) ○UEDA, Yu-mi; ZOUZUMI, Yu-ki; SUGIMOTO, Naoki; MIYOSHI, Daisuke
- 1C5-52** Nucleic Acids Chemistry beyond the Watson-Crick Double Helix (25) : Effects of epigenetic chemical modifications on binding affinity of histone tail peptides with DNA strands (FIRST, Konan Univ.) ○HIGASHIDA, Shu; MURATA, Kohei; SUGIMOTO, Naoki; MIYOSHI, Daisuke
- 1C5-53** Nucleic Acids Chemistry beyond the Watson-Crick Double Helix (26) : Reversible B-A transition of DNA duplexes induced by cationic polymer (FIRST, Konan Univ.) ○YAMAGUCHI, Nonoka; SHIMADA, Naohiko; NAKANO, Shu-ichi; SUGIMOTO, Naoki; MARUYAMA, Atsushi; MIYOSHI, Daisuke

Chair: SUGIYAMA, Hiroshi (18 : 00~18 : 50)

- \* 17:50-18:00: interval for laptop PC connection.(1C5-55, 1C5-57, 1C5-58, 1C5-59)
- 1C5-55<sup>#</sup>** Nucleic Acids Chemistry beyond the Watson-Crick Double Helix (15): Effect of Molecular Crowding on Thermodynamics of Riboswitch Aptamer-FMN Binding in Absence of a Divalent Cation (FIBER, Konan Univ.) ○RODE, Ambadas B.; ENDOH, Tamaki; SUGIMOTO, Naoki
- 1C5-57** The mechanism of changing the thermal stability of a DNA duplex by crowding environment including biomolecules. (FIRST, Konan Univ.) ○NAKAI, Hiroki; YAMAGUCHI, Daisuke; SUGIMOTO, Naoki; NAKANO, Shu-ichi
- 1C5-58** Development of Hypoxia-Specific Oligonucleotide Therapeutics System with Intracellular Environment-Responsive Peptide Ribonucleic Acids (PRNA)- phenyl boronic acid (PBA) unit (IMRAM, Tohoku Univ.) ○ASAI, Mitsuo; UEMATSU, Ryohei; ARAKI, Yasuyuki; SAKAMOTO, Seiji; ISHIBASHI, Satoru; YOKOTA, Takanori; WADA, Takehiko
- 1C5-59** Cell-based evaluation of cross-linking antisense oligoribonucleotides with a caged  $\alpha$ -haloaldehyde group (KIT) ○SUGIHARA, Yuta; NAKATA, Yuki; YAMAYOSHI, Asako; MURAKAMI, Akira; KOBORI, Akio

## Friday, March 25, AM

### Nucleic Acids (Functional nucleic acids)

Chair: WADA, Takehiko (9 : 00 ~10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(2C5-01, 2C5-03, 2C5-05)
- 2C5-01\*** Interaction of human telomere RNA G-quadruplex and hnRNPA1 (Fac. Med., Univ. of Miyazaki) ○ISHIZUKA, Takumi; LIU, Xiao; TAKEDA, Yuma; XU, Yan
- 2C5-03<sup>#</sup>** RNA G-quadruplex-targeting translational inhibition using a small molecule (WPI-iCeMS, Kyoto Univ.) ○KATSUDA, Yousuke; SATO, Shinichi; HAGIHARA, Masaki; UESUGI, Motonari
- 2C5-05\*** Improvement of a small-molecule based method for live-cell imaging of endogenous mRNAs (ICR, Kyoto Univ.; WPI-iCeMS, Kyoto Univ.) ○YATSUZUKA, Kenji; SATO, Shinichi; KATSUDA, Yousuke; UESUGI, Motonari

### Nucleic Acids (nucleic acid medicine)

Chair: KASHIDA, Hiromu (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(2C5-08, 2C5-09, 2C5-11, 2C5-13)
- 2C5-08** Development of cancer cell specific cellular uptake system utilizing MMP-9 cleavage activities (IMRAM, Tohoku Univ.) ○MATSUSHIMA, Moeke; SUGAI, Hiroka; NAKASE, Ikuhiko; YAMAYOSHI, Asako; SAKAMOTO, Seiji; ARAKI, Yasuyuki; WADA, Takehiko
- 2C5-09\*** Synthesis and properties of novel cationic peptides binding to nucleic acid drugs (Fac. Pharm. Sci., Tokyo Univ. of Sci.) ○MAEDA, Yusuke;

- IWATA, Rintaro; SAKAMOTO, Taiichi; WADA, Takeshi
- 2C5-11<sup>#</sup>** Ligand-inducible -1 ribosomal frameshifting in the cells (ISIR, Osaka Univ.) ○MATSUMOTO, Saki; MURATA, Asako; NAKATANI, Kazuhiko
- 2C5-13** Synthesis of a new cross-linkable nucleic acid derivative targeting nucleic acid binding proteins (Grad. Sch. Sci., Tohoku Univ.) ○ODAIRA, Kenta; ISIYAMA, Syogo; YAMADA, Ken; NAGATSUGI, Fumi

### Nucleic Acids (Functional nucleic acids)

Chair: WADA, Takeshi (11 : 20~12 : 20)

- \* 11:10-11:20: interval for laptop PC connection.(2C5-15, 2C5-17, 2C5-18, 2C5-19)
- 2C5-15<sup>#</sup>** Construction of Artificial Metallo-DNA Structures Utilizing Template-independent DNA Polymerases (Grad. Sch. Sci., The Univ. of Tokyo) ○KOBAYASHI, Teruki; SAKAMOTO, Akira; TAKEZAWA, Yusuke; SHIONOYA, Mitsuhiko
- 2C5-17** Polymerase Incorporation of Ligand-bearing Artificial Nucleotide utilizing Natural DNA Templates (Grad. Sch. Sci., The Univ. of Tokyo) ○NAKAMA, Takahiro; SAKAMOTO, Akira; KOBAYASHI, Teruki; TAKEZAWA, Yusuke; SHIONOYA, Mitsuhiko
- 2C5-18** Specific binding between metal ion and mismatched base pair involving 4-thiothymine (Fac. Sci., Tokyo Univ. of Sci.; Fac. Eng., Kanagawa Univ.) ○YAGUCHI, Ayami; AKIBA, Ryo; DEGUCHI, Kanako; ONO, Akira; TORIGOE, Hidetaka
- 2C5-19<sup>#</sup>** Nucleic Acids Chemistry beyond the Watson-Crick Double Helix (19): Sub-nanomolar detection of A-to-I editing framed in double-stranded RNAs by triplex-forming PNA (FIBER, Konan Univ.) ○ANNONI, Chiara; ENDOH, Tamaki; HNEDZKO, Dzyana; ROZNER, Eriks; SUGIMOTO, Naoki

## Friday, March 25, PM

Chair: TAKAGI, Masahiro (13 : 30~14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(2C5-28)
- 2C5-28<sup>#</sup> CSJ Award for Creative Works** Molecular Systems for disease cell-specific gene regulation with peptide-grafted polymers (Grad. Sch. Eng., Kyushu Univ.) ○KATAYAMA, Yoshiki

### Protein (Protein Engineering)

Chair: HOHSAKA, Takahiro (14 : 40~15 : 40)

- \* 14:30-14:40: interval for laptop PC connection.(2C5-35, 2C5-37, 2C5-38, 2C5-39, 2C5-40)
- 2C5-35<sup>#</sup>** In vitro biosynthesis of backbone-modified peptides by post-translational modification reactions (Grad. Sch. Sci., The Univ. of Tokyo; PRESTO, JST) ○KATO, Yasuharu; GOTO, Yuki; SUGA, Hiroaki
- 2C5-37** Novel translation substrates toward carbon-carbon bond formation in ribosome (Grad. Sch. Sci., The Univ. of Tokyo) ○KURODA, Tomohiro; TAKATSUJI, Ryo; GOTO, Yuki; SUGA, Hiroaki
- 2C5-38** Strategy for screening peptides regulating enzymatic activities (Osaka Univ.FBS) ○HARADA, Shoko; MATSUMOTO, Katsuhiko; UEDA, Hiroki
- 2C5-39** Screening of peptides binding to peptide nanofibers by phage display and functionalization of cell scaffold materials (Grad. Sch. Biosci. Biotech., Tokyo Tech) ○MATSUBARA, Daiki; FUKUNAGA, Kazuto; TSUTSUMI, Hiroshi; MIHARA, Hisakazu
- 2C5-40** Synthesis of monosaccharide peptide-conjugated gold nanoparticles and their interaction with lectins (Grad. Sch. Biosci. Biotech., Tokyo Tech) ○SHIRAI, Tomoko; TSUTSUMI, Hiroshi; YUASA, Hideya; MIHARA, Hisakazu

Chair: WADA, Takehiko (15 : 50~16 : 50)

- \* 15:40-15:50: interval for laptop PC connection.(2C5-42)
- 2C5-42 CSJ Award for Creative Works** Creation of Functional Biomaterials Based on Biomolecular Recognition (Grad. Sch. Eng., Tottori Univ.) ○MATSUURA, Kazunori

### Protein (Protein Engineering)

Chair: TAMURA, Tomonori (17 : 00~17 : 50)

- \* 16:50-17:00: interval for laptop PC connection.(2C5-49, 2C5-51, 2C5-52, 2C5-53)
- 2C5-49\*** Liposome-based in vitro evolution of aminoacyl-tRNA synthetase and its application for incorporation of non-natural amino acid into proteins (Sch. Mat. Sci., JAIST; Grad. Sch. Eng., Osaka Univ.) ○WATANABE, Takayoshi; HOHSAKA, Takahiro; UYEDA, Atsuko; MATSUURA, Tomoaki
- 2C5-51** Expression and characterization of an esterase from extremely halophilic archaeon *Halorcula japonica* (Grad. Sch. Biosci. Biotech., Tokyo Tech) ○AMBAL, Shota; YOSHIDA, Kento; YATSUNAMI, Rie; FUKUI, Toshiaki; NAKAMURA, Satoshi
- 2C5-52** Improvement of activity of GH11 xylanase from an alkaliphilic bacterium by directed evolution (Grad. Sch. Biosci. Biotech., Tokyo Tech) ○FUJIMOTO, Hiroshi; TATEOKA, Yuki; YATSUNAMI, Rie; FUKUI, Toshiaki; NAKAMURA, Satoshi

**2C5-53** Identification of Amino Acid Residue Responsible for the Oxidative Half-reaction of Lactate Oxidase (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○HIRAKA, Kentaro; TAKAGI, Eri; KOJIMA, Katsuhiko; TSUGAWA, Wakako; SODE, Koji

Chair: GOTO, Yuki (18:00~18:50)

\* 17:50-18:00: interval for laptop PC connection.(2C5-55, 2C5-57, 2C5-59)

**2C5-55\*** Design of self-assembling protein with temperature-responsive gelation ability (Interdisciplinary Grad. Sch. Sci. and Eng., Tokyo Tech) ○MIZUGUCHI, Yoshinori; MASHIMO, Yasumasa; MIE, Masayasu; KOBATAKE, Eiry

**2C5-57\*** Formation of multi-molecular forms of an antibody light chain and the homogenization method (Fac. Eng., Oita Univ.; ISIT Nanotechnology Lab.) ○UDA, Taizo; MATSUMOTO, Shingo; NAKASHIMA, Hiroki; ITONAGA, Shogo; HIFUMI, Emi

**2C5-59** Construction of extracellular matrix with protein modified polycaprolactone nanofiber. (Interdisciplinary Grad. Sch. Sci. and Eng., Tokyo Tech) ○HIKIBA, Shun; MASHIMO, Yasumasa; MIE, Masayasu; KOBATAKE, Eiry

## Saturday, March 26, AM

### Protein (Metal)

Chair: YAMANAKA, Masaru (9:00~9:40)

\* 8:50-9:00: interval for laptop PC connection.(3C5-01, 3C5-02, 3C5-03, 3C5-04)

**3C5-01** Structural comparison of pro-tyrosinase and active form without shielding domain (Grad. Sch. Eng., Osaka Univ.) ○UMAKOSHI, Kyohei; FUJIEDA, Nobutaka; ITOH, Shinobu

**3C5-02** Protein Design that Induces Tyrosine-Cysteine Cross-linkage by Post-translational Modification (Sch. Eng., Osaka Univ.) ○YAMAWAKI, Sayaka; TANIGUCHI, Yuki; FUJIEDA, Nobutaka; ITOH, Shinobu

**3C5-03** Construction and Characterization of Peptide Self-assembly Containing Metal Ion (Sch. Eng., Osaka Univ.) ○TONOMURA, Atsushi; FUJIEDA, Nobutaka; ITOH, Shinobu

**3C5-04** Hydroxylation of Non-native substrates by Chemically Modified Cytochrome P450BM3 (Grad. Sch. Sci., Nagoya Univ.) ○ORII, Jun; SHOJI, Osami; WATANABE, Yoshihito

## Saturday, March 26, PM

Chair: SHOJI, Osami (13:00~13:50)

\* 12:50-13:00: interval for laptop PC connection.(3C5-25, 3C5-27, 3C5-28, 3C5-29)

**3C5-25\*\*** Domain-swapped cytochrome *cb<sub>562</sub>* dimer and its nanocage encapsulating a Zn-SO<sub>4</sub> cluster in the internal cavity (Grad. Sch. Mat. Sci., NAIST) ○MIYAMOTO, Takaaki; KURIBAYASHI, Mai; NAGAO, Satoshi; SHOMURA, Yasuhiro; HIGUCHI, Yoshiki; HIROTA, Shun

**3C5-27** Design of a stable myoglobin dimer based on the domain-swapped structure (Grad. Sch. Mat. Sci., NAIST) ○SUDA, Ayaka; KOBAYASHI, Hisashi; NAGAO, Satoshi; HIROTA, Shun

**3C5-28** Domain swapping of *c*-type cytochrome in expression system (Grad. Sch. Mat. Sci., NAIST) ○HAYASHI, Yugo; YAMANAKA, Masaru; NAGAO, Satoshi; KOMORI, Hirofumi; HIGUCHI, Yoshiki; HIROTA, Shun

**3C5-29** Photoinduced Electron Transfer in Artificial Co-assembly and Heterodimer of Cytochrome *b<sub>562</sub>* Variants Containing Iron and Zinc Porphyrins (Grad. Sch. Eng., Osaka Univ.; PRESTO, JST) ○KAJIHARA, Ryota; OOHORA, Koji; HAYASHI, Takashi

Chair: AONO, Shigetosh (14:00~14:50)

\* 13:50-14:00: interval for laptop PC connection.(3C5-31, 3C5-32, 3C5-34, 3C5-35)

**3C5-31\*** Construction of cytochrome *c* tetramer and its size control by CO binding (Grad. Sch. Mat. Sci., NAIST) ○YAMANAKA, Masaru; HOSHIZUMI, Makoto; HIROTA, Shun

**3C5-32\*\*** Assembly of Zinc Porphyrin Molecules within a Hexameric Hemoprotein Matrix Covalently Modified with Photosensitizers (Grad. Sch. Eng., Osaka Univ.; PRESTO, JST) ○MASHIMA, Tsuyoshi; OOHORA, Koji; HAYASHI, Takashi

**3C5-34** Growth inhibition of gram negative bacteria by hemophore with artificial metal complexes (Grad. Sch. Sci., Nagoya Univ.) ○NAKASHIMA, Ayaka; SHOJI, Osami; WATANABE, Yoshihito

**3C5-35** Hydroxylation and degradation reactions of fatty acids catalyzed by hydrogen peroxide-dependent Cytochrome P450 (Grad. Sch. Sci., Nagoya Univ.) ○ONODA, Hiroki; SHOJI, Osami; SUGIMOTO, Hiroshi; CHIEN, Chihcheng; SHIRO, Yoshitsugu; WATANABE, Yoshihito

Chair: UENO, Takafumi (15:00~15:50)

\* 14:50-15:00: interval for laptop PC connection.(3C5-37, 3C5-38, 3C5-40)

**3C5-37\*** Development of a CYP102A5-Based Decoy Molecule System (Grad. Sch. Sci., Nagoya Univ.) ○STANFIELD, Joshua Kyle; SHOJI, Osami; WATANABE, Yoshihito

**3C5-38\*\*** Synergistic Effect of Decoy Molecule and Site-directed Mutation Leading to A P450 Methane Monooxygenase (Grad. Sch. Sci., Nagoya Univ.;

CREST, JST; RIKEN Spring-8 Center; RCMS, Nagoya Univ.) ○CONG, Zhiqi; SHOJI, Osami; KASAI, Chie; SUGIMOTO, Hiroshi; SHIRO, Yoshitsugu; WATANABE, Yoshihito

**3C5-40\*\*** In situ observation of dynamic inter-domain motion in cellobiose dehydrogenase anchored on an electrode surface with a modified heme cofactor (Grad. Sch. Eng., Osaka Univ.) ○HARADA, Hirofumi; SUNAGAWA, Naoki; IGARASHI, Kiyohiko; ONODA, Akira; HAYASHI, Takashi

## Nucleic Acids (nucleic acid medicine)

Chair: KUZUYA, Akinori (16:00~16:50)

\* 15:50-16:00: interval for laptop PC connection.(3C5-43, 3C5-45, 3C5-47)

**3C5-43\*** Development of novel functional oligonucleotides for regulation of RISC function (IV) The structural insights of antisense oligonucleotides on the release of microRNA from RISC (KIT) ○ARIYOSHI, Jumpei; EIMORI, Nao; KONISHI, Ryo; KOBORI, Akio; MURAKAMI, Akira; YAMAYOSHI, Asako

**3C5-45\*** Development of crosslinked siRNA which activated via slicing by Ago2 (Grad. Sch. Eng., Nagoya Univ.) ○KAMIYA, Yukiko; IISHIBA, Kazuki; DOI, Tetsuya; KASHIDA, Hiromu; ASANUMA, Hiroyuki

**3C5-47** Development of Anti-miRNA oligonucleotides using Acyclic Nucleic Acid (Grad. Sch. Eng., Nagoya Univ.) ○DONOSHITA, Yuka; MURAYAMA, Keiji; KASHIDA, Hiromu; KAMIYA, Yukiko; ASANUMA, Hiroyuki

## Nucleic Acids (Functional nucleic acids)

Chair: ASANUMA, Hiroyuki (17:00~17:40)

\* 16:50-17:00: interval for laptop PC connection.(3C5-49, 3C5-51, 3C5-52)

**3C5-49\*\*** Development of orthogonal modular adaptors for assembling multiple proteins on DNA nanostructure (IAE, Kyoto Univ.) ○NGUYEN, Thang; NAKATA, Eiji; SAIMURA, Masayuki; MORII, Takashi

**3C5-51\*** Construction of an enzyme assembly on DNA scaffold via a modular adaptor (IAE, Kyoto Univ.) ○DINH, Huyen; NGO, Anh Tien; NAKATA, Eiji; SAIMURA, Masayuki; MORII, Takashi

**3C5-52** Development of new hydrogels utilizing guanine quartet formation (Fac. Chem. Materials and Bioeng., Kansai Univ.) ○TANAKA, Shizuma; FUKUSHIMA, Kazuki; WAKABAYASHI, Kenta; YUKAMI, Shinsuke; KUZUYA, Akinori; OHYA, Yuichi

## Sunday, March 27, AM

### Protein (Protein Engineering)

Chair: WADA, Takehiko (9:00~10:00)

\* 8:50-9:00: interval for laptop PC connection.(4C5-01, 4C5-02, 4C5-03, 4C5-05)

**4C5-01** Photocleavable and recoverable protein PEGylation (Fac. Eng., The Univ. of Tokyo) ○KINPYO, Tomoki; YAMAGUCHI, Satoshi; SHIOTA, Hidefumi; OKAMOTO, Akimitsu

**4C5-02** Introduction of alkyne into proteins by chemical synthesis (Fac. Eng., The Univ. of Tokyo) ○KAMO, Naoki; HAYASHI, Gosuke; OKAMOTO, Akimitsu

**4C5-03\*** Construction of supramolecular architectures by disulfide bonds in protein crystals (Grad. Sch. Biosci. Biotech., Tokyo Tech) ○NEGISHI, Hashiru; ABE, Satoshi; MORI, Hajime; UENO, Takafumi

**4C5-05\*\*** *In vivo* Crystal Engineering for Protein Porous Materials (Grad. Sch. Biosci. Biotech., Tokyo Tech; KIT) ○ABE, Satoshi; MORI, Hajime; UENO, Takafumi

### Protein (Sensing)

(10:10~11:10)

\* 10:00-10:10: interval for laptop PC connection.(4C5-08, 4C5-10, 4C5-11, 4C5-12, 4C5-13)

**4C5-08\*** Development of novel genetically encoded antibody-based fluorescent protein probes (Sch. Mat. Sci., JAIST) HUYNNH NHAT, Kim Phuong; WATANABE, Takayoshi; ○HOHSAKA, Takahiro

**4C5-10** N-terminal-specific fluorescent labeling of monoclonal IgG and fluorescence detection of antigen (Sch. Mat. Sci., JAIST; USHIO Inc.) ○FUKUNAGA, Keisuke; WATANABE, Takayoshi; NOVITASARI, Dian; ABE, Ryoji; OHASHI, Hiroyuki; HOHSAKA, Takahiro

**4C5-11** Fabrication of protein nanoassemblies composed of engineered Split-YFP and Split-CFP (IMRAM, Tohoku Univ.) ○SAKAMOTO, Seiji; TERAUCHI, Mika; HUGO, Anna; ARAKI, Yasuyuki; WADA, Takehiko

**4C5-12** A fluorescent biosensor for nitric oxide based on the auto-fluorescent protein (IAE, Kyoto Univ.) ○TAJIMA, Shunsuke; NAKATA, Eiji; SAIMURA, Masayuki; MORII, Takashi

**4C5-13** Detection of protease activity by concentration quenching using lysine-branched substrates (Grad. Sch. Life Sci. Sys. Eng., KIT) ○SATO, Daisuke; KATO, Tamaki



## Protein

Chair: FURUKAWA, Yoshiaki (11 : 20~12 : 20)

- \* 11:10-11:20: interval for laptop PC connection.(4C5-15, 4C5-17, 4C5-19)  
**4C5-15\*** Time-resolved study on photoreaction of a light-dependent DNA binding protein EL222 (Dep. Chem., Sch. Sci., Kyoto Univ.)  
 ○TAKAKADO, Akira; NAKASONE, Yusuke; TERAZIMA, Masahide  
**4C5-17\*** Detection of enzymes displayed on cell surface with AFM (Fac. Eng., Kobe Univ.) ○TAKENAKA, Musashi; OGINO, Chiaki; KONDO, Akihiko; INOKUMA, Kentaro; HASUNUMA, Tomohisa; KOBAYASHI, Takuya  
**4C5-19\*\*** Direct observation of target DNA recognition of p53 mutants by single-molecule fluorescence microscopy (IMRAM, Tohoku Univ.; Grad. Sch. Sci., Tohoku Univ.; Grad. Sch. Agric. Sci., Tohoku Univ.) ○ITOHO, Yuji; MURATA, Agato; SAKAMOTO, Seiji; NANATANI, Kei; IGARASHI, Chihiro; WADA, Takehiko; TAKAHASHI, Satoshi; KAMAGATA, Kiyoto

## Sunday, March 27, PM

## Nucleic Acids (Sensing, probe)

Chair: SHINOZUKA, Kazuo (13 : 30~14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(4C5-28, 4C5-29, 4C5-30, 4C5-31, 4C5-32, 4C5-33)  
**4C5-28** Synthesis and Properties of Benzene-Glycol Nucleic Acids (Gifu Univ.) ○NIWA, Nazuki; UEDA, Keisuke; UENO, Yoshihito  
**4C5-29** Synthesis and properties of antisense DNA containing of acyclic alkynyl nucleoside analogs (Gifu Univ.) ○OGATA, Aya; UENO, Yoshihito  
**4C5-30** Chimeric RNA oligonucleotides with triazole and phosphate linkages: Synthesis and RNA interference (Grad. Sch. Sci., Tohoku Univ.; WPI-AIMR, Tohoku Univ.; ERATO, JST) ○KOGASHI, Kanako; FUJINO, Tomoko; OKADA, Koudai; MATTARELLA, Martin; SUZUKI, Takeru; YASUMOTO, Ken-ichi; SOGAWA, Kazuhiro; ISOBE, Hiroyuki  
**4C5-31** Synthesis of H-shaped DNA oligonucleotide dimer that is cross-linked with several types of rigid linker (SUMS; WPI-iCeMS, Kyoto Univ.; Dep. Chem., Sch. Sci., Kyoto Univ.) ○TASHIRO, Ryu; PARK, Soyoun; ENDO, Masayuki; SUGIYAMA, Hiroshi  
**4C5-32** Development of a new method for detection of 5-hydroxymethylcytosine with Cu/TEMPO oxidation (RCAT, The Univ. of Tokyo)  
 ○MATSUSHITA, Taku; OKAMOTO, Akimitsu  
**4C5-33** Development of a high-resolution method to detect 5-hydroxymethylcytosine using peroxotungstate (Grad. Sch. Eng., The Univ. of Tokyo)  
 ○KOHYAMA, Kenta; HAYASHI, Gosuke; OKAMOTO, Akimitsu

Chair: DOHNO, Chikara (14 : 40~15 : 40)

- \* 14:30-14:40: interval for laptop PC connection.(4C5-35, 4C5-36, 4C5-37, 4C5-38, 4C5-39, 4C5-40)  
**4C5-35** Development of molecular beacon probe for high-risk HPV genotyping (Grad. Sch. Sci. Tech., Gunma Univ.) ○IRIE, Yusuke; MORIGUCHI, Tomohisa; SHINOZUKA, Kazuo  
**4C5-36** Development of Molecular Beacon Probe which is introduced Silylated Cyanopyrene (Grad. Sch. Sci. Tech., Gunma Univ.) ○TOKITA, Kazuki; MORIGUCHI, Tomohisa; SHINOZUKA, Kazuo  
**4C5-37** Development of Fluorescent Nucleic Acid Probes Possessing Perylene-dimide Derivatives (Grad. Sch. Eng., Univ. of Hyogo) ○ISHINO, Shunya; TAKADA, Tadao; NAKAMURA, Mitsunobu; YAMANA, Kazushige  
**4C5-38** Development of miRNA detection system by pyrene-modified nucleic acid probes (KIT) ○NAKAJIMA, Kosuke; NISHIMURA, Akane; YAMAYOSHI, Asako; MURAKAMI, Akira; KOBORI, Akio  
**4C5-39** Structural optimization of potassium ion sensing oligonucleotide as an in vivo fluorescence imaging probe of potassium ion (Grad. Sch. Eng., KIT) SAKAMOTO, Naoto; SATO, Shinobu; ○TAKENAKA, Shigeori  
**4C5-40** Synthesis of tetra-substituted ferrocenyl-naphthalene diimide for electrochemical telomerase assay (Grad. Sch. Eng., KIT) ○HAMANAKA, Hisashi; KAJIMA, Atsuhito; SATO, Shinobu; TAKENAKA, Shigeori

Chair: TAKENAKA, Shigeori (15 : 50~16 : 50)

- \* 15:40-15:50: interval for laptop PC connection.(4C5-42, 4C5-43, 4C5-45, 4C5-46, 4C5-47)  
**4C5-42** Development of novel fluorescent probes by utilizing rotaxane structure (Fac. Chem. Materials and Bioeng., Kansai Univ.)  
 ○OKUYAMA, Hitomi; HIRAYAMA, Kenta; ISHINO, Mana; KUZUYA, Akinori; OHYA, Yuichi  
**4C5-43\*** Screening of fluorescent ribonucleopeptide sensors by using fluorophore library (IAE, Kyoto Univ.) ○NAKANO, Shun; TAMURA, Tomoki; CHANG, Young-tae; MORII, Takashi  
**4C5-45** Ester hydrolysis by ribonucleopeptides (IAE, Kyoto Univ.)  
 ○TAMURA, Tomoki; ARIYAMA, Kenta; NAKANO, Shun; MORII, Takashi  
**4C5-46** Screening of a library of metal complex-modified ribonucleopeptides with hydrolytic activity (IAE, Kyoto Univ.) ○ARIYAMA, Kenta; TAMURA, Tomoki; NAKANO, Shun; MORII, Takashi  
**4C5-47** Development of PeT-based hybridization sensor for RNA detection (Gifu Univ.) ○NAKAMOTO, Kosuke; YOKOYAMA, Chika; UENO,

# Room D1

## Chishinkan1 Building 210

## Materials Chemistry

## Thursday, March 24, AM

Chair: HIGUCHI, Masakazu (10 : 00~11 : 00)

- \* 9:50-10:00: interval for laptop PC connection.(1D1-07, 1D1-09, 1D1-11)  
**1D1-07\*\*** Design and Synthesis of Triangular Covalent Organic Framework (PMS, IMS) ○WANG, Ping; JIANG, Donglin  
**1D1-09\*\*** An All sp<sup>2</sup>-Carbon-Based Covalent Organic Framework (PMS, IMS) ○JIN, Enquan; DONGLIN, Jiang  
**1D1-11\*\*** A General Strategy for Highly Luminescent Covalent Organic Frameworks Based on Aggregation-Induced Emission (MMS, IMS)  
 ○DALAPATI, Sasanka; JIANG, Donglin

Chair: SHIRAKI, Tomohiro (11 : 10~12 : 10)

- \* 11:00-11:10: interval for laptop PC connection.(1D1-14, 1D1-16, 1D1-18)  
**1D1-14\*\*** Proton conductivity in covalent organic frameworks (PMS, IMS)  
 ○TAO, Shanshan; JIANG, Donglin  
**1D1-16\*\*** Highly Photofunctional Porous Organic Polymer Films (MMS, IMS) ○GU, Cheng; JIANG, Donglin  
**1D1-18\*\*** Covalent Organic Frameworks for Carbon Dioxide Uptake (PMS, IMS) ○ZHAI, Lipeng; JIANG, Donglin

## Thursday, March 24, PM

Chair: IMOTO, Hiroaki (13 : 20~14 : 20)

- \* 13:10-13:20: interval for laptop PC connection.(1D1-27, 1D1-29, 1D1-31)  
**1D1-27\*\*** Controlled assembly structure of polythiophene by coordination nanospaces (Grad. Sch. Eng., Kyoto Univ.) ○KITAO, Takashi; MACLEAN, Michael; UEMURA, Takashi; KITAGAWA, Susumu  
**1D1-29\*** Development of anisotropically deforming materials prepared via crystal crosslinking method (Fac. Sci., Hokkaido Univ.) ○KOKADO, Kenta; ISHIWATA, Takumi; SADA, Kazuki  
**1D1-31\*** Synthesis and application of cage octasilicate containing polymers (Fac. Sci. Technol., Tokyo Univ. of Sci.) ○IGARASHI, Takahiro; TSUKADA, Satoru; GUNJI, Takahiro

Chair: KOKADO, Kenta (14 : 30~15 : 30)

- \* 14:20-14:30: interval for laptop PC connection.(1D1-34, 1D1-35, 1D1-36, 1D1-37, 1D1-38, 1D1-39)  
**1D1-34** Synthesis and Redox Properties of Viologen Derivative-Grafting Porous Coordination Polymer (Grad. Sch. Eng., Kyoto Univ.)  
 ○KURIBAYASHI, Takaki; HIGUCHI, Masakazu; KITAGAWA, Susumu  
**1D1-35** Preparation of porous dielectric materials using core-shell nanoparticles (Sch. Eng., Univ. of Hyogo) ○TOMITA, Yasunari; KAKIBE, Takeshi; KISHI, Hajime; KOBUNE, Masafumi  
**1D1-36** Strong adhesion between hydrogels utilizing intercalation of organic guest to inorganic host. (Fac. Eng., Niigata Univ.) ○TAMESUE, Shingo; YASUDA, Kento; NOGUCHI, Shingo; MITSUMATA, Tetsu; TSUBOKAWA, Norio; YAMAUCHI, Takeshi  
**1D1-37** Synthesis and characterization of inorganic-organic hybrid nanoporous materials derived from siloxane-based building units (Grad. Sch. Eng., The Univ. of Tokyo) ○SEO, Shizuka; CHAIKITTISILP, Watcharop; OKUBO, Tatsuya  
**1D1-38\*** Synthesis and Characteristics of Optical Properties of Organic-Inorganic Hybrids for Thermally Stable Mechanofluorochromism (Grad. Sch. Eng., Kyoto Univ.) ○SUENAGA, Kazumasa; TANAKA, Kazuo; CHUJO, Yoshiki  
**1D1-39** Synthesis and reactivity of pentaethoxydisiloxane. (Fac. Sci. Technol., Tokyo Univ. of Sci.) ○ABE, Iori; TSUKADA, Satoru; GUNJI, Takahiro

Chair: HAYAMI, Shinya (15 : 40~16 : 40)

- \* 15:30-15:40: interval for laptop PC connection.(1D1-41)  
**1D1-41 CSJ Award for Creative Works** Development of Functional Diamond Electrodes (Fac. Sci. Tech., Keio Univ.) ○EINAGA, Yasuaki

Chair: HARANO, Koji (16 : 50~17 : 50)

- \* 16:40-16:50: interval for laptop PC connection.(1D1-48, 1D1-50, 1D1-52, 1D1-53)  
**1D1-48\*** Exploration of Novel Carbon Structures (Grad. Sch. Sci., Tohoku Univ.; Institute for Quantum Chemical Exploration; Research Organization of Information and Systems; Fac. Sys. Eng., Wakayama Univ.) ○OHNO, Koichi; SATOH, Hiroko; IWAMOTO, Takeaki; TOKOYAMA, Hiroaki; YAMAKADO, Hideo  
**1D1-50\*** Synthesis of Nitrogen-doped Graphitic Materials through Carboniza-

tion of Covalent Organic Frameworks (Grad. Sch. Eng., Kyushu Univ.; I: CNER, Kyushu Univ.) ○SHIRAKI, Tomohiro; KIM, Gayoung; NAKASHIMA, Naotoshi

**2D1-52** DFT calculations on energetically stable atomic configurations of alkali metals on carbon surface (KIT) ○NISHIMURA, Naoto; YUMURA, Takashi; WAKASUGI, Takashi

**2D1-53** Alkylation of Infusibilized Coal-Tar-Pitch and Subsequent Dehydration by Microwave (Grad. Sch. Sci. Eng., Chuo Univ.; Fac. Sci. Eng., Chuo Univ.; Grad. Sch. Sci., Eng., Saitama Univ.; Osaka Gas Chemicals Co., Ltd) ○YAMAZAKI, Rona; FUJIMOTO, Sho; YAMAGATA, Kenichi; FUKUDA, Takeshi; YAMASHITA, Makoto

### Friday, March 25, PM

Chair: IMAHORI, Hiroshi (13 : 00~14 : 00)

\* 12:50-13:00: interval for laptop PC connection.(2D1-25, 2D1-26, 2D1-27, 2D1-28)

**2D1-25** Design and Synthesis of Semiconductive Subnaphthalocyanines and Electronic Effects of Halogens on Their Physicochemical Properties (Fac. Sci. Eng., Doshisha Univ.) ○TAKAGI, Akuto; MIZUTANI, Tadashi

**2D1-26** Synthesis of Methylated Cyclo-*meta*-phenylene for Application for Highly Efficient Single-layer Organic Light Emitting Devices (Grad. Sch. Sci., Tohoku Univ.; WPI-AIMR, Tohoku Univ.; ERATO, JST; KONICA MINOLTA, INC; RIKEN CEMS) ○YOSHII, Asami; XUE, Jing; IZUMI, Tomoo; IKEMOTO, Koki; KORETSUNE, Takashi; AKASHI, Ryosuke; ARITA, Ryotaro; TAKA, Hideo; KITA, Hiroshi; SATO, Sota; ISOBE, Hiroyuki

**2D1-27** Development of Highly Efficient Single-layer Organic Light-Emitting Devices Composed of Aromatic Hydrocarbon Macrocycles (WPI-AIMR, Tohoku Univ.; ERATO, JST; Grad. Sch. Sci., Tohoku Univ.; KONICA MINOLTA, INC; RIKEN CEMS) ○IKEMOTO, Koki; XUE, Jing; IZUMI, Tomoo; YOSHII, Asami; KORETSUNE, Takashi; AKASHI, Ryosuke; ARITA, Ryotaro; TAKA, Hideo; KITA, Hiroshi; SATO, Sota; ISOBE, Hiroyuki

**2D1-28 CSJ Award for Young Chemists** Morphology Control and Function Exploration of Crystals and Polymer Materials Through Approaches Inspired by Biominerals (Fac. Sci. Tech., Keio Univ.) ○OAKI, Yuya

Chair: UMEYAMA, Tomokazu (14 : 10~15 : 10)

\* 14:00-14:10: interval for laptop PC connection.(2D1-32, 2D1-33, 2D1-34, 2D1-36)

**2D1-32** Ionic Conductive Properties of Liquid Crystalline Organic/Inorganic Hybrid Materials based on Polyoxometalate (Grad. Sch. Life Sci., Ritsumeikan Univ.) ○ITO, Yukiho; WATANABE, Ryohei; YAMADA, Shigeyuki; TSUTSUMI, Osamu

**2D1-33** Synthesis and Magnetic Properties of Chiral Nitroxide Biradical Compounds (Sch. Eng. Sci., Osaka Univ.) ○YAMAZAKI, Taira; AKITA, Takuya; NAKAGAMI, Sho; KIYOHARA, Daichi; UCHIDA, Yoshiaki; NISHIYAMA, Norikazu

**2D1-34\*** New Strategy for Adhesion achieved by CH/π Interactions (Grad. Sch. Eng., Chiba Univ.; Nippon Soda) ○YAMATE, Taiki; SUZUKI, Hiroshi; KUMAZAWA, Kazuhisa; AKAZOME, Motohiro

**2D1-36\*\*** Development of Rigid Building Blocks Bearing a Diamantane-like Core Derived from myo-Inositol (Kinki Univ.) ○OKAMOTO, Shusuke; MIZUNO, Tomonori; SUDO, Atsushi

Chair: UCHIDA, Yoshiaki (15 : 20~16 : 20)

\* 15:10-15:20: interval for laptop PC connection.(2D1-39, 2D1-40, 2D1-41, 2D1-42, 2D1-43, 2D1-44)

**2D1-39** Preparation of polymer nanofibers by wet spinning using anodic porous alumina (Grad. Sch. Urban Environmental Sci., TMU) ○TSUNASHIMA, Kaori; YANAGISHITA, Takashi; MASUDA, Hideki

**2D1-40** High throughput preparation of inorganic nanofibers using anodic porous alumina (Grad. Sch. Urban Environmental Sci., TMU) ○YANAGISHITA, Takashi; TAKAI, Hideaki; MASUDA, Hideki

**2D1-41** Synthesis and Photophysical Properties of Covalently-Linked Pyrene-Graphene Composites (Grad. Sch. Eng., Kyoto Univ.) ○UMEYAMA, Tomokazu; BAEK, Jinseok; IMAHORI, Hiroshi

**2D1-42\*** Transition Metal Dichalcogenide Films Prepared by Electrophoretic Deposition and Their Photoelectrochemical Properties (Grad. Sch. Eng., Kyoto Univ.) ○BAEK, Jinseok; UMEYAMA, Tomokazu; IMAHORI, Hiroshi

**2D1-43** Synthesis and Photophysical Properties of Covalently Linked Polycyclic Aromatic Hydrocarbon-Porphyrin Systems (Grad. Sch. Eng., Kyoto Univ.) HANAOKA, Takuma; ○UMEYAMA, Tomokazu; IMAHORI, Hiroshi

**2D1-44** Preparation of highly-stable n-type SWNTs coordinated with Aryl Crown Ether Complexes (Grad. Sch. Mat. Sci., NAIST) ○IKEDA, Tomohiro; NONOGUCHI, Yoshiyuki; KAWAI, Tsuyoshi

Chair: MURATSUGU, Satoshi (16 : 30~17 : 20)

\* 16:20-16:30: interval for laptop PC connection.(2D1-46, 2D1-47, 2D1-48, 2D1-49)

**2D1-46** Preparation of gold nanoparticle with an azabismocine skeleton and its reactivity near the gold surface. (Tokyo Nat. Coll. of Tech.) ○ONO,

Takeya; SHIMADA, Shigeru; MACHIDA, Shigeru

**2D1-47** A Study on Decomposition Behavior of Thermally-resistant Gold Nanoparticles (Tokyo Nat. Coll. of Tech.) ○KAI, Tomokuni; MACHIDA, Shigeru

**2D1-48** Effect of alkylphthalocyanine dicarboxylic acid on one-pot synthesis of TiO<sub>2</sub> nano particles encapsulating liquid crystalline phthalocyanine semiconductor (IFMRI, AIST) ○MATSUMOTO, Hiroki; TAKASE, Kazutaka; OHTANI, Masataka; KOBIRO, Kazuya; SHIMIZU, Yo

**2D1-49\*** Preparation of metal nanoparticles using reducibility of silicon nanosheet (Toyota Central R&D Labs., Inc.) ○HASHI, Masataka; YAOKAWA, Ritsuko; NAKANO, Hideyuki

Chair: NONOGUCHI, Yoshiyuki (17 : 30~18 : 10)

\* 17:20-17:30: interval for laptop PC connection.(2D1-52, 2D1-53, 2D1-54)

**2D1-52** Thin film transistors using highly semiconductor enriched single wall carbon nanotube-polymer complex (Toray Industries, Inc.) ○SHIMIZU, Hiroji; WAKITA, Junji; MURASE, Seiichi

**2D1-53** Reaction-mechanism analysis on the CNT Growth by floating-catalyst CVD process using <sup>13</sup>C carbon source (Toray Industries, Inc.) ○HIRAI, Takayoshi; HONDA, Shirou; KUWAHARA, Yuki; SAITO, Takeshi

**2D1-54\*** Preparation and catalytic property of carbon nanotube attached Pt nanocluster catalysts based on Pt4 complex - polypyrrole - carbon nanotube composites (Grad. Sch. Sci., Nagoya Univ.; RCMS, Nagoya Univ.) ○MURATSUGU, Satoshi; MIYAMOTO, Shota; TADA, Mizuki

### Saturday, March 26, AM

Chair: TAHARA, Keishiro (9 : 00 ~10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(3D1-01, 3D1-02, 3D1-04, 3D1-06)

**3D1-01** Construction and characterization of Organic TFT fabricated with Poly-L-Lactic Acid (Grad. Sch. Adv. Integration Sci., Chiba Univ.) ○OKA, Kaoru; MATUMOTO, Tomoaki; NOBESIMA, Daiki; UEMURA, Sei; YOSIDA, Manabu; KAMATA, Toshihide; NAKAMURA, Kazuki; KOBAYASHI, Norihisa

**3D1-02\*** Composite Structure by Metal-polyiodide, I<sub>3</sub><sup>-</sup>, within Hydrophilic Polymer [VIII]; Ionic Diffusion in Ordered Polymers or Charge Transfer Applied with Oriented Ions. (KURRI) ○KAWAGUCHI, Akio

**3D1-04\*\*** Novel poly(ionic liquid)s with poly(ethylene glycol) main chain (Pol. Mater. Unit, NIMS) ○IKEDA, Taichi; MORIYAMA, Satoshi; KIM, Jedeok

**3D1-06** Molecular orientation induced by photopolymerization with non-polarized light (Chem. Res. Lab., Tokyo Tech) ○KURATA, Yosuke; HISANO, Kyohei; AIZAWA, Miho; SHISHIDO, Atsushi

Chair: HIRAI, Kenji (10 : 10~11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(3D1-08, 3D1-10, 3D1-12)

**3D1-08\*** Synthesis of four-armed star polymers having cleavable and reformable chemical bondings and their dynamic molecular topological conversion (Grad. Sch. Arts and Sci., The Univ. of Tokyo) ○HONDA, Satoshi; TOYOTA, Taro

**3D1-10\*\*** Kinetic Supramolecular Polymerization and Control over Aggregate Size in Europium Complexes Possessing High Circular Polarization in Luminescence (Grad. Sch. Mat. Sci., NAIST) ○KUMAR, Jatish; YUASA, Junpei; KAWAI, Tsuyoshi

**3D1-12\*** Effect of Organic Additives on Carbon Nanotube Dispersion Using Inorganic Salts (Fac. Eng. Resource Sci., Akita Univ.) ○MATSUMOTO, Kazuya; SHIBATA, Ayumi; JIKEI, Mitsutoshi

Chair: SAKAMOTO, Ryota (11 : 20~12 : 20)

\* 11:10-11:20: interval for laptop PC connection.(3D1-15, 3D1-16, 3D1-17, 3D1-19)

**3D1-15\*** Redox Active Metal-Organic Framework Brings New Mechanism to the Lithium Batteries (RCMS, Nagoya Univ.) ○ZHANG, Zhongyue

**3D1-16** Vapor-solid interfacial synthesis and electrochemical properties of conductive polymers on the surface of an organic oxidant crystal (Fac. Sci. Tech., Keio Univ.) ○MASAKI, Hirotaka; SATO, Kosuke; KUWABARA, Kento; OAKI, Yuya; IMAI, Hiroaki

**3D1-17\*** Synthesis of quinone derivative/polypyrrole composites by polymerization on solid-liquid interface and their application to redox capacitor (Fac. Sci. Tech., Keio Univ.) ○SATO, Kosuke; OAKI, Yuya; IMAI, Hiroaki

**3D1-19\*\*** Fabrication of a transition metal complex-supported carbon electrode by using an ionic liquid and its application for electrochemical synthesis of ammonia (Grad. Sch. Eng., Nagoya Inst. of Tech.) ○KATAYAMA, Akira; INOMATA, Tomohiko; OZAWA, Tomohiro; MASUDA, Hideki

### Saturday, March 26, PM

Chair: AKAMATSU, Kensuke (13 : 30~14 : 30)

\* 13:20-13:30: interval for laptop PC connection.(3D1-28, 3D1-30, 3D1-32)

**3D1-28\*\*** Thermal Oxidation of a Coordination Complex Coupled with Gas Generation for an Anion-Doped Mesoporous Metal Oxide (Grad. Sch. Sci., Hokkaido Univ.) ○HIRAI, Kenji; ISOBE, Shigehito; SADA, Kazuki

**3D1-30\*** Synthesis of ultrasmall Li-Mn spinel nanoparticles by controlling the hydration of Li<sup>+</sup> in an organic solvent (Grad. Sch. Eng., The Univ. of

Tokyo) OMIYAMOTO, Yumi; KURODA, Yoshiyuki; UEMATSU, Tsubasa; OSHIKAWA, Hiroyuki; SHIBATA, Naoya; IKUHARA, Yuichi; SUZUKI, Kosuke; HIBINO, Mitsuhiro; YAMAGUCHI, Kazuya; MIZUNO, Noritaka

**3D1-32<sup>#</sup>** Ultrafine titanate nanowires with strontium ion exchange properties (WPI-AIMR, Tohoku Univ.) OISHIKAWA, Yoshifumi; TSUKIMOTO, Susumu; NAKAYAMA, Koji; ASAO, Naoki

Chair: NAKASHIMA, Naotoshi (14 : 40~15 : 40)

\* 14:30-14:40: interval for laptop PC connection.(3D1-35, 3D1-37, 3D1-39)

**3D1-35\*** Control of porous carbon structure using porous coordination polymers (Lion corporation; Grad. Sch. Eng., Kyoto Univ.) OFUJIWARA, Yuichi; HORIKE, Satoshi; SUGIYAMA, Takashi; TOBORI, Norio; KITAGAWA, Susumu

**3D1-37\*** The elucidation of the oxidation mechanism of graphite by potassium permanganate (RCIS, Okayama Univ.) OMORIMOTO, Naoki; TAKEUCHI, Yasuo; NISHINA, Yuta

**3D1-39<sup>#</sup>** Tailoring the Oxygen Content of Graphene Oxide for Specific Applications (RCIS, Okayama Univ.) ONISHINA, Yuta; MORIMOTO, Naoki

Chair: XU, Qiang (15 : 50~16 : 50)

\* 15:40-15:50: interval for laptop PC connection.(3D1-42, 3D1-44, 3D1-45, 3D1-46)

**3D1-42<sup>#</sup>** Emergence of Highly Active Oxygen Electrocatalytic Activities in Nanostructured Carbon-, Nitrogen-Compounds: Synthetic Strategy and Electrode Process (MANA, NIMS; GREEN, NIMS) OSAKAUSHI, Ken; ANTONIETTI, Markus; UOSAKI, Kohei

**3D1-44** Electrochemical oxidation of carbon monoxide on metal doped covalent organic framework (Grad. Sch. Eng., The Univ. of Tokyo) OYAMAGUCHI, Shingi; KAMIYA, Kazuhide; NAKANISHI, Shuji; HASHIMOTO, Kazuhito

**3D1-45** Chemically modified nanodiamond particles for MRI contrast agents (AIST; Tokai Univ.; Grad. Sch. Sci. Tech., Keio Univ.) ONAKAMURA, Takako; OHANA, Tsuguyori; TSUCHIYA, Tetsuo; MATSUMOTO, Tomohiro; SUZUKI, Tetsuya; HASEBE, Terumitsu

**3D1-46\*** Post-synthetic process of carbon nanotube with current and heating for thermal and electrical properties improvement (NTRC, AIST) OMATSUMOTO, Naoyuki; OSHIMA, Azusa; SAKURAI, Shunsuke; FUTABA, Don; YUMURA, Motoo; HATA, Kenji

Chair: INOMATA, Tomohiko (17 : 00~18 : 00)

\* 16:50-17:00: interval for laptop PC connection.(3D1-49, 3D1-51, 3D1-52, 3D1-53, 3D1-54)

**3D1-49\*** Structure and properties of titanium phosphonate clusters (Fac. Sci. Technol., Tokyo Univ. of Sci.) OHAYAMI, Ryohei; TSUKADA, Satoru; GUNJI, Takahiro

**3D1-51** Preparation of metal nano-needles using ion-track membranes (QBSC, JAEA) OKOSHIKAWA, Hiroshi; YAMAMOTO, Shunya; SUGIMOTO, Masaki; KITAMURA, Akane; SAWADA, Shinichi; YAMAKI, Tetsuya

**3D1-52** Synthesis of amino-substituted task-specific ionic liquids and their extraction ability of platinum group metal ions (IMRAM, Tohoku Univ.) OMIYAZAKI, Atsushi; MA, Su; FUNAKI, Kenji; KANIE, Kiyoshi; MURAMATSU, Atsushi

**3D1-53** Development of ionic liquid for next generation memory device (Grad. Sch. Eng., Tottori Univ.) OTOJO, Shota; HARADA, Akinori; YAMAOKA, Hiroki; WATANABE, Kouhei; SAKAGUCHI, Atsushi; KINOSHITA, Kentaro; NOKAMI, Toshiaki; ITOH, Toshiyuki

**3D1-54** Extraction of lignin from the biomass using a mixed solvent system of amino acid ionic liquids with nonprotic polar solvent (Fac. Eng., Tottori Univ.) OTAKESHITA, Tokio; NOKAMI, Toshiaki; ITOH, Toshiyuki

## Sunday, March 27, AM

Chair: KANEKO, Yoshiro (9 : 00 ~ 10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(4D1-01, 4D1-02, 4D1-03, 4D1-04, 4D1-05)

**4D1-01<sup>#</sup>** Fabrication of silica with nanogroove structures at the interface between Si substrates and lyotropic liquid crystals (Grad. Sch. Advanced Sci. Eng., Waseda Univ.; Kagami Memorial Research Inst. Materials Sci. Tech., Waseda Univ.) OHARA, Shintaro; KOBAYASHI, Maho; SHIMOJIMA, Atsushi; WADA, Hiroaki; KURODA, Kazuyuki

**4D1-02** Synthesis and property of high temperature resistance chiral metal oxides (Grad. Sch. Eng., Kanagawa Univ.) OSUGIMOTO, Masumi; KAIKAKE, Katsuya; JIN, Ren-hua

**4D1-03** Synthesis and chiral functionality of Ag/silica hybridized chiral materials (Grad. Sch. Eng., Kanagawa Univ.) OTSUNEGA, Seiji; YAO, Dong-dong; KAIKAKE, Katsuya; JIN, Ren-hua

**4D1-04<sup>#</sup>** Preparation of Silica-Au Colloidal Superlattice Crystals by Forming Au Nanoparticles in Interstices of Silica Colloidal Crystals (Grad. Sch. Advanced Sci. Eng., Waseda Univ.; Kagami Memorial Research Inst. Materials Sci. Tech., Waseda Univ.) OMORI, Seiya; YAMAMOTO, Eisuke; SHIMOJIMA, Atsushi; WADA, Hiroaki; KURODA, Kazuyuki

**4D1-05<sup>#</sup>** Oxygen Activation and Dissociation on Transition Metal Free

Perovskite Surfaces (Kyushu Univ.) OSTAYKOV, Aleksandar; TELLEZ, Helena; AKBAY, Taner; DRUCE, John; ISHIHARA, Tatsumi; KILNER, John

Chair: TANAKA, Kazuo (10 : 10~11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(4D1-08, 4D1-09, 4D1-10, 4D1-11, 4D1-13)

**4D1-08** Indirect electrodeposition of titanium dioxide films from aqueous solution (Osaka Municipal Technical Research Institute) OCHIGANE, Masaya; TANI, Jun-ichi; SHINAGAWA, Tsutomu

**4D1-09** Preparation of Magnesium Silicide and Silicon from Porous Silica Glass through Magnesium Reduction (KIT) OKADONO, Kohei; UEHIRA, Kenta; OKADA, Arifumi; SHIOMI, Haruhisa; WAKASUGI, Takashi

**4D1-10<sup>#</sup>** Preparation of Single-Crystalline Mesoporous Quartz Superlattice Using Flux Confined in Nanospace (WIAS; Grad. Sch. Advanced Sci. Eng., Waseda Univ.; Kagami Memorial Research Inst. Materials Sci. Tech., Waseda Univ.) OKURODA, Yoshiyuki; MATSUNO, Takamichi; KITAHARA, Masaki; SHIMOJIMA, Atsushi; WADA, Hiroaki; KURODA, Kazuyuki

**4D1-11<sup>#</sup>** Chemical modification of poly(ethylene terephthalate) fabric by means of  $\gamma$ -irradiation (Fac. Edu., Shizuoka Univ.) OYAGI, Tatsuhiko; TOYOSHIMA, Yukie; SAWATARI, Chie

**4D1-13** Glucamine-Based Low-Molecular-Weight Hydrogelators for Thixotropic Hydrogels (KASTEK, Kyushu Univ.; FIT) OHSEDO, Yutaka; OONO, Masaji; SARUHASHI, Koichiro; WATANABE, Hisayuki

Chair: SHIMOJIMA, Atsushi (11 : 20~12 : 20)

\* 11:10-11:20: interval for laptop PC connection.(4D1-15, 4D1-16, 4D1-17, 4D1-18, 4D1-19, 4D1-20)

**4D1-15** Synthesis of siloxane copolymer using polysiloxane prepared from cyclic siloxane (Fac. Sci. Technol., Tokyo Univ. of Sci.) OHISA, Takayuki; ABE, Yoshimoto; TSUKADA, Satoru; GUNJI, Takahiro

**4D1-16** Evaluation of porosity and gas separation properties of cage silsesquioxane and silicate membrane (Grad. Sch. Eng., Hiroshima Univ.) OYAMAMOTO, Kazuki; KOGE, Sayako; OHSHITA, Joji; TSURU, Toshinori; KAI, Hiroyuki; GUNJI, Takahiro

**4D1-17** Synthesis and Optical Properties of POSS with Highly-Integrated Chromophore (Sch. Eng., Kyoto Univ.) OSATO, Keita; GON, Masayuki; TANAKA, Kazuo; CHUJO, Yoshiki

**4D1-18** Preparation of arylphosphonic acid-containing polysilsesquioxane free-standing films (Fac. Sci. Technol., Tokyo Univ. of Sci.) OFUJII, Shintaro; TSUKADA, Satoru; GUNJI, Takahiro

**4D1-19** Preparation of Structure-controlled Soluble Polysilsesquioxane Containing Phosphonate Side-chain Groups (Grad. Sch. Sci., Eng., Kagoshima Univ.) OHARADA, Akiyuki; OHSHITA, Joji; KANEKO, Yoshiro

**4D1-20** Preferential synthesis of ammonium-group-containing cage-like decasilsesquioxane (Grad. Sch. Sci., Eng., Kagoshima Univ.) OIMAI, Kenta; KANEKO, Yoshiro

## Sunday, March 27, PM

Chair: TSURUOKA, Takaaki (13 : 30~14 : 30)

\* 13:20-13:30: interval for laptop PC connection.(4D1-28, 4D1-29, 4D1-30, 4D1-31, 4D1-32)

**4D1-28** Development of surface coat zinc oxide for cosmetics (Sumitomo Osaka Cement Company, Limited) OMORISHITA, Norito

**4D1-29** Preparation of Tb<sup>3+</sup>-doped Ta<sub>2</sub>O<sub>5</sub> fluorescent spherical particles by W/O emulsion method (Grad. Sch. Life Sci., Ritsumeikan Univ.) OKU, Shohei; FUJIOKA, Daiki; SANADA, Tomoe; WADA, Noriyuki; TANAKA, Atsushi; KOJIMA, Kazuo

**4D1-30** Mechanochemical synthesis of SrAl<sub>2</sub>O<sub>4</sub> glass-ceramics with long afterglow luminescence (Grad. Sch. Eng., Osaka Pref. Univ.; Sharp Corp.) HAYASHI, Akitoshi; SATOFUKA, Yuki; NAGAO, Kenji; TSUJIGUCHI, Masato; UTSUMI, Yoshihiko; KAKIMORI, Nobuaki; TATSUMISAGO, Masahiro

**4D1-31** Influence of calcination temperature on structure and optical properties of Ca<sub>4</sub>Bi<sub>6</sub>O<sub>13</sub> prepared by citric acid complex method (Univ. of Miyazaki) OOBUKURO, Yuki; YAMADA, Hiroshi; MATSUSHIMA, Shigenori; OBATA, Kenji; KOBAYASHI, Kenkichi; SAKAI, Go

**4D1-32\*** Synthesis of Metal Oxides by Using Plasma in Liquid and Their Functions (Grad. Sch. Eng., Hokkaido Univ.; Grad. Sch. Eng., Nagoya Univ.) OYONEZAWA, Tetsu; TSUKAMOTO, Hiroki; MOTONO, Shingo; DOSHIN, Wataru; ISHIDA, Yohei; TOKUNAGA, Tomoharu

Chair: HORIKE, Satoshi (14 : 40~15 : 40)

\* 14:30-14:40: interval for laptop PC connection.(4D1-35, 4D1-37, 4D1-38, 4D1-39, 4D1-40)

**4D1-35\*** Preparation and Morphology Control of Metal-Organic Frameworks at Interface Between Different Phases (FIRST, Konan Univ.) OTSURUOKA, Takaaki; MANTANI, Koji; MATSUYAMA, Tetsuhiro; MIYANAGA, Ayumi; YAMADA, Rikuto; TAKASHIMA, Yohei; AKAMATSU, Kensuke

**4D1-37** Site Selective Growth of Metal-Organic Frameworks Thin Films on Metal Ions-Doped Polymer Film (FIRST, Konan Univ.) OMATSUYAMA, Tetsuhiro; MANTANI, Koji; TSURUOKA, Takaaki; TAKASHIMA, Yohei;

AKAMATSU, Kensuke

- 4D1-38** Role of capping agent on the synthesis of Ag NWs in mono alcohol reduction system (Sch. Eng., The Univ. of Shiga Pref.) ○SUGIYAMA, Shintaro; CUYA, Jhon; IDA, Shohei; KODAMA, Daisuke; SATO, Kimitaka; MIYAMURA, Hiroshi; HIROKAWA, Yoshitsugu; BALACHANDRAN, Jeyadevan
- 4D1-39** Selective preparation of a single structured cyclic tetrasiloxane containing ammonium side-chain groups capable of forming two-dimensional layered aggregate (Grad. Sch. Sci., Eng., Kagoshima Univ.; Osaka Municipal Technical Research Institute) ○HIROHARA, Tomotada; WATASE, Seiji; MATSUKAWA, Kimihiro; KANEKO, Yoshiro
- 4D1-40** Synthesis and Property of Optically Functional Prussian Blue Nanoparticles (Grad. Sch. Adv. Integration Sci., Chiba Univ.) ○TATEJIMA, Seitarou; NAKAMURA, Kazuki; SHIBA, Fumiyuki; OOKAWA, Yuusuke; KOBAYASHI, Norihisa

Chair: TAKASHIMA, Yohei (15 : 50~16 : 30)

\* 15:40-15:50: interval for laptop PC connection.(4D1-42, 4D1-43, 4D1-44, 4D1-45)

- 4D1-42** High yield synthesis of copper nanowires using polyol process (Sch. Eng., The Univ. of Shiga Pref.) ○URUSHIZAKI, Iori; CUYA, Jhon; MIYAMURA, Hiroshi; BALACHANDRAN, Jeyadevan
- 4D1-43** One-pot synthesis of Ni coated Cu nanowires by alcohol reduction system (Sch. Eng., The Univ. of Shiga Pref.) ○ISHIJIMA, Masanao; CUYA, Jhon; MIYAMURA, Hiroshi; BALACHANDRAN, Jeyadevan
- 4D1-44** Formation of Nanowires by High-Energy Single Particle-Triggered Linear Polymerization of Solid-State Aromatic Amines (Sch. Eng., Osaka Univ.) ○HORIO, Akifumi; SAKURAI, Tsuneki; SEKI, Shu
- 4D1-45** Effect of reflux time and ethanol content on crystal structures in nickel hydroxide nanosheets (Grad. Sch. Eng., Mie Univ.) ○AZUMA, Saori; HATANO, Kazuya; KOSHIO, Akira; KOKAI, Fumio

## Room D2

### Chishinkan1 Building 211

### Functions of Materials

Thursday, March 24, AM

Chair: NOBUOKA, Kaoru (10 : 00~11 : 00)

- \* 9:50-10:00: interval for laptop PC connection.(1D2-07, 1D2-09, 1D2-11)
- 1D2-07\*** Protein transduction by organic-inorganic hybrid nanogel carrier (Grad. Sch. Eng., Kyoto Univ.) ○KAWASAKI, Riku; SASAKI, Yoshihiro; KATAGIRI, Kiyofumi; SAWADA, Shinichi; AKIYOSHI, Kazunari
- 1D2-09\*** Synthesis, fabrication of nanoparticles, and hydrolysis behavior of fatty acid derivatives of anticancer agent SN-38 (IMRAM, Tohoku Univ.) ○KOSEKI, Yoshitaka; IKUTA, Yoshikazu; KAMISHIMA, Takaaki; ONODERA, Tsunenobu; OIKAWA, Hidetoshi; KASAI, Hitoshi
- 1D2-11\*** Self-assembled Glyco Capsules for Artificial nano-organelles. (Grad. Sch. Eng., Kyoto Univ.) ○NISHIMURA, Tomoki; MUKAI, Sada-atsu; SAWADA, Shinichi; SASAKI, Yoshihiro; AKIYOSHI, Kazunari

Chair: KASAI, Hitoshi (11 : 10~12 : 00)

- \* 11:00-11:10: interval for laptop PC connection.(1D2-14, 1D2-15, 1D2-16, 1D2-17, 1D2-18)
- 1D2-14** Property of Human(Hemoglobin-Albumin) Cluster as an Artificial Oxygen Carrier (Fac. Sci. Eng., Chuo Univ.) ○IWASAKI, Hitomi; KOMATSU, Teruyuki
- 1D2-15** Synthesis and Oxygen-Binding Property of (Hemoglobin-Recombinant Canine Serum Albumin) Cluster (Fac. Sci. Eng., Chuo Univ.) ○KUREISHI, Moeka; YAMADA, Kana; AKIYAMA, Motofusa; KOMATSU, Teruyuki
- 1D2-16** Development of the hydrophobically-modified gelatin sealant with soft tissue penetration (MANA, NIMS) ○MIZUNO, Yosuke; MIZUTA, Ryo; HASHIZUME, Mineo; TAGUCHI, Tetsushi
- 1D2-17** Chemical Modification of Exfoliated Carbon Fibers for Anticancer Drug Delivery Carriers (Grad. Sch. Eng., Oita Univ.) ○MORIKAWA, Yumi; NOBUOKA, Kaoru; KITAOKA, Satoshi; TOYODA, Masahiro; ISHIKAWA, Yuichi
- 1D2-18** Transfection with cationized gold nanorods (Sch. Eng., Kyoto Univ.) ○NAKATSUJI, Hirotaka; IMAHORI, Hiroshi; MURAKAMI, Tatsuya

Thursday, March 24, PM

Chair: FUJIGAYA, Tsuyohiko (13 : 10~14 : 10)

- \* 13:00-13:10: interval for laptop PC connection.(1D2-26, 1D2-27, 1D2-28, 1D2-29, 1D2-30, 1D2-31)
- 1D2-26** Thermovoltic cell that uses host-guest interaction of cyclodextrin and the improvement of the Seebeck coefficient (Fac. Eng., Kyushu Univ.)

○ZHOU, Hongyao; YAMADA, Tepei; KIMIZUKA, Nobuo

- 1D2-27** Construction of Thermovoltic Cell based on Choline iodide used as Solid electrolyte (Grad. Sch. Eng., Kyushu Univ.; CMS, Khushu Univ.; PRESTO, JST) ○SHIMONO, Tomoya; YAMADA, Tepei; KIMIZUKA, Nobuo
- 1D2-28** Fabrication of ionomer based polymer actuators using a stretchable flexible electrode material (Grad. Sch. Eng., Univ. of Fukui) ○SHOJI, Eiichi
- 1D2-29** Fabrication of the patterned composite electrode material by the ion beam irradiation (Wakasa wan Energy Research Center) ○HATASHITA, Masanori; SHOJI, Eiichi
- 1D2-30** Development of Upconversion Emitting Devices Utilizing Organic Photovoltaic Conversion (IFRC, Kyushu Univ.; Grad. Sch. Eng., Kyushu Univ.) ○TACHIBANA, Hiroki; HIDAKA, Yu; AIZAWA, Naoya; YASUDA, Takuma
- 1D2-31** Solution Phase Synthesis and Photoelectrochemical Properties of  $(\text{Cu}_{1-x}\text{Ag}_x)_2\text{ZnSnS}_4$  Nanoparticles (Grad. Sch. Eng., Nagoya Univ.) ○KAKUDO, Ryosuke; KAMEYAMA, Tatsuya; KUWABATA, Susumu; TORIMOTO, Tsukasa

Chair: KIMURA, Mutsumi (14 : 20~15 : 20)

- \* 14:10-14:20: interval for laptop PC connection.(1D2-33, 1D2-34, 1D2-35, 1D2-36, 1D2-38)
- 1D2-33** Mechanism clarification of upconversion emission enhancement based on the excitation of localized surface plasmon resonance (Grad. Sch. Sci. Tech., Nihon Univ.; Coll. Sci. Tech., Nihon Univ.) ○JIN, Shota; TAKESHIMA, Naoto; SUGAWA, Kosuke; OTSUKI, Joe
- 1D2-34\*** Fabrication and Thermoelectric Characterizations of Carbon Nanotube/UV-curable Resin. (Grad. Sch. Eng., Kyushu Univ.) ○HUANG, Wenxin; FUJIGAYA, Tsuyohiko; NAKASHIMA, Naotoshi
- 1D2-35** Photocatalysis characteristics of organic p-n bilayer of perylene derivative and cobalt phthalocyanine (Grad. Sch. Sci. Tech., Hirosaki Univ.; FRIS, Tohoku Univ.; Chem. Res. Lab., Tokyo Tech) ○OKUMURA, Masato; KIKUCHI, Yuko; ITOH, Takashi; NAGAI, Keiji; ABE, Toshiyuki
- 1D2-36\*** Development of Photon Energy Storage and Thermal Conversion System Using a Liquid Azobenzene Derivative (Grad. Sch. Eng., Kyushu Univ.; CMS, Khushu Univ.) ○MORIKAWA, Masa-aki; MASUTANI, Kouta; KIMIZUKA, Nobuo
- 1D2-38\*** Synthesis of Liquid Arylazopyrazole Derivatives and Their Photo- and Thermal-isomerization Properties (Grad. Sch. Eng., Kyushu Univ.; CMS, Khushu Univ.) ○YANG, Hanyu; ISHIBA, Keita; MORIKAWA, Masa-aki; KIMIZUKA, Nobuo

Chair: AKIYAMA, Motofusa (15 : 30~16 : 30)

- \* 15:20-15:30: interval for laptop PC connection.(1D2-40, 1D2-42, 1D2-44)
- 1D2-40\*** Photocurrent enhancement of porphyrin using optical antenna based on plasmonic copper arrays (Coll. Sci. Tech., Nihon Univ.) ○SUGAWA, Kosuke; YAMAGUCHI, Daisuke; OTSUKI, Joe
- 1D2-42\*\*** Opto-electronic considerations for High performance Cesium Lead Halide Perovskite Solar Cells. (KIT) ○RIPOLLES, Teresa; HAMADA, Kengo; OGOMI, Yuhei; SHEN, Qing; HAYASE, Shuzi
- 1D2-44\*** Novel Zn Phthalocyanine-based Panchromatic Dyes for Dye-Sensitized Solar Cells (Grad. Sch. Sci. Technol., Shinshu Univ.) ○YAMAMOTO, Satoshi; KIMURA, Mutsumi

Chair: MORIKAWA, Masa-aki (16 : 40~17 : 20)

- \* 16:30-16:40: interval for laptop PC connection.(1D2-47, 1D2-49)
- 1D2-47\*\*** Construction of Plasmonic Photoenergy Conversion Electrodes using Distinct Size of PbS Quantum Dots Coupled with Au Nanoparticles towards Multiple Exciton Generation (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) ○LI, Xiaowei; TODA, Takahiro; MINAMIMOTO, Hiro; MURAKOSHI, Kei
- 1D2-49\*** Photooxidation Studies on  $\text{DTS}(\text{FBTTh}_2)_2$  Fullerene Thin Films for Organic Photovoltaic Cell (RISC, AIST; RCPV, AIST; JASRI) ○YAMANE, Shogo; SUZUKI, Yasumasa; MIYADERA, Tetsuhiko; CHIKAMATSU, Masayuki; YOSHIDA, Yuji; KOGANEZAWA, Tomoyuki; ARAI, Koji; AKIYAMA, Yuki; SUDA, Hiroyuki; MIZUKADO, Junji

Chair: NAGAI, Keiji (17 : 30~18 : 10)

- \* 17:20-17:30: interval for laptop PC connection.(1D2-52, 1D2-54)
- 1D2-52\*** Developments of Electron-accepting  $\pi$ -Conjugated Compounds for Organic Photovoltaics: The Correlation between Thin-film Properties and Photovoltaic Characteristics. (ISIR, Osaka Univ.) ○JINNAI, Seihou; IE, Yutaka; ASO, Yoshio
- 1D2-54\*\*** Photofunctionality of highly-crystalline molecular nanosheets with well-defined nanopores (Grad. Sch. Eng., Osaka Pref. Univ.) ○MAKIURA, Rie

### Asian International Symposium -Advanced Nanotechnology-

Friday, March 25, PM

Chair: Seki, Takahiro (13 : 20~14 : 40)

- 2D2-27\*** Opening Remarks (Kyusyu Univ.) Kimizuka, Nobuo (13:20~

13:30)

- 2D2-28<sup>#</sup> Keynote Lecture** Organically-Capped Metal Nanoparticles for Soft Plasmonics and Soft Electronics (Monash Univ., Australia) Cheng, Wenlong (13:30~14:00)
- 2D2-31<sup>#</sup> Invited Lecture** Precise Nanostructural Control of Binary Metallic Nanoparticles (Kyoto Univ.) Sato, Ryota (14:00~14:20)
- 2D2-33<sup>#</sup> Invited Lecture** Nanotechnology for fine electron manipulation (NIMS) Sato, Norifusa (14:20~14:40)

Chair: Teranishi, Toshiharu (14 : 40~16 : 10)

- 2D2-35<sup>#</sup> Invited Lecture** Photon Upconversion in Self-assembled Supramolecular Organogels (Chinese Academy of Sciences, P.R.China) Duan, Pengfei (14:40~15:00)
- 2D2-37<sup>#</sup> Invited Lecture** Potential Distribution Design of Dendritic Structures and Applications in Materials Chemistry (Tokyo Tech.) Albrecht, Ken (15:00~15:20)
- 2D2-39<sup>#</sup> Keynote Lecture** Self-Healing/Healable Polymeric Films (Jilin Univ., P.R.China) Sun, Junqi (15:20~15:50)
- 2D2-42<sup>#</sup> Invited Lecture** Vertical alignment of azobenzene-containing lyotropic mesophases in sol-gel system (Nagoya Univ.) Hara, Mitsuo (15:50~16:10)

Chair: Oikawa, Hidetoshi (16 : 10~17 : 20)

- 2D2-44<sup>#</sup> Invited Lecture** A Versatile Route to Functional Star Polymers Facilitated by Coordination-Driven Self-Assembly (Kyoto Univ.) Hosono, Nobuhiko (16:10~16:30)
- 2D2-46<sup>#</sup> Invited Lecture** Anomalous anisotropic thermoresponse of NPAAm-based hydrogel enabled by switchable internal electrostatic repulsion (Univ. of Tokyo) Kim, Younsoo (16:30~16:50)
- 2D2-48<sup>#</sup> Invited Lecture** Thermoresponsive Polymer Brushes for Bio-separations (Tokyo Women's Medical Univ.) Nagase, Kenichi (16:50~17:10)
- 2D2-50<sup>#</sup> Concluding Remarks** (Kyusyu Univ.) Katayama, Yoshiki (17:10~17:20)

## Functions of Materials

Saturday, March 26, AM

Chair: OOYA, Tooru (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(3D2-01, 3D2-02, 3D2-03, 3D2-05)
- 3D2-01** Synthesis and production of flexible thin films of perylene derivative bearing cyclotetrasiloxane moieties (Grad. Sch. Eng., Kagawa Univ.)  
○TAKENAMI, Kaede; FUNAHASHI, Masahiro
- 3D2-02** Stabilization of Liquid Crystal Phases of Phthalocyanine Derivatives Bearing Oligosiloxane Moieties by Nanosegregation (Grad. Sch. Eng., Kagawa Univ.) ○YAMAOKA, Ryutarō; FUNAHASHI, Masahiro
- 3D2-03\*** Magnetic Circular Dichroism of Nitroxide Radical Compounds (Grad. Sch. Eng. Sci., Osaka Univ.) ○AKITA, Takuya; UCHIDA, Yoshiaki; NAKAGAMI, Sho; NISHIYAMA, Norikazu
- 3D2-05\*** Polymer Film with Molecular Orientation Directed by Dynamic Lighting (Chem. Res. Lab., Tokyo Tech) ○HISANO, Kyohei; SHISHIDO, Atsushi

Chair: FUNAHASHI, Masahiro (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(3D2-08, 3D2-09, 3D2-11, 3D2-12, 3D2-13)
- 3D2-08** Optical limiting of polymer-stabilized liquid crystal film due to photophysical molecular reorientation (Chem. Res. Lab., Tokyo Tech)  
○KATAYAMA, Erika; WANG, Jing; SHISHIDO, Atsushi
- 3D2-09\*** Development of high-performance cesium strontium adsorbent using the Phase-separating method Porous glass. (Grad. Sch. Fac. Env. and Info. Sci., Yokohama Natl. Univ.) ○NAGASAWA, Hiroshi; SUZUKI, Takahiro; NAGANO, Sho; AMEMIYA, Takashi; ITOH, Kiminori
- 3D2-11** Nanostructured chelate materials composed of comb-like polyamines and metaloxides (Dept. of Material & Life Chem., Kanagawa Univ.)  
○KAIKAKE, Katsuya; AKIYAMA, Shinsuke; JIN, Ren-hua
- 3D2-12** Evaluation of CO<sub>3</sub>-type Mg-Al Layered Double Hydroxide in HCl, SO<sub>2</sub> and NO<sub>x</sub> Treatment (Grad. Sch. Environmental Studies, Tohoku Univ.) ○TOCHINAI, Masahito; KAMEDA, Tomohito; KUMAGAI, Shogo; YOSHIOKA, Toshiaki
- 3D2-13** Surface modification of carbonaceous material containing sulfur and the adsorption capacity for cadmium ion (Fac. Eng., Chiba Univ.)  
○TERADA, Shunpei; AMANO, Yoshimasa; MACHIDA, Motoi; IMAZEKI, Fumio

Chair: SHISHIDO, Atsushi (11 : 20~12 : 00)

- \* 11:10-11:20: interval for laptop PC connection.(3D2-15, 3D2-16, 3D2-17, 3D2-18)
- 3D2-15** Selective adsorption of a component responsible for "hineka" in Japanese sake with supported gold nanoparticles and their mechanism (Fac. Sci., Kyushu Univ.) ○TONE, Misaki; HASEGAWA, Takayuki; YAMAMOTO, Yusuke; MURAYAMA, Haruno; ISHIDA, Tamao; ISOGAI, Atsuko; FUJII, Tsutomu; HONMA, Tetsuo; OKUMURA,

Mitsutaka; FUJITANI, Tadahiro; TOKUNAGA, Makoto

- 3D2-16** Development of CO<sub>2</sub>-adsorbent that works even around 400 ppm at 300 K and its regeneration: CaA-type-zeolite (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○SAKAMOTO, Yuta; ODA, Akira; OHKUBO, Takahiro; KURODA, Yasushige
- 3D2-17** Inclusion Complexation of Cyclodextrins in Aqueous Two-Phase System (Fac. Eng., Kobe Univ.) ○YAMAMOTO, Kazuhiro; OOOYA, Tooru
- 3D2-18** Synthesis and properties of SiO<sub>2</sub>/TiO<sub>2</sub>/Ag hybridized chiral materials (Grad. Sch. Eng., Kanagawa Univ.) ○MURAKAMI, Ken; KAIKAKE, Katsuya; JIN, Ren-hua

## Room D3 Chishinkan1 Building 212

### Functions of Materials

Thursday, March 24, AM

Chair: TSUTSUMI, Osamu (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(1D3-01, 1D3-02, 1D3-03, 1D3-04, 1D3-05, 1D3-06)
- 1D3-01** Photoinduced Shape Changes of Azobenzene-based Photochromic Amorphous Molecular Materials in Agar Gel (Grad. Sch. of Eng., Muroran Inst. of Tech.) ○ICHIKAWA, Ryota; NAKANO, Hideyuki
- 1D3-02** Thermally Reversible Phase Separation and Photoresponse of Azobenzene-based Amorphous Molecular Materials - Poly(vinyl acetate) Hybrid Films (Grad. Sch. of Eng., Muroran Inst. of Tech.)  
○ICHIKAWA, Ryoji; NAKANO, Hideyuki
- 1D3-03** Photoinduced Changes in Phase-separated Structures of Hybrid Films of Azobenzene-based Photochromic Amorphous Molecular Materials with Ionic Liquids (Grad. Sch. of Eng., Muroran Inst. of Tech.) ○IWASHITA, Tomohisa; NAKANO, Hideyuki
- 1D3-04** Photoinduced Macroscopic Morphological Transformation of an Amphiphilic Diarylethene Assembly (Grad. Sch. Eng., Kyoto Univ.; PRESTO, JST) ○HIGASHIGUCHI, Kenji; TAIRA, Genki; KITAI, Jun-ichiro; HIROSE, Takashi; MATSUDA, Kenji
- 1D3-05** The Effect of Intermolecular Interaction on Photoinduced Morphological Transformation of Amphiphilic Diarylethenes (Grad. Sch. Eng., Kyoto Univ.; PRESTO, JST) ○YOTSUJI, Hajime; HIGASHIGUCHI, Kenji; MATSUDA, Kenji
- 1D3-06** Photodriven movement of objects using supramolecular structure of diarylethene (Grad. Sch. Eng., Kyoto Univ.; PRESTO, JST)  
○SAKAGUCHI, Akira; HIGASHIGUCHI, Kenji; MATSUDA, Kenji

Chair: MATSUDA, Kenji (10 : 10~11 : 00)

- \* 10:00-10:10: interval for laptop PC connection.(1D3-08, 1D3-09, 1D3-10, 1D3-11, 1D3-12)
- 1D3-08** Photoluminescence and phase transition behavior of bicyclic gold complexes (Grad. Sch. Life Sci., Ritsumeikan Univ.) ○KAWANO, Ryo; LEBON, Florian; DAITANI, Misato; YAMADA, Shigeyuki; TSUTSUMI, Osamu
- 1D3-09** Photoluminescence and phase transition behavior of liquid-crystalline gold complexes containing a siloxy group (Coll. Life Sci., Ritsumeikan Univ.) ○MITSUHASHI, Fumika; YAMADA, Shigeyuki; TSUTSUMI, Osamu
- 1D3-10** Photoluminescence behaviors of chiral liquid-crystalline gold complexes with β - citronellol structure (Coll. Life Sci., Ritsumeikan Univ.)  
○SAKAMOTO, Kaho; ANUKUL, Preeyanuch; YAMADA, Shigeyuki; TSUTSUMI, Osamu
- 1D3-11** New type of azobenzene tethered peptides to control kinesin motility by photoirradiation (RIES, Hokkaido Univ.) ○MATSUO, Kazuya; TAMAOKI, Nobuyuki
- 1D3-12<sup>#</sup>** A new class of azobenzene tethered peptides allowing the reversible kinesin motility control by the single wavelength of visible region (RIES, Hokkaido Univ.) ○AMMATHNADU S., Amrutha; K. R., Sunilkumar; TAMAOKI, Nobuyuki

Chair: FUKAZAWA, Aiko (11 : 10~12 : 10)

- \* 11:00-11:10: interval for laptop PC connection.(1D3-14, 1D3-15, 1D3-16, 1D3-17, 1D3-18, 1D3-19)
- 1D3-14** Emission Properties of Amorphous Molecular Materials Containing Two Triphenylamine Moieties (Grad. Sch. of Eng., Muroran Inst. of Tech.)  
○OGURA, Kosuke; NAKANO, Hideyuki
- 1D3-15** Synthesis and Mechanofluorochromic Property of a Novel Amorphous Molecular Material Containing Pyrene Moiety (Grad. Sch. of Eng., Muroran Inst. of Tech.; Grad. Sch. Eng., Hokkaido Univ.) ○YONETA, Shoji; NAGATA, Eisuke; ARA, Takuya; OMAGARI, Shun; NAKANISHI, Takayuki; HASEGAWA, Yasuchika; NAKANO, Hideyuki
- 1D3-16** Mechanofluorochromic Properties of 1-Carbamoylpyrene Derivatives (Grad. Sch. of Eng., Muroran Inst. of Tech.; Grad. Sch. Eng., Hokkaido

- Univ.) ○ARA, Takuya; NAGATA, Eisuke; OMAGARI, Shun; NAKANISHI, Takayuki; HASEGAWA, Yasuchika; NAKANO, Hideyuki
- 1D3-17** Fluorescent Color Changes of 1-Alkanoylaminopyrenes Adsorbed onto a Cellulose Paper (Grad. Sch. of Eng., Muroran Inst. of Tech.) NAGATA, Eisuke; ○NAKANO, Hideyuki
- 1D3-18** Photoluminescence and phase transition behaviors of gold complexes bearing polyfluorinated structure (Coll. Life Sci., Ritsumeikan Univ.) ○TANEKI, Kensuke; YAMADA, Shigeyuki; TSUTSUMI, Osamu
- 1D3-19** Multi-photon absorption property of the rod-like gold complex: Observation of a single crystal (Grad. Sch. Life Sci., Ritsumeikan Univ.; IFMRI, AIST) ○ANDO, Akihiro; YAMADA, Shigeyuki; TSUTSUMI, Osamu; KAMADA, Kenji

### Thursday, March 24, PM

Chair: NAKANO, Hideyuki (13 : 20~14 : 20)

- \* 13:10-13:20: interval for laptop PC connection.(1D3-27, 1D3-28, 1D3-29, 1D3-31)
- 1D3-27** Viscosity Response of PEG-functionalized Flexible Fluorophores (Grad. Sch. Sci., Nagoya Univ.; PRESTO, JST; WPI-ITbM, Nagoya Univ.) ○KASHIWAGI, Akihiro; SAITO, Shohei; YAMAGUCHI, Shigehiro
- 1D3-28** Flexible Fluorophore at Interface: Evaluation of Environment-Dependent Fluorescence (Grad. Sch. Sci., Nagoya Univ.; PRESTO, JST; Grad. Sch. Eng., Nagoya Univ.; WPI-ITbM, Nagoya Univ.) ○UENO, Ryo; SAITO, Shohei; HARA, Mitsuo; YAMAGUCHI, Shigehiro
- 1D3-29\*** Negative Photochromism of Binaphthyl-Bridged Phenoxy-Imidazolyl Radical Complex (Coll. Sci. Eng., Aoyama Gakuin Univ.) ○YAMAGUCHI, Tetsuo; KOBAYASHI, Yoichi; ABE, Jiro
- 1D3-31\*** Negative Photochromism of Naphthalene-bridged Phenoxy-Imidazolyl Radical Complex (Coll. Sci. Eng., Aoyama Gakuin Univ.; Grad. Sch. Eng. Sci., Osaka Univ.) ○MUTOH, Katsuya; KOBAYASHI, Yoichi; SOTOME, Hikaru; YONEDA, Yusuke; MIYASAKA, Hiroshi; ABE, Jiro

Chair: FUKAMINATO, Tsyoshi (14 : 30~15 : 30)

- \* 14:20-14:30: interval for laptop PC connection.(1D3-34, 1D3-37, 1D3-39)
- 1D3-34** Young Scholar Lectures of CSJ Nobel Stimuli-Responsive Materials Driven by Switching of Auophilic Interactions:Single-Crystal-to-Single-Crystal Phase Transitions of Gold(I) Isocyanide Complexes (Grad. Sch. Eng., Hokkaido Univ.) ○SEKI, Tomohiro
- 1D3-37\*\*** Diastereoselective Photo Cyclization of Diarylethenes Tuned by Intramolecular Noncovalent Interactions (Grad. Sch. Mat. Sci., NAIST) ○IJIMA, Shunsuke; NAKASHIMA, Takuya; KAWAI, Tsyoshi
- 1D3-39** Photochromic Properties of Pentaarylbiimidazole and Phenoxy-Imidazolyl Radical Complex Derivatives Having Thiophene Backbone (Grad. Sch. Sci., Eng., Aoyama Gakuin Univ.) ○IKEZAWA, Takahiro; MUTOH, Katsuya; KOBAYASHI, Yoichi; ABE, Jiro

Chair: MORIMOTO, Masakazu (15 : 40~16 : 40)

- \* 15:30-15:40: interval for laptop PC connection.(1D3-41, 1D3-43, 1D3-45)
- 1D3-41\*\*** Two-photon Induced Fast Photoswitch System Involving Electron Transfer from Higher Excited States (Coll. Sci. Eng., Aoyama Gakuin Univ.; Sch. Eng. Sci., Osaka Univ.) ○KOBAYASHI, Yoichi; KATAYAMA, Tetsuro; SETOURA, Kenji; ITO, Syoji; MIYASAKA, Hiroshi; ABE, Jiro
- 1D3-43\*\*** Photon-Quantitative 6 $\pi$ -Electrocyclization of a Diarylbenzo[b]thiophene in Polar Medium and Their Application for PAGs (Grad. Sch. Mat. Sci., NAIST) ○LI, Ruiji; KAWAI, Tsyoshi; NAKASHIMA, Takuya
- 1D3-45\*\*** The Competition of Intramolecular Charge Transfer on Fluorescent Photochromic Terarylenes (Grad. Sch. Mat. Sci., NAIST) ○KANAZAWA, Rui; NAKASHIMA, Takuya; SLIWA, Michel; KAWAI, Tsyoshi

Chair: SEKI, Tomohiro (16 : 50~17 : 50)

- \* 16:40-16:50: interval for laptop PC connection.(1D3-48, 1D3-50, 1D3-52)
- 1D3-48\*\*** Unprecedented photoswitching behavior of helical twisting power from dimeric chiral azobenzene dopants in cholesteric liquid crystal (RIES, Hokkaido Univ.) ○KIM, Yuna; TAMAOKI, Nobuyuki
- 1D3-50\*\*** Room Temperature Liquid Pyrenes with Regulated Photophysical Properties (MANA, NIMS) NAKANISHI, Takashi; ○LU, Fengniu
- 1D3-52\*\*** Humidity-sensitive Molecular Hybrid Films (Grad. Sch. of Eng., Muroran Inst. of Tech.) ○ICHIKAWA, Ryoji; NAGATA, Eisuke; NISHIMURA, Tomohiro; NAKANO, Hideyuki

### Friday, March 25, PM

Chair: KAMEYAMA, Tatsuya (13 : 00~14 : 00)

- \* 12:50-13:00: interval for laptop PC connection.(2D3-25, 2D3-27, 2D3-29)
- 2D3-25\*** Mechano- and thermoresponsive luminescence observed for a cyclophane (RIES, Hokkaido Univ.; Adolphe Merkle Institute) ○SAGARA, Yoshimitsu; SIMON, Yoan; TAMAOKI, Nobuyuki; WEDER, Christoph
- 2D3-27\*\*** Photoreactivity and structure analysis of supramolecular azobenzene moiety in nanolayered microenvironment (Dept. of Appl. Chem., Tokyo Metropolitan Univ.) ○HASSAN, Syed Zahid; RAMAKRISHNAN, Vivek; HORIGUCHI, Haruo; YAMAMOTO, Daisuke; NABETANI, Yu; TACHIBANA, Hiroshi; INOUE, Haruo

- 2D3-29\*** Synthesis of nanocrystalline layered double hydroxides towards functional hierarchical porous materials (Grad. Sch. Eng., Osaka Pref. Univ.) ○TOKUDOME, Yasuaki; FUKUI, Megu; TARUTANI, Naoki; MORIMOTO, Tsyoshi; TAKAHASHI, Masahide

Chair: TOKUDOME, Yasuaki (14 : 10~15 : 10)

- \* 14:00-14:10: interval for laptop PC connection.(2D3-32, 2D3-34, 2D3-36)
- 2D3-32\*** Preparation of Near-Infrared Emitting AgInTe<sub>2</sub> Quantum Dots for in vivo Imaging (Grad. Sch. Eng., Nagoya Univ.) ○KAMEYAMA, Tatsuya; ISHIGAMI, Yujiro; SHIMADA, Taisuke; YUKAWA, Hiroshi; BABA, Yoshinobu; ISHIKAWA, Tetsuya; KUWABATA, Susumu; TORIMOTO, Tsukasa
- 2D3-34\*** Rare-earth doped chiral oxides with modulated photoluminescence (Fac. Eng., Kanagawa Univ.) ○JIN, Ren-hua; ABE, Syunsuke; NAKAJIMA, Erika
- 2D3-36\*\*** Fluorescent helical nanostructures assembled from achiral azobenzene derivatives (Grad. Sch. Eng., Tottori Univ.) ○HAN, Mina; CHO, Sung June; SHIMIZU, Masaki; KIMURA, Akinori; TAMAGAWA, Tomokazu; NORIKANE, Yasuo; MATSUURA, Kazunori; SEKI, Takahiro

Chair: ASAH, Tsyoshi (15 : 20~16 : 10)

- \* 15:10-15:20: interval for laptop PC connection.(2D3-39, 2D3-42)
- 2D3-39** CSJ Award for Young Chemists Outstanding Photophysical Function from Purely Aromatic Compounds under Super Rigid Environment (Grad. Sch. Sci., Eng., Tokyo Tech) ○HIRATA, Shuzo
- 2D3-42\*** Photomagnetic Property of Layered Double Hydroxides Nanosheet (Fac. Sci. Tech., Keio Univ.) ○YAMAMOTO, Takashi; TSUBOI, Tomoya; EINAGA, Yasuaki

Chair: MATSUO, Takashi (16 : 20~17 : 20)

- \* 16:10-16:20: interval for laptop PC connection.(2D3-45, 2D3-46, 2D3-47, 2D3-48, 2D3-49, 2D3-50)
- 2D3-45** Photochromism of the Reversed Phenoxy-Imidazolyl Radical Complex Having Thiophene Ring (Coll. Sci. Eng., Aoyama Gakuin Univ.) ○TOSHIMITSU, Shota; MUTOH, Katsuya; KOBAYASHI, Yoichi; ABE, Jiro
- 2D3-46** Photochromic Behavior of Phenoxy-Dimethylimidazolyl Radical Complexes (Coll. Sci. Eng., Aoyama Gakuin Univ.) ○MISHIMA, Yasuhiro; MUTOH, Katsuya; KOBAYASHI, Yoichi; ABE, Jiro
- 2D3-47** Stepwise Two-Photon Induced Photochromism and the Initial Process for Generating Radicals of the Biphenyl-Linked Bis(Phenoxy-Imidazolyl Radical Complex) (Coll. Sci. Eng., Aoyama Gakuin Univ.; Grad. Sch. Eng. Sci., Osaka Univ.) ○YONEKAWA, Izumi; MUTOH, Katsuya; YONEDA, Yusuke; SOTOME, Hikaru; KOBAYASHI, Yoichi; MIYASAKA, Hiroshi; ABE, Jiro

- 2D3-48** Synthesis and Photochemistry of Self-Assembled Photochromic Nanofibers (Coll. Sci. Eng., Aoyama Gakuin Univ.) ○FUJITA, Yuuki; KOBAYASHI, Yoichi; ABE, Jiro
- 2D3-49** Unique mechanical response of diarylethene crystals accompanying helical shape (Grad. Sch. Eng., Osaka City Univ.) ○TSUJIOKA, Hajime; KOBATAKE, Seiya
- 2D3-50** Photoinduced Reversible Crystal Growths of a Diarylethene to Form Superhydrophilic Surface (Grad. Sch. Sci. Tech., Ryukoku Univ.) ○TAKASE, Kazuki; MORIMOTO, Masakazu; MAYAMA, Hiroyuki; KOJIMA, Yuko; YOKOJIMA, Satoshi; NAKAMURA, Shinichiro; UCHIDA, Kingo

Chair: KOBAYASHI, Yoichi (17 : 30~18 : 30)

- \* 17:20-17:30: interval for laptop PC connection.(2D3-52, 2D3-53, 2D3-54, 2D3-55, 2D3-56, 2D3-57)
- 2D3-52** Photoinduced Formation and Wettability of Diarylethene Microcrystalline Surface with Double Roughness Structures. (Fac. Sci. Tech., Ryukoku Univ.; Dept. of Chem., Asahikawa Med. Univ.; Fac. Eng., Yamagata Univ.; Sch. Pharm., TUPLS; RIKEN RINC) ○NISHIMURA, Ryo; MAYAMA, Hiroyuki; NONOMURA, Yoshimune; SAWAGUCHI, Haruna; YOKOJIMA, Satoshi; NAKAMURA, Shinichiro; UCHIDA, Kingo
- 2D3-53** Enantioselective photocyclization of bisthiénylenes in human serum albumin and determination of absolute stereochemistry of the cyclized products (Grad. Sch. Eng., Yokohama Natl. Univ.) ○WATANOBE, Yuta; OSAWA, Ken; NAKAGAWA, Tetsuya; YOKOYAMA, Yasushi
- 2D3-54** Free surface command system for out-of-plane control in LC polymer films (Grad. Sch. Eng., Nagoya Univ.) ○NAKAI, Takashi; HARA, Mitsuo; NAGANO, Shusaku; SEKI, Takahiro
- 2D3-55** Photochromism of 1-Thiazolyl-2-vinylcyclopentene Derivatives Having a Phenyl- or Pentafluorophenyl-Substituted Olefin (National Institute of Technology, Niihama College) ○TAKAMI, Shizuka; YAMAGUCHI, Tadatsugu; IRIE, Masahiro
- 2D3-56** Multi-color Fluorescence Photoswitching by Using Fluorescent Photochromic Nanoparticles (Fac. Eng., Kumamoto Univ.) ○ISHIDA, Sanae; FUKAMINATO, Tsyoshi; KIM, Sunnam; OGATA, Tomonari; KURIHARA, Seiji
- 2D3-57** Surface modification of photomechanical diarylethene crystals using layer-by-layer assembly. (Coll. Sci., Rikkyo Univ.) ○CHIBA, Hiroka; MORIMOTO, Masakazu; IRIE, Masahiro

## Saturday, March 26, AM

Chair: MORIMOTO, Masakazu (9 : 00 ~ 10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(3D3-01, 3D3-03, 3D3-04, 3D3-05, 3D3-06)

**3D3-01\*** Preparation of Layered Double Hydroxide/Chelate Dye Hybrid Materials with Detection Ability of Cu(I) ions (Grad. Sch. Fac. Sci. Eng., Shimane Univ.) ○SASAI, Ryo; NISHIDA, Tomohiro; DATE, Yusuke; FUJIMURA, Takuya; HINO, Eiichi; FUJII, Takatoshi; AOKI, Kaoru

**3D3-03** Ordered Self-Assembly Structures Formed by a Liquid Crystalline Azobenzene Random Copolymers with a POSS Side-Chain Unit (Grad. Sch. Eng., Nagoya Univ.) ○NAGAI, Miho; HARA, Mitsuo; NAGANO, Shusaku; SEKI, Takahiro

**3D3-04** Orientation of liquid crystalline polymer hetero-interfaces formed by inkjet technique (Grad. Sch. Eng., Nagoya Univ.) ○KITAMURA, Issei; HARA, Mitsuo; NAGANO, Shusaku; SEKI, Takahiro

**3D3-05** Syntheses and Photochromic Properties of Phenoxy-Imidazolyl Radical Complex Derivatives (Coll. Sci. Eng., Aoyama Gakuin Univ.) ○ARAI, Hiroki; KOBAYASHI, Yoichi; ABE, Jiro

**3D3-06** Synthesis of Photoresponsive Microtubule Inhibitors (Fac. Eng., Kumamoto Univ.) ○TAKASHIMA, Ryoya; FUKAMINATO, Tsuyoshi; KIM, Sunnam; OGATA, Tomonari; KURIHARA, Seiji; NIIDOME, Takuro

Chair: NAGANO, Shusaku (10 : 10 ~ 11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(3D3-08, 3D3-09, 3D3-10, 3D3-11, 3D3-12, 3D3-13)

**3D3-08** Interactions between CdTe Quantum Dots and Photochromic Molecules (Sch. Sci. Tech., Kwansai Gakuin Univ.; Coll. Sci., Rikkyo Univ.) ○UEMOTO, Kenta; KINOSHITA, Ken; KATAYAMA, Tetsuro; MORIMOTO, Masakazu; IRIE, Masahiro; TAMAI, Naoto

**3D3-09** Photochromism of diarylethenes having a benzophosphole group (Coll. Sci., Rikkyo Univ.) ○CHIKAWA, Tomohiro; MORIMOTO, Masakazu; IRIE, Masahiro

**3D3-10** Thermally reversible photochromism of dipyrrolylene derivatives (Coll. Sci., Rikkyo Univ.) ○INABA, Kouhei; MORIMOTO, Masakazu; IRIE, Masahiro

**3D3-11** Photochromism of fluorescent diarylethenes in the single-crystalline phase (Coll. Sci., Rikkyo Univ.) ○KASHIHARA, Ryota; MORIMOTO, Masakazu; IRIE, Masahiro

**3D3-12** Fluorescence Photoswitching by Using a Cooperative Photo-orientation in an Azobenzene Liquid-crystalline Polymer (Fac. Eng., Kumamoto Univ.) ○HASHIMOTO, Takuma; FUKAMINATO, Tsuyoshi; KIM, Sunnam; OGATA, Tomonari; KURIHARA, Seiji

**3D3-13** Synthesis and Magnetic Properties of Photoresponsive Nitroxide Radicals (Grad. Sch. Eng. Sci., Osaka Univ.) ○KIYOHARA, Daichi; AKITA, Takuya; NAKAGAMI, Sho; UCHIDA, Yoshiaki; NISHIYAMA, Norikazu

Chair: NISHIYAMA, Katsura (11 : 20 ~ 12 : 20)

\* 11:10-11:20: interval for laptop PC connection.(3D3-15, 3D3-16, 3D3-17, 3D3-18, 3D3-19, 3D3-20)

**3D3-15** The effect of ether linkages on phase transition behavior of azobenzene-triphenylene derivatives (Grad. Sch. Sci. Tech., Ryukoku Univ.; IFMRI, AIST) ○MINOBE, Ryota; SHIMIZU, Yo; UCHIDA, Kingo

**3D3-16** Development of a novel negative photochromic compound with the rational molecular design (Grad. Sch. Sci., Hiroshima Univ.) ○HATANO, Sayaka; SHIMOKAWA, Chie; ABE, Manabu

**3D3-17** Fast Photochromism of PABI Crystals (Sch. Advanced Sci. Eng., Waseda Univ.) ○KOMIYA, Jun; TANAKA, Seiichi; ONDA, Ken; SAKON, Aya; UEKUSA, Hidehiro; KOSHIMA, Hideko; ASAH, Toru

**3D3-18** Photochromism of novel diarylethene derivatives with interactive donor and acceptor groups (Sch. Eng., Yokohama Natl. Univ.) ○TAKEUCHI, Sakiko; NAKAGAWA, Tetsuya; YOKOYAMA, Yasushi

**3D3-19** Switching of photoluminescence behavior of cyclic trinuclear gold complexes based on nano-crystallization process (Coll. Life Sci., Ritsumeikan Univ.) ○NAKATA, Manami; NAKAMURA, Kyosuke; YAMADA, Shigeyuki; TSUTSUMI, Osamu; OTA, Mie; AMEYAMA, Kei

**3D3-20** Synthesis, Optical, and Electroluminescence Properties of New Stilbene-Based Organic Semiconductors (IFRC, Kyushu Univ.; Fac. Eng., Kyushu Univ.) ○ISAYAMA, Kohei; AIZAWA, Naoya; YASUDA, Takuma

## Saturday, March 26, PM

Chair: YASUDA, Takuma (13 : 30 ~ 14 : 30)

\* 13:20-13:30: interval for laptop PC connection.(3D3-28, 3D3-29, 3D3-30, 3D3-31, 3D3-32, 3D3-33)

**3D3-28** Photoluminescent properties of crystal cross-linked gel capturing rare earth ion inside (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) ○OURA, Tsuyoshi; MOCHIZUKI, Yumi; ISHIWATA, Takumi; KOKADO, Kenta; SADA, Kazuki

**3D3-29** Aggregation Induced Emission of Amorphous Molecular Materials Containing Triphenylamine Moiety. (Grad. Sch. of Eng., Muroran Inst. of Tech.) ○SHISHIDO, Kazuki; ICHIKAWA, Ryota; KURITA, Motoki; MIZUGUCHI, Kei; NAKANO, Hideyuki

**3D3-30** Triplet-triplet-annihilation up-converted emission of crystalline solid : Measurement of excitation power-dependence and quantum yield of single crystal grain (IFMRI, AIST) ○SAKAGAMI, Yusuke; MIZOKURO, Toshiko; KAMADA, Kenji; FUJIWARA, Yutaka; OSAWA, Hirokazu; KOBAYASHI, Kenji

**3D3-31** Photochemical behavior of novel cationic BODIPY derivatives on the inorganic nanosheets (Grad. Sch. Urban Environmental Sci., TMU) ○NAKAMOTO, Shogo; OHTANI, Yuta; MOTOHASHI, Minoru; SHIMADA, Tetsuya; TAKAGI, Shinsuke

**3D3-32** Photoluminescence and fluorescence quantum yield of 7,7,8,8-tetracyanoquinodimethane (TCNQ) (Sch. Eng., Muroran Inst. of Tech.; Grad. Sch. of Eng., Muroran Inst. of Tech.) ○TAMAYA, Honami; NAKANO, Hideyuki; IIMORI, Toshifumi

**3D3-33** Control of optical properties of molecular gels comprising phenols and AOT by means of solvophobic interactions (Grad. Sch. Fac. Edu., Shimane Univ.; Fac. Sci., Fukuoka Univ.; IMS; Fac. Edu., Shimane Univ.) KINOSHITA, Masaru; KATSUMOTO, Yukiteru; SHIKANO, Yutaka; ○NISHIYAMA, Katsura

Chair: ASAH, Toru (14 : 40 ~ 15 : 30)

\* 14:30-14:40: interval for laptop PC connection.(3D3-35, 3D3-36, 3D3-37, 3D3-38, 3D3-39)

**3D3-35<sup>#</sup>** Switchable optical properties of PIC in clay mineral hybrid film (Grad. Sch. Med., Yamaguchi Univ.) ○MATEJDES, Marian; HIMENO, Daisuke; TOMINAGA, Makoto; SUZUKI, Yasutaka; KAWAMATA, Jun

**3D3-36** Morphology change and reaction mechanism of photo-responsive layered hybrids (Grad. Sch. Urban Environmental Sci., TMU) ○NABETANI, Yu; RAMAKRISHNAN, Vivek; HASSAN, Syed Zahid; HORIGUCHI, Haruo; TACHIBANA, Hiroshi; INOUE, Haruo

**3D3-37** Adsorption of monovalent chiral ruthenium(II) complex by a clay (Fac. Sci., Toho Univ.) ○YAMAGISHI, Akihiko; TAMURA, Kenji; KITAZAWA, Takafumi; SATO, Hisako

**3D3-38** Preparation of ZnS-AgInS<sub>2</sub> nanoparticles with various ligands for organic-inorganic hybrid solar cells (Grad. Sch. Energy Sci., Kyoto Univ.) ○YAGI, Yutaro; HACHIYA, Kan; SAGAWA, Takashi

**3D3-39** Synthesis of SnO<sub>2</sub>/Graphene Oxide Hybrid using Sol-gel Method and its Photocatalytic activity (Grad. Sch. Env. Life Sci., Okayama Univ.; RCIS, Okayama Univ.) ○GOTO, Haruko; TAJIMA, Tomoyuki; NISHINA, Yuta; TAKAGUCHI, Yutaka

Chair: HATANO, Sayaka (15 : 40 ~ 16 : 30)

\* 15:30-15:40: interval for laptop PC connection.(3D3-41, 3D3-42, 3D3-43, 3D3-44, 3D3-45)

**3D3-41** Luminous change of Mg/Al-layered double hydroxide/fluoresce in hybrid thin films by adsorbing gas molecules (NIT, Yonago Coll.) ○DATE, Yusuke; MATSUI, Yume; KAGAWA, Yoichi; SASAI, Ryo; FUJIMURA, Takuya; HINO, Eiichi; FUJII, Takatoshi; AOKI, Kaoru

**3D3-42<sup>#</sup>** Preparation of M-doped Ca<sub>2</sub>Nb<sub>2</sub>O<sub>10</sub> nanosheets (M: Pd, Ir) and their photocatalytic property. (Kyushu Univ.) ○KIM, Yoonyoung; IDA, Shintaro; HAGIWARA, Hidehisa; SAKAI, Takaaki; ISHIIHARA, Tatsumi

**3D3-43** The construction of clay-porphyrin complex aiming the environment responsive light-harvesting system (Urban Environmental Sci., TMU) ○NISHINA, Haruka; HOSHINO, Shota; OHTANI, Yuta; SHIMADA, Tetsuya; TAKAGI, Shinsuke

**3D3-44<sup>#</sup>** Random laser consisting of a smectite and a fluorescent dye (Grad. Sch. Med., Yamaguchi Univ.) ○SUZUKI, Yasutaka; SATOMI, Koichiro; TOMINAGA, Makoto; KAWAMATA, Jun

**3D3-45** Thermo-responsible control of blue emission and coloration in crystal violet lactone composite film (Fac. Eng., Chiba Univ.) ○WAKUSHIMA, Akiko; OGASAWARA, Kouki; NAKAMURA, Kazuki; KOBAYASHI, Norihisa

Chair: UCHIDA, Kingo (16 : 40 ~ 17 : 10)

\* 16:30-16:40: interval for laptop PC connection.(3D3-47, 3D3-48, 3D3-49)

**3D3-47** 3D Orientation control of Liquid Crystalline Polymer film by adjusting free-surface condition (Grad. Sch. Eng., Univ. of Hyogo) ○MIYAKE, Kazutoshi; KONDO, Mizuho; OKADA, Makoto; MATSUI, Shinji; KAWATSUKI, Nobuhiro

**3D3-48** Analysis of interaction form and optical chirality of DNA / chiral Ru (II) complex. (Fac. Eng., Chiba Univ.) ○MINAMI, Haruki; ITAMOTO, Natumi; KUNIKYO, Taiki; NAKAMURA, Kazuki; KOBAYASHI, Norihisa

**3D3-49** Microphase Separated Structure in Diblock Copolymer connecting Two Different LC Orientation Blocks (Grad. Sch. Eng., Nagoya Univ.) ○OTSUKA, Yumi; HARA, Mitsuo; NAGANO, Shusaku; SEKI, Takahiro

# Room D4

## Chishinkan1 Building 213

### Applications of Materials

Friday, March 25, AM

#### Batteries

Chair: SEKI, Kazuhiro (9 : 00 ~ 9 : 40)

\* 8:50-9:00: interval for laptop PC connection.(2D4-01, 2D4-02, 2D4-03, 2D4-04)

**2D4-01** Preparation and Characterization of Anion Exchange Membranes for Fuel Cell Applications by Ion-Track Grafting Polymerization (QBSC, JAEA; Grad. Sch. Eng., The Univ. of Tokyo) ○NURYANTHI, Nunung; YAMAKI, Tetsuya; KITAMURA, Akane; KOSHIKAWA, Hiroshi; SAWADA, Shinichi; YOSHIMURA, Kimio; TERAJ, Takayuki

**2D4-02** Preparation of LaGaO<sub>3</sub> based electrolyte thin film on tubular anode substrate. (Kyushu Univ.) ○ONITA, Keigo; HOSOI, Kohei; IDA, Shintaro; ISHIHARA, Tatsumi

**2D4-03** Effects of sulfur electrolyte additives on rate characteristics of lithium ion batteries (Grad. Sch. Life Sci., Ritsumeikan Univ.) ○KIKUZAKI, Shota; YOGI, Chihito; SANADA, Tomoe; TANAKA, Atsuhiko; KOJIMA, Kazuo; KATAYAMA, Misaki; INADA, Yasuhiro; OHTA, Toshiaki

**2D4-04** Nitrogen introduction effect on the carbon-based catalyst material with ammonia during the electron beam irradiation (Fac. Eng., Saitama Inst. of Tech.) ○OHTA, Tomonori; SAGIMOTO, Masaki; KOSHIKAWA, Hiroshi; YAMAMOTO, Shunnya; YAMAKI, Tetsuya; HAGIWARA, Tokio

Friday, March 25, PM

Chair: KINOSHITA, Motoi (13 : 00 ~ 13 : 40)

\* 12:50-13:00: interval for laptop PC connection.(2D4-25, 2D4-27, 2D4-28)

**2D4-25\*** Study on copper-modified covalent triazine frameworks as efficient electrocatalysts for oxygen reduction reactions (Grad. Sch. Eng., The Univ. of Tokyo) ○IWASE, Kazuyuki; KAMIYA, Kazuhide; NAKANISHI, Shuji; HASHIMOTO, Kazuhito

**2D4-27** Performance evaluation of flexible organic thin film solar cell with Ag nanowire (Fac. Eng. Nagoya Inst. of Tech.) ○KATO, Daiki; AOKI, Atsushi; ABE, Takayuki

**2D4-28** Fabrication of semitransparent organic thin film solar cells using slit electrodes (Grad Sch. Eng., Nagoya Inst. of Tech.) ○MATSUMOTO, Yuki; AOKI, Atsushi; ABE, Takayuki

#### Photoresist etc.

Chair: NAGANO, Shusaku (13 : 50 ~ 14 : 50)

\* 13:40-13:50: interval for laptop PC connection.(2D4-30, 2D4-34, 2D4-35)

**2D4-30** CSJ Award for Technical Development Development of Novel Top-coat Materials for ArF Immersion Lithography (JSR Corp.) SHIMA, Motoyuki; SUGIE, Norihiko; KUSABIRAKI, Kazunori; ○NAKAGAWA, Hiroki; CHIBA, Takashi

**2D4-34\*** Fabrication of block copolymer patterns over large area by Molecular Transfer Printing (Toray Industries, Inc.) ○INOUE, Takejiro

**2D4-35** Anti-counterfeit technology using plasmonic gold nanoparticles self-assemblies (LASTI, Univ. of Hyogo) ○FUKOKA, Takao; YAMAGUCHI, Akinobu; MORI, Yasushige

#### Optical Measurements

Chair: AOKI, Atsushi (15 : 00 ~ 15 : 50)

\* 14:50-15:00: interval for laptop PC connection.(2D4-37, 2D4-38, 2D4-39, 2D4-41)

**2D4-37** Evaluation of Surface Mechanics of Bending Flexible Films by Means of PDMS-label with a Periodic Structure (Chem. Res. Lab., Tokyo Tech) ○FUKUHARA, Motoyuki; KOIKE, Yasunori; AKAMATSU, Norihisa; FUJIKAWA, Shigenori; SHISHIDO, Atsushi

#### Materials for Displays

**2D4-38** Influence of diffusion coefficient on morphology of Ag deposit and optical properties for the silver deposition-based electrochromic device (Fac. Eng., Chiba Univ.) ○TODA, Soma; ONODERA, Ryou; NAKAMURA, Kazuki; KOBAYASHI, Norihisa

**2D4-39\*\*** Development of Phosphorescent Organoiridium Complexes Bearing Carrier-Transporting Moieties Aimed at OLED Applications (Grad. Sch. Eng., Osaka Pref. Univ.; TRI-OSAKA) ○OKAMURA, Naoki; YAGI, Shigeyuki; MAEDA, Takeshi; NAKAZUMI, Hiroyuki; SAKURAI, Yoshiaki

**2D4-41** Synthesis and Luminescent Properties of Phosphorescent Dipyrrodo-phenazine-Platinum(II) Complexes with Carbazole-Appended Acetylidyde Ligands (Grad. Sch. Eng., Osaka Pref. Univ.; TRI-OSAKA) ○MATSUURA,

Hiroki; YAGI, Shigeyuki; MAEDA, Takeshi; NAKAZUMI, Hiroyuki; SAKURAI, Yoshiaki

Chair: MAEDA, Takeshi (16 : 00 ~ 16 : 50)

\* 15:50-16:00: interval for laptop PC connection.(2D4-43, 2D4-44, 2D4-45, 2D4-46)

**2D4-43** Photoelectric Characteristics of Light-emitting Electrochemical Transistor Using Ruthenium Complex (Grad Sch. Eng., Nagoya Inst. of Tech.) ○NAKANO, Motoyuki; AOKI, Atsushi

**2D4-44** Improvement of device properties of AC-operated electrochemiluminescent device using Ruthenium(II) complex by adding TiO<sub>2</sub> nanoparticles (Fac. Eng., Chiba Univ.) ○ICHIHARA, Kazuki; TSUNEYASU, Shota; NAKAMURA, Kazuki; KOBAYASHI, Norihisa

**2D4-45** Effects of electrolyte composition on blue color electrochemiluminescence from anthracene derivatives (Fac. Eng., Chiba Univ.) ○ICHIKAWA, Takuya; TSUNEYASU, Syouta; NAKAMURA, Kazuki; KOBAYASHI, Norihisa

**2D4-46\*** Improvement of device properties of AC-operated electrochemiluminescent device by introducing hybrid capacitor configuration (Chiba Univ.) ○TSUNEYASU, Shota; NAKAMURA, Kazuki; KOBAYASHI, Norihisa

Chair: NAGANO, Shusaku (17 : 00 ~ 17 : 40)

\* 16:50-17:00: interval for laptop PC connection.(2D4-49, 2D4-50, 2D4-52)

**2D4-49** Mechanism investigation of Light-Emitting Electrochemical Cells Fabricated with Periodically Corrugated and Planar Substrates Using Electrochemical Impedance Spectroscopy (Sch. Advanced Sci. Eng., Waseda Univ.) ○CHO, Tetsuyuki; NISHIDE, Hiroyuki; NISHIKITANI, Yoshinori; UCHIDA, Soichi; NISHIMURA, Suzushi; IKEDA, Satoru

### Environment, measurements

**2D4-50\*** The optical properties of ferrocyanide nanoparticles used as an adsorbate for disposal of high-level radioactive nuclear waste liquids (Grad. Sch. Eng., Nagoya Univ.) WATANABE, Shinta; SAWADA, Yuki; NAKAYA, Masato; YOSHINO, Masahito; NAGASAKI, Takanori; KAMEYAMA, Tatsuya; TORIMOTO, Tsukasa; INABA, Yusuke; TAKAHASHI, Ideharu; TAKESHITA, Kenji; ○ONO, Jun

**2D4-52** Amperometric NH<sub>3</sub> sensor based on oxidation activity of electrode (Kyushu Univ.) ○FUJIWARA, Takeshi; FUKAMACHI, Keiko; IDA, Shintaro; ISHIHARA, Tatsumi

Chair: IDA, Shintaro (17 : 50 ~ 18 : 30)

\* 17:40-17:50: interval for laptop PC connection.(2D4-54, 2D4-56, 2D4-57)

**2D4-54\*** Organic Vapor Breakthrough in Humidified Activated Carbon Bed and Application of the Wheeler-Jonas Equation (JNIOSSH) ○ABIKO, Hironobu; FURUSE, Mitsuya; TAKANO, Tsuguo

**2D4-56** Development of a self-cleaning film with the surface maintenance functions using the monolith structure (Grad. Sch. Fac. Sci. Technol., Tokyo Univ. of Sci.) ○YAMAGUCHI, Hiromi; NAKATA, Kazuya; SAKAI, Hideki; TERASHIMA, Chiaki; HUZISHIMA, Akira

**2D4-57** Purification Method of Hemoglobin-Albumin Cluster as an Artificial Oxygen Carrier. (Fac. Sci. Eng., Chuo Univ.) ○FUNAKI, Ryosuke; AKIYAMA, Motofusa; KOMATSU, Teruyuki

Saturday, March 26, AM

#### Hybrid materials

Chair: HARA, Mitsuo (9 : 20 ~ 10 : 20)

\* 9:10-9:20: interval for laptop PC connection.(3D4-03, 3D4-04, 3D4-05, 3D4-06, 3D4-08)

**3D4-03** Preparation and Application of Fluoroalkyl End-capped Vinyltrimethoxysilane Oligomer/Diisocyanate/Polyethylene Glycol Nanocomposites (Grad. Sch. Sci. Tech., Hirosaki Univ.; Nippon Chemical Industrial Co., Ltd.) ○SASAHARA, Shohei; AOMI, Yuta; YAMADA, Satoshi; SUGIYA, Masashi; SAWADA, Hideo

**3D4-04** Preparation and Application of Fluoroalkyl End-capped Vinyltrimethoxysilane Oligomeric Nanocomposites Containing Phosphonic Acid Segments (Fac. Sci. Tech., Hirosaki Univ.; Grad. Sch. Sci. Tech., Hirosaki Univ.) ○YAMASHITA, Katsumi; SASAHARA, Shohei; SAWADA, Hideo

**3D4-05** Preparation and Application of Fluoroalkyl End-capped Vinyltrimethoxysilane Oligomer/Talc/Cyclodextrin Nanocomposites (Fac. Sci. Tech., Hirosaki Univ.; Grad. Sch. Sci. Tech., Hirosaki Univ.; Nippon Chemical Industrial Co.,Ltd.) ○CHIBA, Masaya; SAITO, Tomoya; OIKAWA, Yuri; YAMADA, Satoshi; SUGIYA, Masashi; SAWADA, Hideo

**3D4-06\*\*** Synthesis and Properties of Modified POSS Containing Various Types of Substituents (Grad. Sch. Eng., Kyoto Univ.) ○UEDA, Kazunari; TANAKA, Kazuo; CHUJO, Yoshiki

**3D4-08\*** Synthesis of Novel Functionalized POSS Fillers (Grad. Sch. Eng., Kyoto Univ.) ○KOZUKA, Hiroto; TANAKA, Kazuo; CHUJO, Yoshiki

Chair: TANAKA, Kazuo (10 : 30 ~ 11 : 00)

\* 10:20-10:30: interval for laptop PC connection.(3D4-10, 3D4-11)

**3D4-10** Preparation of Fluoroalkyl End-capped Vinyltrimethoxysilane Oligomer/Zirconia Nanocomposites - Application of These Nanocomposites to the



Surface Modification (Grad. Sch. Sci. Tech., Hirosaki Univ.; Kanto Denka Kogyo Co., Ltd.) ○KASAI, Fumihiko; OIKAWA, Yuri; GOTO, Yuki; SAWADA, Hideo

**3D4-11\*** Preparation and Thermal Stability of Fluorinated Oligomer/Silica/Acrylonitrile-Butadiene Rubber Nanocomposites - Application to the Separation of Oil and Water (Grad. Sch. Sci. Tech., Hirosaki Univ.; Fujikura Composites) ○RATCHA, Arissara; SAITO, Tomoya; TAKAHASHI, Rika; SAWADA, Hideo

Chair: KIMURA, Mutsumi (11 : 10~11 : 50)

\* 11:00-11:10: interval for laptop PC connection.(3D4-14, 3D4-16, 3D4-17)

**3D4-14\*** Preparation and Application of Fluorinated Oligomer/Silica/Talc Nanocomposites-encapsulated Hydrophilic Compounds Possessing the super-hydrophilic/superoleophobic Characteristic (Grad. Sch. Sci. Tech., Hirosaki Univ.; Nippon Chemical Industrial Co., Ltd.) ○OIKAWA, Yuri; SAITO, Tomoya; YAMADA, Satoshi; SUGIYA, Masashi; SAWADA, Hideo

**3D4-16** Preparation and Application of Fluoroalkyl End-capped Vinyltrimethoxysilane Oligomer Composite Gels Possessing the Gluconamide Segments (Grad. Sch. Sci. Tech., Hirosaki Univ.) ○FUJII, Shogo; SAITO, Tomoya; SAWADA, Hideo

## High strength materials

**3D4-17** Evaluation of shear modulus of high performance carbon fibers (Toray Industries, Inc.) ○MATSUMOTO, Naohiro; WATANABE, Jun; TANAKA, Fumihiko

## Saturday, March 26, PM

### Functional dyes

Chair: MATSUMOTO, Shinya (13 : 00~13 : 50)

\* 12:50-13:00: interval for laptop PC connection.(3D4-25, 3D4-27, 3D4-28, 3D4-29)

**3D4-25\*** Photodynamic therapy using water-soluble sulfonyl-substituted zinc phthalocyanine complexes (Fac. Textile Sci. Technol., Shinshu Univ.; Rhodes University) ○IKEUCHI, Takuro; JOHN, Mack; TEBELLO, Nyokong; KOBAYASHI, Nagao; KIMURA, Mutsumi

**3D4-27** Synthesis of Novel Dipyrrophenazine Derivatives and Their Photosensitizing Properties for Singlet Oxygen Generation (Grad. Sch. Eng., Osaka Pref. Univ.; Grad. Sch. Eng., Hiroshima Univ.) ○HAYASHI, Yuichiro; YAGI, Shigeyuki; MAEDA, Takeshi; NAKAZUMI, Hiroyuki; ENOKI, Toshiaki; OYAMA, Yousuke; OHSHITA, Joji

**3D4-28** Synthesis and photophysical properties of quinoid-type bisboron complexes based on indole rings (Fac. Eng., Gifu Univ.) KUBOTA, Yasuhiro; ○MAKINO, Toshiaki; FUNABIKI, Kazumasa; MATSUI, Masaki

**3D4-29** Synthesis and properties of (arylamino)anthraquinone-BF<sub>2</sub> complexes (Fac. Eng., Gifu Univ.) ○AKADA, Hiroki; KUBOTA, Yasuhiro; FUNABIKI, Kazumasa; MATSUI, Masaki

Chair: MATSUI, Masaki (14 : 00~14 : 50)

\* 13:50-14:00: interval for laptop PC connection.(3D4-31, 3D4-32, 3D4-33, 3D4-34, 3D4-35)

**3D4-31** Pyrylium-coumarin dyad as a colorimetric receptor for ratiometric cyanide anion detection (RCSE, Osaka Univ.; Grad. Sch. Eng. Sci., Osaka Univ.) ○NAKAMURA, Masaya; SHIRAI, Yasuhiro; HIRAI, Takayuki

**3D4-32** Development of a thin film pH sensor for microorganism culture vessel (Grad. Sch. Eng., Osaka Pref. Univ.) ○SUGIHARA, Tomoyuki; MAEDA, Takeshi; ISHIKAWA, Shutaro; NAKAZUMI, Hiroyuki

**3D4-33** Synthesis of Coumarins by Three-component Coupling Reaction Using Arynes and Their Application to Dye-sensitized Solar Cells (Grad. Sch. Eng., Hiroshima Univ.; ACT-C, JST) YOSHIDA, Hiroto; ○FUJII, Shori; TAKAKI, Ken; OYAMA, Yousuke

**3D4-34** Optical and Electrical Properties of Novel BODIPY Dye Having both Phenyl Boronic Acid Pinacol Ester and Amino Group (Fac. Eng., Hiroshima Univ.) ○HATOU, Marin; AOYAMA, Satoshi; OYAMA, Yousuke; OHSHITA, Joji

**3D4-35** The cocrystal structure of a color developer, 2,2'-diallyl-4,4'-sulfonyldiphenol, with a fluoran dye for thermal paper (Grad. Sch. Fac. Env. and Info. Sci., Yokohama Natl. Univ.; Yokohama Natl. Univ. Support Center for Gender Equality; Nippon Kayaku Co. Ltd. Functional Chemicals R&D Laboratories; Nippon Kayaku Co. Ltd. Functional Chemicals Group) ○OHASHI, Tatsuya; GONTANI, Saori; MIYANAGA, Kyohei; KURATA, Takaaki; AKATANI, Yoshiki; MATSUMOTO, Shinya

Chair: YAGI, Shigeyuki (15 : 00~15 : 50)

\* 14:50-15:00: interval for laptop PC connection.(3D4-37, 3D4-38, 3D4-39, 3D4-40, 3D4-41)

**3D4-37** Optical properties of polymorphs of *N,N'*-dipropylated and *N,N'*-dibutylated diketopyrrolopyrrole derivatives (Grad. Sch. Fac. Env. and Info. Sci., Yokohama Natl. Univ.; Tokyo Printing Ink) ○FUJISHIMA, Takeru; OKADA, Naoya; TODA, Akehiro; IMAI, Kengo; SEKINE, Toshinari; MATSUMOTO, Shinya

**3D4-38** Vapochromism of 2,5-diamino-3,6-dicyanopyrazine dye having 4-chlorobenzyl substituents in vacuum-deposited films (Coll. Eng. Sci.,

Yokohama Natl. Univ.) ○INOUE, Kazuya; AKUNE, Yoko; UEHARA, Takuya; MATSUMOTO, Shinya

**3D4-39** Development of thienopyrrole-based squarylium dyes with absorption and fluorescence in the near-infrared region (Fac. Eng., Gifu Univ.) KUBOTA, Yasuhiro; ○TACHIKAWA, Motoki; FUNABIKI, Kazumasa; MATSUI, Masaki

**3D4-40** Sensitizing performance of novel unsymmetrical indoline squarylium dyes (Fac. Eng., Gifu Univ.) ○NISHIWAKI, Daichi; KUBOTA, Yasuhiro; FUNABIKI, Kazumasa; MANSEKI, Kazuhiro; MATSUI, Masaki

**3D4-41** Estimation of thermal- and photo-stability of polyfluorinated near-infrared absorbing organic dyes (Fac. Eng., Gifu Univ.) FUNABIKI, Kazumasa; ○GOTO, Syunya; KUBOTA, Yasuhiro; MATSUI, Masaki

Chair: KUBO, Yuji (16 : 00~16 : 40)

\* 15:50-16:00: interval for laptop PC connection.(3D4-43, 3D4-44, 3D4-45, 3D4-46)

**3D4-43** Near-infrared Squaraine Dyes Having Thermally Removable Functionality (Grad. Sch. Eng., Osaka Pref. Univ.) ○ASHIDA, Takuhiro; MAEDA, Takeshi; YAGI, Shigeyuki; NAKAZUMI, Hiroyuki

**3D4-44** Synthesis and Optical Properties of Bichromophoric Squaraine Dyes Consisting of Benzodipyrrole Moieties (Sch. Eng., Osaka Pref. Univ.; Grad. Sch. Eng., Osaka Pref. Univ.) ○ODA, Yuya; MAEDA, Takeshi; YAGI, Shigeyuki; NAKAZUMI, Hiroyuki

**3D4-45\*** Linear and Tripodal Squaraine Dyes with Triphenylamine Components for Dye-Sensitized Solar Cells (Grad. Sch. Eng., Osaka Pref. Univ.) ○NGUYEN, Tay Van; MAEDA, Takeshi; YAGI, Shigeyuki; NAKAZUMI, Hiroyuki

**3D4-46** Visualization of Gamma-Rays by Color Former Gels Using Brominated Low-molecular-weight Organogelators (Grad. Sch. Sci., Eng., Saitama Univ.; Tokyo Metropolitan Ind. Tech. Res. Inst.) ○TACHIKAWA, Tatsuya; KOIKE, Yuya; SEKIGUCHI, Masayuki; NAKAGAWA, Seiko

Chair: TACHIKAWA, Tatsuya (16 : 50~17 : 30)

\* 16:40-16:50: interval for laptop PC connection.(3D4-48, 3D4-49, 3D4-50, 3D4-51)

**3D4-48** Synthesis and characterization of 2,3-naphtho-fused BODIPY (Urban Environmental Sci., TMU) ○NAKASHIMA, Mika; YAMAZAWA, Sho; NISHIYABU, Ryuhei; KUBO, Yuji

**3D4-49** Synthesis of a tetraaryl BODIPY dye for an application of dye sensitized solar cells (Grad. Sch. Urban Environmental Sci., TMU; Nippon Kayaku Co. Ltd.) ○ASABA, Takuro; KUBO, Yuji; KANEKO, Masayoshi; SHIGAKI, Koichiro

**3D4-50** Sensitizers having a benz[*c*,*d*]indolenine skeleton for dye-sensitized solar cell (Fac. Eng., Gifu Univ.) ○HAISHIMA, Yuki; KUBOTA, Yasuhiro; FUNABIKI, Kazumasa; MATSUI, Masaki

**3D4-51** Improved stability of hydrophobic natural dye by intercalation in organoclay (Fac. Eng., Shizuoka Univ.) ○TAGUCHI, Taiga; KOGA, Mikiko; SHIBATA, Masashi; KOHNO, Yoshiumi; MAEDA, Yasuhisa

## Room D5

Chishinkan1 Building 214

## Inorganic Chemistry

### Friday, March 25, AM

Chair: FUJITA, Koji (10 : 00~11 : 00)

\* 9:50-10:00: interval for laptop PC connection.(2D5-07, 2D5-08, 2D5-09, 2D5-10, 2D5-11, 2D5-12)

**2D5-07** Synthesis of white bismuth sulfide via reaction of bismuth salt and thiol (Grad. Sch. Sci., Eng., Yamagata Univ.) ○HOSHI, Yuki; OCHIAI, Bungo

**2D5-08** Synthesis and characterization of novel rhodium carbide (Dep. Chem., Sch. Sci., Kyoto Univ.) ○WAKISAKA, Takuo; KUSADA, Kohei; YAMAMOTO, Tomokazu; YOSHIOKA, Satoru; HIGASHIHARA, Toshiaki; MATSUMURA, Syo; KUBOTA, Yoshiki; KITAGAWA, Hiroshi

**2D5-09\*** Synthesis of a New Six-coordinated Silicon Compound by Using Multidentate Ligand with Controlled Reactive Site (Grad. Sch. Advanced Sci. Eng., Waseda Univ.) ○INAMORI, Yuya; KOMATA, Yuma; SHIMOJIMA, Atsushi; WADA, Hiroaki; KURODA, Kazuyuki

**2D5-10\*** Tuning Steric Effects and Electron-donor Ability of Tripodal N4-Ligand/Controlling Copper(I)-dioxygen Reactivity (Grad. Sch. Eng., Osaka Univ.) ○PARIA, Sayantan; MORIMOTO, Yuma; SUGIMOTO, Hideki; FUJIEDA, Nobutaka; ITOH, Shinobu

**2D5-11\*** Electrochemical reduction of oxalic acid using TiO<sub>2</sub>/ZrO<sub>2</sub> composite particle (I<sub>2</sub>CNER, Kyushu Univ.) ○HATA, Shinichi; OHKUBO, Kazuya; SADAKEYO, Masaaki; KATO, Kenichi; YAMAUCHI, Miho

**2D5-12\*** Preparation of luminescent nanoparticles Zn<sub>2</sub>GeO<sub>4</sub>:Mn<sup>2+</sup> by pulsed laser ablation in water. (Ritsumeikan Univ.) ○MASUDA, Tetsuya; FUJIOKA, Daiki; SANADA, Tomoe; WADA, Noriyuki; TANAKA, Atsuhiko; KOJIMA, Kazuo

Chair: SUGIMOTO, Hideki (11 : 10~12 : 00)

- \* 11:00-11:10: interval for laptop PC connection.(2D5-14, 2D5-15, 2D5-17, 2D5-18)
- 2D5-14** Synthesis and magnetic property of new layered oxyhalogenide (Grad. Sch. Eng., Kyoto Univ.) ○MATSUMOTO, Yuki; YAMAMOTO, Takafumi; TAKEIRI, Fumitaka; HAYASHI, Naoaki; KAGEYAMA, Hiroshi
- 2D5-15<sup>#</sup>** A labile hydride strategy for the synthesis of novel oxynitrides (Grad. Sch. Eng., Kyoto Univ.) ○TAKEIRI, Fumitaka; YAJIMA, Takeshi; AIDZU, Kohei; AKAMATSU, Hirofumi; FUJITA, Koji; YOSHIMUNE, Wataru; GOPALAN, Venkatraman; TANAKA, Katsuhisa; YAMAMOTO, Takafumi; KOBAYASHI, Yoji; KAGEYAMA, Hiroshi
- 2D5-17** High-Temperature Topochemical Ammonolysis to Synthesize an Oxynitride Perovskite. (Grad. Sch. Eng., Kyoto Univ.) ○MIKITA, Riho; AHAREN, Tomoko; YAMAMOTO, Takafumi; TAKEIRI, Fumitaka; YOSHIMUNE, Wataru; FUJITA, Koji; YOSHIDA, Suguru; TANAKA, Katsuhisa; DMITRY, Battuk; ARTEM M., Abakumov; CRAIG M., Brown; KOBAYASHI, Yoji; KAGEYAMA, Hiroshi
- 2D5-18** Synthesis and physical properties of single-crystalline perovskite-type oxides with anomalously high-valent transition-metal ions prepared in a strong oxidizing solution (Grad. Sch. Eng., The Univ. of Tokyo) KINOSHITA, Masataka; YOKOYAMA, Sho; SAKAI, Hideaki; OGASAWARA, Yoshiyuki; HIBINO, Mitsuhiro; MIZUNO, Noritaka; ○ISHIWATA, Shintaro

## Friday, March 25, PM

Chair: FUJISAWA, Jun-ichi (14 : 30~15 : 30)

- \* 14:20-14:30: interval for laptop PC connection.(2D5-34, 2D5-36, 2D5-38)
- 2D5-34<sup>\*</sup>** New perovskite-type oxides  $\text{LaCa}_2\text{Fe}_2\text{O}_9$  with *A*-site layered order/disorder structures (1): synthesis and the charge disproportionation transitions (ICR, Kyoto Univ.) ○GUGO, Haichuan; HOSAKA, Yoshiteru; SEKI, Hayato; SAITO, Takashi; ICHIKAWA, Noriya; SHIMAKAWA, Yuichi
- 2D5-36<sup>\*</sup>** New perovskite-type oxides  $\text{LaCa}_2\text{Fe}_2\text{O}_9$  with *A*-site layered order/disorder structures (2): Magnetic structure analysis (ICR, Kyoto Univ.) ○HOSAKA, Yoshiteru; GUGO, Haichuan; SAITO, Takashi; ICHIKAWA, Noriya; PASCAL, Manuel; DIMITRY, Khalyavin; ANGEL, Arevalo Lopez; J. PAUL, Atfield; SHIMAKAWA, Yuichi
- 2D5-38<sup>\*</sup>**  $\text{ScFeO}_3$  isomer (MSL, Tokyo Tech; MCES, Tokyo Tech) HAMADSAKI, Yosuke; SHIMIZU, Takao; YASUI, Shintaro; TANIYAMA, Tomoyasu; ○ITOH, Mitsuru

Chair: OHTANI, Masataka (15 : 40~16 : 50)

- \* 15:30-15:40: interval for laptop PC connection.(2D5-41, 2D5-43, 2D5-44, 2D5-45, 2D5-46)
- 2D5-41<sup>\*</sup>** Strong electronic couplings between conjugated molecules and  $\text{TiO}_2$  by sulfur bridging atoms (Grad. Sch. Sci. Tech., Gunma Univ.) ○FUJISAWA, Jun-ichi; MUROGA, Ryuki; HANAYA, Minoru
- 2D5-43** Measurement of the half-life variation of  $^{235\text{m}}\text{U}$  depending on the chemical environments (Grad. Sch. Sci., Osaka Univ.) ○SHIGEKAWA, Yudai; KASAMATSU, Yoshitaka; YASUDA, Yuki; SHINOHARA, Atsushi
- 2D5-44** Measurements of the first ionization energies of heavy actinides, fermium ( $Z=100$ ) and mendelevium ( $Z=101$ ) (ASRC, JAEA) ○SATO, Tetsuya K.; ASAI, Masato; KANEYA, Yusuke; TSUKADA, Kazuaki; TOYOSHIMA, Atsushi; MITSUKAI, Akina; NAGAME, Yuichiro; TAKEDA, Shinsaku; SAKAMA, Minoru; SATO, Daisuke; OOE, Kazuhiro; OSA, Akihiko; MAKII, Hiroyuki; ICHIKAWA, Shinichi; SCHAEDEL, Matthias; KRATZ, Jens Volker; STORA, Thierry; SHIGEKAWA, Yudai
- 2D5-45** Study of derivation method of adsorption enthalpy for gas phase chemistry of superheavy elements (Grad. Sch. Sci. and Technol., Niigata Univ.) ○SHIRAI, Kaori; OSHIMI, Yoshinari; GOTO, Shin'ichi; OOE, Kazuhiro; KUDO, Hisaaki
- 2D5-46<sup>\*</sup>** Reduction and determination of oxidation state of Mo and W by dithiol ligands (Grad. Sch. Sci., Hiroshima Univ.) ○MIYASHITA, Sunao; KYAKUNO, Natsuki; KANEKO, Masashi; NAKASHIMA, Satoru

Chair: NAKASHIMA, Satoru (17 : 00~18 : 00)

- \* 16:50-17:00: interval for laptop PC connection.(2D5-49, 2D5-51, 2D5-52, 2D5-53)
- 2D5-49<sup>\*</sup>** Development of rapid one-pot synthetic method for porous nanomaterials having ultrafine concave-convex surface (Sch. Env. Sci. Eng., KUT) ○OHTANI, Masataka; KOBIRO, Kazuya
- 2D5-51** Mass Spectrometry using Porous Nanoparticles having Ultrafine Concave-Convex Surface (Sch. Env. Sci. Eng., KUT) ○HAMADA, Dai; TAKASE, Kazutaka; OHTANI, Masataka; KOBIRO, Kazuya
- 2D5-52** One-pot synthesis of cobalt nanosheet assemblies via ultra-rapid heating reaction (Sch. Env. Sci. Eng., KUT) ○MIMURA, Kei; OHTANI, Masataka; KOBIRO, Kazuya
- 2D5-53<sup>#</sup>** One-pot synthesis of nanofiber-bundles of  $\text{TiO}_2$  with cheek brush-like morphology (Grad. Sch. Eng., KUT) ○DURIYASART, Farkfun; HAMAUZI, Hiromu; OHTANI, Masataka; KOBIRO, Kazuya

## Saturday, March 26, AM

Chair: SUZUKI, Kosuke (9 : 10 ~ 10 : 10)

- \* 9:00-9:10: interval for laptop PC connection.(3D5-02, 3D5-03, 3D5-04,

3D5-06, 3D5-07)

- 3D5-02** Synthesis of proton-containing decavanadate-bolaamphiphile hybrid crystals (Sch. Sci., Tokai Univ.) ○KIYOTA, Yoshiki; KOJIMA, Tatsuhiro; TAIRA, Minako; KAWANO, Masaki; ITO, Takeru
- 3D5-03** Synthesis and Catalysis of an Yttrium-Containing Polyoxovanadate (Grad. Sch. Nat. Sci. Technol., Kanazawa Univ.) ○KIKUKAWA, Yuji; YAMAMOTO, Chikara; HAYASHI, Yoshihito
- 3D5-04<sup>#</sup>** Physical Properties with Ion Fluctuation in Polyoxometalate (Grad. Sch. Sci., Hiroshima Univ.) ○KATO, Chisato; NISHIHARA, Sadafumi; MARYUNINA, Kseniya; TSUNASHIMA, Ryo; TATEWAKI, Yoko; INOUE, Katsuya
- 3D5-06** Catalytic epoxidation of cyclooctene by hydrogen peroxide in the presence of  $[\text{VW}_5\text{O}_{19}]^{3-}$ . (Coll. Eng., Chubu Univ.) ○KIHARA, Daisuke; OOKAWA, Chisa; TOGAWA, Yuta; ISHIKAWA, Eri
- 3D5-07** Synthesis and Crystal Structure of  $(\text{TBA})_3[\text{VW}_5\text{O}_{19}]$  (Coll. Eng., Chubu Univ.) ISHIKAWA, Eri; ○TOGAWA, Yuta; OOKAWA, Chisa

Chair: ISHIKAWA, Eri (10 : 20~11 : 30)

- \* 10:10-10:20: interval for laptop PC connection.(3D5-09, 3D5-10, 3D5-12, 3D5-13, 3D5-14, 3D5-15)
- 3D5-09** Preparation and characterization of a new dilacunar silicotungstates combined with a Ru(benzene) moiety (Fac. Eng., Hiroshima Univ.) ○KIKUCHI, Masaya; SADAKANE, Masahiro; SANO, Tsuneji; OTA, Hiromi; TSUNOJI, Nao
- 3D5-10<sup>\*</sup>** Synthesis and Rearrangement of Ring-Shaped Mn-Substituted Phosphotungstate Clusters (Grad. Sch. Eng., The Univ. of Tokyo) ○MINATO, Takuo; SUZUKI, Kosuke; YAMAGUCHI, Kazuya; MIZUNO, Noritaka
- 3D5-12** Synthesis and Water- and Temperature-Triggered Reversible Structural Transformation of Multinuclear Cobalt(II) Cores within Polyoxometalates (Grad. Sch. Eng., The Univ. of Tokyo) ○SUZUKI, Kosuke; KURIYAMA, Yosuke; KIKUKAWA, Yuji; YAMAGUCHI, Kazuya; MIZUNO, Noritaka
- 3D5-13** Redox stability of Ru-substituted polyoxotungstates with carbonyl ligand (Fac. Eng., Hiroshima Univ.) ○ABE, Shinichi; NISHIKI, Kensuke; YE, Shen; SANO, Tsuneji; SADAKANE, Masahiro; TSUNOJI, Nao
- 3D5-14** Investigating a reaction process of  $[\text{Na}(\text{SO}_3)_2(\text{PhPO}_3)_4\text{Mo}_{18}\text{O}_{49}]^{5-}$  cluster by 31P-NMR (Grad. Sch. Sci. Eng., Yamaguchi Univ.) ○FUZIBAYASHI, Masaru; NAKAMURA, Ippei; FUJIWARA, Aya; TSUNASIMA, Ryo
- 3D5-15** Structure and alternating electric field response of mixed-valence  $[\text{P}^{\text{IV}}\text{Mo}_5\text{Mo}^{\text{VI}}_{12}\text{O}_{40}]^{(3+n)-}$  cluster salted with proton accepting heterocyclic amine (Grad. Sch. Sci. Eng., Yamaguchi Univ.) ○NAKAMURA, Ippei; KATO, Chisato; HOSHINO, Norihisa; NISHIHARA, Sadafumi; INOUE, Katsuya; AKUTAGAWA, Tomoyuki; TSUNASHIMA, Ryo

## Saturday, March 26, PM

Chair: INAGUMA, Yoshiyuki (12 : 40~13 : 40)

- \* 12:30-12:40: interval for laptop PC connection.(3D5-23, 3D5-24, 3D5-26, 3D5-27, 3D5-28)
- 3D5-23** Development of pyrazine-2-carboxylate titanium compounds using water as a solvent (IMRAM, Tohoku Univ.) ○KOBAYASHI, Makoto; OKUHARA, Tatsuya; KATO, Hideki; KAKIHANA, Masato
- 3D5-24<sup>\*</sup>** Cascade type two-step structural transformation of Cu-based PCP in water (WPI-iCeMS, Kyoto Univ.) ○KO, Nakeun; SATO, Hiroshi; HOSONO, Nobuhiko; MATSUDA, Ryotaro; KITAGAWA, Susumu
- 3D5-26<sup>#</sup>** Construction of Porous Structures based on Cyclic Metal Complexes and Polyoxometalate Composites (Grad. Sch. Sci., Kyushu Univ.) ○Scott Bethany E.; YOU, Tetsu; KOSHIYAMA, Tomomi; OHBA, Masaaki
- 3D5-27** Influence of treatment temperature of He and  $\text{NH}_3$  on adsorption of phosphate ions onto PAN fibers from aqueous solution (Fac. Eng., Chiba Univ.) ○YAMAZAKI, Yuki; AMANO, Yoshimasa; MACHIDA, Motoi; IMAZEKI, Fumio
- 3D5-28** Formation of Ni species with superparamagnetic nature in MFI-type zeolite and its reversibility by (re-oxidation)-(re-reduction) treatment (Okayama Univ.) ○NANJO, Tsubasa; ODA, Akira; SUNATSUKI, Yukinari; OHKUBO, Takahiro; KURODA, Yasushige

Chair: KOBAYASHI, Makoto (13 : 50~14 : 50)

- \* 13:40-13:50: interval for laptop PC connection.(3D5-30, 3D5-32, 3D5-34)
- 3D5-30<sup>\*</sup>** New chemistry of metal-metal  $\sigma$  bond: activation of the small molecules by utilizing the light responsive of the  $\text{Cd}_2^{2+}$  species formed in the specific MFI reaction field (PRESTO, JST) ○ODA, Akira; OHKUBO, Takahiro; YUMURA, Takashi; KOBAYASHI, Hisayoshi; KURODA, Yasushige
- 3D5-32<sup>#</sup>** Physical Property Control of ZnO Thin Film Using Hydrogen Ion Beam Irradiation at Low Temperature (Dep. Chem., Sch. Sci., Kyoto Univ.; Grad. Sch. Eng., Kyushu Univ.; KIT) ○NAKAYAMA, Ryo; MAESATO, Mitsuhiro; NAGAOKA, Takashi; ARITA, Makoto; ZHU, Wenliang; PEZZOTTI, Giuseppe; KITAGAWA, Hiroshi
- 3D5-34<sup>\*</sup>** Reconsideration of enhancement of red emission in praseodymium-doped perovskite-type oxide  $\text{SrTiO}_3:\text{Pr}$  by the addition of aliovalent cation (Fac. Sci., Gakushuin Univ.) ○INAGUMA, Yoshiyuki; SASAKI, Shuhei; MORI, Daisuke

Chair: MAKI, Hideshi (15 : 00~16 : 00)

- \* 14:50-15:00: interval for laptop PC connection.(3D5-37, 3D5-38, 3D5-39, 3D5-40, 3D5-41)
- 3D5-37<sup>#</sup>** Controlling Factors on the Hierarchical Macroscopic Structure Organized by Inorganic Nanosheet Liquid Crystals (Grad. Sch. Eng., KIT) ○MOURI, Emiko; NONO, Yoshihiro; NAKATO, Teruyuki
- 3D5-38<sup>#</sup>** Formation of Nanoscrolls from Layered Octosilicate through Intercalation of Dimethyldioctadecylammonium Cations (Grad. Sch. Advanced Sci. Eng., Waseda Univ.; Kagami Memorial Research Inst. Materials Sci. Tech., Waseda Univ.) ○SUGIHARA, Megumi; TORIMOTO, Aya; MATSUMOTO, Takuya; ASAKURA, Yusuke; KURODA, Yoshiyuki; SHIMOJIMA, Atsushi; WADA, Hiroaki; KURODA, Kazuyuki
- 3D5-39** Synthesis of Interlayer-Modified Mg(OH)<sub>2</sub> with Tripodal Ligands in Organic Solvents (Sch. Advanced Sci. Eng., Waseda Univ.; WIAS; Kagami Memorial Research Inst. Materials Sci. Tech., Waseda Univ.) ○MURAMATSU, Keisuke; KURODA, Yoshiyuki; NAKANO, Yuki; KOICHI, Tatsuyuki; SHIMOJIMA, Atsushi; WADA, Hiroaki; KURODA, Kazuyuki
- 3D5-40<sup>#</sup>** Preparation of Layered Double Hydroxide Nanoparticles by Rehydration of Mg-Al Mixed Metal Oxides in Aqueous Solutions of Tripodal Ligands (Grad. Sch. Advanced Sci. Eng., Waseda Univ.) ○OKA, Yuya; KURODA, Yoshiyuki; SHIMOJIMA, Atsushi; WADA, Hiroaki; KURODA, Kazuyuki
- 3D5-41\*** The lanthanoid bearing on titanate nanosheets including Group 5 elements (Kawasaki Med. Sch.) ○DAISUKE, Yoshioka; YASUMITSU, Nishimura

Chair: MOURI, Emiko (16 : 10~17 : 20)

- \* 16:00-16:10: interval for laptop PC connection.(3D5-44, 3D5-45, 3D5-46, 3D5-47, 3D5-49, 3D5-50)
- 3D5-44** Preparation of titania films by electrodeposition (Nagano Pref. General Ind. Tech. Ctr.; Grad. Sch. Sci. Technol., Shinshu Univ.) ○NAGAYA, Satoshi; NISHIKIORI, Hiromasa
- 3D5-45** Fabrication of Anodic Oxidation Porous Alumina Titanium Oxide Thin Film Nano-composite by Liquid Phase Deposition at Low Temperature (Grad. Sch. Eng., Kobe Univ.; Center for Environ. Manage., Kobe Univ.) ○SETO, Shohei; MAKI, Hideshi; MIZUHATA, Minoru
- 3D5-46<sup>#</sup>** Electrochemical fabrication of one-dimensional porphyrinic wires on electrodes (Grad. Sch. Sci., The Univ. of Tokyo) ○MUSTAFAR, Suzaliza; WU, Kuo-hui; SAKAMOTO, Ryota; NISHIHARA, Hiroshi
- 3D5-47<sup>#</sup>** Preparation of Transition Metal-Doped Metal Oxide Nanosheet and the Effect of Transition Metal on Its Photocatalyst Activity (Grad. Sch. Fac. Sci. Eng., Shimane Univ.) ○SOONTORNCHAIYAKUL, Wasusate; FUJIMURA, Takuya; USAMI, Hisanao; SASAI, Ryo
- 3D5-49** Hetero-assembly of MoS<sub>2</sub> nanosheets with Ca<sub>2</sub>Nb<sub>2</sub>O<sub>10</sub> nanosheets and its photocurrent property under visible light (MANA, NIMS; Penn State Univ) ○SAKAI, Nobuyuki; SASAKI, Takayoshi; MALLOUK, Thomas E.
- 3D5-50** Preparation of thin films of pillared layered materials for gas sensor (Grad. Sch. Eng., Univ. of Hyogo) ○ARAKI, Masanobu; MATSUO, Yohaiki

**Room D6**  
Chishinkan1 Building 215

## Coordination Chemistry, Organometallic Chemistry

Thursday, March 24, AM

Zn

Chair: MATSUDA, Ryotaro (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(1D6-01, 1D6-02, 1D6-03, 1D6-04, 1D6-05, 1D6-06)
- 1D6-01** Theoretical model study on optical properties of bis(dipyrrinato) zinc (II) complexes (Grad. Sch. Eng. Sci., Osaka Univ.) ○ASAOKA, Mizuki; NISHIKUBO, Rena; MIYAGI, Koji; TAKEBAYASHI, Taku; KITAGAWA, Yasutaka; NAKANO, Masayoshi
- 1D6-02<sup>#</sup>** Luminescent nanowires based on bis(dipyrrinato)zinc(II) complexes (Grad. Sch. Sci., The Univ. of Tokyo) ○TOYODA, Ryojun; SAKAMOTO, Ryota; MATSUOKA, Ryota; TSUCHIYA, Mizuho; NISHIHARA, Hiroshi
- 1D6-03** Synthesis and photophysical properties of dipyrromethene ligand having arylborane unit and zinc(II) complexes (Fac. Eng., Nagasaki Univ.) ○TAKAKI, Koyo; SAKUDA, Eri; HORIUCHI, Shinnosuke; ARIKAWA, Yasuhiro; UMAKOSHI, Keisuke
- 1D6-04** Synthesis and Properties of a Novel Zinc Complex Having an NAD Model Ligand (Fac. Sci., Univ. of Toyama; Grad. Sch. Sci. Eng., Univ. of Toyama) ○TEZUKA, Yousuke; OHTSU, Hideki; TSUGE, Kiyoshi
- 1D6-05<sup>#</sup>** Synthesis of bola-type diimines with bulky dinuclear zinc complexes and their gelation ability (IIS, The Univ. of Tokyo) ○SHEN, Qianwen; SUZUKI, Yoshikazu; YOSHIKAWA, Isao; HOUJOU, Hirohiko

- 1D6-06** Support effects on the catalytic activities of Pt-loaded MOFs for CO oxidation (Grad. Sch. Sci., Kyushu Univ.; I<sub>2</sub>CNER, Kyushu Univ.; RIKEN Spring-8 Center) ○YOSHIMARU, Shotaro; SADAKEYO, Masaaki; KATO, Kenichi; ALEKSANDAR, Staykov; YAMAUCHI, Miho

Chair: OHTSU, Hideki (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(1D6-08, 1D6-10, 1D6-12)
- 1D6-08<sup>#</sup>** Structural Investigation of Crystalline-to-Amorphous-to-Crystalline Phase Transformation of a Coordination Network (POSTECH) ○OHTSU, Hiroyoshi; KOJIMA, Tatsuhiro; NIWA, Yasuhiro; BENNET, Thomas; KAWANO, Masaki
- 1D6-10<sup>#</sup>** Analysis of host-guest interactions in the crystalline sponge showing significant periodicity change (Grad. Sch. Eng., The Univ. of Tokyo; ACCEL, JST) ○HOSHINO, Manabu; FUJITA, Makoto
- 1D6-12\*** Synthesis of photoreactive solid solution based on porous metal complexes and photo-activation of their nanopores (WPI-iCeMS, Kyoto Univ.) ○OHBA, Tadashi; KUSAKA, Shinpei; HOSONO, Nobuhiko; HORI, Akihiro; MATSUDA, Ryotaro; KITAGAWA, Susumu

Cu

Chair: OHBA, Masaaki (11 : 20~12 : 20)

- \* 11:10-11:20: interval for laptop PC connection.(1D6-15, 1D6-17, 1D6-18, 1D6-19, 1D6-20)
- 1D6-15<sup>#</sup>** Oxygen Responsive Emission in the Solid State at High Temperature Based on Copper(I) Complexes Bearing Diimine Ligand (Fac. Sci. and Technol., Seikei Univ.) ○NISHIKAWA, Michihiro; WASHIMI, Masaya; TSUBOMURA, Taro
- 1D6-17<sup>#</sup>** Mechanochemical Syntheses and Conversions of Highly-Luminescent Cu(I) Dinuclear Complexes (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) ○HASEGAWA, Tatsuya; KOBAYASHI, Atsushi; YOSHIDA, Masaki; KATO, Masako
- 1D6-18** Synthesis and Physical Properties of New Coordination Polymers with Copper halogen and tetrazine (Kinki Univ.; PRESTO, JST) ○TANISHIMA, Koki; OKUBO, Takashi; MAEKAWA, Masahiko; KURODA-SOWA, Takayoshi
- 1D6-19** Research on Fabrication Methods of Thin-Films and Application to Solar Cells with d-π Complexes consisting of HAT Derivatives and Copper Halides (Kinki Univ.; PRESTO, JST) ○HIMOTO, Kento; NAKAMURA, Kana; OKUBO, Takashi; MAEKAWA, Masahiko; KURODA-SOWA, Takayoshi
- 1D6-20<sup>#</sup>** Elucidation of Formation Mechanism for Coordination Polymer Supported by Copper-Tripodal Triheteroaryl Ligand System (Grad. Sch. Sci., Osaka City Univ.) ○KAKUTAKA, Kairi; ENOMOTO, Ryo; NISHIKAWA, Keisuke; MORIMOTO, Yoshiki; TACHI, Yoshimitsu

Thursday, March 24, PM

Chair: KURODA-SOWA, Takayoshi (13 : 30~14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(1D6-28, 1D6-29, 1D6-31, 1D6-33)
- 1D6-28** Membrane Channel Formation Control Using Amphotericin B Incorporated a Metal Binding Site (Grad. Sch. Sci., Kyushu Univ.) ○ASADA, Sana; KOSHIYAMA, Tomomi; OHBA, Masaaki
- 1D6-29\*** Adsorption and Redox Properties of Porous Composites Based on Cyclic Metal Complexes and Polyoxometalates (Grad. Sch. Sci., Kyushu Univ.) ○TETSU, You; YONEDA, Hiroshi; Scott Bethany E.; KOSHIYAMA, Tomomi; OHBA, Masaaki
- 1D6-31\*** Structure and properties of nano-space of metal organic frameworks inducing magnetic conversion of oxygen molecular dimer (WPI-iCeMS, Kyoto Univ.) ○HORI, Akihiro; FUJII, Shunsaku; SATO, Yohei; KUBOTA, Yoshiki; MATSUDA, Ryotaro; KITAGAWA, Susumu
- 1D6-33** Gate Gas Adsorption Properties of Porous Coordination Polymers Based on angular bidentate Ligands (NIPPON STEEL & SUMITOMO METAL CORPORATION) ○KAJIRO, Hiroshi; HORI, Akihiro; MATSUDA, Ryotaro; IGARASHI, Ryota; KITAGAWA, Susumu

Cu, Au

Chair: NAKAZAWA, Jun (14 : 40~15 : 40)

- \* 14:30-14:40: interval for laptop PC connection.(1D6-35, 1D6-36, 1D6-37, 1D6-38, 1D6-39, 1D6-40)
- 1D6-35** Theoretical study of magnetic interaction in pyrazole-bridged dinuclear Cu(II) complex with approximately spin-projected optimization method (Grad. Sch. Eng. Sci., Osaka Univ.) ○MIYAGI, Koji; ASAOKA, Mizuki; NISHIKUBO, Rena; TAKEBAYASHI, Taku; KITAGAWA, Yasutaka; NAKANO, Masayoshi
- 1D6-36<sup>#</sup>** Crystal structure and physical properties of a flexible one-dimensional porous copper complex with bulky fluorinated anions (Fac. Env. Earth Sci., Hokkaido Univ.) ○ZHENG, Xin; NORO, Shin-ichiro; KUBO, Kazuya; NAKAMURA, Takayoshi
- 1D6-37** Synthesis of N-heterocyclic carbene gold complexes having macrocyclic structure (Fac. Sci., Shizuoka Univ.) ○FUKASAWA, Kensuke; NISHINA, Naoko
- 1D6-38** Emission properties of Au<sub>8</sub> clusters with long fluorescence lifetime

- (Grad. Sch. Sci. Eng. For Edu., Univ. of Toyama; Fac. Env. Earth Sci., Hokkaido Univ.) ○OKUBO, Nobuyuki; MAEBA, Junich; SHICHIBU, Yukatsu; KONISHI, Katsuaki; IWAMURA, Munetaka; NOZAKI, Koichi  
**1D6-39<sup>#</sup>** Unique Properties of Ferrocenyl Modified Ultrasmall Gold Clusters (Grad. Sch. Eng., Hokkaido Univ.) ○SHICHIBU, Yukatsu; ORDONEZ, Carlos; KONISHI, Katsuaki  
**1D6-40<sup>#</sup>** Creation of Porous Framework Based on a D-Penicillaminato  $\text{Co}^{\text{III}}_2\text{Au}^{\text{I}}_3$  Complex Anions and Aqua Manganese(II) Cations (Grad. Sch. Sci., Osaka Univ.) ○SURINWONG, Sireenart; YOSHINARI, Nobuto; KUWAMURA, Naoto; IGASHIRA, Asako; KONNO, Takumi

## Au, Pd, Ni

Chair: KONISHI, Katsuaki (15 : 50~16 : 50)

- \* 15:40-15:50: interval for laptop PC connection.(1D6-42, 1D6-43, 1D6-45, 1D6-46, 1D6-47)  
**1D6-42<sup>#</sup>** Halogen elimination reaction of an Au(III) complex included in a Pd (II)-macrocycle-assembled porous crystal (Grad. Sch. Sci., The Univ. of Tokyo) ○TASHIRO, Shohei; ISHII, Ryoma; SHIONOYA, Mitsuhiko  
**1D6-43<sup>#\*</sup>** Construction of size-specific and reaction-selective reaction fields with a porous crystal Metal-Macrocycle Framework (MMF) (Grad. Sch. Sci., The Univ. of Tokyo) ○YONEZAWA, Hirotaka; TASHIRO, Shohei; SHIONOYA, Mitsuhiko  
**1D6-45<sup>#</sup>** Withdrawn  
**1D6-46** Alkane Oxygenation Catalysis of Nickel Complexes with Oxazoline-based Bidentate and Tridentate Ligands (Grad. Sch. Eng., Kanagawa Univ.) ○IZUMI, Takashi; NAKAZAWA, Jun; HIKICHI, Shiro  
**1D6-47** Development of immobilized nickel complex catalyst based on bisoxazoline ligand and their catalytic activities toward alkane oxidation (Grad. Sch. Eng., Kanagawa Univ.) ○SAKAMAKI, Kengo; NAKAZAWA, Jun; HIKICHI, Shiro

## Ni

Chair: YAMADA, Teppei (17 : 00~18 : 00)

- \* 16:50-17:00: interval for laptop PC connection.(1D6-49, 1D6-51, 1D6-53)  
**1D6-49<sup>#\*</sup>** Physical properties of a hydrogen-bonding molecular solid based on a Ni bimetal complex with donor-acceptor-donor nature (Dep. Chem., Sch. Sci., Kyoto Univ.) ○MIKIHIRO, Hayashi; OTSUBO, Kazuya; MAESATO, Mitsuhiko; KOMATSU, Tokutaro; SUGIMOTO, Kunihisa; KITAGAWA, Hiroshi  
**1D6-51<sup>\*</sup>** Low-Overpotential Hydrogen Evolution from Water Catalyzed by a Nickel Complex Having Multi-Electron and Multi-Proton Transfer Units (Fac. Sci., Kyushu Univ.; WPI-I2CNER, Kyushu Univ.; UIUC; CMS, Khushu Univ.) ○YAMAUCHI, Kosei; KOSHIBA, Keita; HUYNH, Mioy; HAMMES-SCHIFFER, Sharon; SAKAI, Ken  
**1D6-53<sup>\*</sup>** Syntheses and Electronic Properties of Two-Dimensional Layered-Type Nickel MX-Ghost Leg Complexes (Dep. Chem., Sch. Sci., Kyoto Univ.) ○HASHIGUCHI, Ryota; OTSUBO, Kazuya; SUGIMOTO, Kunihisa; FUJIWARA, Akihiko; KITAGAWA, Hiroshi

## Ni

Chair: HOSONO, Nobuhiko (18 : 10~19 : 00)

- \* 18:00-18:10: interval for laptop PC connection.(1D6-56, 1D6-57, 1D6-59, 1D6-60)  
**1D6-56** Syntheses and properties of protonated nickel dithiolene complex with multi-proton accepting moieties (Fac. Sci., Kyoto Univ.) ○KIMURA, Yojiro; HAYASHI, Mikihiro; MAESATO, Mitsuhiko; SUGIMOTO, Kunihisa; KITAGAWA, Hiroshi  
**1D6-57<sup>\*</sup>** Adsorption behavior of crystalline peptide metallo-macrocycle under gaseous mixture (Ochanomizu Univ.; PRESTO, JST; Grad. Sch. Eng., Kyushu Univ.) ○MIYAKE, Ryosuke; KUWATA, Chika; YAMADA, Teppei  
**1D6-59** Guest Adsorption Property Control of Pseudo-pillared-layer-type Porous Coordination Polymers (Grad. Sch. Sci., Kyushu Univ.) ○TOMOKAGE, Narumi; MIURA, Hiroki; MISHIMA, Akio; KOSHIYAMA, Tomomi; OHBA, Masaaki  
**1D6-60** Magnetic and Guest Adsorption Properties of Hofmann-type Porous Coordination Polymers (Grad. Sch. Sci., Kyushu Univ.) ○TSUJI, Miho; MISHIMA, Akio; KOSHIYAMA, Tomomi; OHBA, Masaaki

## Friday, March 25, AM

## Pd, Pt

Chair: MATSUMOTO, Takeshi (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(2D6-01, 2D6-03, 2D6-04, 2D6-05, 2D6-06)  
**2D6-01<sup>#\*</sup>** Control of Metal Arrays Based on Heterometallics Masquerading in Heterochiral Aggregations of Chiral Clothespin-Shaped Pd(II) and Pt(II) Complexes (Grad. Sch. Eng. Sci., Osaka Univ.) ○NAITO, Masaya; INOUE, Ryo; IIDA, Masayuki; KUWAJIMA, Yuuki; KAWAMORITA, Soichiro; KOMIYA, Naruyoshi; NAOTA, Takeshi  
**2D6-03** Structure and photoluminescence properties of novel half-lantern type

- diplatinum complex bridged by 4-membered-N-heterocyclic thiolate ligand (Grad. Sch. Mat. Sci., Univ. of Hyogo) ○MATSUOKA, Hidenori; OZAWA, Yoshiki; TORIUMI, Koshiro; ABE, Masaaki  
**2D6-04** Mechanochromic Luminescence of Binuclear trans-Bis(salicylaldiminato)platinum(II) Complex Bearing Pentamethylene Linkers. (Grad. Sch. Eng. Sci., Osaka Univ.) ○MAEDA, Takatoshi; KOMIYA, Naruyoshi; KAWAMORITA, Soichiro; NAOTA, Takeshi  
**2D6-05** The Solvent Effect on Emission Spectrum of Pt(II)(N<sup>+</sup>C<sup>-</sup>N)-type Complex Coordinated with an Acetylene Derivative. (Grad. Sch. Nanobiosci., Yokohama City Univ.) ○SATO, Kyouhei; SHINOZAKI, Kazuteru  
**2D6-06** Emission properties of trans-bis( $\beta$ -iminoaryloxy)platinum(II) complexes (Sch. Eng. Sci., Osaka Univ.) ○INOUE, Ryo; KAWAMORITA, Soichiro; NAOTA, Takeshi

## Pt

Chair: SATO, Kyouhei (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(2D6-08, 2D6-09, 2D6-10, 2D6-11, 2D6-13)  
**2D6-08<sup>#</sup>** Association and emission properties of polymethylene-vaulted trans-bis(2-iminoimidazolato)platinum(II) complexes (Grad. Sch. Eng. Sci., Osaka Univ.) ○LE, Ngoc Ha Thu; NAOTA, Takeshi  
**2D6-09** Synthesis and Multicolor Emission Property of trans-Bis(thiosalicylaldiminato)platinum(II) Complexes with Pylenelethynyl Functionality (Grad. Sch. Eng. Sci., Osaka Univ.) ○KATAKURA, Naoki; KOMIYA, Naruyoshi; NAOTA, Takeshi  
**2D6-10** Structure and Emission Property of Heteroleptic trans-Bis(salicylaldiminato)Pt(II) Complexes (Grad. Sch. Eng. Sci., Osaka Univ.) ○YAMANE, Tatsunori; KOMIYA, Naruyoshi; NAOTA, Takeshi  
**2D6-11<sup>\*</sup>** Mixed-valency and Electrochromism of a Trinuclear Platinum Complex Bridged by the S<sup>-</sup>N<sup>-</sup>S Ligand (Fac. Sci., Hokkaido Univ.; Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) SHITAMA, Hotaka; ○YOSHIDA, Masaki; KOBAYASHI, Atsushi; KATO, Masako  
**2D6-13** Control of Electrochemical Transformation Processes of Redox-active Columnar Metallomesogens (Fac. Sci. Eng., Chuo Univ.) ○SAKAZUME, Yasutaka; WAKIZAKA, Masanori; MATSUMOTO, Takeshi; CHANG, Ho-chol

Chair: KATO, Masako (11 : 20~12 : 20)

- \* 11:10-11:20: interval for laptop PC connection.(2D6-15, 2D6-17, 2D6-19, 2D6-20)  
**2D6-15<sup>#\*</sup>** Structural and electronic properties of halogen-bridged mixed-valence platinum complexes with mechanically interlocked molecules (Dep. Chem., Sch. Sci., Kyoto Univ.) ○OTSUBO, Kazuya; SUGIMOTO, Kunihisa; FUJIWARA, Akihiko; KITAGAWA, Hiroshi  
**2D6-17<sup>\*</sup>** Crystal structure and electronic state of a novel four-legged MX-tube typed platinum complex with pyrazine bridging ligands (Dep. Chem., Sch. Sci., Kyoto Univ.) ○OTAKE, Ken-ichi; OTSUBO, Kazuya; SUGIMOTO, Kunihisa; SATO, Hiroyasu; KITAGAWA, Hiroshi  
**2D6-19** Synthesis and property of ring-shaped Pt-thiolate multi-nuclear complexes (Chem. Res. Lab., Tokyo Tech) ○ISHIHARA, Kentaro; IMAOKA, Takane; YAMAMOTO, Kimihisa  
**2D6-20** Studies on equilibrium between 4- and 5-coordinate divalent group 10 metal complexes Bearing New Tripodal Tetradentate Ligands (Grad. Sch. Sci. Tech., Gunma Univ.) ○TAKEDA, Nobuhiro; OMA, Rin; TAKAHASHI, Shuhei; ISHIDA, Noriaki; TANAKA, Yusuke; SAHARA, Shinji; MACHII, Mika; TAKIZAWA, Yutaka; KOMEDA, Yutaka; TOMIUKA, Takahiro; WATANABE, Daisuke; UNNO, Masafumi

## Friday, March 25, PM

## Co

Chair: MIYAKE, Ryosuke (13 : 30~14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(2D6-28, 2D6-29, 2D6-30, 2D6-31, 2D6-32)  
**2D6-28** Syntheses and bistability control of amphiphilic valence tautomeric cobalt complexes possessing polyether chains (Fac. Sci. Eng., Chuo Univ.) ○CHIDA, Mayumi; WAKIZAKA, Masanori; MATSUMOTO, Takeshi; CHANG, Ho-chol  
**2D6-29** Precise Structural Analysis of Charge-separated-type  $\text{Au}^{\text{I}}_4\text{Co}^{\text{III}}_2$  Ionic Crystals (Grad. Sch. Sci., Osaka Univ.) ○KOJIMA, Tatsuhiro; IGASHIRA, Asako; KONNO, Takumi  
**2D6-30** Catalase-like Catalytic Activity of Charge-separated-type  $\text{Au}^{\text{I}}_4\text{Co}^{\text{III}}_2$  Ionic Crystals (Grad. Sch. Sci., Osaka Univ.; Grad. Sch. Sci., The Univ. of Tokyo; Grad. Sch. Eng., Osaka Univ.; ALCA, JST; Grad. Sch. Eng., Osaka City Univ.; Meijo Univ.) ○YAMADA, Mihoko; YOSHINARI, Nobuto; OKADA, Satoshi; MADDARA, Sai Prakash; HARANO, Koji; NAKAMURA, Eiichi; SUENOBU, Tomoyoshi; YAMADA, Yusuke; FUKUZUMI, Shunichi; KONNO, Takumi  
**2D6-31** Withdrawn  
**2D6-32<sup>#\*</sup>** Diversity of magnetic functionalities in nanosized cyanido-bridged  $\{\text{M}_9[\text{M}'(\text{CN})_6]_6\}$  ( $\text{M} = 3d$  metal ion,  $\text{M}' = \text{Mo}, \text{W}, \text{Re}$ ) spherical clusters (Grad. Sch. Sci., The Univ. of Tokyo) ○CHORAZY, Szymon; NAKABAYASHI, Koji; PODGAJNY, Robert; RAMS, Michal; STANEK,

Jan; SIEKLUCKA, Barbara; OHKOSHI, Shin-ichi

## Co, Rh

Chair: YAMADA, Mihoko (14 : 40~15 : 40)

- \* 14:30-14:40: interval for laptop PC connection.(2D6-35, 2D6-36, 2D6-37, 2D6-38, 2D6-39)
- 2D6-35** Synthesis of homochiral MOF using (*R*)-BINOL-4,4'-dibenzoic acid and its application for enantiomer separation (Fac. Chem. Materials and Bioeng., Kansai Univ.) NAGASE, Syouhei; OANAMI, Taku; TANAKA, Kouichi; LIPKOWSKA, Zofia
- 2D6-36** Synthesis of homochiral MOFs using (*R*)-BINOL-5,5'-dicarboxylic acid and 4,4'-bipyridylethylene and its application for enantiomeric separation. (Fac. Chem. Materials and Bioeng., Kansai Univ.) OTERAUCHI, Tomoya; TANAKA, Koichi
- 2D6-37** Synthesis and crystal structure of homochiral MOFs derived from (*R*)-BINOL-3,3'-dicarboxylic acid and 4,4'-bipyridine. (Fac. Chem. Materials and Bioeng., Kansai Univ.) OMORIOKA, Takahiko; TANAKA, Koichi
- 2D6-38** Electronic structure study on humidity-induced magnetization of Prussian blue analogue Co[Cr(CN)<sub>6</sub>]<sub>2</sub>/3 zH<sub>2</sub>O (Grad. Sch. Frontier Sci., The Univ. of Tokyo) OINOUE, Takanobu; MIYAWAKI, Jun; CUI, Yitao; TOKORO, Hiroko; NAKAGAWA, Kohsuke; OHKOSHI, Shinichi; HARADA, Yoshihisa
- 2D6-39**<sup>#</sup> Dynamic structural transformation of porous metal-organic polyhedral assemblages (WPI-iCeMS, Kyoto Univ.) OLARPENT, Patrick; FURUKAWA, Shuhei; KITAGAWA, Susumu

## Rh, Al, Si

Chair: NAOTA, Takeshi (15 : 50~16 : 50)

- \* 15:40-15:50: interval for laptop PC connection.(2D6-42, 2D6-44, 2D6-46)
- 2D6-42**<sup>#</sup> Supramolecular assembly of porous metal-organic polyhedral into amorphous polymeric materials (WPI-iCeMS, Kyoto Univ.) OCARNE SANCHEZ, Arnau; LARPENT, Patrick; NAKAHAMA, Masashi; FURUKAWA, Shuhei; KITAGAWA, Susumu
- 2D6-44**<sup>#</sup> Novel Two-electron Water Activation Methodology using Aluminum Porphyrins with Low Over-potential (Cent.Artificial Photosynthesis, TMU) OKUTTASSERY, Fazalurahman; MATHEW, Siby; SAGAWA, Shogo; YAMAMOTO, Daisuke; ONUKI, Satomi; NABETANI, Yu; TACHIBANA, Hiroshi; INOUE, Haruo
- 2D6-46**<sup>#</sup> Water Oxidation Catalyzed by Ubiquitous Silicon based Molecular Catalyst (Cent.Artificial Photosynthesis, TMU) OREMELLO, Sebastian Nybin; KUTTASSERY, Fazalurahman; HIRANO, Takehiro; YAMAMOTO, Daisuke; ONUKI, Satomi; NABETANI, Yu; TACHIBANA, Hiroshi; INOUE, Haruo

## Ir, Fe

Chair: ISHII, Kazuyuki (17 : 00~18 : 00)

- \* 16:50-17:00: interval for laptop PC connection.(2D6-49, 2D6-51, 2D6-52, 2D6-53, 2D6-54)
- 2D6-49**<sup>\*</sup> Photoinduced Hydrogen Generation Using an Anionic Iridium Complex as a Sensitizer (Grad. Sch. Arts and Sci., The Univ. of Tokyo) OTAKIZAWA, Shin-ya; KANO, Ryoto; MURATA, Shigeru
- 2D6-51** Investigation of photo-gradation reaction in dichloromethane solution of Ir complex (Grad. Sch. Nanobiosci., Yokohama City Univ.) OTAKAYASU, Satoshi; SHINOZAKI, Kazuteru
- 2D6-52** Direct Arylation and Emission Properties of Tris-(2,4-difluorophenyl)pyridinato)iridium(III) Complexes (Grad. Sch. Eng. Sci., Osaka Univ.) OSAITO, Shunsuke; KAWAMORITA, Soichiro; NAOTA, Takeshi
- 2D6-53** Charge-Transfer Phase Transitions of Mixed-valence 1D Chain Complexes (Fac. Sci., Kyushu Univ.) ONAKAMURA, Kazusa; KANG, Soonchul; KANEGAWA, Shinji; SATO, Osamu
- 2D6-54** Physicochemical properties of mixed-valence Fe(II) complexes with *o*-phenylenediamine and *o*-benzoquinodimine (Fac. Sci. Eng., Chuo Univ.) OYAMAMOTO, Risa; WAKIZAKA, Masanori; MATSUMOTO, Takeshi; CHANG, Ho-chol

Chair: MATSUMOTO, Takeshi (18 : 10~19 : 00)

- \* 18:00-18:10: interval for laptop PC connection.(2D6-56, 2D6-58, 2D6-59)
- 2D6-56**<sup>\*</sup> Syntheses and fluorescent properties of hexacoordinated Si(IV) complexes with Schiff base ligands (Inst. Sci. Eng., Kanazawa Univ.) OKAWAMOTO, Keisuke; AKASHI, Haruo; SHIBAHARA, Takashi; HASHIMOTO, Hideki; HAYASHI, Yoshihito
- 2D6-58** Aggregation behavior of phthalocyanines in liquid crystal molecules (IIS, The Univ. of Tokyo) OISHITA, Kotaro; ISHII, Kazuyuki
- 2D6-59**<sup>#</sup> Self-assembled structures based on metal-containing pi-conjugated scaffolds (Institute Organic Chemistry, University of Münster (Germany)) OFERNANDEZ, Gustavo

## Saturday, March 26, AM

## Ru, Fe

Chair: KUWATA, Shigeki (9 : 00 ~ 9 : 40)

- \* 8:50-9:00: interval for laptop PC connection.(3D6-01, 3D6-03)
- 3D6-01**<sup>\*</sup> C-H oxidation by ruthenium(III)-pterin complexes through proton-coupled electron transfer (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) OMITOME, Hiroumi; ISHIZUKA, Tomoya; KOTANI, Hiroaki; KOJIMA, Takahiko
- 3D6-03**<sup>#</sup> Redox Behavior of Iron Complexes with Thiolate Ligands Derived from Quinoly-Substituted Thiophenes (Grad. Sch. Sci., Osaka City Univ.) OHIROTSU, Masakazu; MATSUNAGA, Takumi; NAKAJIMA, Hiroshi

## Saturday, March 26, PM

Chair: NAKAJIMA, Hiroshi (13 : 00~14 : 00)

- \* 12:50-13:00: interval for laptop PC connection.(3D6-25, 3D6-26, 3D6-28, 3D6-29, 3D6-30)
- 3D6-25** Photochemical Reduction of a Ru(II)-Bound  $\pi$ -Expanded Hetero-aromatic Ligand and Photocatalytic Hydrogen Evolution (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba; IMCE, Kyushu Univ.) OSAWAKI, Takuya; ISHIZUKA, Tomoya; SHIOTA, Yoshihito; KOTANI, Hiroaki; YOSHIZAWA, Kazunari; KOJIMA, Takahiko
- 3D6-26**<sup>#</sup> Electrochemical Properties of Ruthenium(II) Complexes Having the Azo Group in Organic Solvent or Ionic Liquid (Sci. Tec., Sophia Univ.) OSUMOGE, Yuka; NAGAO, Hirotaaka
- 3D6-28** Synthesis and Reactivity of Proytic Pincer-type Bis(pyrazolyl)pyridine Complexes Bearing Amide group on Pyrazole Ring (Grad. Sch. Sci., Eng., Tokyo Tech) ONAKAHARA, Yoshiko; TODA, Tatsuhiro; KUWATA, Shigeki
- 3D6-29** Reactivity of a ruthenium complex bearing an NHC ligand in catalytic oxidations (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) OSHIMOYAMA, Yoshihiro; ISHIZUKA, Tomoya; KOTANI, Hiroaki; KOJIMA, Takahiko
- 3D6-30** Noninnocent PNP-pincer Type Phosphaalkene Ligand (Eind-PPEP): Synthesis and Applications to Iron and Copper Complexes (ICR, Kyoto Univ.) OSASAKI, Daichi; TANAKA, Yuto; TAGUCHI, Hiroomi; TAKEUCHI, Katsuhiko; TSUJIMOTO, Shota; MATSUO, Tsukasa; OZAWA, Fumiyouki

## Fe

Chair: TSUKADA, Satoru (14 : 10~15 : 10)

- \* 14:00-14:10: interval for laptop PC connection.(3D6-32, 3D6-33, 3D6-35, 3D6-36)
- 3D6-32** syntheses and Electrochemical Properties of Iron Porphyrin Complexes Bearing PCET Active Sites (IMS; SOKENDAI; ACT-C, JST) OUSHIJI, Riku; OKABE, Yuki; KONDO, Mio; MASAOKA, Shigeyuki
- 3D6-33**<sup>\*</sup> Photochemical dehydrogenation of methanol catalyzed by bis-(2-aminophenolato) Fe(II) complex at room temperature (Fac. Sci. Eng., Chuo Univ.; Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) OWAKIZAKA, Masanori; TANAKA, Ryota; USUI, Akane; KOBAYASHI, Atsushi; KATO, Masako; MATSUMOTO, Takeshi; CHANG, Ho-chol
- 3D6-35** Syntheses and Electrochemical Properties of Iron Porphyrin Complexes Bearing Pyrene Substituents at meso Positions (IMS; SOKENDAI; ACT-C, JST) OKABE, Yuki; KONDO, Mio; MASAOKA, Shigeyuki
- 3D6-36**<sup>#</sup> Water Oxidation Reaction Catalyzed by Pentanuclear Iron Complexes (IMS; SOKENDAI; Fac. Sci., Fukuoka Univ.; ACT-C, JST) OKAMURA, Masaya; KUGA, Reiko; KAWATA, Satoshi; KONDO, Mio; MASAOKA, Shigeyuki

Chair: CHANG, Hochol (15 : 20~16 : 20)

- \* 15:10-15:20: interval for laptop PC connection.(3D6-39, 3D6-40, 3D6-41, 3D6-42, 3D6-43, 3D6-44)
- 3D6-39** Synthesis and properties of Fe-Mo dinuclear complexes (Grad. Sch. Fac. Sci. Technol., Tokyo Univ. of Sci.) OABE, Naoya; TSUKADA, Satoru; GUNJI, Takahiro
- 3D6-40** Synthesis and properties of Fe-Ru trinuclear dithiolene complex (Fac. Sci. Technol., Tokyo Univ. of Sci.) OSAGAWA, Takuya; TSUKADA, Satoru; GUNJI, Takahiro
- 3D6-41** Synthesis and Properties of Iron Carbonyl Complexes Containing an S,C,N-Tridentate Schiff Base Ligand with a Thioether Side Chain (Grad. Sch. Sci., Osaka City Univ.) OTANAKA, Yui; HIROTSU, Masakazu; NAKAJIMA, Hiroshi
- 3D6-42** Synthesis of Phosphine-supported Tetra- and Hexa-Nuclear Iron-hydride Clusters and their application in N<sub>2</sub> fixation (Grad. Sch. Sci., Nagoya Univ.) OARAKE, Ryoichi; SAKADANI, Kazuki; TADA, Mizuki; OHKI, Yasuhiro
- 3D6-43**<sup>#</sup> Low-Coordinate Dinitrogen Iron Complex with Iminophosphorane Ligand (Fac. Eng. Nagoya Inst. of Tech.) OSUZUKI, Tatsuya; FRYZUK, Michael; INOMATA, Tomohiko; TOMOHIRO, Ozawa; MASUDA, Hideki
- 3D6-44** Synthesis of novel diiron complex with anthracene framework and its reactivity toward dinitrogen (Grad. Sch. Eng., Nagoya Inst. of Tech.)

○FUJIMOTO, Keisuke; SUZUKI, Tatsuya; INOMATA, Tomohiko; OZAWA, Tomohiro; MASUDA, Hideki

## Fe, Ni

Chair: OZAWA, Tomohiro (16 : 30~17 : 40)

- \* 16:20-16:30: interval for laptop PC connection.(3D6-46, 3D6-47, 3D6-48, 3D6-49, 3D6-50, 3D6-51, 3D6-52)
- 3D6-46** Selective Alkane Oxidation by High-Spin Oxodiiron(IV): Effect of Steric Hindrance on the Substrate Selectivity (Fac. Sci. Eng., Doshisha Univ.) ○KISHIMOTO, Tatsuya; SAKURAI, Katsutoshi; HITOMI, Yutaka; KODERA, Masahito
- 3D6-47<sup>#</sup>** Direct Oxidation of Benzene to Phenol with H<sub>2</sub>O<sub>2</sub> Catalyzed by Dinickel Complexes Stabilized by Dinucleating Ligands (Fac. Sci. Eng., Doshisha Univ.) ○ZAOPTURA, Antonius Andre; TSUJI, Tomokazu; HITOMI, Yutaka; KODERA, Masahito
- 3D6-48** Application Magnetic Ionic liquids composed of Ionic Liquids and FeCl<sub>4</sub> (Fac. Edu., Kagawa Univ.) ○KOMADA, Yuya; TAKAGI, Yumiko
- 3D6-49** Preparation and Application Magnetic Ionic liquids composed of FeCl<sub>4</sub> (Grad. Sch. Edu., Kagawa Univ.) ○FUKUI, Nobuo; TAKAGI, Yumiko
- 3D6-50** Effect of the coexistence of weak hydrogen bonds and  $\pi$ - $\pi$  interactions on high temperature hysteretic spin crossover of mononuclear iron(II) complex (Fac. Edu., Gifu Univ.) ○HAGIWARA, Hiroaki; SUZUKI, Mika
- 3D6-51** Synthesis, structure and properties of dinuclear double helicate iron (II) complexes formed by bis-1,2,3-triazolimine ligands containing various alkyl spacer units (Fac. Edu., Gifu Univ.) ○HORA, Shiori; HAGIWARA, Hiroaki
- 3D6-52** Properties of [Ni(N2P2)] complex with o-phenylenediamide (Fac. Sci. Eng., Chuo Univ.) ○ITO, Takahiro; WAKIZAKA, Masanori; MATSUMOTO, Takeshi; CHANG, Ho-chol

## Sunday, March 27, AM

## Fe, Au, Os

Chair: INOMATA, Tomohiko (9 : 00 ~ 10 : 10)

- \* 8:50-9:00: interval for laptop PC connection.(4D6-01, 4D6-03, 4D6-04, 4D6-05, 4D6-06, 4D6-07)
- 4D6-01\*** Synthesis and Catalytic Activity of N- or O-Bridged Dinuclear Iron Complex of Porphyrin/Phthalocyanine Heterodimer (Grad. Sch. Sci., Nagoya Univ.; IMCE, Kyushu Univ.) ○MIHARA, Nozomi; YAMADA, Yasuyuki; IGAWA, Kazunobu; TOMOOKA, Katsuhiko; TANAKA, Kentaro
- 4D6-03** Molecular arraying via intercalation into a face-to-face dimer of Au (III) porphyrins bridged by two peptide linkage (Grad. Sch. Sci., Nagoya Univ.) ○NISHIO, Motoki; YAMADA, Yasuyuki; TANAKA, Kentaro
- 4D6-04** Redox Reactivity of Osmium Complexes Supported by Hexadentate Pyridylalkylamine Ligands (Grad. Sch. Eng., Osaka Univ.) ○KIRIYAMA, Kahori; SUGIMOTO, Hideki; ITOH, Shinobu
- 4D6-05<sup>#</sup>** Effects of Lewis Acids on the Catalytic Oxidation Reaction of Alkanes with Transition-Metal Complexes (Grad. Sch. Eng., Osaka Univ.) HANADA, Shinichi; MORIMOTO, Yuma; FUJIEDA, Nobutaka; SUGIMOTO, Hideki; ○ITOH, Shinobu

## Co

- 4D6-06** Rational Synthesis and Electrochemical Properties of Multinuclear Cluster Compounds Based on a Tripod-type Complex Unit (Grad. Sch. Sci., Kyushu Univ.) ○TSUJI, Yasuhiro; TOGO, Tatsuo; MISHIMA, Akio; KOSHIYAMA, Tomomi; OHBA, Masaaki
- 4D6-07** Synthesis and Structure of an S-Bridged Co<sup>III</sup><sub>2</sub>Pd<sup>II</sup>Ag<sup>I</sup> Tetranuclear Complex with D-Penicillamine (Grad. Sch. Sci., Osaka Univ.) ○OYA, Naoyuki; KUWAMURA, Naoto; YOSHINARI, Nobuto; IGASHIRA, Asako; KONNO, Takumi

Chair: YAMADA, Yasuyuki (10 : 20~11 : 30)

- \* 10:10-10:20: interval for laptop PC connection.(4D6-09, 4D6-10, 4D6-11, 4D6-12, 4D6-13, 4D6-14, 4D6-15)
- 4D6-09** Site-Selective Ligand Exchange in a Macrocyclic Dinuclear Cobalt (III) Metallohost (Grad. Sch. Nat. Sci. Technol., Kanazawa Univ.) ○OKADA, Masahiro; SAKATA, Yoko; AKINE, Shigehisa
- 4D6-10** Metal Ion Recognition of a New Macrocyclic Dinuclear Cobalt(III) Metallohost Accompanied by Ligand Exchange (Grad. Sch. Nat. Sci. Technol., Kanazawa Univ.) ○SAKATA, Yoko; TAMIYA, Munehiro; OKADA, Masahiro; AKINE, Shigehisa
- 4D6-11** Construction of Charge-separated-type Au<sup>I</sup><sub>4</sub>Co<sup>III</sup><sub>2</sub> Ionic Crystals with N,N'-bridged-D-penicillamine (Grad. Sch. Sci., Osaka Univ.) ○INOUE, Takahiro; YAMADA, Mihoko; KOJIMA, Tatsuhiko; YOSHINARI, Nobuto; KONNO, Takumi
- 4D6-12** Synthesis and properties of cobalt dithiolene complex having dihalobenzenedithiolate ligand. (Grad. Sch. Fac. Sci. Technol., Tokyo Univ. of Sci.) ○KONDO, Masataka; TSUKADA, Satoru; GUNJI, Takahiro
- 4D6-13** Construction of Co(III) complexes having N2O2-type coordination environment oriented selective nitric oxide sensing (Nagoya Inst. of Tech.)

○MISHINA, Ritsuko; OZAWA, Tomohiro; INOMATA, Tomohiko; MASUDA, Hideki

- 4D6-14** Redox properties of a novel trinuclear cobalt complex bridged by a ligand with three-fold symmetry consisting of three catechol moieties (Grad. Sch. Eng., Osaka Univ.) ○NISHIMOTO, Aika; MORIMOTO, Yuma; ITOH, Shinobu
- 4D6-15** Synthesis and Characterization of the Cobalt Complexes Supported by Tripodal Tetradentate Ligand Containing Bulky Substituents (Sch. Eng., Osaka Univ.) ○OKABE, Shinsuke; PARI, Sayantan; MORIMOTO, Yuma; SUGIMOTO, Hideki; FUJIEDA, Nobutaka; ITOH, Shinobu

Chair: YOSHINARI, Nobuto (11 : 40~12 : 50)

- \* 11:30-11:40: interval for laptop PC connection.(4D6-17, 4D6-18, 4D6-20, 4D6-21, 4D6-22)
- 4D6-17** Hydrogen peroxide production and water oxidation catalyzed by robust cyano-bridged coordination polymer metal complexes (Grad. Sch. Eng., Osaka Univ.; Grad. Sch. Eng., Osaka City Univ.; Faculty of Science and Technology; ALCA&SENTAN, JST) ○ISAKA, Yusuke; OYAMA, Kohei; SUENOBU, Tomoyoshi; YAMADA, Yusuke; FUKUZUMI, Shunichi
- 4D6-18\*** Synthesis and Characterization of Various Cobalt-NHC Complexes Catalyzing HER with Low Driving Forces (Fac. Sci., Kyushu Univ.; WPI-I2CNER, Kyushu Univ.; CMS, Khushu Univ.) ○KAWANO, Ken; YAMAUCHI, Kosei; SAKAI, Ken
- 4D6-20** Photocatalytic Reduction of CO<sub>2</sub> to CO with a Cobalt Chlorine Complex (Grad. Sch. Eng., Osaka Univ.; Graduate School of Science and Technology; ALCA&SENTAN, JST) ○AOI, Shoko; OHKUBO, Kei; MASE, Kentaro; FUKUZUMI, Shunichi
- 4D6-21** Synthesis and light-driven hydrogen evolution activity of a cobalt complex (Fac. Env.Earth Sci., Hokkaido Univ.) ○KON, Keita; KATO, Masaru; YAGI, Ichizo
- 4D6-22\*** In Situ Raman Spectroscopy of the Catalytic Water Oxidation over the Cobalt-Porphyrin-Modified Electrodes (Fac. Sci., Kyushu Univ.; WPI-I2CNER, Kyushu Univ.; CMS, Khushu Univ.; The University of Illinois at Urbana-Champaign) ○NAKAZONO, Takashi; TSE, Edmund; GEWIRTH, Andrew; SAKAI, Ken

## Room E1

Chishinkan1 Building 216

## Coordination Chemistry, Organometallic Chemistry

Thursday, March 24, AM

## Cu, Au

Chair: TANAKA, Daisuke (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(1E1-01, 1E1-02, 1E1-03, 1E1-04, 1E1-05, 1E1-06)
- 1E1-01** Synthesis and Properties of Multinuclear Gold Complexes Having Benzene-1,2-Dithiolate Ligands (ICR, Kyoto Univ.) ○KAJI, Shoji; MURATA, Michihisa; WAKAMIYA, Atsushi; MURATA, Yasujiro
- 1E1-02** Transmetalation of an AuCdII 116-Nuclear Supramolecular Cage with D-Penicillamine and Tris(diphenylphosphine) (Grad. Sch. Sci., Osaka Univ.) ○IMANISHI, Kento; KOJIMA, Tatsuhiko; YOSHINARI, Nobuto; IGASHIRA, Asako; KONNO, Takumi
- 1E1-03** Property Control of Subnanometer-sized Gold Clusters by Proximity  $\pi$  Electronic Systems (Grad. Sch. Env. Sci., Hokkaido Univ.) ○IWASAKI, Mitsuhiro; KOBAYASHI, Naoki; SHICHIBU, Yukatsu; KONISHI, Katsuaki
- 1E1-04** Withdrawn
- 1E1-05** Synthesis and properties of gold(I)-thiolate coordination polymer with PEG chains (Grad. Sch. Env. Sci., Hokkaido Univ.) ○MATSUMINE, Riku; SHICHIBU, Yukatsu; KONISHI, Katsuaki
- 1E1-06** Synthesis of alkyne-functionalized N-heterocyclic carbene gold complexes (Fac. Sci., Shizuoka Univ.) ○HASEGAWA, Eri; NISHINA, Naoko

Chair: HORIKE, Satoshi (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(1E1-08, 1E1-10, 1E1-11, 1E1-12, 1E1-13)
- 1E1-08<sup>#</sup>** Electronic Coupling Behavior of Sub-nanometer Sized Gold Clusters (Grad. Sch. Env. Sci., Hokkaido Univ.) ○SUGIUCHI, Mizuho; SHICHIBU, Yukatsu; KONISHI, Katsuaki
- 1E1-10<sup>#</sup>** Ultra-stable Au<sub>6</sub> Cluster Protected by Exceptional  $\pi$ -rich Diphosphine Ligand (Fac. Env.Earth Sci., Hokkaido Univ.) ○ABU BAKAR, Md; SHICHIBU, Yukatsu; KONISHI, Katsuaki
- 1E1-11<sup>#</sup>** Syntheses and Structures of Copper Hydride Clusters Supported by Multidentate Phosphine Ligands (Fac. Sci., Nara Women's Univ.) ○NAKAMAE, Kanako; KAMIRYO, Yoshia; KURE, Bunsho; NAKAJIMA, Takayuki; TANASE, Tomoaki
- 1E1-12** Linkage of Tris(3-aminopropanethiolato)rhodium(III) Octahedrons with Group 11 Metal Ions (Grad. Sch. Sci., Osaka Univ.) ○KOUNO,

Masahiro; YAMADA, Mihoko; KUWAMURA, Naoto; YOSHINARI, Nobuto; KONNO, Takumi

- 1E1-13** Synthesis and Characterization of Novel Hexaazatriphenylene Derivatives with Two Different Functional Groups. (Sch. Sci. Tech., Kwansai Gakuin Univ.) ○HINOKIMOTO, Akira; TANAKA, Daisuke

Chair: SHICHIBU, Yukatsu (11 : 20~12 : 20)

\* 11:10-11:20: interval for laptop PC connection.(1E1-15, 1E1-16, 1E1-17, 1E1-18, 1E1-19, 1E1-20)

- 1E1-15** Synthesis and Reactivity of a Defective-type  $\text{Cu}^{\text{I}}\text{Ni}^{\text{II}}_5$  Mixed-metal Cluster with N-bridged-D-penicillamine (Grad. Sch. Sci., Osaka Univ.) ○ICHIKAWA, Tomoki; YOSHINARI, Nobuto; KONNO, Takumi

- 1E1-16** Synthesis and Structure of a Cyclic  $\text{Cu}^{\text{II}}_{24}$  Complex with D-Penicillaminedisulfide (Grad. Sch. Sci., Osaka Univ.) ○NISHIURA, Misa; IGASHIRA, Asako; KONNO, Takumi

- 1E1-17** Reactivity of D-Penicillamine to an S-Bridged  $\text{Cu}^{\text{I}}_4\text{Rh}^{\text{III}}_4$  Octanuclear Complex (Grad. Sch. Sci., Osaka Univ.) ○YASUKAWA, Yuhei; YOSHINARI, Nobuto; KUWAMURA, Naoto; IGASHIRA, Asako; KONNO, Takumi

- 1E1-18** Control of crystallization process of a pillared layer Porous Coordination Polymer by a micro flow reaction (Sch. Sci. Tech., Kwansai Gakuin Univ.) ○TANAKA, Yoko; KAWANO, Ryuji; TANAKA, Daisuke

- 1E1-19** Vitrification of 2D layered Cu(I) coordination polymers (Grad. Sch. Eng., Kyoto Univ.) ○KURASHO, Haruna; HORIKE, Satoshi; KITAGAWA, Susumu

- 1E1-20** Synthesis and reactivity of the copper complex with the anionic N2O2-type ligand (Fac. Eng. Nagoya Inst. of Tech.) ○SENGOKU, Tomonori; INOMATA, Tomohiko; OZAWA, Tomohiro; MASUDA, Hideki

## Thursday, March 24, PM

Chair: YAMAUCHI, Kosei (13 : 30~14 : 40)

\* 13:20-13:30: interval for laptop PC connection.(1E1-28, 1E1-30, 1E1-31, 1E1-32, 1E1-33)

- 1E1-28\*** Stabilizing effect of tetradentate ligands on Cu(I) complexes photosensitizer in the photocatalytic  $\text{CO}_2$  reduction using a Fe(II) complex as a catalyst (Grad. Sch. Sci., Eng., Tokyo Tech) ○TAKEDA, Hiroyuki; ISHITANI, Osamu

- 1E1-30** Improvement of the photocatalytic reduction systems for  $\text{CO}_2$  reduction using salen-typed Fe complexes as catalysts and Cu complex as a photosensitizer (Grad. Sch. Sci., Eng., Tokyo Tech) ○MIZUTANI, Toshihide; TAKEDA, Hiroyuki; ISHITANI, Osamu

- 1E1-31** Photocatalytic  $\text{CO}_2$  reduction using a Mn complex as a catalyst and a Cu complex as a photosensitizer (Grad. Sch. Sci., Eng., Tokyo Tech) ○KAMIYAMA, Hiroko; TAKEDA, Hiroyuki; ISHITANI, Osamu

- 1E1-32** Reactivity of Copper(I) Complexes Supported by N2 Ligands toward Nitric Oxide (Grad. Sch. Eng., Osaka Univ.) ○INOUE, Keisuke; MORIMOTO, Yuma; ITOH, Shinobu

- 1E1-33\*** Copper-Catalyzed Selective Oxygenation of Aliphatic Substituents in Heteroaromatic Compounds with  $\text{O}_2$  (Grad. Sch. Eng., Osaka Univ.; IRC3, AIST) ○ABE, Tsukasa; TANAKA, Shinji; TAMURA, Masanori; SATO, Kazuhiko; ITOH, Shinobu

## Ni, Pd, Pt

Chair: UMAKOSHI, Keisuke (14 : 50~15 : 40)

\* 14:40-14:50: interval for laptop PC connection.(1E1-36, 1E1-37, 1E1-38, 1E1-39, 1E1-40)

- 1E1-36** Electrochemical Reduction of  $\text{CO}_2$  into  $\text{HCOOH}$  by Ionic Liquid-substituted Ni Complex (Grad. Sch. Eng., Nagoya Inst. of Tech.) ○NAGAI, Takuya; MASUDA, Hideki

- 1E1-37** Development of Ni-pyridylalkylamine complexes with high catalytic efficiency toward benzene hydroxylation with hydrogen peroxide (Sch. Eng., Osaka Univ.) ○TAKAGI, Yusaku; MORIMOTO, Yuma; ITOH, Shinobu

- 1E1-38** Development of hydrogen production catalyst by pyridine-phosphine type Ni(II) complex with amino group (Grad. Sch. Eng., Nagoya Inst. of Tech.) ○TATEMATSU, Ryo; INOMATA, Tomohiko; OZAWA, Tomohiro; MASUDA, Hideki

- 1E1-39** Crystal Structure of Ni(II) Cyclam Ditetrakis(4-chlorophenyl)borate Salts (Kitakyushu Nat. Coll. of Tech.) ○YAMAMOTO, Ryutarō; MATSUI, Chihiro; TAKEHARA, Kenji; OKAWARA, Toru

- 1E1-40** Kinetic Studies on Pt(II)-Catalyzed Hydrogen Evolution Driven by Viologen Radicals. (Fac. Sci., Kyushu Univ.; WPI-I<sub>2</sub>CNER, Kyushu Univ.; CMS, Khushu Univ.) ○WAKIYAMA, Fumiaki; YAMAUCHI, Kousei; SAKAI, Ken

Chair: KURE, Bunsho (15 : 50~16 : 50)

\* 15:40-15:50: interval for laptop PC connection.(1E1-42, 1E1-43, 1E1-44, 1E1-45, 1E1-47)

- 1E1-42** Synthesis and luminescent properties of platinum(II) complexes bearing imidazole derivatives and bipyridines (Grad. Sch. Eng., Nagasaki Univ.) ○MARUTA, Hironari; HAMASAKI, Shoko; SAKUDA, Eri; HORIUTI, Sinnosuke; ARIKAWA, Yasuhiro; UMAKOSHI, Keisuke

- 1E1-43** Intermolecular Ligand Exchange Reaction of Dioligano Platinum(II) Complexes with 1,5-Cyclooctadiene Ligand (Chem. Res. Lab., Tokyo Tech)

○KIHO, Minetada; YOSHIGOE, Yusuke; SUZAKI, Yuji; KOHTARO, Osakada

- 1E1-44** Synthesis and luminescence behavior of palladium(II) and platinum(II) complexes with Schiff base ligands containing pyrene moiety (Aichi Univ. of Educ.) ○TAKAGI, Shoji; NAKAJIMA, Kiyohiko

- 1E1-45\*** Synthesis of Macrocyclic Pt and Pd (II) Complex with Bridging Aryl or Alkynyl Ligands via Transmetalation (Chem. Res. Lab., Tokyo Tech)

○YOSHIGOE, Yusuke; SUZAKI, Yuji; OSAKADA, Kohtaro

- 1E1-47** Redox behavior of extended metal chain complexes supported by conjugated polyene ligands (Sch. Physical Sci., SOKENDAI; Grad. Sch. Sci., Eng., Tokyo Tech; CIMoS, IMS; Grad. Sch. Eng., Osaka Univ.) ○YAMASHITA, Mitsuki; HORIUCHI, Sinnosuke; TACHIBANA, Yuki; YAMAMOTO, Koji; MURAHASHI, Tetsuro

Chair: TETSURO, Murahashi (17 : 00~18 : 00)

\* 16:50-17:00: interval for laptop PC connection.(1E1-49, 1E1-50, 1E1-51, 1E1-52, 1E1-53, 1E1-54)

- 1E1-49** Synthesis and Reaction of Clothespin-Shaped Binuclear Palladium Complexes Bearing azapolymethylene Linkers (Grad. Sch. Eng. Sci., Osaka Univ.) ○KAMABAYASHI, Jun; KAWAMORITA, Soichiro; NAOTA, Takeshi

- 1E1-50** Synthesis and Properties of Linear Octapalladium Coordination Polymers with Bisocyanide Linkers (Nara Women's Univ.) ○MIYANO, Haruka; NAKAMAE, Kanako; KURE, Bunsho; NAKAJIMA, Takayuki; YOSHIMURA, Tomokazu; TANASE, Tomoaki

- 1E1-51\*** Withdrawn

- 1E1-52** Recognition of the Number of Methyl Groups on Aromatic Compounds by an Anthracene-shelled Coordination Capsule (Chem. Res. Lab., Tokyo Tech) ○MATSUNO, Sho; YAMASHINA, Masahiro; SEI, Yoshihisa; YOSHIZAWA, Michito; AKITA, Munetaka

- 1E1-53** A Coordination Capsule with an Anthracene Shell: Unique Enclathration of Oligo(Ethylene Glycol)s (Chem. Res. Lab., Tokyo Tech) ○YAMASHINA, Masahiro; YOSHIZAWA, Michito; AKITA, Munetaka

- 1E1-54** Synthesis and Host Capability of a Double Capsule with Anthracene Panels (Chem. Res. Lab., Tokyo Tech) ○YAZAKI, Kohei; YOSHIZAWA, Michito; AKITA, Munetaka

Chair: YOSHIZAWA, Michito (18 : 10~19 : 00)

\* 18:00-18:10: interval for laptop PC connection.(1E1-56, 1E1-57, 1E1-58, 1E1-59, 1E1-60)

- 1E1-56** Sn-F bond activation by the cooperative action of palladium complexes with Lewis acids (Grad. Sch. Sci., Osaka Pref. Univ.) ○BABA, Yuki; KAMEO, Hajime; MATSUZAKA, Hiroyuki

- 1E1-57** Reactivity of group 10 metal complexes bearing new  $\text{PS}_3$ -type tripodal tetradentate ligand (Grad. Sch. Sci. Tech., Gunma Univ.) ○OMA, Rin; TAKEDA, Nobuhiro; UNNO, Masafumi

## Rh

- 1E1-58\*** Construction of photoactive frameworks with open metal sites (IMS; Sch. Physical Sci., SOKENDAI; ACT-C, JST) ○CHINAPANG, Pondchanok; ITOH, Takahiro; KONDO, Mio; MASAOA, Shigeyuki

- 1E1-59** Crystal Structures and Magnetic Properties of Tetrakis(benzamidinato)dirhodium(II,III) Complexes with Axial Halogens (Grad. Sch. Fac. Sci. Eng., Shimane Univ.) ○MIKAMI, Saki; KATAOKA, Yusuke; KAWAMOTO, Tatsuya; MIKURIYA, Masahiro; HANDA, Makoto

- 1E1-60** High efficient hydrogen evolution reaction by anchor-shape dinuclear rhodium complexes and the investigation of their reaction mechanism (Fac. Sci. Eng., Shimane Univ.) ○YANO, Natsumi; KATAOKA, Yusuke; KAWAMOTO, Tatsuya; HANDA, Makoto

## Friday, March 25, AM

### Re, Rh, Ir, Pt, Zn

Chair: KOSHIYAMA, Tomomi (9 : 00 ~10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(2E1-01, 2E1-02, 2E1-03, 2E1-05, 2E1-06)

- 2E1-01** Electronic Effects of a Planar Trianionic Ligand on the Substitution Reactivity of Axial Ligands of Six-coordinated Rh(III) Complexes (Grad. Sch. Eng., Osaka Univ.) ○FUJITA, Daiki; SUGIMOTO, Hideki; MORIMOTO, Yuma; ITOH, Shinobu

- 2E1-02** Synthesis and Properties of Triplatinum Complexes Supported by Branched Tetrakisphosphine Ligands (Fac. Sci., Nara Women's Univ.) ○KOIKE, Kanako; UEGAKI, Miho; NAKAMAE, Kanako; KURE, Bunsho; NAKAJIMA, Takayuki; TANASE, Tomoaki

- 2E1-03\*** Photocatalytic reduction of  $\text{CO}_2$  using Ir(tpy)(bpy) complex (Morikawa Senior Fellow Lab., Toyota Central R&D Labs., Inc) ○SATO, Shunsuke; MORIKAWA, Takeshi

- 2E1-05** Stereoselectivity in the photochemical isomerization of tris-cyclometalated iridium(III) complexes (Graduate School of Engineering, Chiba University) ○SAGO, Mei; YAGAI, Shiki; KARATSU, Takashi

- 2E1-06** Application of Cyclometalated Iridium (III) Complexes to Monomolecular-System Radical Initiator (Grad. Sch. Eng., Chiba Univ.) ○WATANABE, Yuki; KARATSU, Takashi; YAGAI, Shiki

Chair: KARATSU, Takashi (10 : 10~11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(2E1-08, 2E1-09, 2E1-11, 2E1-13)

**2E1-08** Incorporation of an Ir complex metallolinker into a porous coordination polymer (PCP) and its application into photocatalytic CO<sub>2</sub> reduction (Sch. Eng., Kyoto Univ.; WPI-iCeMS, Kyoto Univ.) ○MINE, Shuhei; KAJIWARA, Takashi; HIGUCHI, Masakazu; KITAGAWA, Susumu

**2E1-09\*** Water-soluble iridium complexes with a multifunctional ligand and their catalytic performance for hydrogenation of carbon dioxide. (RCPV, AIST) ○SUNA, Yuki; TSURUSAKI, Akihiro; ONISHI, Naoya; MANAKA, Yuichi; HIMEDA, Yuichiro

**2E1-11\*\*** Microwave synthesis of functional metal complexes; Why microwave?. Synthesis with newly developed solid state microwave reactor and LC-MS accurate mass analysis (Minerva Light Lab.; K-nex cooperation; Agilent Technology Co.) ○MATSUMURA, Takeko; KISHI, Munetaka; YMASHITA, Kazunori; SHIMIZU, Naoto; SAWADA, Hirokazu

**2E1-13** Construction of Efficient Reaction Field Based on Lipophilic Metal Complexes and Lposome (Grad. Sch. Sci., Kyushu Univ.) ○KANDA, Nao; ASADA, Sana; HATAE, Tatsuru; KOSHIYAMA, Tomomi; OHBA, Masaaki

Chair: YAMAUCHI, Kosei (11 : 20~12 : 20)

\* 11:10-11:20: interval for laptop PC connection.(2E1-15, 2E1-18, 2E1-20)

**2E1-15<sup>†</sup>** CSJ Award for Young Chemists Bottom-up Creation of Functional Low-Dimensional Materials Based on Metal Complexes (Grad. Sch. Sci., The Univ. of Tokyo) ○SAKAMOTO, Ryota

**2E1-18\*\*** Photocatalytic Reduction of CO<sub>2</sub> using Dinuclear Ir(III)-Re(I) Complex (Grad. Sch. Sci., Eng., Tokyo Tech) ○KURAMOCHI, Yusuke; ISHITANI, Osamu

**2E1-20** Photocatalytic CO<sub>2</sub> reduction using a Ru(II)-Re(I) multinuclear complex adsorbed on solid surface. (Grad. Sch. Sci., Eng., Tokyo Tech) ○TOKUDA, Kazuma; UEDA, Yutaro; TAMAKI, Yusuke; ISHITANI, Osamu

## Friday, March 25, PM

## Ru

Chair: ISHIZUKA, Tomoya (13 : 30~14 : 30)

\* 13:20-13:30: interval for laptop PC connection.(2E1-28, 2E1-30, 2E1-32, 2E1-33)

**2E1-28\*\*** Electrochemical reduction of CO<sub>2</sub> by phosphine-substituted polypyridine Ru(II) complexes (IMS; SOKENDAI; ACT-C, JST) ○LEE, Sze Koon; NAKAMURA, Go; KONDO, Mio; MASAOKA, Shigeyuki

**2E1-30\*\*** Development of the metal complex photocatalysts for CO<sub>2</sub> reduction molecular-designed for the hybridization with heterogeneous materials (Grad. Sch. Sci., Eng., Tokyo Tech) ○TAMAKI, Yusuke; ISHITANI, Osamu

**2E1-32** Deuterium Isotope Effect on Photocatalytic CO<sub>2</sub> Reduction by Ruthenium Complex in Heavy Water/*N,N*-Dimethylacetamide (Grad. Sch. Sci., Kitasato Univ.) ○KITAMURA, Kyohei; KURAMOCHI, Yusuke; USHIDA, Kiminori; ISHIDA, Hitoshi

**2E1-33** Photocatalytic CO<sub>2</sub> Reduction by Ruthenium Complexes: Temperature Dependence of CO/Format Selectivity (Grad. Sch. Sci., Kitasato Univ.) ○ISHIDA, Hitoshi; SAKABA, Akihiko

Chair: MURATSUGU, Satoshi (14 : 40~15 : 40)

\* 14:30-14:40: interval for laptop PC connection.(2E1-35, 2E1-37, 2E1-38, 2E1-39, 2E1-40)

**2E1-35\*\*** Hydrogen peroxide generation using NAD/NADH functionalized Ru compounds (WPI-iCeMS, Kyoto Univ.) ○KOBAYASHI, Katsuaki; TANAKA, Koji

**2E1-37** Covalent immobilization of ruthenium complexes aimed at water oxidation on an ITO electrode (WPI-iCeMS, Kyoto Univ.) ○FUKUSHIMA, Takashi; KOBAYASHI, Katsuaki; TANAKA, Koji

**2E1-38** Mechanistic Insight into substrate oxidation with a Ru(V)-imido complex (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) ○MAKINO, Misaki; ISHIZUKA, Tomoya; KOTANI, Hiroaki; KOJIMA, Takahiko

**2E1-39<sup>†</sup>** Development of catalytic inorganic membrane and cells for energy application (Fac. Sci., Univ. of Glasgow; Fac. Sci., Kyushu Univ.) ○NAKANISHI, Keita; COOPER, Geoffrey; POINTS, Laurie; BLOOR, Leanne; OHBA, Masaaki; CRONIN, Leroy

**2E1-40** Step-Wise Syntheses and Electrochemical Properties of Hetero Pentanuclear Metal Clusters (LCCMS, IMS; Sch. Physical Sci., SOKENDAI; Fac. Sci., Fukuoka Univ.; ACT-C, JST) ○IZU, Hitoshi; OKAMURA, Masaya; KUGA, Reiko; VIJAYENDRAN, Praneeth; KATSUTA, Nagisa; KAWATA, Satoshi; KONDO, Mio; MASAOKA, Shigeyuki

Chair: MASAOKA, Shigeyuki (15 : 50~16 : 50)

\* 15:40-15:50: interval for laptop PC connection.(2E1-42, 2E1-43, 2E1-45, 2E1-46, 2E1-47)

**2E1-42** Preparation of composition-regulated bimetallic nanoclusters from supported Cu-porphyrin - Ru<sub>12</sub> complex (Grad. Sch. Sci., Nagoya Univ.) ○YAMAGUCHI, Atsuki; MAENO, Tomoaki; MURATSUGU, Satoshi; TADA, Mizuki

**2E1-43\*\*** Electronic Structures and Reactivity of Mixed-valence Diruthenium

Complexes of Ru(III)-Ru(IV), Having the Doubly Oxido-Bridged Core (Sci. Tec., Sophia Univ.) ○SUZUKI, Tomoyo; NAGAO, Hirokazu

**2E1-45** Synthesis of heterometallic complexes including a Ru(II)-terpyridine unit with a macrocyclic ligand (Grad. Sch. Sci., Osaka Univ.; JST PRESTO) ○MASUDA, Hiroyuki; ODA, Kohei; HATANAKA, Tsubasa; FUNAHASHI, Yasuhiro

**2E1-46<sup>†</sup>** Geometrical Isomers and Redox Properties of Ruthenium(II/III) Complexes with 3-hydroxypicolinamide Ligand (Sch. Sci. Tech., Kwansai Gakuin Univ.) ○MITSUHASHI, Ryoji; SUZUKI, Takayoshi; MIKURIYA, Masahiro

**2E1-47** Ligand Exchange Reaction of N-Fused Porphyrin Ruthenium Complex (Grad. Sch. Eng., Kyushu Univ.) ○MATSUO, Hideaki; TOGANOH, Motoki; FURUTA, Hiroyuki

Chair: SUGIMOTO, Hideki (17 : 00~18 : 00)

\* 16:50-17:00: interval for laptop PC connection.(2E1-49, 2E1-50, 2E1-52, 2E1-53, 2E1-54)

**2E1-49** Syntheses and Properties of Ruthenium Complexes Bearing 1,2-dinitrosobenzene (Sci. Tec., Sophia Univ.) ○UEKI, Yuta; WONG, Chun-yuen; NAGAO, Hirokazu

**2E1-50\*\*** Synthesis and Properties of Ruthenocene Derivatives with [7]Helicene as Ligands. (Grad. Sch. Eng., The Univ. of Tokyo) ○AKIYAMA, Midori; TSUCHIYA, Yuto; ISHII, Ayumi; HASEGAWA, Miki; KURASHIGE, Yuki; NOZAKI, Kyoko

**2E1-52** Regioselective introduction of phosphine ligand to ruthenium complex bearing protic tris(pyrazole)-type ligand (Grad. Sch. Sci., Eng., Tokyo Tech) ○YAMAGISHI, Hiroaki; KUWATA, Shigeki

## W, Mn, Re

**2E1-53** Electrochemical reduction of CO<sub>2</sub> of low concentration using a Re(I) complex as a catalyst (Grad. Sch. Sci., Eng., Tokyo Tech) ○NISHIKAWA, Tetsuya; UENO, Kazuki; SAHARA, Go; KUMAGAI, Hiromu; ISHITANI, Osamu

**2E1-54** Electrochemical CO<sub>2</sub> reduction of low concentration of CO<sub>2</sub> by using CO<sub>2</sub> capture ability of Mn(I) complexes (Grad. Sch. Sci., Eng., Tokyo Tech) ○CHIBA, Hiroyuki; TAKEDA, Hiroyuki; KUMAGAI, Hiromu; SAHARA, Go; UENO, Kazuki; ISHITANI, Osamu

Chair: NAGAO, Hirokazu (18 : 10~19 : 00)

\* 18:00-18:10: interval for laptop PC connection.(2E1-56, 2E1-57, 2E1-58, 2E1-59, 2E1-60)

**2E1-56** Tuning of Light Sensitivity of CO-Releasing Materials Based on Porous Coordination Polymers (Sch. Eng., Kyoto Univ.; WPI-iCeMS, Kyoto Univ.) ○IKEMURA, Shuya; KIM, Chiwon; CARNE, Arnaud; FURUKAWA, Shuhei; KITAGAWA, Susumu

**2E1-57** Synthesis and Multi-Redox property of a Mn pentanuclear cluster helicate (Fac. Sci., Fukuoka Univ.) ○UENO, Shunya; ISHIKAWA, Ryuta; KAWATA, Satoshi

**2E1-58** Synthesis of manganese complexes with novel tridentate and tetradentate ligands consisting with cyclohexanediamine framework and their oxidation reactivity. (Sch. Eng., Osaka Univ.) ○HIRATA, Yuka; SUGIMOTO, Hideki; ITOH, Shinobu

**2E1-59** C-H Halogenation Catalyzed by Mononuclear Metal Complexes (Fac. Sci. Eng., Doshisha Univ.) ○MINAMIDE, Miho; YAMAMURA, Ryo; KODERA, Masahito; HITOMI, Yutaka

**2E1-60** Preparation and Characterization of Tungsten(V) Imido Complexes bearing 1,4-Diaza-1,3-butadiene Ligands (Grad. Sch. Eng. Sci., Osaka Univ.) ○IKEDA, Hideaki; TANAHASHI, Hiromasa; TSURUGI, Hayato; MASHIMA, Kazushi

## Saturday, March 26, AM

## V, Ti, Os

Chair: URA, Yasuyuki (9 : 00 ~ 9 : 40)

\* 8:50-9:00: interval for laptop PC connection.(3E1-01, 3E1-02, 3E1-03)

**3E1-01** Preparation of a Element Block Compound Consisting of Vanadium (Grad. Sch. Eng., Kobe Univ.) ○KOZONO, Yudai; OOYA, Tooru

**3E1-02** Synthesis of Titanium Complexes Having Bulky Monodentate Nitrogen Ligands (Fac. Sci. Eng., Kinki Univ.) ○YASUKI, Naoki; KANAZAWA, Shoya; HAMURA, Masahiro; MATSUO, Tsukasa

**3E1-03\*\*** Geometric Effects of Os(III) Complexes with a Bis(pyridylmethyl) cyclohexanediamine Tetradentate Ligand on the Reactivity in *cis*-Dihydroxylation of Alkenes. (Grad. Sch. Eng., Osaka Univ.) ○SUGIMOTO, Hideki; KAI, Kenichiro; ITOH, Shinobu



## Asian International Symposium -Coordination Chemistry, Organometallic Chemistry-

Saturday, March 26, PM

## Bioinorganic Chemistry

Chair: Itoh, Shinobu (13 : 00~14 : 10)

**3E1-25<sup>#</sup> Keynote Lecture** Multiple, Interconnected Pathological Factors (Metals, Amyloid- $\beta$  & Reactive Oxygen Species) in Alzheimer's Disease (Ulsan National Institute of Science and Technology, Korea) Lim, Mi Hee (13:00~13:30)

**3E1-28<sup>#</sup> Invited Lecture** Molecular Catalysts Designed for Water Oxidation (IMS) Masaoka, Shigeyuki (13:30~13:50)

**3E1-30<sup>#</sup> Invited Lecture** Characterization and Reactivity of Nonheme Iron and Cobalt Superoxo Complexes (Kanagawa Univ.) Nakazawa, Jun (13:50~14:10)

(14 : 10~14 : 20)

**3E1-32<sup>#</sup> Computer Setting and Break** (14:10~14:20)

## Catalysis

Chair: Ogoshi, Sensuke (14 : 20~15 : 30)

**3E1-33<sup>#</sup> Keynote Lecture** Bridging Chemistry and Biology through Metal Catalysis (Nanjing Univ., China) Zhao, Jing (14:20~14:50)

**3E1-36<sup>#</sup> Invited Lecture** Salt-free Reduction of Transition Metal Complexes for Generating Catalytically Active Low-valent Species (Osaka Univ.) Tsurugi, Hayato (14:50~15:10)

**3E1-38<sup>#</sup> Invited Lecture** Iron-Catalyzed Enantioselective Cross-Coupling Reactions of Racemic  $\alpha$ -Haloesters (Kyoto Univ.) Adak, Laksmikanta (15:10~15:30)

(15 : 30~15 : 40)

**3E1-40<sup>#</sup> Computer Setting and Break** (15:30~15:40)

## Material Chemistry

Chair: Oshio, Hiroki (15 : 40~16 : 50)

**3E1-41<sup>#</sup> Keynote Lecture** Single Site Catalysis in MOFs (Univ. of Adelaide, Australia) Doonan, Christian J (15:40~16:10)

**3E1-44<sup>#</sup> Invited Lecture** Targeted Construction and Functionalization of Metal-organic Frameworks (Nankai Univ., China) Chang, Ze (16:10~16:30)

**3E1-46<sup>#</sup> Invited Lecture** Dynamics of a Motional Water Dimer Trapped inside a Magnetic Bistable Cobalt-Iron Cage (Univ. of Tsukuba) Wei, Rong-jia (16:30~16:50)

## Coordination Chemistry, Organometallic Chemistry

Sunday, March 27, AM

## Al, Ti, Zr, Si, Fe, Pt, Cu, Zn

Chair: NOBUHIRO, Yanai (9 : 00 ~10 : 10)

\* 8:50-9:00: interval for laptop PC connection.(4E1-01, 4E1-02, 4E1-03, 4E1-04, 4E1-05, 4E1-07)

**4E1-01** Chemical fixation of CO<sub>2</sub> to the epoxide using ammonium salt modified MOF as heterogeneous catalyst (Fac. Chem. Materials and Bioeng., Kansai Univ.) OOTSUKA, Shinya; TANAKA, Koichi

**4E1-02** Asymmetric ring opening of *cis*-stilbene oxide with aniline derivatives catalyzed by homochiral MOF (Fac. Chem. Materials and Bioeng., Kansai Univ.) OKAYAHARA, Jun; TANAKA, Kyouhei; TANAKA, Kouichi

**4E1-03** Direct Synthesis of Coordination Polymers in the Inner Aqueous Phase of Liposome using Membran Channels (Grad. Sch. Sci., Kyushu Univ.) KOGANEMARU, Rina; HONJO, Masayuki; HATAE, Tatsuru; KOSHIIYAMA, Tomomi; OHBA, Masaaki

**4E1-04** Synthesis of Coordination Polymer with Mixed Cations Conductivity (Grad. Sch. Eng., Kyoto Univ.) OGIWARA, Naoki; HORIKI, Satoshi; KITAGAWA, Susumu

**4E1-05<sup>#</sup>** Acid Catalysis in Porous Ionic Crystals with Salophen Complex and Polyoxometalate (Grad. Sch. Arts and Sci., The Univ. of Tokyo) OKAWAHARA, Ryosuke; UCHIDA, Sayaka

**4E1-07** Controlling assembly structures of anthracene mediated by porous metal complexes (Grad. Sch. Eng., Kyoto Univ.) OHONGU, Ryoto; KITAO, Takashi; UEMURA, Takashi; KITAGAWA, Susumu

Chair: UCHIDA, Sayaka (10 : 20~11 : 30)

\* 10:10-10:20: interval for laptop PC connection.(4E1-09, 4E1-11, 4E1-13, 4E1-14)

**4E1-09\*** Controlled reactivity of thiol derivatives by functionalization of PCP pore surfaces (WPI-iCeMS, Kyoto Univ.) OKUSAKA, Shinpei; MATSUDA, Ryotaro; KITAGAWA, Susumu

**4E1-11\*** Control of Metal Complexes by Liposome Spaces (Fac. Sci., Kyushu Univ.) OKOSHIYAMA, Tomomi; HATAE, Tatsuru; HONJO, Masayuki; ASADA, Sana; KANDA, Nao; KOGANEMARU, Rina; OHBA, Masaaki

**4E1-13** Development of Colorimetric Alkane Sensor with Porous Coordination Framework (FIRST, Konan Univ.) OTAKASHIMA, Yohei; SATO, Yasushi; TSURUOKA, Takaaki; AKAMATSU, Kensuke

**4E1-14\*** Energy harvesting system for highly efficient photon upconversion under extremely low excitation intensity (Grad. Sch. Eng., Kyushu Univ.; CMS, Khushu Univ.; PRESTO, JST) OYANAI, Nobuhiro; MAHATO, Prasenjit; OGAWA, Taku; KIMIZUKA, Nobuo

Chair: KUSAKA, Shinpei (11 : 40~12 : 50)

\* 11:30-11:40: interval for laptop PC connection.(4E1-17, 4E1-18, 4E1-20, 4E1-21, 4E1-22, 4E1-23)

**4E1-17** Building Block Approach in the Design of Coordination Polymers Based on Metal-Pyrazinediol Complexes (Fac. Sci., Fukuoka Univ.) OKANAZASHI, Ken; ISHIKAWA, Ryuta; KAWATA, Satoshi

**4E1-18<sup>#</sup>** Pt-Based Metallo-Supramolecular Polymer for Anhydrous Proton Conduction (Pol. Mater. Unit, NIMS) OCHAKRABORTY, Chanchal; HIGUCHI, Masayoshi

**4E1-20** Synthesis and property of the artificial Si(IV) siderophore complex as a plant growth promoter (Grad Sch. Eng., Nagoya Inst. of Tech.) OSUZUKI, Naruhito; INOMATA, Tomohiko; OZAWA, Tomohiro; MASUDA, Hideki

**4E1-21<sup>#</sup>** Synthesis and Structure of Janus Octasilsesquioxane (Grad. Sch. Sci. Tech., Gunma Univ.) OOGURI, Naoki; EGAWA, Yasunobu; TAKEDA, Nobuhiro; UNNO, Masafumi

**4E1-22** Development of Bulky Carboxylate Ligands and Their Complexation Properties (Fac. Sci. Eng., Kinki Univ.) OSUZUKI, Nobuhisa; NISHII, Mamiko; KANAZAWA, Shoya; YASUKI, Naoki; MATSUO, Tsukasa

**4E1-23** Development of Photoacid Generators with a Copper Complex Moiety as the Chromophore Unit (Grad. Sch. Sci. Eng., Chuo Univ.) OTSUKIMURA, Aki; KODAMA, Shintaro; ISHII, Youichi

## Room E2

Chishinkan1 Building 217

## Coordination Chemistry, Organometallic Chemistry

Thursday, March 24, AM

## bioinorganic chemistry

Chair: HITOMI, Yutaka (9 : 00 ~10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(1E2-01, 1E2-02, 1E2-04, 1E2-05)

**1E2-01** Ligand substituents effects on formation and reactivity of mononuclear cobalt(III)-superoxo and hydroperoxo complexes (Grad. Sch. Eng., Kanagawa Univ.) ONISHIURA, Toshiki; CHIBA, Yosuke; NAKAZAWA, Jun; HIKICHI, Shiro

**1E2-02\*** Synthesis and Reactivity of Tricopper Complexes Encapsulated in a Cryptand containing Bisaminomethyl Pyridyl Groups (Grad. Sch. Sci., Osaka Univ.) ONAGATA, Kojiro; HATANAKA, Tsubasa; INOMATA, Tomohiko; OZAWA, Tomohiro; MASUDA, Hideki; FUNAHASHI, Yasuhiro

**1E2-04** Preparation of Fuel Cell Cathode Catalyst Prepared from Copper Salen Complexes and Evaluation of Activity toward Oxygen Reduction Reaction (Grad. Sch. Eng., Osaka Univ.) OITO, Minoru; TANAKA, Yuta; ONODA, Akira; HAYASHI, Takashi

**1E2-05<sup>#</sup>** ORR Activity of a Non-precious Metal Carbon Catalyst Prepared from Iron-salen Complexes with Different Ligand Frameworks : Effects of Ligand Frameworks on the Activity (Grad. Sch. Eng., Osaka Univ.) OTANAKA, Yuta; ONODA, Akira; HAYASHI, Takashi

Chair: NAKAZAWA, Jun (10 : 10~11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(1E2-08, 1E2-09, 1E2-10, 1E2-11, 1E2-13)

**1E2-08** Synthesis of New Dinuclear Heterometal Complexes to Enable an Efficient CO<sub>2</sub>-Fixation (Fac. Sci. Eng., Doshisha Univ.) OMIYATA, Fumiko; YOSHIDA, Tsuyoshi; HITOMI, Yutaka; KODERA, Masahito

**1E2-09** Methane Generation by Hemoprotein Reconstituted with a Nickel Complex as a Model of Methyl-coenzyme M Reductase (Grad. Sch. Eng., Osaka Univ.; PRESTO, JST) OMIYAZAKI, Yuta; MORITA, Yoshitsugu; OOHORA, Koji; HAYASHI, Takashi

**1E2-10<sup>#</sup>** Preparation and Physicochemical Properties of Myoglobin Reconstituted with a Metal Complex of Oxaporphyrin (Grad. Sch. Eng., Osaka Univ.; PRESTO, JST) OMEICHIN, Hiroyuki; OOHORA, Koji; HAYASHI, Takashi

**1E2-11<sup>#</sup>** Crystal Structures and Coordination Behavior of Aqua- and Cyano-Co(III) Tetrahydrocorrin in a Myoglobin Matrix (Grad. Sch. Eng., Osaka Univ.; PRESTO, JST; IMCE, Kyushu Univ.) OMORITA, Yoshitsugu

OOHORA, Koji; SAWADA, Akiyoshi; KAMACHI, Takashi; YOSHIZAWA, Kazunari; HAYASHI, Takashi

**1E2-13** Enzymatic function of cell-puncturing protein needles conjugated with organometallic complexes (Sch. Biosci. Biotech., Tokyo Tech) ○MANO, Megumi; SYO, Takeya; MAITY, Basudev

Chair: NAKAJIMA, Hiroshi (11 : 20~12 : 20)

\* 11:10-11:20: interval for laptop PC connection.(1E2-15, 1E2-16, 1E2-17, 1E2-18, 1E2-20)

**1E2-15** Synthesis and characterization of a water-soluble strapped porphyrin and its metal complexes (Grad. Sch. Eng., Doshisha Univ.) ○SHIMOJI, Daiki; KITAGISHI, Hiroaki; OHARA, Kazuki; KANO, Koji

**1E2-16** Electronic effect of ligand on high-spin  $\mu$ -oxodioxidiron(IV) (Grad. Sch. Eng., Doshisha Univ.) ○SAKURAI, Katsutoshi; KODERA, Masahito; HITOMI, Yutaka

**1E2-17** Synthesis of Mononuclear Nonheme Iron Complexes Having Sterically Bulky Substituents (Fac. Sci. Eng., Doshisha Univ.) ○KUROKI, Kouhei; KUMAZAKI, Kosuke; KODERA, Masahito; HITOMI, Yutaka

**1E2-18\*** Substituent Effect on the Formation and Decomposition of Reactive Oxygen Species by Iron Complexes (Fac. Sci. Eng., Doshisha Univ.) ○IWAMOTO, Yuji; KODERA, Masahito; HITOMI, Yutaka

**1E2-20** Development of Mononuclear Metal Complexes with Superoxide Dismutase Activity (Fac. Sci. Eng., Doshisha Univ.) ○SAKAI, Ryosuke; IWAMOTO, Yuji; KODERA, Masahito; HITOMI, Yutaka

## Thursday, March 24, PM

### bioinorganic chemistry

Chair: KITAGISHI, Hiroaki (13 : 30~14 : 30)

\* 13:20-13:30: interval for laptop PC connection.(1E2-28, 1E2-29, 1E2-30, 1E2-32, 1E2-33)

**1E2-28** Structure and stability of peroxodiiron(III) complex with carboxylate-containing dinucleating ligand (Grad. Sch. Eng., Doshisha Univ.) ○TSUJI, Tomokazu; KODERA, Masahito; HITOMI, Yutaka

**1E2-29** Fluorogenic Detection of Hydrogen Peroxide by the Use of the Reaction of Iron Complex with Hydrogen Peroxide (Fac. Sci. Eng., Doshisha Univ.) ○MORIMOTO, Ryuki; KODERA, Masahito; HITOMI, Yutaka

**1E2-30\*** Design, Synthesis and Anticancer Activity of Fe(II)-based Helical Metallo-Supramolecular Polymer (Pol. Mater. Unit, NIMS) ○RANA, Utpal; HIGUCHI, Masayoshi

**1E2-32\*** Synthesis of a Water-Soluble Carbon-Monooxide-Releasing Iron(III) Carbonyl Complex Responsive to Visible Light (Grad. Sch. Sci., Osaka City Univ.) ○NAKAE, Toyotaka; KUBOTA, Masashi; HIROTSU, Masakazu; NAKAJIMA, Hiroshi

**1E2-33** Preparation of hybrid biocatalyst containing a diiron carbonyl complex embedded within a cavity of  $\beta$ -barrel protein: Effect of acidic residues introduced into the cavity. (Grad. Sch. Eng., Osaka Univ.) ○AOKI, Ayumi; SANO, Yohei; ONODA, Akira; HAYASHI, Takashi

### Co, Fe, Ru

Chair: KOSHIYAMA, Tomomi (14 : 40~15 : 40)

\* 14:30-14:40: interval for laptop PC connection.(1E2-35, 1E2-36, 1E2-37, 1E2-38, 1E2-39)

**1E2-35** Synthesis of Iron(II) Quadrupty-Fused Porphyrinato (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) ○KOMAMURA, Keiyu; ISHIZUKA, Tomoya; KOTANI, Hiroaki; KOJIMA, Takahiko

**1E2-36** Dehydration-induced Transformation in Crystal Structures and Spin Crossover Behaviors for Fe(II) complexes (Grad. Sch. Sci., Kobe Univ.; CSREA, Kobe Univ.; MPRC, Kobe Univ.) ○OKAI, Mitsunobu; TAKAHASHI, Kazuyuki; SAKURAI, Takahiro; OHTA, Hitoshi

**1E2-37** Structure and Magnetic Property of Spin Crossover Fe(II) Complexes with short intermolecular hydrogen bond. (Grad. Sch. Eng. Sci., Kyushu Univ.) ○NAKANISHI, Takumi; SATO, Osamu

**1E2-38** Synthesis and Development of New Fe<sub>4</sub> Cyanide-bridged Nanocage Analogues (IMCE, Kyushu Univ.) ○NISHINO, Satoshi; KANG, Soonchul; KANEGAWA, Shinji; SATO, Osamu

**1E2-39\*** Control of Spin-crossover Behavior by Interface Strain in Hetero-junction-type Hofmann-type Metal-Organic Framework Thin Film (Dep. Chem., Sch. Sci., Kyoto Univ.) ○HARAGUCHI, Tomoyuki; OTSUBO, Kazuya; SAKATA, Osami; FUJIWARA, Akihiko; KITAGAWA, Hiroshi

Chair: SATO, Osamu (15 : 50~16 : 50)

\* 15:40-15:50: interval for laptop PC connection.(1E2-42, 1E2-43, 1E2-44, 1E2-46, 1E2-47)

**1E2-42** Phase transition behaviors of a bis(tolylterpyridine) cobalt complex (Grad. Sch. Sci. Tech., Nihon Univ.) ○FURUHASHI, Tomoo; SHINOZAKI, Yoshinao; KIDA, Yuki; SUGAWA, Kosuke; OTSUKI, Joe

**1E2-43** Study on electron-transfer coupled spin transition behavior in cyanide-bridged decanuclear cobalt-iron cage complexes (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) ○OHTA, Yuto; SHIGA, Takuya; OSHIO, Hiroki

**1E2-44\*** Correlation between Specific Magnetic and Structural Changes Associated with Adsorption of Nitrogen Monoxide in a Porous Fe(II)Pt(II) Coordination Polymer (Grad. Sch. Sci., Kyushu Univ.) ○MISHIMA, Akio;

HORI, Akihiro; MATSUDA, Ryotaro; KITAGAWA, Susumu; KOSHIYAMA, Tomomi; OHBA, Masaaki

**1E2-46** Structures and Magnetic Properties before and after Irradiation of Heterospin-Fe Complexes (Grad. Sch. Pharm., Kyushu Univ.) ○MORI, Koya; KARASAWA, Satoru; KOGA, Noboru

**1E2-47** Substitution Effects on Novel Anionic Spin Crossover Complexes (Sch. Sci., Kobe Univ.) ○MURATA, Suguru; TAKAHASHI, Kazuyuki; SAKURAI, Takahiro; OHTA, Hitoshi

Chair: OTSUKI, Joe (17 : 00~18 : 00)

\* 16:50-17:00: interval for laptop PC connection.(1E2-49, 1E2-50, 1E2-52, 1E2-53, 1E2-54)

**1E2-49** Theoretical Study of Macrocyclic Tetraferrocenyl Boronate Ester: Electronic Structure and Application to Molecular Devices (Division of Liberal Arts., Kogakuin Univ.; Grad. Sch. Mat. Sci., NAIST) ○TOKUNAGA, Ken; TAHARA, Keishiro

**1E2-50\*** Analysis of Photochemical Reactions of Metal Complexes in Solution by Electrochemical Measurements (IMS; SOKENDAI; ACT-C, JST) ○FUKATSU, Arisa; OKAMURA, Masaya; OKABE, Yuki; KONDO, Mio; MASAOKA, Shigeyuki

**1E2-52** Development of ionic liquid-modified gold nanoparticles for the catalyst support. (Grad Sch. Eng., Nagoya Inst. of Tech.) ○YOKOI, Kentarou; KITAGAWA, Tatsuya; INOMATA, Tomohiko; OZAWA, Tomohiro; MASUDA, Hideki

**1E2-53** Synthesis of Novel Fe(III) Complexes with Non-Coordinating N-H bond and their Supramolecular Structures via Intermolecular Hydrogen-bonding Interactions (Sch. Sci. Tech., Kwansai Gakuin Univ.) ○MITSUHASHI, Ryoji; ○HOSOYA, Satoshi; SUZUKI, Takayoshi; MIKURIYA, Masahiro

**1E2-54** Synthesis and property of cyanide-bridged ruthenium-platinum complex based on dinuclear ruthenium acetate (Sch. Sci. Tech., Kwansai Gakuin Univ.) ○MIKURIYA, Masahiro; ○KAWAUCHI, Shun; ONO, Kenta; MITSUHASHI, Ryoji; YOSHINARI, Nobuto; KONNO, Takumi; TANAKA, Hidekazu; HANDA, Makoto

Chair: KOTANI, Hiroaki (18 : 10~19 : 00)

\* 18:00-18:10: interval for laptop PC connection.(1E2-56, 1E2-58, 1E2-59, 1E2-60)

**1E2-56\*** Diimine Ligand Effects on Photophysical Properties of Starburst-Type Arylborane-Ruthenium(II) Complexes (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) ○NAKAGAWA, Atsushi; SAKUDA, Eri; ITO, Akitaka; FUJII, Sho; KITAMURA, Noboru

**1E2-58** Effect of cavity size on luminescence properties of Ru(II) terpyridyl groups encapsulated in cage-type ligands (Grad. Sch. Sci., Osaka Univ.; JST PRESTO) ○HARA, Kanae; HATANAKA, Tsubasa; FUNAHASHI, Yasuhiro

**1E2-59** Development of the DSSCs Performance Using a Phosphonium-Type Ionic Liquid-Modified TiO<sub>2</sub> Electrode (Grad Sch. Eng., Nagoya Inst. of Tech.) ○MATSUNAGA, Ayaka; INOMATA, Tomohiko

**1E2-60** Reduction Behavior of Nitrido-bridged Dinuclear Ruthenium Complexes in Ionic Liquids (Sci. Tec., Sophia Univ.) ○KAWAGUCHI, Shoko; SUMOGE, Yuka; FUJITA, Masahiro; NAGAO, Hirotaka

## Friday, March 25, AM

### Mn, Fe, Ru

Chair: OZAWA, Hiroaki (9 : 00 ~ 10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(2E2-01, 2E2-02, 2E2-03, 2E2-04, 2E2-05)

**2E2-01** Development and Their Redox Reactivities of Organometallic Molecular Wires containing Anthraquinone/Anthrahydroquinone Frameworks (Chem. Res. Lab., Tokyo Tech) ○OYAMA, Yosuke; TANAKA, Yuya; AKITA, Munetaka

**2E2-02** Property of mixed-valence Ru complexes with an unsymmetric linker (Chem. Res. Lab., Tokyo Tech) ○TAKAHASHI, Hiroki; TANAKA, Yuya; AKITA, Munetaka

**2E2-03** Preparation of Molecularly Imprinted Ru Porphyrin Complex for Regioselective Oxidation of Steroids (Grad. Sch. Sci., Nagoya Univ.; RCMS, Nagoya Univ.) ○BABA, Hiroshi; TANIMOTO, Tatsuya; TERAU, Yousuke; MURATSUGU, Satoshi; TADA, Mizuki

**2E2-04** Synthesis of glass with Mn series MOF and proton conductivity (Grad. Sch. Eng., Kyoto Univ.) ○OHARA, Yuki; OGIWARA, Naoki; HORIKE, Satoshi; KITAGAWA, Susumu

**2E2-05\*** Guest dependent anisotropic thermal expansions in 2D cyano-network coordination polymers (Grad. Sch. Sci. & Tech., Kumamoto Univ.) ○OHTANI, Ryo; KITAMURA, Yuu; HAYAMI, Shinya

Chair: TANAKA, Yuya (10 : 10~11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(2E2-08, 2E2-09, 2E2-10, 2E2-12, 2E2-13)

**2E2-08** Theoretical study on electronic structures of [Ru(bpy)<sub>2</sub>(pbn)<sub>2</sub>]<sup>2+</sup> and its reduced complexes (Sch. Eng. Sci., Osaka Univ.) ○NISHIKUBO, Rena; ASAOKA, Mizuki; KITAGAWA, Yasutaka; KOBAYASHI, Ktsuaki; TANAKA, Koji; NAKANO, Masayoshi

- 2E2-09** Formation of Supramolecular Structures Composed of H-Bonded Ruthenium Complexes and its Electrochemical Properties on HOPG Surface (Fac. Sci. Eng., Chuo Univ.) ○OKA, Shota; OZAWA, Hiroaki; HAGA, Masa-aki
- 2E2-10<sup>#</sup>** Orientation-controllable dinuclear Ru complex modification of single-walled carbon nanotubes and their electric/electrochemical properties (Fac. Sci. Eng., Chuo Univ.) ○OZAWA, Hiroaki; KATORI, Norihiko; OKA, Shota; HAGA, Masa-aki
- 2E2-12** Effect of substrate under graphene sheet on electrochemical properties of dinuclear ruthenium complexes (Grad. Sch. Sci. Eng., Chuo Univ.; NTRC, AIST) ○KATORI, Norihiko; KITA, Tomomi; KOHMOTO, Mayuko; OZAWA, Hiroaki; OKIGAWA, Yuki; ISHIIHARA, Masatou; HAGA, Masa-aki
- 2E2-13** Rectification of hetero-layer films composed Ru complex and Prussian blue nanocrystals (Grad. Sch. Sci. Eng., Chuo Univ.) ○SATO, Hiroaki; OZAWA, Hiroaki; HAGA, Masa-aki

### V, Cr, Mo, Re

Chair: OHTANI, Ryo (11 : 20~12 : 20)

- \* 11:10-11:20: interval for laptop PC connection.(2E2-15, 2E2-16, 2E2-17, 2E2-18, 2E2-20)
- 2E2-15** Guest Responsive Luminescent Property of Re(V)Zn(II) Porous Coordination Polymer and Control of the Responsiveness (Grad. Sch. Sci., Kyushu Univ.) ○MIURA, Hiroki; MISHIMA, Akio; KOSHIYAMA, Tomomi; OHA, Masaaki
- 2E2-16<sup>#</sup>** Synthesis of PEDOT in 3D-Porous Coordination Polymers (Grad. Sch. Eng., Kyoto Univ.) ○LE OUAY, Benjamin; KITAO, Takashi; UEMURA, Takashi; KITAGAWA, Susumu
- 2E2-17** Promotion of Nuclear Spin Conversion of Adsorbed Hydrogen in Porous Magnets (Grad. Sch. Sci., Kyushu Univ.) ○OHTSUBO, Yuta; MISHIMA, Akio; HORI, Akihiro; KOSHIYAMA, Tomomi; OHBA, Masaaki
- 2E2-18<sup>#</sup>** Synthesis, crystal structure, and first-principles calculations of a cyanide-bridged copper-molybdate bimetallic assembly (Grad. Sch. Sci., The Univ. of Tokyo) ○UMETA, Yoshikazu; CHORAZY, Szymon; NAKABAYASHI, Koji; OHKOSHI, Shin-ichi
- 2E2-20** Structural Characterization of Complexes with Vanadium(V)-Nitrogen Double Bonds (Grad. Sch. Eng., Osaka Univ.) MORIUCHI, Toshiyuki; ○SAKURAMOTO, Takashi; HIRAO, Toshikazu

### Friday, March 25, PM

#### Al, Si, Ge, Sn

Chair: SASAMORI, Takahiro (13 : 30~14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(2E2-28, 2E2-29, 2E2-30, 2E2-31, 2E2-32)
- 2E2-28** Synthesis of Tetrasilane-1,4-diyl by the Dimerization of Disilene (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) ○SUZUKI, Takayuki; NOZAWA, Takeshi; ICHINOHE, Masaaki; SEKIGUCHI, Akira
- 2E2-29** Synthesis of 1,2-Di(2-thienyl)disilene Bearing the Bulky Rind Groups (Fac. Sci. Eng., Kinki Univ.) ○NISHIMURA, Shogo; KAZUSA, Nobuhiro; HAYAKAWA, Naoki; KOBAYASHI, Megumi; HASHIZUME, Daisuke; TAMAO, Kohei; MATSUO, Tsukasa
- 2E2-30** Synthesis and Properties of Disilenes with Polycyclic Aromatic Substituents (Grad. Sch. Sci., Tohoku Univ.) ○KOSAI, Tomoyuki; ISHIDA, Shintaro; IWAMOTO, Takeaki
- 2E2-31** Synthesis of  $\pi$ -Conjugated Digermene Compounds Stabilized by the Bulky Rind Groups (Fac. Sci. Eng., Kinki Univ.) ○YAMATANI, Kenta; KAWAI, Hodaka; HAYAKAWA, Naoki; TANIKAWA, Tomoharu; MATSUO, Tsukasa
- 2E2-32<sup>#</sup>**  $\pi$ -Conjugated Dimetalene Compounds Stabilized by the Bulky Rind Groups (Fac. Sci. Eng., Kinki Univ.) ○HAYAKAWA, Naoki; MATSUO, Tsukasa

Chair: MATSUO, Tsukasa (14 : 40~15 : 40)

- \* 14:30-14:40: interval for laptop PC connection.(2E2-35, 2E2-36, 2E2-37, 2E2-38, 2E2-39, 2E2-40)
- 2E2-35** Reaction of Disilyne with Metal Azides (Div. of Chem., Fac. Pure Appl. Sci., Univ. of Tsukuba) ○HATTORI, Futa; ICHINOHE, Masaaki; SEKIGUCHI, Akira
- 2E2-36** Cyclotrimerization of Phenylacetylene Mediated by 1,2-Digermabenzene (ICR, Kyoto Univ.; FIFC, Kyoto Univ.) ○SUGAHARA, Tomohiro; SASAMORI, Takahiro; GUO, Jing-dong; NAGASE, Shigeru; TOKITOH, Norihiro
- 2E2-37** Synthesis and Structure of Silaborene-KCl Adducts (Grad. Sch. Sci., Tohoku Univ.) ○SUZUKI, Yuku; ISHIDA, Shintaro; IWAMOTO, Takeaki
- 2E2-38** Reactivity of Lewis base stabilized silamine (Grad. Sch. Sci., Eng., Saitama Univ.) ○TAKANORI, Watanabe; NORIO, Nakata; DAISUKE, Hashizume; TSUYOSHI, Kato; BACEIREDO, Antoine
- 2E2-39** Dearomative Cycloadditions of Isolable Dialkylsilylene with Pyridines (Grad. Sch. Sci., Tohoku Univ.) ○TAMURA, Tomofumi; ISHIDA, Shintaro; IWAMOTO, Takeaki
- 2E2-40** Oxidation reaction of six-membered aminogermylene (Grad. Sch.

Sci., Eng., Saitama Univ.; RIKEN CEMS; Université de Paul Sabatier LHFA) ○TOYODA, Miki; NAKATA, Norio; HASHIZUME, Daisuke; SAFFON-MERCERON, Nathalie; BACEIREDO, Antoine; KATO, Tsuyoshi

Chair: ISHIDA, Shintaro (15 : 50~16 : 50)

- \* 15:40-15:50: interval for laptop PC connection.(2E2-42, 2E2-44, 2E2-46, 2E2-47)
- 2E2-42<sup>#</sup>** Reactions of a Silylyne Tungsten Complex Having an Eind Group with Ketones and Aldehydes (Grad. Sch. Sci., Tohoku Univ.) ○YOSHIMOTO, Takashi; HASHIMOTO, Hisako; HAYAKAWA, Naoki; MATSUO, Tsukasa; TOBITA, Hiromi
- 2E2-44\*** Reactivity of a Chlorogermylene Bearing a Bulky Ferrocenyl Group (ICR, Kyoto Univ.; FIFC, Kyoto Univ.) ○SUZUKI, Yuku; SASAMORI, Takahiro; GUO, Jing-dong; NAGASE, Shigeru; TOKITOH, Norihiro
- 2E2-46** Synthesis and property of six-membered 1,3-bis(chlorostannylene) (Grad. Sch. Sci., Eng., Saitama Univ.) ○HOSODA, Narimi; NAKATA, Norio; ISHII, Akihiko
- 2E2-47** Reactivity of Germabenzenylpotassium (ICR, Kyoto Univ.) ○FUJIMORI, Shiori; MIZUHATA, Yoshiyuki; SASAMORI, Takahiro; TOKITOH, Norihiro

Chair: NAKATA, Norio (17 : 00~18 : 00)

- \* 16:50-17:00: interval for laptop PC connection.(2E2-49, 2E2-50, 2E2-51, 2E2-53, 2E2-54)
- 2E2-49** Creation of an Anionic Ferrocene Analog Using Stannole Rings as Key Ligands (Grad. Sch. Sci., Eng., Saitama Univ.) ○MATSUNAGA, Naoki; FURUKAWA, Shunsuke; SAITO, Masaichi
- 2E2-50** Synthesis and Thermal Isomerization of Group 6 Metal Complexes of 2-Stannaphthalene (ICR, Kyoto Univ.) ○HONJO, Kazuma; MIZUHATA, Yoshiyuki; SASAMORI, Takahiro; TOKITOH, Norihiro
- 2E2-51\*** Synthesis and Properties of Heavier Group 13 Element-incorporated Benzenes (Grad. Sch. Sci. Eng., Chuo Univ.) ○NAKAMURA, Taichi; SUZUKI, Katsunori; YAMASHITA, Makoto
- 2E2-53** Synthesis and Structure of Phospha- and Bismapyramidanes (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) ○SUGASAWA, Haruka; LEE, Vladimir Ya.; SEKIGUCHI, Akira; GAPURENKO, Olga A.; MINYAEV, Ruslan M.; MINKIN, Vladimir I.
- 2E2-54** The Coupling Reaction of 1,1,2,2-Tetra-tert-butyl-3,3,4,4-tetrachlorocyclotetrasilane (Grad. Sch. Sci. Tech., Gunma Univ.) ○AKUTSU, Takuya; TSURUSAKI, Akihiro; KYUSHIN, Soichiro

Chair: SAKAMOTO, Kenkichi (18 : 10~19 : 00)

- \* 18:00-18:10: interval for laptop PC connection.(2E2-56, 2E2-57, 2E2-58, 2E2-59, 2E2-60)
- 2E2-56** Synthesis of Cyclopentasilanes with Functional Groups at the 1,1-positions (Grad. Sch. Sci. Tech., Gunma Univ.) ○KOBAYASHI, Atsushi; TSURUSAKI, Akihiro; KYUSHIN, Soichiro
- 2E2-57<sup>#</sup>** Reactions and Mechanisms of 1,3-Disilabicyclo[1.1.0]butane with Aldehydes (Grad. Sch. Sci., Tohoku Univ.) ○CHINARAJ, Siwat; ISHIDA, Shintaro; IWAMOTO, Takeaki
- 2E2-58** Synthesis and photoisomerization of silyl-substituted tetrahedrane derivatives having  $\pi$ -system (Div. of Chem., Fac. Pure Appl. Sci., Univ. of Tsukuba) ○OKANIWA, Kento; NAKAMOTO, Masaaki; SEKIGUCHI, Akira
- 2E2-59** Stepwise Synthesis and Photo-induced Isomerization of Phosphino Tetrahedrane (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) ○IWASAKI, Mako; NAKAMOTO, Masaaki; SEKIGUCHI, Akira
- 2E2-60** Synthesis, Fluorescence, and Photoreactions of Stilbene Derivatives Containing Silyl Groups (Grad. Sch. Nat. Sci. Technol., Kanazawa Univ.) ○HORIKOSHI, Ryo; MAEDA, Hajime; FURUYAMA, Taniyuki; SEGI, Masahito

### Saturday, March 26, AM

#### Zn, Bi, Ga, In

Chair: AGO, Tomohiro (9 : 00~9 : 40)

- \* 8:50-9:00: interval for laptop PC connection.(3E2-01, 3E2-02, 3E2-03, 3E2-04)
- 3E2-01** Functionalized Cyclopentane Synthesis by Cascade Reaction of Allenones, Diketones, and Bis(iodozincio)methane (Grad. Sch. Eng., Kyoto Univ.) ○HARAGUCHI, Ryosuke; MATSUBARA, Seijiro
- 3E2-02** Reactions of Bismuthabenzene (Grad. Sch. Sci. Eng., Chuo Univ.; Fac. Sci. Eng., Chuo Univ.) ○ISHII, Takuya; NAKAMURA, Taichi; SUZUKI, Katsunori; YAMASHITA, Makoto
- 3E2-03** Group 13 Organometallics with Chiral Hydrocarbon Ligand (Grad. Sch. Eng., Osaka Univ.) NISHIMOTO, Yoshihiro; ○HIDAKA, Fumiko; YASUDA, Makoto
- 3E2-04** Synthesis and Application to Catalyst of Group 13 Organometallic Complexes Stabilized by Intramolecular Coordination (Grad. Sch. Eng., Osaka Univ.) NISHIMOTO, Yoshihiro; ○MACHINAKA, Syota; YASUDA, Makoto

## Saturday, March 26, PM

## B, Al

Chair: SUZUKI, Katsunori (13 : 00~14 : 00)

- \* 12:50-13:00: interval for laptop PC connection.(3E2-25, 3E2-26, 3E2-27, 3E2-28, 3E2-29, 3E2-30)
- 3E2-25** Synthesis and reactivity of group 10 transition metal complexes bearing aluminum containing diphosphine ligands (Sch. Eng., Kyoto Univ.) ○HARA, Naofumi; SAITO, Teruhiko; NAKAO, Yoshiaki
- 3E2-26** Synthesis and reactivity of group 9 and 10 transition metal complexes bearing boron containing diphosphine ligands (Grad. Sch. Eng., Kyoto Univ.) ○TANAKA, Yuuki; SAITO, Teruhiko; NAKAO, Yoshiaki
- 3E2-27** Synthesis and Structure of an Iron-Halolumanyl Complex bearing a Bulky Substituent (ICR, Kyoto Univ.) ○YANAGISAWA, Tatsuya; AGOU, Tomohiro; SASAMORI, Takahiro; TOKITOH, Norihiro

## Si, Ge

- 3E2-28** Abnormal Peterson and Wittig reactions of cyclopropanone (Grad. Sch. Sci., Shizuoka Univ.) ○HANITANI, Kaito; SAKAMOTO, Kenkichi
- 3E2-29** Synthesis and Properties of Alkyl Substituted Oligosilolane (Grad. Sch. Sci., Shizuoka Univ.) ○YANG, Wenbo; SAKAMOTO, Kenkichi
- 3E2-30** Structural Analysis of Mesophases of Silyl-Substituted p-Terphenyls (Grad. Sch. Sci. Tech., Gunma Univ.) ○NANBA, Kenji; OTSUKA, Kyohei; NEGISHI, Yuma; KANNO, Ken-ichiro; ISHIDA, Shintaro; KYUSHIN, Soichiro

Chair: TAKEDA, Nobuhiro (14 : 10~15 : 10)

- \* 14:00-14:10: interval for laptop PC connection.(3E2-32, 3E2-33, 3E2-34, 3E2-35, 3E2-36, 3E2-37)
- 3E2-32** The reaction of disilyne with diarylketone (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) ○URAYAMA, Kazuho; ICHINOHE, Masaaki; SEKIGUCHI, Akira
- 3E2-33** The Reaction of Persilyl-substituted Cyclotrisilene with Metal Azide: Synthesis and Structure of Amide-substituted Cyclotrisilene (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) ○OMORI, Yu; ICHINOHE, Masaaki; SEKIGUCHI, Akira
- 3E2-34** Synthetic Study on a Triarylsilyl Radical and Related Chemical Species by Utilizing a Cavity-Shaped Molecular Framework (Grad. Sch. Sci., Eng., Tokyo Tech) ○OGAWA, Takuma; SASE, Shohei; GOTO, Kei
- 3E2-35** Synthesis and property of chlorogermylene and chlorostannylene bearing a [NPN]-type iminophosphonamide ligand (Fac. Sci., Saitama Univ.) ○TAKAHASHI, Shintaro; NAKATA, Norio; ISHII, Akihiko
- 3E2-36** Synthesis and Reactions of Diquinonyldisilane derivatives (Grad. Sch. Sci., Shizuoka Univ.) ○KAWASAKI, Takayuki; SAKAMOTO, Kenkichi
- 3E2-37** Synthesis of Unsymmetrically Substituted Oligosilanes via Catalytic Functionalization Reactions (Grad. Sch. Sci. Tech., Gunma Univ.) ○AIKAWA, Yumi; INO, Misaki; KANNO, Ken-ichiro; KYUSHIN, Soichiro

Chair: NAMAMOTO, Masaaki (15 : 20~16 : 20)

- \* 15:10-15:20: interval for laptop PC connection.(3E2-39, 3E2-40, 3E2-41, 3E2-42, 3E2-43, 3E2-44)
- 3E2-39** Synthesis and Fluorescence Properties of a N-Methylcarbazole-bridged Molecular Gyrotop (Urban Environmental Sci., TMU) ○HASHIMOTO, Hikaru; INAGAKI, Yusuke; SETAKA, Wataru
- 3E2-40** Synthesis of a Novel Thiophene-bridged Molecular Gyrotop and Dynamics inside a Crystalline State (Grad. Sch. Urban Environmental Sci., TMU) ○TSURUNAGA, Miyako; INAGAKI, Yusuke; YAMAGUCHI, Kentaro; SETAKA, Wataru
- 3E2-41** Development of the Fluorescent and Photoisomerizable 2,2'-Disilylazobenzene Featuring Double Intramolecular Nitrogen-Silicon Interaction (Grad. Sch. Sci., The Univ. of Tokyo; Div. of Chem., Fac. Pure Appl. Sci., Univ. of Tsukuba; Grad. Sch. Sci. Tech., Gunma Univ.) ○KANO, Naokazu; YAMAMURA, Masaki; KAWASHIMA, Takayuki
- 3E2-42** Synthesis of Extended Germa[N]pericyclynanes (Grad. Sch. Mat. Sci., NAIST) ○MORI, Junta; FUJIWARA, Taro; TANIMOTO, Hiroki; KAKIUCHI, Kiyomi
- 3E2-43** Synthesis and Reactions of Trisilylcyclododecatiene (Grad. Sch. Sci., Shizuoka Univ.) ○OKA, Shohei; SAKAMOTO, Kenkichi
- 3E2-44** Synthesis and Reactions of 1-Cyclobutenylsilanes (Grad. Sch. Sci., Shizuoka Univ.) ○SUGINO, Takumi; SAKAMOTO, Kenkichi

Chair: SASE, Shohei (16 : 30~17 : 40)

- \* 16:20-16:30: interval for laptop PC connection.(3E2-46, 3E2-47, 3E2-48, 3E2-50, 3E2-51)
- 3E2-46** Siloxane bond forming reaction by Inexpensive Lewis acid catalyst (Sch. Sci. Tech., Gunma Univ.) ○EGAWA, Yasunobu; HAYASHI, Kumiko; TAKEDA, Nobuhiro; UNNO, Masafumi
- 3E2-47** Precision Synthesis of Cyclic Tri- and Tetrasiloxanes from Silanols as Key Intermediates (Sagami Chemical Research Institute) ○FUKAWA, Marina; TANAKA, Ryoji
- 3E2-48\*** Catalytic Ring-opening Addition of Water to Cyclotrisiloxanes

(Sagami Chemical Research Institute) ○FUJIWARA, Kiyotaka; TANAKA, Ryoji; UEMATU, Ryouta; FUKAWA, Marina

- 3E2-50** Cycloaddition reaction of silyl-substituted cyclobutadiene derivatives with aromatic compounds (Div. of Chem., Fac. Pure Appl. Sci., Univ. of Tsukuba) ○SHOJI, Yukako; INAGAKI, Yusuke; NAKAMOTO, Masaaki; SEKIGUCHI, Akira
- 3E2-51\*** Distinct Diradical Nature of Phenylene-linked Cyclobutadiene Derivatives (Div. of Chem., Fac. Pure Appl. Sci., Univ. of Tsukuba) ○KOBAYASHI, Yuzuru; NAKAMOTO, Masaaki; FURUKAWA, Ko; SEKIGUCHI, Akira

## Sunday, March 27, AM

## bioinorganic chemistry

Chair: FUJIEDA, Nobutaka (9 : 00 ~ 9 : 40)

- \* 8:50-9:00: interval for laptop PC connection.(4E2-01, 4E2-02, 4E2-03, 4E2-05, 4E2-06, 4E2-07)
- 4E2-01** Construction of the complex mimicking enterobactin using the three-fold symmetry of ionic channel on ferritin (Grad. Sch. Sci., Nagoya Univ.) ○KONDO, Mio; NAKAJIMA, Hiroshi; WATANABE, Yoshihito
- 4E2-02** Photoinduced electron transfer reaction of Tris(2,2'-bipyridine) ruthenium(II) complex bound to the active site of Chymotrypsin (Fac. Sci., Nara Women's Univ.) ○KIMURA, Hiroko; TAKASHIMA, Hiroshi
- 4E2-03\*\*** Biohybrid Catalysts incorporated in a  $\beta$ -Barrel Protein for Olefin Metathesis in Water (RWTH Aachen University and Grad. Eng., Osaka Univ.) ○SAUER, Daniel F.; HIMIYAMA, Tomoki; ONODA, Akira; HAYASHI, Takashi; OKUDA, Jun

Chair: KURAHASHI, Takuya (9 : 40 ~ 11 : 30)

- 4E2-05** Reactivity of Hypochlorite Adduct of a Chiral Manganese(IV)Salen Complex (Fac. Sci., Nara Women's Univ.) ○ARAKI, Ikuko; HUIJI, Hiroshi; KURAHASHI, Takuya
- 4E2-06** Construction of a Hemoprotein-Carbon Nanotube Hybrid by CuAAC Reaction: Controlling Orientation of Hemoprotein by Modification of the Heme Sidechain (Grad. Sch. Eng., Osaka Univ.) ○INOUE, Nozomu; ONODA, Akira; HAYASHI, Takashi
- 4E2-07** Catalytic C-H Bond Hydroxylation Using Myoglobin Mutant Reconstituted with Manganese Porphycene (Grad. Sch. Eng., Osaka Univ.; PRESTO, JST) ○NITTA, Kosuke; NISHIURA, Takako; OOHORA, Koji; HAYASHI, Takashi
- \* 10:10-10:20: interval for laptop PC connection.(4E2-09, 4E2-10, 4E2-11, 4E2-12, 4E2-13, 4E2-14, 4E2-15)
- 4E2-09** Synthesis of Manganese-Oxo Clusters from Dioxide and Mn(II) Complexes Bearing Bulky Phenoxide Ligand (RCMS, Nagoya Univ.) ○SENDA, Shunsuke; ITOH, Takahiro; KOGAWA, Yumiko; OHKI, Yasuhiro; TASUMI, Kazuyuki
- 4E2-10** A Manganese Cubane Cluster Encapsulated in a Molecular Cage (Grad. Sch. Sci., Osaka Univ.) ○YONAGA, Shuhei; TANGE, Kosuke; HATANAKA, Tsubasa; FUNAHASHI, Yasuhiro
- 4E2-11** Possible Peroxo State of the Dicopper Site of Particulate Methane Monoxygenase from Quantum Mechanics and Molecular Mechanics Calculations (IMCE, Kyushu Univ.) ○ITOYAMA, Shuhei; DOITOMI, Kazuki; KAMACHI, Takashi; SHIOTA, Yoshihito; YOSHIZAWA, Kazunari
- 4E2-12** Theoretical elucidation on a synthetic model of a copper-containing dioxygenase (Grad. Sch. Sci., Osaka Univ.; Department of Chemistry.) ○NUMATA, Takahiro; SAITO, Toru; KAWAKAMI, Takashi; YAMANAKA, Shusuke; OKUMURA, Mitsutaka
- 4E2-13\*** Reactivity of Copper(II) Alkylperoxo Complex having Tetrahedral Geometry (Grad. Sch. Eng., Osaka Univ.) SHIMIZU, Ikuma; PARIJA, Sayantan; MORIMOTO, Yuma; SUGIMOTO, Hideki; FUJIEDA, Nobutaka; ○ITOH, Shinobu
- 4E2-14** Cell Introduction of Binuclear Metal Complexes that Efficiently Cleave DNA (Fac. Sci. Eng., Doshisha Univ.) ○KADOYA, Yuki; FUKUI, Katsuki; ASO, Kenta; HITOMI, Yutaka; KODERA, Masahito
- 4E2-15** Development of Dicopper Complexes as a Cathode Catalyst for Polymer Electrolyte Fuel Cell: Control of the Redox Potential (Fac. Sci. Eng., Doshisha Univ.) ○HACHIGATA, Shinya; KITAYAMA, Kou; TSUJI, Tomokazu; HITOMI, Yutaka; KODERA, Masahito

Chair: FUNAHASHI, Yasuhiro (11 : 40~12 : 20)

- \* 11:30-11:40: interval for laptop PC connection.(4E2-17, 4E2-18, 4E2-19, 4E2-20)
- 4E2-17** The Electron-withdrawing Effect of Porphyrin Ligand on the Reactivity of Hypochlorite(III) Porphyrin Complex (Fac. Sci., Nara Women's Univ.) ○YOKOTA, Sawako; FUJII, Hiroshi
- 4E2-18** Reaction and Reaction Mechanism of Iron(IV)oxo Porphyrin  $\pi$ -Cation Radical with Aromatic Rings (Nara Women's Univ.) ○ASAKA, Maaya; FUJII, Hiroshi
- 4E2-19** Effect of porphyrin radical orbital of iron(IV)oxo porphyrin  $\pi$ -cation radical complex on its monooxygenation reactivity (Fac. Sci., Nara Women's Univ.) ○FUKUI, Nami; FUJII, Hiroshi
- 4E2-20** Development of microbe detection system using the hybrid-type artificial siderophore-iron(III) complexes (Fac. Eng. Nagoya Inst. of Tech.) ○ENDO, Suguru; INOMATA, Tomohiko

# Room E3

## Chishinkan1 Building 218

### Physical Chemistry -Chemical Kinetics and Dynamics-

Thursday, March 24, AM

Chair: OUCHI, Yukio (9 : 10 ~ 10 : 10)

\* 9:00-9:10: interval for laptop PC connection.(1E3-02, 1E3-03, 1E3-04, 1E3-06)

**1E3-02** Pt Particle Size Effect on CO electro-oxidation (Grad. Sch. Sci., Eng., Saitama Univ.) ○SAKAJO, Takeru; NAKABAYASHI, Seiichi

**1E3-03** Development of in-situ high-resolution 3-dimensional imaging technique for polymer electrolyte fuel cells (Innovation Res. Ctr. for Fuel Cells, The Univ. of Electro-Communications) ○SEKIZAWA, Oki; URUGA, Tomoya; ISHIGURO, Nozomu; HIGASHI, Kotarou; MATSUI, Hirosuke; IWASAWA, Yasuhiro; TADA, Mizuki

**1E3-04\*** Structural Kinetics Study during Degradation Processes of PEFC Pt/C and Pt<sub>3</sub>Co/C Cathode Electrocatalysts by In Situ Time-Resolved XAFS (RIKEN Spring-8 Center; RCMS, Nagoya Univ.; Innovation Res. Ctr. for Fuel Cells, The Univ. of Electro-Communications; JASRI; IMS) ○ISHIGURO, Nozomu; KITYAKARN, Sutasinee; SEKIZAWA, Oki; NAGASAWA, Kensaku; URUGA, Tomoya; YOKOYAMA, Toshohiko; TADA, Mizuki

**1E3-06\*\*** Graphite-Conjugated Pyrazines: Synthesis, Characterizations and Electro-kinetics (MIT) ○FUKUSHIMA, Tomohiro; SURENDRANATH, Yogesh

Chair: NAKATA, Satoshi (10 : 20~11 : 10)

\* 10:10-10:20: interval for laptop PC connection.(1E3-09, 1E3-11, 1E3-12, 1E3-13)

**1E3-09\*** Autonomous motion of a vesicle creating and using the surrounding pH change (Grad. Sch. Eng., Doshisha Univ.) ○NAWA, Erika; YAMAMOTO, Daigo; SHIOI, Akihisa

**1E3-11** Chemotactic oil droplets on reactive aqueous solution (Dokkyo Med. Univ.) ○MAGOME, Nobuyuki; SAKUTA, Hiroki; UMEZAWA, Noriko; OKUDA, Tatsuya; MORI, Yoshihito; YOSHIKAWA, Kenichi

**1E3-12** Chemotactic liquid droplet stimulated by gas: Attractive and Repulsive motion (Grad. Sch. Life Med. Sci., Doshisha Univ.; Dokkyo Med. Univ. Chem.; Fac. Sci., Ochanomizu Univ.) ○SAKUTA, Hiroki; MAGOME, Nobuyuki; MORI, Yoshihito; YOSHIKAWA, Kenichi

**1E3-13** Mode changes of oil droplet locomotion induced by light irradiation in aqueous surfactant solution (Fac. Sci. Tech., Keio Univ.) ○KANEKO, Sho; ASAKURA, Kouichi; BANNO, Taisuke

Chair: BANNO, Taisuke (11 : 20~11 : 50)

\* 11:10-11:20: interval for laptop PC connection.(1E3-15, 1E3-17)

**1E3-15\*** Spatio-temporally pattern of the group of camphor particles (Grad. Sch. Sci., Hiroshima Univ.) ○MATSUDA, Yui; SUEMATSU, Nobuhiko; KITAHATA, Hiroyuki; IKURA, Yumihiko; NAKATA, Satoshi

**1E3-17** Characteristic self-propelled motor which depends on the anisotropy of the field. (Grad. Sch. Sci., Hiroshima Univ.) ○YAMAMOTO, Hiroya; NAKATA, Satoshi; YAMANAKA, Osamu; GÓRECKI, Jerzy; SUMINO, Yutaka; KITAHATA, Hiroyuki; SUEMATSU, Nobuhiko; KOYANO, Yuki

Thursday, March 24, PM

Chair: MURAKAMI, Yoshinori (13 : 00~13 : 50)

\* 12:50-13:00: interval for laptop PC connection.(1E3-25, 1E3-26, 1E3-27, 1E3-28)

**1E3-25** Effects of metal ion on the Liesegang phenomena in calcium system. (Grad. Sch. Sci., Eng., Kagoshima Univ.) NISHI, Tomoki; ○KAMINAGA, Akiko

**1E3-26** Spatio-Temporal Pattern of Chemical Wave Train (Meiji Univ. Interdisciplinary Math. Sci.) ○SUEMATSU, Nobuhiko; NAKATA, Satoshi

**1E3-27** Influence of Chirality of Glycerophospholipid Derivatives on their Polymorphic Crystallization (Fac. Sci. Tech., Keio Univ.) ○INA, Yuki; BANNO, Taisuke; ASAKURA, Kouichi

**1E3-28\*** Macroscopic self-oscillation of a co-crystal composed of an azobenzene derivative and oleic acid realized by coupling of photoisomerization and structural phase transition (Fac. Sci., Hokkaido Univ.; Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) ○IKEGAMI, Tomonori; KAGEYAMA, Yoshiyuki; TAKEDA, Sadamu

Chair: SUEMATSU, Nobuhiko (14 : 00~14 : 50)

\* 13:50-14:00: interval for laptop PC connection.(1E3-31, 1E3-32, 1E3-34)

**1E3-31** Measurement of the natural current with the iron corrosion in tetrachloromethane aqueous solution (Fac. Eng., KAIT) ○HONDA, Kazuhiro

**1E3-32\*** Influence of microbubbles on the formation of free radicals using the

ultrasound irradiation (NNCT) ○MURAKAMI, Yoshinori; MARUYAMA, Aya; MASUDA, Nanae

**1E3-34\*** Kinetic study on the decomposition of magnesium chloride hexahydrate by carbon felt atmospheric pressure microwave plasma (Grad. Sch. Eng., Saitama Inst. of Tech.) ○SUZUKI, Akihiro; YAJIMA, Tatsuhiko

Chair: ITO, Soyoji (15 : 00~16 : 10)

\* 14:50-15:00: interval for laptop PC connection.(1E3-37, 1E3-39, 1E3-41, 1E3-42)

**1E3-37\*\*** pH Dependence of the Femto-to-Picosecond Photoreaction Dynamics of a Sodium-Ion-Pumping Rhodopsin KR2 and its Origin (Molecular Spectroscopy Lab., RIKEN) ○TAHARA, Shinya; TAKEUCHI, Satoshi; YOSHIZUMI, Rei; INOUE, Keiichi; OHTANI, Hiroyuki; KANDORI, Hideki; TAHARA, Tahei

**1E3-39\*** The study of conformational fluctuation of cytochrome *c* on a lipid membrane by two-dimensional fluorescence lifetime correlation spectroscopy (Molecular Spectroscopy Lab., RIKEN; RIKEN Center for advanced photonics) ○SAKAGUCHI, Miyuki; ISHII, Kunihiko; TAHARA, Tahei

**1E3-41\*** Study of microsecond conformational dynamics of biomolecules using dynamic quenching and two-dimensional fluorescence lifetime correlation spectroscopy (2D FLCS) (Molecular Spectroscopy Lab., RIKEN; RIKEN Center for Advanced Photonics) ○SARKAR, Bidyut; ISHII, Kunihiko; TAHARA, Tahei

**1E3-42\*** Kinetic study for isomerization and peptide bond cleavage of Asp isomers (Himeji Dokkyo Univ. Pharmaceutical Sciences) ○AKI, Kenzo; OKAMURA, Emiko

Chair: YUTAKA, Nagasawa (16 : 20~17 : 20)

\* 16:10-16:20: interval for laptop PC connection.(1E3-45, 1E3-48, 1E3-50)

**1E3-45#** CSJ Award for Young Chemists The Study on Photoreceptive Membrane Protein, "Rhodopsin", and the Application (Grad Sch. Eng., Nagoya Inst. of Tech.) ○INOUE, Keiichi

**1E3-48\*** Time-resolved study on the photoreaction of PapB and its interaction with PapA (Dep. Chem., Sch. Sci., Kyoto Univ.) ○NAKASONE, Yusuke; KIKUKAWA, Kotaro; MASUDA, Shinji; TERAZIMA, Masahide

**1E3-50** Reaction dynamics of BfpI detected by the transient grating method (Dep. Chem., Sch. Sci., Kyoto Univ.) ○SHIBATA, Kosei; NAKASONE, Yusuke; TERAZIMA, Masahide

Chair: YAGO, Tomoaki (17 : 30~18 : 40)

\* 17:20-17:30: interval for laptop PC connection.(1E3-52, 1E3-54, 1E3-56, 1E3-57)

**1E3-52\*\*** H- and J-aggregate formation of rhodamine derivatives and elucidation of their photophysical properties (ISIR, Osaka Univ.) ○KIM, Sooyeon; FUJITSUKA, Mamoru; MIYATA, Mikiji; MAJIMA, Tetsuro

**1E3-54\*** Relative Yields of Radicals Produced in Deuterated Methanol by Irradiation (Tokyo Metropolitan Ind. Tech. Res. Inst.) ○NAKAGAWA, Seiko

**1E3-56** Study of iodine collection in weakly ionized plasma (Fac. Eng., FUT; UOIT) ○SUNAGAWA, Takeyoshi; HARVEL, Glenn

**1E3-57\*** Radical ions of stilbene derivatives studied by pulse radiolysis-time-resolved resonance Raman measurements (ISIR, Osaka Univ.) ○FUJITSUKA, Mamoru; CHO, Dae Won; CHOI, Jungkwoon; TOJO, Sachiko; MAJIMA, Tetsuro

Friday, March 25, AM

Chair: HONDA, Kazuhiro (9 : 00 ~ 9 : 40)

\* 8:50-9:00: interval for laptop PC connection.(2E3-01, 2E3-02, 2E3-03, 2E3-04)

**2E3-01** Estimation of a liquid junction potential difference between an ionic liquid and methanol (Dept. of Material & Life Chem., Kanagawa Univ.) ○MATSUBARA, Yasuo; ANDO, Kazuya; ISHII, Shota; KOIDE, Yoshihiro

**2E3-02** Electrochemical behavior of self-assembled monolayers of cyclodextrins including a cobalt complex. (Fac. Env. Earth Sci., Hokkaido Univ.) ○WATANABE, Yuuya; KON, Keita; KATOU, Masaru; YAGI, Itizou

**2E3-03#** Oxygen reduction catalyzed by copper-incorporated carbon electrocatalysts (Fac. Env. Earth Sci., Hokkaido Univ.) ○KATO, Masaru; MUTO, Marika; YAGI, Ichizo

**2E3-04** IV-SFG Studies on the Interface Structure of Ionic Liquid/Pt Electrode with Li<sup>+</sup> Cation (Grad. Sch. Sci., Eng., Tokyo Tech) ○MIWA, Yujiro; IWAHASHI, Takashi; SAKAI, Yasunari; YAMAGATA, Masaki; ISHIKAWA, Masashi; ZHOU, Wei; OUCHI, Yukio

### Asian International Symposium -Photochemistry-

Friday, March 25, PM

Chair: Masuo, Sadahiro (13 : 30~14 : 20)

**2E3-28#** Keynote Lecture Design and synthesis of organic functional materials for solar cell and transistor applications (National Chiao Tung Univ., Taiwan) Cheng, Yen-Ju (13:30~14:00)

**2E3-31#** Invited Lecture Synthesis and Photo-induced Carrier Dynamics of Heterostructured Nanocrystals (Kyoto Univ.) Sakamoto, Masanori (14:00~14:20)

Chair: Ueno, Kosei (14 : 20~15 : 10)

**2E3-33<sup>#</sup> Keynote Lecture** Using plasmonic liquid marble to unravel real-time and molecular-level mechanism and kinetics (Nanyang Technological Univ., Singapore) Ling, Xing Yi (14:20~14:50)**2E3-36<sup>#</sup> Invited Lecture** Photochemistry of molecular-assembly systems probed by the fluorescence modulation (Shinshu Univ.) Ito, Fuyuki (14:50~15:10)

Chair: Kameyama, Tatsuya (15 : 20~16 : 00)

**2E3-39<sup>#</sup> Invited Lecture** Reduction of carbon dioxide using metal-complex/semiconductor hybrid photocatalysts (Tokyo Tech.) Maeda, Kazuhiko (15:20~15:40)**2E3-41<sup>#</sup> Invited Lecture** Plasmon-induced ammonia synthesis from dinitrogen, water and visible light (Hokkaido Univ.) Oshikiri, Tomoya (15:40~16:00)

Chair: Ito, Shoji (16 : 00~17 : 00)

**2E3-43<sup>#</sup> Invited Lecture** Efficient fluorescence photoswitching by few photons in fluorescent photochromic nanoparticles (Kumamoto Univ., ENS Cachan) O Fukaminato, Tsuyoshi; Jia, Su; Nakatani, Keitaro; Métivier, Rémi (16:00~16:20)**2E3-45<sup>#</sup> Invited Lecture** Structure control of dye/metal-nanoparticle hybrid and its photochemical properties (NIMS) Eguchi, Miharu (16:20~16:40)**2E3-47<sup>#</sup> Invited Lecture** Modification of Fermi's golden rule at plasmonic metal nanoparticle junctions investigated by surface enhanced spectroscopy (AIST) Itoh, Tamitake (16:40~17:00)

## Physical Chemistry -Chemical Kinetics and Dynamics-

Chair: BAN, Takahiko (17 : 20~18 : 00)

\* 17:10-17:20: interval for laptop PC connection.(2E3-51, 2E3-52, 2E3-53, 2E3-54)

**2E3-51** Size-control of Gold Nanoparticles Using Hydroquinone (Yokohama Natl. Univ.) OKODAMA, Yojiro; HIROTA, Tetuya; SHIBATA, Kenichi; ITOU, Kiminori; AMEMIYA, Takashi**2E3-52** Influences of additives in hydrolysis of ester compounds by H<sub>2</sub>O under pressurized microwave irradiation (Fac. Eng., Sojo Univ.) OIKENAGA, Kazutoshi; NAKAGAWA, Kazumi; INOUE, Takahiro**2E3-53** Influence of electrolytes on self-propelled motion of deformable micrometer-sized oil droplets in a surfactant solution (Grad. Sch. Arts and Sci., The Univ. of Tokyo) OASAMI, Arisa; BANNO, Taisuke; KITAHATA, Hiroyuki; KOYANO, Yuki; TOYOTA, Taro**2E3-54** Waving Motion of Tubular Molecular Aggregate Formed at an Interface Between Decylamine and Water (Grad. Sch. Arts and Sci., The Univ. of Tokyo) OTANAKA, Yuki; TOYOTA, Taro

Chair: TOYOTA, Taro (18 : 10~18 : 50)

\* 18:00-18:10: interval for laptop PC connection.(2E3-56, 2E3-57, 2E3-59)

**2E3-56** Self-motivated movement of graphite particles treated with ethanol in water (Fac. Life Med. Sci., Doshisha Univ.) MATSUURA, Hirotsato; YOSHIKAWA, Kenichi**2E3-57\*** Energy Conversion Mechanism for Chemotaxis of Active Matter (Sch. Eng. Sci., Osaka Univ.) O BAN, Takahiko; KOBAYASHI, Yuya; SONO, Ayaka**2E3-59** Application possibility of bacterial oscillation (TUT) OSASAKI, Satoshi; HOSOKI, Mayuri

## Saturday, March 26, AM

Chair: FUJITSUKA, Mamoru (9 : 10 ~10 : 20)

\* 9:00-9:10: interval for laptop PC connection.(3E3-02, 3E3-05, 3E3-07, 3E3-08)

**3E3-02** Young Scholar Lectures of CSJ Manipulation of 2D dye assemblies towards efficient photochemical reaction systems (Grad. Sch. Eng., Hokkaido Univ.) OISHIDA, Yohei**3E3-05\*** Exciton Dynamics of Colloidal Perovskite Nanoparticles by Means of Widefield Femtosecond Transient Absorption Microscopy (Sch. Sci. Tech., Kwansai Gakuin Univ.) OKATAYAMA, Tetsuro; SUENAGA, Harunobu; OKUHATA, Tomoki; TAMAI, Naoto**3E3-07** Cyclization Reactions of Diarylethenes through the Triplet Excited State by Intermolecular Energy Transfer (Grad. Sch. Sci., Eng., Saitama Univ.) OMURATA, Ryutarō; MINOSHIMA, Yusuke; YAGO, Tomoaki; WAKASA, Masanobu**3E3-08** Long-range interaction between the Mn cluster and the primary quinone Q<sub>A</sub> in photosystem II (Grad. Sch. Sci., Nagoya Univ.; Sch. Sci., Nagoya Univ.) OKATO, Yuki; ISHII, Rina; NOGUCHI, Takumi

Chair: MASUO, Sadahiro (10 : 30~11 : 40)

\* 10:20-10:30: interval for laptop PC connection.(3E3-10, 3E3-11, 3E3-12, 3E3-14, 3E3-16)

**3E3-10** Exciton-exciton annihilation dynamics of dimeric photosystem II (Grad. Sch. Eng. Sci., Osaka Univ.) OYONEDA, Yusuke; KATAYAMA, Tetsuro; NAGASAWA, Yutaka; MIYASAKA, Hiroshi; UMENA, Yasufumi**3E3-11** Excimer formation dynamics of pyrene in poly(pyrene-substituted methylene) (Fac. Sci., Gakushuin Univ.; Grad. Sch. Sci., Eng., Ehime Univ.)

OTAKAYA, Tomohisa; ODA, Tatsuya; AZUMA, Tatsuya; SHIMOMOTO, Hiroaki; ITOH, Tomomichi; ISHIBASHI, Yukihide; ASahi, Tsuyoshi; IWATA, Koichi; IHARA, Eiji

**3E3-12<sup>#</sup>** Control of Sequential Energy and Electron Transfer Reaction on 2-dimensional reaction field utilizing Organic Capsule Molecules (Grad. Sch. Urban Environmental Sci., TMU; Univ. Miami) OFUJIMURA, Takuya; RAMASAMY, Elamparuthi; ISHIDA, Yohei; SHIMADA, Tetsuya; TAKAGI, Shinsuke; RAMAMURTHY, Vaidhyanathan**3E3-14\*** Intramolecular electron transfer processes from excited C<sub>60</sub> radical anion (ISIR, Osaka Univ.) OFUJITSUKA, Mamoru; MAJIMA, Tetsuro**3E3-16** Photoinduced electron-transfer dynamics of electron donor-substituted acridinium ion derivatives (Grad. Sch. Eng., Osaka Univ.; Faculty of Science and Technology; UNISOKU Co., Ltd.; ALCA&SENTAN, JST) OTSUDAKA, Takeshi; OHKUBO, Kei; NAKAGAWA, Tatsuo; HANADA, Hiroaki; FUKUZUMI, Shunichi

## Saturday, March 26, PM

Chair: TACHIKAWA, Takashi (13 : 00~14 : 10)

\* 12:50-13:00: interval for laptop PC connection.(3E3-25, 3E3-26, 3E3-27, 3E3-28, 3E3-30)

**3E3-25** High Magnetic Field Effects on Singlet Fission of Non-substitutional and Fluorine Substituted Diphenylhexatriene (Grad. Sch. Sci., Eng., Saitama Univ.) OKAISE, Mana; YAGO, Tomoaki; SONODA, Yoriko; WAKASA, Masanobu**3E3-26** The solvent dependence of magnetic field effects on the photoinduced electron transfer reaction in ionic liquids (Fac. Sci., Saitama Univ.) OTAKEDA, Tomoya; YAGO, Tomoaki; WAKASA, Masanobu**3E3-27** Study on reaction mechanism of a photoinitiator, 2,2-dimethoxy-2-phenylacetophenone at early stage of photopolymerization by using Rapid-Flow ESR method (KIT) OMIYAKE, Yusuke; KANAORI, Kenji; TAJIMA, Kunihiko; NIWA, Masahiro; HIRANO, Keisuke**3E3-28\*** Excited state dynamics of a flexible  $\pi$ -conjugated system with double anthracene moieties (Grad. Sch. Eng. Sci., Osaka Univ.) OSOTOME, Hikaru; SAITO, Shohei; KASHIWAGI, Akihiro; YAMAGUCHI, Shigehiro; ITO, Syoji; MIYASAKA, Hiroshi**3E3-30\*** Real time measurement of ultrafast charge transfer in bipolaron formation by using visible 5-fs laser pulse (Grad. Sch. Eng., Kanagawa Univ.) OHASHIMOTO, Sena; YABUSHITA, Atsushi; IWAKURA, Izumi

Chair: TAMAI, Naoto (14 : 20~15 : 20)

\* 14:10-14:20: interval for laptop PC connection.(3E3-33, 3E3-34, 3E3-36, 3E3-38)

**3E3-33** A fluorescence sensor of photosensitizing reactions (Health Research Inst., AIST) KOAHARA, Reiko; NAKANISHI, Shunsuke; OBIJU, Vasudevanpillai**3E3-34\*** Study of Excimer Formation and Intermolecular Proton Transfer of Polycyclic Aromatic Compounds with Urea Groups (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) O MATSUMOTO, Hisato; NISHIMURA, Yoshinobu; ARAI, Tatsuo**3E3-36\*** Photoionization of a benzothienopyrene base diarylethene derivative in the presence of cyclodextrins by using multi-color multi-laser irradiation (Grad. Sch. Eng., FUT) OTAKESHITA, Tatsuya; YANO, Atsushi; HARA, Michihiro**3E3-38** Development of Novel Fluorescence Correlation Spectroscopy Utilizing the Standing Evanescent-wave and its Application to the Lipid Bilayer (Grad. Sch. Sci., Eng., Saitama Univ.) OOTOSU, Takuhiro; YAMAGUCHI, Shoichi

Chair: NAKAJIMA, Atsushi (15 : 30~16 : 30)

\* 15:20-15:30: interval for laptop PC connection.(3E3-40, 3E3-42, 3E3-44, 3E3-45)

**3E3-40<sup>#</sup>** Analysis of intermolecular reaction kinetics based on single-molecule transmission electron microscopic imaging (Grad. Sch. Sci., The Univ. of Tokyo) OKADA, Satoshi; HARANO, Koji; YAMANOUCHI, Kaoru; NAKAMURA, Eiichi**3E3-42\*** Detection of neutral species in the MALDI plume by near-infrared femtosecond laser ionization. (Grad. Sch. Sci. and Technol., Niigata Univ.; Fac. Pharm. Sci., NUPALS) OSHIROTA, Tatsuro; TSUGE, Masashi; HIKOSAKA, Yasumasa; SOEJIMA, Kouichi; HOSHINA, Kennosuke**3E3-44** Characteristics of Anharmonic Vibrations of Atoms in a Cluster: a Molecular Dynamics Examination (Grad. Sch. Sci. Eng., Yamaguchi Univ.) OFUJII, Shun; OHKAWA, Kenichi; SHIMAMURA, Shuji**3E3-45** Photoabsorption spectroscopy of silver cluster cations up to 35 atoms: evaluation of oscillator strength (Grad. Sch. Sci., Kyushu Univ.) OKIYOMURA, Yuya; TOBITA, Kenichiro; ITO, Tomonori; ARAKAWA, Masashi; TERASAKI, Akira

Chair: TERASAKI, Akira (16 : 40~17 : 40)

\* 16:30-16:40: interval for laptop PC connection.(3E3-47, 3E3-48, 3E3-49, 3E3-50, 3E3-51, 3E3-52)

**3E3-47** Selective generation of magic binary nanoclusters based on high-power impulse magnetron sputtering method (Fac. Sci. Tech., Keio Univ.; ERATO,

- JST; KiPAS) ○TSUNOYAMA, Hironori; SUGAWARA, Yoshito; NAKAJIMA, Atsushi
- 3E3-48** Size-effect in Suzuki-Miyaura coupling reaction catalyzed by size-selected palladium nanoclusters soft-landed on SrTiO<sub>3</sub>(100) (Fac. Sci. Tech., Keio Univ.; ERATO, JST; KiPAS) ○ITO, Haruchika; KOBAYASHI, Ryota; EGUCHI, Toyooki; TSUNOYAMA, Hironori; NAKAJIMA, Atsushi
- 3E3-49** Precise synthesis of supported platinum clusters (Chem. Res. Lab., Tokyo Tech) ○OKAYASU, Takeshi; ISHIHARA, Kentaro; IMAOKA, Takane; YAMAMOTO, Kimihisa
- 3E3-50** Preparation of magnetic nanoparticles from cobalt by using laser ablation technique in solution and measurement of Faraday rotation spectra (Sch. Eng., Muroran Inst. of Tech.; Grad. Sch. of Eng., Muroran Inst. of Tech.) ○TANI, Yohei; KANDA, Yasuharu; UEMICHI, Yoshio; IIMORI, Toshifumi
- 3E3-51** Effect of cluster size and ligand structure on photoluminescence property of organoeuropium(II) sandwich clusters (Fac. Sci. Tech., Keio Univ.; ERATO, JST; KiPAS) ○ABE, Kanako; KANO, Mai; TSUJI, Takashi; TSUNOYAMA, Hironori; NAKAJIMA, Atsushi
- 3E3-52** Optical properties of mononuclear organoeuropium sandwich complexes ligated by cyclononatetraenyl anions: (C<sub>9</sub>H<sub>9</sub>)<sub>2</sub>Eu (Grad. Sch. Sci. Tech., Keio Univ.) ○KAWASAKI, Kenshiro; SUGIYAMA, Rion; TSUJI, Takashi; IWASA, Takeshi; TSUNOYAMA, Hironori; MIZUHATA, Yoshiyuki; TOKITOH, Norihiro; NAKAJIMA, Atsushi

### Sunday, March 27, AM

Chair: UWADA, Takayuki (9 : 10 ~ 10 : 00)

- \* 9:00-9:10: interval for laptop PC connection.(4E3-02, 4E3-03, 4E3-04, 4E3-06)
- 4E3-02<sup>#</sup>** Metal ion reductions by femtosecond laser filamentation and their efficiencies (Grad. Sch. Sci., Osaka City Univ.; Toyota Central R&D Labs., Inc.; ILT; QBSC, JAEA) ○NAKASHIMA, Nobuaki; YAMANAKA, Ken-ichi; SAEKI, Morihisa; OHBA, Hironori; TANIGUCHI, Seiji; YATSUHASHI, Tomoyuki
- 4E3-03** Time-resolved observation of laser induced modification disturbed by dislocations inside a LiF single crystal (Kyoto Univ.) ○SAKAKURA, Masaaki; OKADA, Takuro; SHIMOTSUMA, Yasuhiko; FUKUDA, Naoaki; MIURA, Kiyotaka
- 4E3-04<sup>\*</sup>** Selective Plasmonic Optical Trapping of Nano Sized Dye Aggregates (Grad. Sch. Sci., Osaka City Univ.; Grad. Sch. Mat. Sci., Univ. of Hyogo; Fac. Sci., Hokkaido Univ.; Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) MOTOTSUJI, Ayaka; SHOJI, Tatsuya; YAO, Hiroshi; YOSHII, Takahiro; MURAKOSHI, Kei; ○TSUBOI, Yasuyuki
- 4E3-06** Selective Trapping of DNAs Using Localized Surface Plasmon : Study on Multiple-ring Formation Mechanism (Grad. Sch. Sci., Osaka City Univ.) ○ITO, Kenta; SHOJI, Tatsuya; YOSHII, Takahiro; MURAKOSHI, Kei; TSUBOI, Yasuyuki

Chair: MURAMATSU, Masayasu (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(4E3-08, 4E3-10, 4E3-12)
- 4E3-08<sup>\*</sup>** Control of formation, growth, and dissolution of L-phenylalanine giant cluster assembly by laser trapping (NCTU) ○YUYAMA, Ken-ichi; SUGIYAMA, Teruki; MASUHARA, Hiroshi
- 4E3-10<sup>#</sup>** Spectral properties of plasmon-molecule hybrid states under strong coupling and its dynamics (RIES, Hokkaido Univ.) ○LI, Jie; UEHARA, Hiyori; OSHIKIRI, Tomoya; UENO, Kosei; CHEN, Qi-dai; SUN, Hong-bo; MISAWA, Hiroaki
- 4E3-12<sup>#</sup>** Spectral response and spatial evolution of plasmonic near field in coupled gold nanostructures (RIES, Hokkaido Univ.) ○YU, Han; SUN, Quan; OSHIKIRI, Tomoya; UENO, Kosei; KUBO, Atsushi; MATSUO, Yasutaka; MISAWA, Hiroaki

Chair: UENO, Kosei (11 : 20~11 : 50)

- \* 11:10-11:20: interval for laptop PC connection.(4E3-15, 4E3-16, 4E3-17)
- 4E3-15** Single-Particle Spectroscopy of Halide Exchange Reactions on Organolead Trihalide Perovskites (Grad. Sch. Sci., Kobe Univ.) ○KARIMATA, Izuru; KOBORI, Yasuhiro; TACHIKAWA, Takashi
- 4E3-16** Crystal Face Dependent Charge Dynamics on a BiVO<sub>4</sub> Photocatalyst Studied by Single-Particle Spectroelectrochemistry (Grad. Sch. Sci., Kobe Univ.) ○OCHI, Tomoya; KOBORI, Yasuhiro; TACHIKAWA, Takashi
- 4E3-17** Spectroscopic study on mixed aggregates of gold and organic nanoparticles (Grad. Sch. Sci., Eng., Ehime Univ.) ○ISHIBASHI, Yukihide; SHIRAIISHI, Koya; KITAGAWA, Haruna; ASahi, Tsuyoshi

### Sunday, March 27, PM

Chair: WAKABAYASHI, Tomonari (13 : 00~14 : 00)

- \* 12:50-13:00: interval for laptop PC connection.(4E3-25, 4E3-27, 4E3-29)
- 4E3-25<sup>#</sup>** Mechanism of oxidative addition of haloalkanes to atomic gold anion (Grad. Sch. Sci., The Univ. of Tokyo; ESICB, Kyoto Univ.) ○MURAMATSU, Satoru; KOYASU, Kiichiro; TSUKUDA, Tatsuya
- 4E3-27<sup>#</sup>** CO-adsorption reactions on cobalt oxide cluster ions investigated by ion mobility mass spectrometry (Grad. Sch. Sci., Tohoku Univ.) ○NAKANO, Motoyoshi; MORIYAMA, Ryoichi; OHSHIMO, Keijiro; MISAIZU, Fuminori

- 4E3-29<sup>#</sup>** Stable Compositions and Structural Changes with Size of Transition Metal Oxide Cluster Ions (Grad. Sch. Sci., Tohoku Univ.; IEHE, Tohoku Univ.) OHSHIMO, Keijiro; MORIYAMA, Ryoichi; WU, Jenna; AZUMA, Shohei; KOMUKAI, Tatsuya; NAKANO, Motoyoshi; ○MISAIZU, Fuminori

Chair: TUKUDA, Tatsuya (14 : 10~14 : 50)

- \* 14:00-14:10: interval for laptop PC connection.(4E3-32, 4E3-33, 4E3-35)
- 4E3-32** Characterization of nano-level particles by ion trap ion mobility measurement (Fac. Sci., Toho Univ.) ○JINNOUCHI, Ryota; HIROSHIBA, Yasuhiro; MATSUBAYASHI, Hironobu; OHKAWA, Wataru; SUGAI, Toshiki
- 4E3-33<sup>#</sup>** Development of combined measurement system based on multi-stage ion trap ion mobility (Fac. Sci., Toho Univ.) HIROSHIBA, Yasuhiro; MATSUBAYASHI, Hironobu; JINNOUCHI, Ryota; OHKAWA, Wataru; ○SUGAI, Toshiki
- 4E3-35<sup>#</sup>** Polarization of Light by Oriented Molecular Films using UV Microscope (Fac. Sci. Eng., Kinki Univ.) ○WAKABAYASHI, Tomonari; CHIKAYAMA, Takumi; MORISAWA, Yusuke

Chair: YAMAKITA, Yoshihiro (15 : 00~15 : 50)

- \* 14:50-15:00: interval for laptop PC connection.(4E3-37, 4E3-38, 4E3-40, 4E3-41)
- 4E3-37** Development of transfer system in tandem trap reactor and merging two droplets (Fac. Sci., Gakushuin Univ.) ○OGAWA, Masato; EGUCHI, Takaaki; KOHNO, Jun-ya
- 4E3-38<sup>\*</sup>** Chemical Reaction induced by collision of liquid droplets (Fac. Sci., Gakushuin Univ.) ○KOHNO, Jun-ya
- 4E3-40** Development of tandem trap apparatus combined with Raman spectrometer for synthesis and identification of single levitated particle (Grad. Sch. Sci. and Technol., Gakushuin Univ.) ○EGUCHI, Takaaki; OGAWA, Masato; KOHNO, Jun-ya
- 4E3-41** Raman spectroscopic observation of reaction process between HSO<sub>4</sub>- and OH- induced by droplet collision (Grad. Sch. Sci. and Technol., Gakushuin Univ.) ○ANAHARA, Kazuma; KOHNO, Jun-ya

Chair: KOHNO, Jun-ya (16 : 00~17 : 00)

- \* 15:50-16:00: interval for laptop PC connection.(4E3-43, 4E3-44, 4E3-46, 4E3-47, 4E3-48)
- 4E3-43** Ion imaging study of ultraviolet photodissociation processes of gas-phase Mg<sup>+</sup>-methyl halide complex ions (Grad. Sch. Sci., Tohoku Univ.) ○YAMAZAKI, Kenichiro; FUJIMOTO, Keita; OKUTSU, Kenichi; NAKANO, Motoyoshi; OHSHIMO, Keijiro; MISAIZU, Fuminori
- 4E3-44<sup>#</sup>** Development of photofragment ion imaging apparatus using a linear-type tandem reflectron: Photodissociation of Ca<sup>+</sup>Ar in ultraviolet region (Grad. Sch. Sci., Tohoku Univ.) ○OKUTSU, Kenichi; YAMAZAKI, Kenichiro; FUJIMOTO, Keita; NAKASHIMA, Yuji; NAKANO, Motoyoshi; OHSHIMO, Keijiro; MISAIZU, Fuminori
- 4E3-46** C=O bond activation in 4f transition metal-molecule cluster cations studied by time-of-flight mass spectrometry (Grad. Sch. Sci. Eng., The Univ. of Electro-Communications) ○SHIMOKAWARA, Shota; IWASAKI, Hidenori; SAITO, Koudai; YAMAKITA, Yoshihiro
- 4E3-47** Activation of ammonia by bimetallic cobalt-niobium cluster cations (Genesis Res. Inst., Inc.) ○HIRABAYASHI, Shinichi; ICHIHASHI, Masahiko
- 4E3-48** Reactivity of transition-metal-doped silver cluster ions with oxygen: effects of geometric and electronic structures (Grad. Sch. Sci., Kyushu Univ.) ○SARUGAKU, Shun; MURAKAMI, Ryohei; MATSUMOTO, Jumpei; KAWANO, Tomoki; ARAWAKA, Masashi; TERASAKI, Akira

## Room E4

Chishinkan1 Building 219

### Physical Chemistry -Properties-

Thursday, March 24, AM

### Surface, Thin Films, Nano Materials, Cluster, and Nanotube

Chair: MATSUMOTO, Yoshiyasu (9 : 30 ~ 10 : 10)

- \* 9:20-9:30: interval for laptop PC connection.(1E4-04, 1E4-05, 1E4-06)
- 1E4-04** Evaporation and adsorption at air/water interface dynamics of alcohol molecules observed by cavity enhanced Raman spectroscopy (Grad. Sch. Sci. and Technol., Gakushuin Univ.) ○KIYHARA, Yasuhito; ASAMI, Hiroya; KOHNO, Jun-ya
- 1E4-05** Global geometry search and property analysis of subnanosized transition metal clusters by means of ab initio relativistic molecular theory (Grad. Sch. Of Humanities and Sci., Ochanomizu Univ.) ○MIYAZAKI, Kasumi; MORI, Hirotohi
- 1E4-06<sup>\*</sup>** Relationship between electronic structures and hydrogen absorbing properties of nanosized Pd/Pt particles: A consideration by relativistic

electronic structure theory (Grad. Sch. Of Humanities and Sci., Ochanomizu Univ.) ○MORI, Hiroto; MATSUDA, Aya

Chair: SUGIMOTO, Toshiki (10 : 20~10 : 50)

- \* 10:10-10:20: interval for laptop PC connection.(1E4-09, 1E4-10, 1E4-11)  
**1E4-09** Opto-electronic conversion produced at the perovskite/ionic liquid interfaces (Grad. Sch. Sci., Nagoya Univ.) KARAK, Supravat; NANJO, Chihiro; MATSUSHITA, Michio; ○AWAGA, Kunio  
**1E4-10** Rest Potentials of Binary Mixture of Ionic Liquids and Threshold Voltages of Electric-Double-Layer Transistors (Grad. Sch. Sci., Nagoya Univ.) ○NANJO, Chihiro; M. MATSUSHITA, Michio; AWAGA, Kunio  
**1E4-11** Chemical Modification-induced Unique Near-IR Photoluminescence of Carbon Nanotubes (Grad. Sch. Eng., Kyushu Univ.; I<sub>2</sub>CNER, Kyushu Univ.) ○SHIRAIISHI, Tomonari; SHIRAKI, Tomohiro; NAKSHIMA, Naotoshi

Chair: AWAGA, Kunio (11 : 00~12 : 00)

- \* 10:50-11:00: interval for laptop PC connection.(1E4-13, 1E4-14, 1E4-16, 1E4-17)  
**1E4-13** Quantitative Evaluation of Photo-Induced Charge Carrier Generation at Pentacene/Fullerene Thin Film Interfaces (ICR, Kyoto Univ.) ○NAKAO, Kazuto; MURDEY, Richard; HADA, Miyako; SHIOYA, Nobutaka; SHIMOAKA, Takafumi; HASEGAWA, Takeshi; SATO, Naoki  
**1E4-14\*** Effect of Thin Film Structure on Photoluminescence of Tetraphenyl-dibenzoperiflanthene (Dep. Chem., Sch. Sci., Kyoto Univ.) ○YAMADA, Kazuto; WATANABE, Kazuya; SUGIMOTO, Toshiki; MATSUMOTO, Yoshiyasu  
**1E4-16** Magnetic field effects of organic photovoltaic cells (Grad. Sch. Mat. Sci., Univ. of Hyogo) ○YASUKAWA, Naoto; UEDA, Hiroaki; NISHIOKA, Yusuke; MORI, Yuichi; SATO, Seiichi; TAJIMA, Hiroyuki  
**1E4-17\*** Nonlinear electric properties of macromolecule/DNA nanonetworks (Grad. Sch. Sci., Osaka Univ.) YAMAGUCHI, Harumasa; SUMIDA, Saki; KISHIMOTO, Hiroyuki; ETOH, Riko; OHYAMA, Hiroshi; OTSUKA, Yoichi; CHAE, Dukchil; ○MATSUMOTO, Takuya

## Thursday, March 24, PM

Chair: KATO, Hiroyuki (13 : 10~14 : 10)

- \* 13:00-13:10: interval for laptop PC connection.(1E4-26, 1E4-28, 1E4-29, 1E4-31)  
**1E4-26\*** Excitation dynamics of plasmon at graphene/alkali atom/Ir(111) surfaces (Dep. Chem., Sch. Sci., Kyoto Univ.) ○TANAKA, Shunsuke; WATANABE, Kazuya; PETROVIC, Marin; KRALJ, Marko; LAZIC, Predrag; SUGIMOTO, Toshiki; MATSUMOTO, Yoshiyasu  
**1E4-28** Scanning tunneling spectroscopy of stacks of aromatic molecules on graphite surface (Grad. Sch. Sci., Eng., Tokyo Tech) ○IWANE, Madoka; FUJII, Shintaro; KIGUCHI, Manabu  
**1E4-29\*** Photocatalytic hydrogen evolution reaction driven by CdSe quantum dot: the role of surface passivation ligand (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) ○SAWAGUCHI, Kana; YOSHIDA, Masaki; KOBAYASHI, Atsushi; KATO, Masako  
**1E4-31** Refractive index dependence of surface plasmon resonance in far- and deep-ultraviolet regions using aluminum thin film (Sch. Sci. Tech., Kwansai Gakuin Univ.) ○WATARI, Koji; TANABE, Ichiro; TANAKA, Yoshito; GOTO, Takeyoshi; KIKAWADA, Masakazu; INAMI, Wataru; KAWATA, Yoshimasa; OZAKI, Yukihiro

Chair: TUKUDA, Tatsuya (14 : 20~15 : 20)

- \* 14:10-14:20: interval for laptop PC connection.(1E4-33, 1E4-35, 1E4-36, 1E4-37, 1E4-38)  
**1E4-33\*** Dye-assisted nonlinear imaging of plasmons excited in single gold nanoparticles (Sch. Advanced Sci. Eng., Waseda Univ.) ○IMAEDA, Keisuke; IMURA, Kohei  
**1E4-35** Non-linear optical properties of gold nanoparticles studied by time-resolved optical microscopy (Grad. Sch. Advanced Sci. Eng., Waseda Univ.) ○MA, Shomin; IMURA, Kohei  
**1E4-36** Optical properties of chemically modified polystyrene nanosphere assembly (Grad. Sch. Advanced Sci. Eng., Waseda Univ.) ○KAMURA, Yoshio; IMURA, Kohei  
**1E4-37** nonlinear optical response of silver nanoparticle on gold thin film (Grad. Sch. Advanced Sci. Eng., Waseda Univ.) ○MORIYAMA, Kazunori; OOSHIMA, Takuya; TORIMOTO, Tsukasa; IMURA, Kohei  
**1E4-38** Density functional theory calculations of on orientation of dimethylaminonitrostilbene inside carbon nanotubes (KIT) ○YAMAMOTO, Wataru; YUMURA, Takashi; WAKASUGI, Takashi

Chair: MATSUMOTO, Takuya (15 : 30~16 : 30)

- \* 15:20-15:30: interval for laptop PC connection.(1E4-40, 1E4-41, 1E4-42, 1E4-44)  
**1E4-40** Research of single molecule NDR electrical properties of polyoxometalate derivatives with MCBJ method (Sch. Sci., Osaka Univ.) ○YAMAZAKI, Yoshito; MIYAMOTO, Humiya; UNO, Hidemitsu; KOJIMA, Takahiro; OGAWA, Takuji  
**1E4-41** Charge transport properties of mechanochromic molecular junctions (Grad. Sch. Sci., Eng., Tokyo Tech; Chem. Res. Lab., Tokyo Tech)

○FUJII, Shintaro; KOIKE, Masato; KIGUCHI, Manabu; SHOJI, Yoshiaki; FUKUSHIMA, Takanori

- 1E4-42\*** Thermopower and current-voltage characteristics of 1,4-benzene-dithiol-single molecular junctions (Grad. Sch. Sci., Eng., Tokyo Tech) ○KOMOTO, Yuki; FUJII, Shintaro; NAKAMURA, Hisao; TADA, Tomofumi; KIGUCHI, Manabu  
**1E4-44\*** Porphyrin as anchoring group for single molecule conductance measurements (Grad. Sch. Sci., Osaka Univ.) ○TAMAKI, Takashi; YAMADA, Ryo; TADA, Hirokazu; OGAWA, Takuji

## Phase Equilibrium and Phase Transition

Chair: SUZUKI, Hal (16 : 40~17 : 40)

- \* 16:30-16:40: interval for laptop PC connection.(1E4-47, 1E4-49, 1E4-51, 1E4-52)  
**1E4-47\*** Cold Crystallization and Multi-step Thermochromism of Alkyl-Derivatized DPP Pigment Molecules (Fac. Sci., Tokyo Univ. of Sci.) ○HONDA, Akinori; TAKAHASHI, Yoshiyuki; TAMAKI, Yoshinori; MIYAMURA, Kazuo  
**1E4-49\*** Anomalous isotope effects on the paraelectric transition in ferroelectric crystalline ice films (Dep. Chem., Sch. Sci., Kyoto Univ.) ○AIGA, Norihiro; OTSUKI, Yuji; SUGIMOTO, Toshiki; WATANABE, Kazuya; MATSUMOTO, Yoshiyasu  
**1E4-51** Sublimation dynamics of isotope mixed crystalline- and amorphous-ice thin films (Dep. Chem., Sch. Sci., Kyoto Univ.) ○KATO, Fumiaki; TAKAKUWA, Hiroaki; HARADA, Kuniaki; SUGIMOTO, Toshiki; WATANABE, Kazuya; MATSUMOTO, Yoshiyasu  
**1E4-52** Thickness dependence of crystallization kinetics of amorphous solid water on Pt(111) (Dep. Chem., Sch. Sci., Kyoto Univ.) ○HARADA, Kuniaki; SUGIMOTO, Toshiki; WATANABE, Kazuya; MATSUMOTO, Yoshiyasu

Chair: WATANABE, Keisuke (17 : 50~18 : 40)

- \* 17:40-17:50: interval for laptop PC connection.(1E4-54, 1E4-56, 1E4-58)  
**1E4-54\*** Low-frequency Vibration of Li Cation Encapsulated in C<sub>60</sub> Fullerene and Structural Transition in [Li<sup>+</sup>@C<sub>60</sub>(PF<sub>6</sub>)<sub>6</sub>] Crystal (RIKEN; Idea International Co. Ltd.; RACGM, Tohoku Univ.) ○SUZUKI, Hal; ISHIDA, Misaki; YAMADA, Yusuke; YAMASHITA, Masatsugu; OTANI, Chiko; KAWACHI, Kazuhiko; KASAMA, Yashuhiko; KWON, Eunsang  
**1E4-56\*** Phase diagram of the charged colloidal dispersion by molecular dynamics simulation (Fac. Bio., Hosei Univ.) ○KATAOKA, Yosuke  
**1E4-58** Hofmeister effect on the phase transition of poly(N-isopropylacrylamide) in a crowded macromolecular environment (Grad. Sch. Sci., Kyushu Univ.) ○YONEYAMA, Karin; SAKOTA, Kenji; SEKIYA, Hiroshi

## Friday, March 25, PM

### Surface, Thin Films, Nano Materials, Cluster, and Nanotube

Chair: WATANABE, Kazuya (12 : 50~13 : 30)

- \* 12:40-12:50: interval for laptop PC connection.(2E4-24, 2E4-25, 2E4-27)  
**2E4-24** Fluid properties by surface chemical groups in extended nanopore (Grad. Sch. Eng., The Univ. of Tokyo) ○IKEDA, Keisuke; KAZOE, Yutaka; MORIKAWA, Kyojiro; TSUKAHARA, Takehiko; MAWATARI, Kazuma; KITAMORI, Takehiko  
**2E4-25\*** Effect of Deposition Condition on Crystal Structure of Co-based Heusler alloys (Coll. Sci. Eng., Kanto Gakuin Univ.) ○SUMIYOSHI, Rie; IWASAKI, Haruki; OMURA, Kouji; HIRAKI, Hiroto; MURATA, Kazuki; MOTOMURA, Minoru; SHIMOJI, Ipppei; WATANABE, Nobuaki; KOIWA, Ichiro  
**2E4-27\*** Observation of time and spatial evolutions of photoexcited electrons on organic thin films by time resolved two-photon photoelectron emission microscopy (Fac. Sci. Tech., Keio Univ.; Keio Institute of Pure and Applied Sciences:KiPAS; ERATO, JST) ○YAMAGIWA, Kana; SHIBUTA, Masahiro; EGUCHI, Toyooki; NAKAJIMA, Atsushi

Chair: FURUBE, Akihiro (13 : 40~14 : 10)

- \* 13:30-13:40: interval for laptop PC connection.(2E4-29, 2E4-30, 2E4-31)  
**2E4-29** Observation of change in titania surface charge during UV irradiation (Grad. Sch. Sci. Technol., Shinshu Univ.) ○NISHIKIORI, Hiromasa; TAGAMI, Kotaro; WATANABE, Mizuki  
**2E4-30** Production of Fluorinated Hydrophilic Carbon Nanoparticles by Laser-induced Plasma (Grad. Sch. Sci., Osaka City Univ.) ○OKAMOTO, Takuya; HAMAGUCHI, Tomoyuki; YATSUHASHI, Tomoyuki  
**2E4-31\*** High-yield, large-scale synthesis and characterization of open-shell superatom [PdAu<sub>8</sub>(PPh<sub>3</sub>)<sub>8</sub>]Cl<sub>2</sub> (Grad. Sch. Sci., The Univ. of Tokyo; ESICB, Kyoto Univ.) ○MATSUO, Shota; TAKANO, Shinjiro; YAMAZOE, Seiji; KOYASU, Kiichiro; TSUKUDA, Tatsuya

### Electrical conductors • magnetism

Chair: HANASAKI, Noriaki (14 : 20~15 : 00)

- \* 14:10-14:20: interval for laptop PC connection.(2E4-33, 2E4-34, 2E4-35, 2E4-36)  
**2E4-33** Structure and magnetic properties of trinuclear lanthanoid complexes



sandwiched by lacunary-type polyoxometalates (Grad. Sch. Env. Sci., Hokkaido Univ.) ○NISHIDE, Daisuke; KUBO, Kazuya; NORO, Shin-ichiro; NAKAMURA, Takayoshi

- 2E4-34** Theoretical investigation of easy-to-use DMRG-CASCI method in both organic spin system and metal complex (Sch. Sci., Osaka Univ.) ○KAWAKAMI, Takashi; SAITO, Toru; SHOJI, Mitsuo; YAMADA, Satoru; KINOSHITA, Keiji; TAKANO, Yu; YAMANAKA, Shusuke; OKUMURA, Mitsutaka; NAKAJIMA, Takahito; YAMAGUCHI, Kizashi
- 2E4-35** Control of the Conformation and Spin States of p-Terphenylquinone Derivatives by Mechanical Stimulus (Grad. Sch. Eng., Kyoto Univ.) ○TOMITA, Hiroshi; SAKAMAKI, Daisuke; SEKI, Shu
- 2E4-36** Construction and Physical Properties of the  $K_4$  Structure formed by a Triangular  $\pi$  Radical Anion (Grad. Sch. Sci., Nagoya Univ.) ○MIZUNO, Asato; SHUKU, Yoshiaki; RIE, Suizu; MATSUSHITA, Michio; TSUCHIIZU, Masahisa; AWAGA, Kunio

Chair: MORI, Hatsumi (15 : 10~16 : 10)

\* 15:00-15:10: interval for laptop PC connection.(2E4-38)

- 2E4-38<sup>#</sup>** CSJ Award for Creative Works Development of Control Method of Conduction and Magnetism in Molecular Crystals (Grad. Sch. Sci., Eng., Ehime Univ.) ○NAITO, Toshio

Chair: YAMAMOTO, Hiroshi (16 : 20~17 : 20)

\* 16:10-16:20: interval for laptop PC connection.(2E4-45, 2E4-46, 2E4-47, 2E4-48, 2E4-49, 2E4-50)

- 2E4-45** Syntheses, Structures and Properties of Novel Organic Conductors Based on a Benzo-fused Catechol-TTF Derivative (ISSP, The Univ. of Tokyo) ○TERASHI, Takuya; UEDA, Akira; MORI, Hatsumi
- 2E4-46** Purely organic conductor based on TTF fused with two catechol moiety: Unique hydrogen-bond manners, electronic structure, and physical properties derived from deprotonation. (ISSP, The Univ. of Tokyo) ○YOSHIDA, Junya; UEDA, Akira; KUMAI, Reiji; MURAKAMI, Youichi; YAMAKAWA, Hiromichi; MIYAMOTO, Tatsuya; OKAMOTO, Hiroshi; MORI, Hatsumi
- 2E4-47** Structures and physical properties of the hydrogen-bond-utilized quasi-one-dimensional organic conductor beta-[BTBT(OH)<sub>2</sub>]<sub>2</sub>ClO<sub>4</sub> (ISSP, The Univ. of Tokyo; KEK) ○HIGASHINO, Toshiki; YOSHIDA, Junya; UEDA, Akira; KOBAYASHI, Kensuke; KUMAI, Reiji; MURAKAMI, Youichi; MORI, Hatsumi
- 2E4-48** Exploration of Steric Substituent Effects in Catechol-fused TTF-based Organic Conductors (ISSP, The Univ. of Tokyo; KEK) ○UEDA, Akira; KUMAI, Reiji; MURAKAMI, Youichi; MORI, Hatsumi
- 2E4-49** Structure and Properties of  $\alpha$ -(BEDT-TTF)<sub>2</sub>(PO-CON(CH<sub>3</sub>)CH<sub>2</sub>SO<sub>3</sub>)<sub>3</sub>H<sub>2</sub>O (2) (Grad. Sch. Sci., Osaka Univ.; Grad. Sch. Mat. Sci., Univ. of Hyogo) ○AKUTSU, Hiroki; ISHIHARA, Keita; YAMADA, Jun-ichi; NAKATSUJI, Shinichi; NAKAZAWA, Yasuhiro
- 2E4-50** Structures and physical properties of molecular conductors based on TTP derivatives with alkyl groups: Effect on the length of alkyl chain (Grad. Sch. Sci., Eng., Ehime Univ.) ○KATAYAMA, Shogo; SHIRAHATA, Takashi; MISAKI, Yohji

Chair: AKUTSU, Hiroki (17 : 30~18 : 30)

\* 17:20-17:30: interval for laptop PC connection.(2E4-52, 2E4-54, 2E4-55, 2E4-57)

- 2E4-52<sup>\*</sup>** Superconducting transition in an organic Mott insulator by light-induced electron doping (CIMO<sub>5</sub>, IMS; Sch. Physical Sci., SOKENDAI; RIKEN; Grad. Sch. Eng., Osaka Univ.) ○SUDA, Masayuki; TAKASHINA, Naoto; SAKURAI, Hidehiro; YAMAMOTO, Hiroshi
- 2E4-54** Electrical and Magnetic Properties of a  $\pi$ -d System Molecular Conductor Composed of Iron(III) Tetrabenzoporphyrin (Grad. Sch. Sci. & Tech., Kumamoto Univ.; Grad. Sch. Sci., Osaka Univ.) ○NISHI, Miki; MATSUDA, Masaki; IKEDA, Mitsuo; HANASAKI, Noriaki
- 2E4-55<sup>#\*</sup>** Peculiar Electronic States and Hysteresis Phenomena in the  $\pi$ -d Mixed Crystal System (DIETSe)<sub>2</sub>FeBr<sub>4</sub>Cl<sub>4(1-x)</sub> (Dep. Chem., Sch. Sci., Kyoto Univ.; Fac. Eng., Nagaoka Univ. of Tech.; NHMFL) ○KAWAGUCHI, Genta; MAESATO, Mitsuhiro; KOMATSU, Tokutaro; IMAKUBO, Tatsuro; GRAF, David; KITAGAWA, Hiroshi
- 2E4-57** Carrier doping in a [Ni(dmit)<sub>2</sub>] salt by using solid state ion exchange (Grad. Sch. Sci., Hiroshima Univ.) ○ICHIHASHI, Katsuya; NISHIHARA, Sadafumi; KONNO, Daisuke; MARYUNINA, Kseniya; INOUE, Katsuya; TOYODA, Kazuhiro; AKUTAGAWA, Tomoyuki; NAKAMURA, Takayoshi

## Saturday, March 26, AM

### Surface, Thin Films, and Nano Materials

Chair: ONISHI, Hiroshi (9 : 00 ~10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(3E4-01)

- 3E4-01** CSJ Award for Creative Works Governing the Metal-Molecule Interface: Towards New Functionality in Single-Molecule Junctions (Grad. Sch. Sci., Eng., Tokyo Tech) ○KIGUCHI, Manabu

### Optical properties, Triplet

Chair: KAWAKAMI, Takashi (10 : 10~11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(3E4-08, 3E4-10, 3E4-11, 3E4-13)

- 3E4-08<sup>\*</sup>** Theoretical Analysis of Electronic Coupling in Covalently-Linked Systems and Proposal of a Design Guideline for Efficient Intramolecular Singlet Fission (Grad. Sch. Eng. Sci., Osaka Univ.) ○ITO, Soichi; NAGAMI, Takanori; KUBO, Takashi; NAKANO, Masayoshi
- 3E4-10** Theoretical study on molecular configuration dependence of electronic interactions related to singlet fission in peropyrene dimer model (Sch. Eng. Sci., Osaka Univ.) ○NAGAMI, Takanori; ITO, Soichi; KUBO, Takashi; NAKANO, Masayoshi
- 3E4-11<sup>\*</sup>** Theoretical study on singlet fission dynamics based on the quantum master equation (Grad. Sch. Eng. Sci., Osaka Univ.; Grad. Sch. Sci., Osaka Univ.) ○NAKANO, Masayoshi; NAGAMI, Takanori; ITO, Soichi; KUBO, Takashi
- 3E4-13** Excited-State Dynamics of Anthracene-Stable Radical Derivatives by Transient Absorption Spectroscopy (Grad. Sch. Sci., Osaka City Univ.) ○ITO, Akitaka; HINOSHITA, Masumi; TEKI, Yoshio

### Non-linear, Luminescence, Sensing

Chair: TEKI, Yoshio (11 : 20~12 : 20)

\* 11:10-11:20: interval for laptop PC connection.(3E4-15, 3E4-17, 3E4-18, 3E4-20)

- 3E4-15<sup>\*</sup>** Theoretical study on the intermolecular interactions and third-order nonlinear optical properties for dimers of diradical molecules (Dept. of Chem. Eng., NNCT) ○YONEDA, Kyohiei; MATSUSHITA, Naoyuki; FUJIYOSHI, Jun-ya; MATSUI, Hiroshi; KISHI, Ryohei; NAKANO, Masayoshi
- 3E4-17** Molecular Aggregation and Fluorescence of Chiral Alkylamide-Substituted Pyrene Derivative (Grad. Sch. Eng., Tohoku Univ.) ○ANETAI, Hayato; TAKEDA, Takashi; HOSHINO, Norihisa; AKUTAGAWA, Tomoyuki
- 3E4-18<sup>#\*</sup>** The effect of circular birefringence on the circular dichroism measurement by using elliptically polarized light (IMRAM, Tohoku Univ.) ○ARAKI, Yasuyuki; KURONUMA, Makoto; SATO, Takehito; SAKAMOTO, Seiji; WADA, Takehiko
- 3E4-20** the Effect of Addition of Metal Ion on the Photostability of Organic Fluorescent Dyes (Grad. Sch. Eng., Osaka Univ.) ○IMOTO, Takuma; MIZUKAMI, Shin; KIKUCHI, Kazuya

## Saturday, March 26, PM

### Nano and Quantum Dot

Chair: NAKANO, Masayoshi (13 : 30~14 : 30)

\* 13:20-13:30: interval for laptop PC connection.(3E4-28, 3E4-29, 3E4-31, 3E4-32, 3E4-33)

- 3E4-28** Effects of excitation wavelength dependence on electron transfer dynamics of Pt nanoparticle-attached CdSe nanoplatelets (Sch. Sci. Tech., Kwansei Gakuin Univ.) ○MAEDA, Kingo; OKUHATA, Tomoki; KATAYAMA, Tetsuro; TAMAI, Naoto
- 3E4-29<sup>\*</sup>** The quantitative investigation of multiple exciton relaxation process in a single semiconductor quantum dot interacted by metal-coated probe nanostructures (Sch. Sci. Tech., Kwansei Gakuin Univ.) ○NAIKI, Hiroyuki; TAKATA, Hiroki; KOIZUMI, Norihisa; MASUO, Sadahiro
- 3E4-31** Effect of photochemical electronic doping on luminescence enhancement of CdSe nanocrystals (Sch. Sci. Tech., Kwansei Gakuin Univ.) ○KAKIMOTO, Naoki; OKUHATA, Tomoki; KATAYAMA, Tetsuro; TAMAI, Naoto
- 3E4-32** Metal-substitution effect on magnetic permeability of epsilon-iron oxide at zero-field ferromagnetic resonance (Grad. Sch. Sci., The Univ. of Tokyo) ○NAMAI, Asuka; YOSHIKIYO, Marie; OHKOSHI, Shin-ichi
- 3E4-33** Preparation of Quantum Dots of Organometal Halide Perovskites and their Exciton Dynamics (Sch. Sci. Tech., Kwansei Gakuin Univ.) ○SUENAGA, Harunobu; OKUHATA, Tomoki; KATAYAMA, Tetsuro; TAMAI, Naoto

### Chromism, Structural Modulation

Chair: MATSUDA, Masaki (14 : 40~15 : 40)

\* 14:30-14:40: interval for laptop PC connection.(3E4-35, 3E4-36, 3E4-37, 3E4-38, 3E4-39, 3E4-40)

- 3E4-35** Fluorescent Multiple Ion Sensing by Crown-Ether Fused Quinoxaline Derivative (IMRAM, Tohoku Univ.; Grad. Sch. Eng., Tohoku Univ.) ○NAKANE, Yuta; TAKEDA, Takashi; HOSHINO, Norihisa; SAKAI, Kenichi; AKUTAGAWA, Tomoyuki
- 3E4-36** Chromism of Ellagic Acid Solution by Photo Irradiation and Addition of Oxidant. (Grad. Sch. Eng., Tohoku Univ.) ○TOKUTOMI, Hisashi; TAKEDA, Takashi; HOSHINO, Norihisa; AKUTAGAWA, Tomoyuki
- 3E4-37** Shear Stress Effects on Photochromism Diarylethene Crystals (Tokyo Univ. of Sci., Yamaguchi) ○INOUE, Takeshi; FUNASAKO, Yusuke;

INOKUCHI, Makoto

- 3E4-38** Transistors based on neutral mixed-stack charge-transfer complexes with structural phase transition (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) ○YOKOKURA, Seiya; TAKAHASHI, Yukihiko; HASEGAWA, Hiroyuki; HARADA, Jun; INABE, Tamotsu; MATSUSHITA, Michio; AWAGA, Kunio
- 3E4-39** Carrier Transport Properties at the Contact Interface between 2,5-Difluoro-7,7,8,8-tetracyanoquinodimethane(F2TCNQ) and metallophthalocyanine Single Crystals (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) ○SHIMADA, Takuro; TAKAHASHI, Yukihiko; HASEGAWA, Hiroyuki; HARADA, Jun; INABE, Tamotsu
- 3E4-40** Unique Ferroelectricity found in Plastic Ionic Crystals (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) ○OYAMAGUCHI, Hideaki; SHIMOJO, Takafumi; HARADA, Jun; HASEGAWA, Hiroyuki; TAKAHASHI, Yukihiko; INABE, Tamotsu

### Liquid Crystals and Condensed Phases

Chair: TAKEDA, Takashi (15 : 50~16 : 40)

- \* 15:40-15:50: interval for laptop PC connection.(3E4-42, 3E4-44, 3E4-45, 3E4-46)
- 3E4-42\*** Two different conformations in the alkyl homologues of a novel liquid crystal exhibiting calamitic-discotic bimesomorphism (AIST) ○SHIMIZU, Yo; MINOBE, Ryota; CHIKAMORI, Kazuki; OHTA, Noboru; SEKIGUCHI, Hiroshi; OKUDA, Daiju; TANAKA, Daisuke; UCHIDA, Kingo
- 3E4-44** Discotic Liquid Crystals of Organic Transition Metal Complexes (117): Effect of Chain Length on Mesomorphism of Octakis-(m-alkoxyphenoxy)phthalocyaninato copper(II) Complexes . (Grad. Sch. Sci. Technol., Shinshu Univ.) ○NAKAMURA, Hiromu; YOSHIOKA, Miho; IGARASHI, Kensaku; SATO, Hiroyuki; OHTA, Kazuchika
- 3E4-45** Discotic Liquid Crystals of Organic Transition Metal Complexes (118): Synthesis and Columnar Mesomorphism of Novel the (m-CnOPhS) 8PcCu Complexes (Grad. Sch. Sci. Technol., Shinshu Univ.) ○CHINO, Yoshiaki; OHTA, Kazuchika
- 3E4-46** Discotic Liquid Crystals of Organic Transition Metal Complexes (119): Synthesis of Chlorinated Phthalocyanine Metallomesogens and their Mesomorphism and Spectroscopic Properties (Fac. Textile Sci. Technol., Shinshu Univ.) ○KAJITANI, Akio; YATABE, Masashi; OHTA, Kazuchika

Chair: MOCHIDA, Tomoyuki (16 : 50~17 : 20)

- \* 16:40-16:50: interval for laptop PC connection.(3E4-48, 3E4-49, 3E4-50)
- 3E4-48** Unusual Magnetic Interactions in Novel Hydrogen-bonded Nitroxide Radical Liquid Crystals (Grad. Sch. Eng. Sci., Osaka Univ.) ○NAKAGAMI, Sho; AKITA, Takuya; KIYOHARA, Daichi; UCHIDA, Yoshiaki; TAMURA, Rui; NISHIYAMA, Norikazu
- 3E4-49** Phase Transition and Liquid Crystalline Behaviors of (Dodecylammonium)(Phenylphosphate) Salts (Grad. Sch. Eng., Tohoku Univ.) ○UCHIKAWA, Shota; HOSHINO, Norihisa; TAKEDA, Takashi; AKUTAGAWA, Tomoyuki
- 3E4-50** Phase Transition Behavior and Dielectric Response of Alkylamide-Substituted Pararosaniline Derivative (Sch. Eng., Tohoku Univ.) ○AKAHANE, Satoru; TAKEDA, Takashi; HOSHINO, Norihisa; AKUTAGAWA, Tomoyuki

### Sunday, March 27, AM

#### Liquid and solution

Chair: KIMURA, Yoshifumi (9 : 00 ~10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(4E4-01, 4E4-02, 4E4-04, 4E4-06)
- 4E4-01** Structural control of silica gels due to magnetic treatment water (Fac. Sci., Shinshu Univ.) ○KAIDA, K; SASAHARA, Shigeo; HAMASAKI, Atom; OZEKI, Sumio
- 4E4-02\*** Hydration State of Hydronium Cation Studied by Far-Ultraviolet Spectroscopy (Sch. Sci. Tech., Kwansei Gakuin Univ.) ○GOTO, Takeyoshi; OZAKI, Yukihiko
- 4E4-04\*** Unified Theory of Electrical Conductivity in Strong Electrolyte Solutions: Extended Debye-Huckel Theory and Hydration-Bridge Theory (Sch. Env. Sci. Eng., KUT) ○SUMI, Katsuhiko; ITOH, Yoshitaka; TANAKA, Yuzo
- 4E4-06** Time- and angle-resolved photoemission spectroscopy of the excited-state dynamics of hydrated electrons (Dep. Chem., Sch. Sci., Kyoto Univ.) ○KARASHIMA, Shutaro; YAMAMOTO, Yo-ichi; SUZUKI, Toshinori

Chair: KAMIYAMA, Tadashi (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(4E4-08, 4E4-10, 4E4-12, 4E4-13)
- 4E4-08\*** Development of a new approach for time resolved emission spectroscopy on the basis of RISM-SCF-SEDD and SSSV (WPI-ITbM, Nagoya Univ.) ○YOKOGAWA, Daisuke
- 4E4-10\*** Local Structure Observation of KSCN Solution by Soft X-ray Absorption Spectroscopy (PMS, IMS) ○YUZAWA, Hayato; NAGASAKA, Masanari; KOSUGI, Nobuhiko

- 4E4-12** The effect of molecular-weight specific adsorption of polyethylene glycol on two-state transition of myoglobin (Grad. Sch. Sci., Kyushu Univ.) ○YASUTOMI, Shota; SAKOTA, Kenji; SEKIYA, Hiroshi
- 4E4-13** Influence of the secondary structure of proteins on its rotational diffusion coefficients (Dep. Chem., Sch. Sci., Kyoto Univ.) ○YOSHITAKE, Tomoyuki; TERAZIMA, Masahide

Chair: GOTO, Takeyoshi (11 : 20~12 : 00)

- \* 11:10-11:20: interval for laptop PC connection.(4E4-15, 4E4-16, 4E4-17, 4E4-18)
- 4E4-15** Excess thermodynamic properties of 1-alkyl-3-methylimidazolium iodide + water system (Kinki Univ.) ○YOSHIDA, Sho; HAYASHI, Hidetaka; KIMURA, Takayoshi; KAMIYAMA, Tadashi
- 4E4-16** Excess enthalpies of amines and alcohols in ternary solution (Kinki Univ.) ○HAYASHI, Hidetaka; KIMURA, Takayoshi; KAMIYAMA, Tadashi
- 4E4-17** Raman spectroscopic study of water structure in copolymer hydrogel (Dept. of Sci. Tech., Meiji Univ.) ○TOJIMA, Yu; SEKINE, Yurina; FUKAZAWA, Tomoko
- 4E4-18** Structural Changes of Polymer and Water in Hydrogel During Dehydration (Dept. of Sci. Tech., Meiji Univ.) ○NAOHARA, Ryo; NARITA, Kentaro; FUKAZAWA, Tomoko

### Sunday, March 27, PM

#### Ionic Liquid

Chair: SHIROTA, Hideaki (13 : 10~14 : 00)

- \* 13:00-13:10: interval for laptop PC connection.(4E4-26, 4E4-27, 4E4-28, 4E4-29, 4E4-30)
- 4E4-26** Effects of Chirality on the Thermal Properties of Ionic Liquids Based on Ruthenium Sandwich Complexes (Grad. Sch. Sci., Kobe Univ.) ○HIGASHI, Tomomi; MOCHIDA, Tomoyuki
- 4E4-27** Effects of Substituents and Anions on the Phase Behavior of Ionic Liquids from Ruthenium Sandwich Complexes (Sch. Sci., Kobe Univ.) ○TOMINAGA, Takumi; UEDA, Takahiro; MOCHIDA, Tomoyuki
- 4E4-28** Developments of Ionic liquids based on ruthenium complexes that transform into porous coordination polymers by photoirradiation (Grad. Sch. Sci., Kobe Univ.) ○UEDA, Takahiro; TOMINAGA, Takumi; MOCHIDA, Tomoyuki
- 4E4-29\*** Preparation of Thermochromic Ionic Liquids from Cationic Nickel Complexes (Grad. Sch. Sci., Kobe Univ.) ○LAN, Xue; TAKAHASHI, Kazuyuki; MOCHIDA, Tomoyuki
- 4E4-30** Heterogeneous structure of ionic liquids viewed from the rotational relaxation of anthracene (Fac. Sci. Eng., Doshisha Univ.) ○FUJII, Kaori; YASAKA, Yoshiro; UENO, Masakatsu; KIMURA, Yoshifumi

Chair: MOCHIDA, Tomoyuki (14 : 10~14 : 40)

- \* 14:00-14:10: interval for laptop PC connection.(4E4-32, 4E4-33, 4E4-34)
- 4E4-32** Temperature Dependence of Low-Frequency Spectra of Imidazolium-Based Ionic Liquids (Grad. Sch. Adv. Integration Sci., Chiba Univ.) ○KAKINUMA, Shohei; SHIROTA, Hideaki
- 4E4-33** Electronic states of imidazolium ionic liquid studied by attenuated-total reflectance far-ultraviolet spectroscopy and quantum chemical calculation (Sch. Sci. Tech., Kwansei Gakuin Univ.) ○TANABE, Ichiro; KURAWAKI, Tuji; MORISAWA, Yusuke; OZAKI, Yukihiko
- 4E4-34** Study of electronic states of ionic liquids which composed of only single bond by using attenuated total reflection in the far-ultraviolet region. (Fac. Sci. Eng., Kinki Univ.) ○MORISAWA, Yusuke; SOGA, Kenji; TANABE, Ichiro

## Room E5

Chishinkan1 Building 220

### Coordination Chemistry, Organometallic Chemistry

Thursday, March 24, AM

Ti, Zr, Hf, Ta

Chair: OHKI, Yasuhiro (9 : 00 ~10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(1E5-01, 1E5-02, 1E5-03, 1E5-04, 1E5-05)
- 1E5-01** Dinitrogen Activation by Half-Sandwich Titanium Complexes Containing Various Cyclopentadienyl Ligands (RIKEN CSRS) ○SHIMA, Takanori; HU, Shaowei; HOU, Zhaomin
- 1E5-02\*** Denitrogenation of Pyridine Derivatives Mediated by a Titanium Hydride Complex (RIKEN CSRS) ○HU, Shaowei; LUO, Gen; SHIMA, Takanori; LUO, Yi; HOU, Zhaomin
- 1E5-03** Reduction of Titanium Pyrrolylaluminate Complexes and Their

Reactivity to  $\alpha$ -Olefins (Grad. Sch. Eng. Sci., Osaka Univ.) OHATO, Wataru; TSURUGI, Hayato; MASHIMA, Kazushi

- 1E5-04** Formation of Dihydroindenyltitanium Complex from Titanacyclopentadiene with Cp Ligand (CRC, Hokkaido Univ.) OBANDO, Masayoshi; LI, Haijun; NAKAJIMA, Kiyohiko; SONG, Zhiyi; TAKAHASHI, Tamotsu  
**1E5-05\*** Synthesis and Reactions of Titanium and Zirconium Complexes Having a Tripodal Aryloxide Ligand (Grad. Sch. Sci., Eng., Tokyo Tech) ONAKANISHI, Yusuke; ISHIDA, Yutaka; KAWAGUCHI, Hiroyuki

Chair: ISHIDA, Yutaka (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(1E5-08, 1E5-09, 1E5-10, 1E5-11, 1E5-12, 1E5-13)  
**1E5-08#** Dinitrogen activation and transformation by a bis(phosphinophenyl) amido-ligated titanium complex (RIKEN CSRS) OWANG, Baoli; NISHIURA, Masayoshi; HOU, Zhaomin  
**1E5-09** Homogeneous Reduction of CO<sub>2</sub> with Hydrosilanes Catalyzed by Zirconium Cationic Species (Fac. Sci. Eng., Kinki Univ.) OKANAZAWA, Shoya; MATSUO, Tsukasa  
**1E5-10** Highly Porous N-Confused Porphyrin-based Metal-Organic Frameworks (Grad. Sch. Eng., Kyushu Univ.) OYANG, Yufeng; SAKASHITA, Ryuichi; ISHIDA, Masatoshi; FURUTA, Hiroyuki  
**1E5-11** Regioselective 1-hexene oligomerization using aryl-substituted [OSSO]-type zirconium complex (Fac. Sci., Saitama Univ.) ONAKAMURA, Kazuaki; SAITO, Yusuke; NAKATA, Norio; ISHII, Akihiko  
**1E5-12#** Extended Conjugated Arene Coordination to Cationic Dinuclear Alkylhafnium Complexes (Grad. Sch. Eng. Sci., Osaka Univ.) OLOPEZ, Michael J; TSURUGI, Hayato; MASHIMA, Kazushi  
**1E5-13** Reductive Cleavage of Nitrogen-nitrogen Double Bonds of Azocompounds by Low-valent Tantalum Complexes (Grad. Sch. Eng. Sci., Osaka Univ.) OKAWAKITA, Kento; TSURUGI, Hayato; MASHIMA, Kazushi

## Mo, W, Re

Chair: SHIMA, Takanori (11 : 20~12 : 10)

- \* 11:10-11:20: interval for laptop PC connection.(1E5-15, 1E5-17, 1E5-18)  
**1E5-15#** Synthesis of Rhodium and Iridium Complexes Bearing 2,5-Di-tert-butyltantalacyclopentadiene as a Metal-containing Diene Ligand (Sch. Eng. Sci., Osaka Univ.) OYAMAMOTO, Keishi; TSURUGI, Hayato; MASHIMA, Kazushi  
**1E5-17** Synthesis, Structure and Reactivity of Group 6 Metal Complexes Bearing a PSiP- or PGeP-Pincer Type Ligand (Grad. Sch. Sci., Eng., Tokyo Tech) ONAGAMATSU, Mayuko; MIURA, Norio; TAKAYA, Jun; IWASAWA, Nobuharu  
**1E5-18\*** Theoretical study on nitrogen fixation catalyzed by dimolybdenum complexes bearing PCP-type pincer ligands (IMCE, Kyushu Univ.) OTANAKA, Hiromasa; MATSUO, Yuki; EIZAWA, Aya; ARASHIBA, Kazuya; KURIYAMA, Shogo; NAKAJIMA, Kazunari; NISHIBAYASHI, Yoshiaki; YOSHIZAWA, Kazunari

## Thursday, March 24, PM

Chair: ITAZAKI, Masumi (13 : 30~14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(1E5-28, 1E5-29, 1E5-30, 1E5-31, 1E5-32, 1E5-33)  
**1E5-28** Reaction of a Permethylyl(silylene)tungsten Complex with Sulfur Reagents (Sch. Sci. Tech., Gunma Univ.) OMURAOKA, Takako; YAMAMOTO, Ai; UENO, Keiji  
**1E5-29** Reversible fac-mer Photoisomerization of Rhenium Complexes Bearing a PGeP-Pincer Type Ligand (Grad. Sch. Sci., Eng., Tokyo Tech) OSUGIMOTO, Tadahiyo; SHIMOMAKI, Katsuya; MURATA, Kei; TAKAYA, Jun; IWASAWA, Nobuharu

## Fe

- 1E5-30** Synthesis and Properties of Alkenyl-Bridged Diiron Complexes Containing a Diphosphine Ligand (Grad. Sch. Sci., Osaka City Univ.) OMURATA, Chisato; HIROTSU, Masakazu; NAKAJIMA, Hiroshi  
**1E5-31** Preparation and Reactivity of Iron-Dinitrogen Complex Bearing Carbazole-Based Anionic Pincer Ligand (Grad. Sch. Eng., The Univ. of Tokyo) OHIGUCHI, Junichi; KURIYAMA, Shogo; ARASHIBA, Kazuya; NAKAJIMA, Kazunari; NISHIBAYASHI, Yoshiaki  
**1E5-32** The effect of metal salts on the oxidation reaction of (o-acetylphenyl) ferrocenes (Grad. Sch. Life Sci., Ritsumeikan Univ.) OYAMAMOTO, Shoko; OKADA, Yutaka  
**1E5-33** Theoretical study of a mechanism of dinitrogen conversion into ammonia and hydrazine catalyzed by an iron complex (IMCE, Kyushu Univ.) OYUKI, Matsuo; TANAKA, Hiromasa; KURIYAMA, Shogo; ARASHIBA, Kazuya; NAKAJIMA, Kazunari; NISHIBAYASHI, Yoshiaki; YOSHIZAWA, Kazunari

Chair: TAKAYA, Jun (14 : 40~15 : 40)

- \* 14:30-14:40: interval for laptop PC connection.(1E5-35, 1E5-36, 1E5-37, 1E5-38, 1E5-39, 1E5-40)  
**1E5-35** Regioselective Hydrothiolation Reaction of Arylalkyne Catalyzed by

an Iron Complex (Fac. Sci., Osaka City Univ.) ITAZAKI, Masumi; ONOCHIDA, Tomoya; KATSUBE, Shinya; NAKAMURA, Wataru; NAKAZAWA, Hiroshi

## Ru

- 1E5-36** Metathesis reaction between alkyne and acetonitrile across the triruthenium plane (Grad. Sch. Sci., Eng., Tokyo Tech) OTAKAHASHI, Yusuke; KANEKO, Takeshi; TAKAO, Toshiro  
**1E5-37** Oxidation of triruthenium complexes having  $\mu_3$ -cyclo alkyne ligand (Grad. Sch. Sci., Eng., Tokyo Tech) OSAITO, Moeko; TAKAO, Toshiro  
**1E5-38** Synthesis and Catalytic Activity of Ruthenium Complex Bearing PCP-Type Pincer Ligand (Grad. Sch. Eng., The Univ. of Tokyo) ONISHIMURA, Shunsuke; EIZAWA, Aya; ARASHIBA, Kazuya; NAKAJIMA, Kazunari; NISHIBAYASHI, Yoshiaki  
**1E5-39** Synthesis of half-sandwich-type ruthenium complexes bearing a protic imidazole and their reactions with cyclic allylic compounds (Grad. Sch. Sci., Eng., Tokyo Tech) OOHTA, Satomi; KUWATA, Shigeki  
**1E5-40** Synthesis and Reactivity of Half-sandwich-type Ruthenium and Iridium Complexes Bearing Glyoxime Ligand (Grad. Sch. Sci., Eng., Tokyo Tech) OTAKAMURA, Taishin; FURUTA, Tatsuro; IKARIYA, Takao; KUWATA, Shigeki

Chair: SUNADA, Yuusuke (15 : 50~16 : 50)

- \* 15:40-15:50: interval for laptop PC connection.(1E5-42, 1E5-43, 1E5-44, 1E5-45, 1E5-46, 1E5-47)  
**1E5-42** Ruthenium Complex Bearing a Silane-Bipyridine SiNN-Type Pincer Ligand: Synthesis and Reactions with Alkenes (Sch. Sci., Tohoku Univ.) OMOCHIZUKI, Daiki; KOMURO, Takashi; TOBITA, Hiromi  
**1E5-43** Synthesis and Reactivities of Protic Bis(pyrazole) Ruthenium Complexes Bearing N-Heterocyclic Carbene Moiety (Grad. Sch. Sci., Eng., Tokyo Tech) OTODA, Tatsuro; KUWATA, Shigeki  
**1E5-44** Photochemical CO<sub>2</sub> Reduction by Ruthenium Complexes having a Pyridine-Based Bis(carbene) Ligand (Grad. Sch. Eng., Nagasaki Univ.) OHIGASHI, Takefumi; TAJIRI, Hiroki; ARIKAWA, Yasuhiro; HORIUCHI, Shinnosuke; SAKUDA, Eri; UMAKOSHI, Keisuke  
**1E5-45** Reaction of dinuclear ruthenium tetrahydride complex with carbon disulfide: mechanistic insights into CO<sub>2</sub> activation. (Grad. Sch. Sci., Eng., Tokyo Tech) OSHIMOGAWA, Ryuichi; SUZUKI, Hiroharu; TAKAO, Toshiro  
**1E5-46** Catalytic dehydrogenative oxidation of a cyclic amine using a dinuclear ruthenium tetrahydride complex (Grad. Sch. Sci., Eng., Tokyo Tech) OFUJITA, Ryosuke; SHIMOGAWA, Ryuichi; SUZUKI, Hiroharu; TAKAO, Toshiro  
**1E5-47** Dynamic property of a face-capping benzene ligand on mixed ligand triruthenium hydride complex (Grad. Sch. Sci., Eng., Tokyo Tech) OTSURUMAKI, Yohei; SHIMOGAWA, Ryuichi; SUZUKI, Hiroharu; TAKAO, Toshiro

Chair: TAKAO, Toshiro (17 : 00~18 : 00)

- \* 16:50-17:00: interval for laptop PC connection.(1E5-49, 1E5-50, 1E5-51, 1E5-52, 1E5-54)  
**1E5-49** Ru-Catalyzed *anti*-Markovnikov Hydroalkoxylation of Allylic Alcohols (Fac. Life Med. Sci., Doshisha Univ.) ONAKAMURA, Yushi; OHTA, Tetsuo; OE, Yohei  
**1E5-50** Highly efficient hydrosilane reduction of various carbonyl compounds catalyzed by disilatruthenacycle complex (Grad. Sch. Eng. Sci., Kyushu Univ.) OTAKESHITA, Takashi; INOUE, Ryoko; SUNADA, Yusuke; NAGASHIMA, Hideo  
**1E5-51#** Ru(0)-Catalyzed Conjugated Triene Synthesis using Conjugated Diene and Alkyne (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) OIN, Seonyoung; KIYOTA, Sayori; WATANABE, Saki; KOMINE, Nobuyuki; HIRANO, Masafumi  
**1E5-52\*** Oxidation of Molecular Dihydrogen in Water Catalyzed by Thiolate-Bridged Diruthenium Complexes (Grad. Sch. Eng., The Univ. of Tokyo) OYUKI, Masahiro; NAKAJIMA, Kazunari; NISHIBAYASHI, Yoshiaki  
**1E5-54** Catalytic hydrogenation of carbon dioxide to methanol in the presence of amine-based polymer (Grad. Sch. Sci., Eng., Tokyo Tech) OYOSHIMURA, Atsuki; WATARI, Ryo; KUWATA, Shigeki; KAYAKI, Yoshihito

Chair: KUWATA, Shigeki (18 : 10~19 : 00)

- \* 18:00-18:10: interval for laptop PC connection.(1E5-56, 1E5-58, 1E5-59, 1E5-60)  
**1E5-56\*** Formation of a three membered BCN ring on a triruthenium cluster (Grad. Sch. Sci., Eng., Tokyo Tech) OKANEKO, Takeshi; TAKAO, Toshiro; SUZUKI, Hiroharu

## Co

- 1E5-58** Electronic Structure and Reactivity of a Heterometallic Complex Composed of Bipyridine-Cobalt and Cp\*-Ruthenium moieties (Grad. Sch. Sci., Eng., Tokyo Tech) ONAGAOKA, Masahiro; TAKAO, Toshiro  
**1E5-59#** Synthesis and Catalytic Activity of Cobalt Complexes Bearing PSiP Ligands for Nitrogen Fixation (Grad. Sch. Eng., The Univ. of Tokyo)

○IMAYOSHI, Ryuji; NAKAJIMA, Kazunari; NISHIBAYASHI, Yoshiaki  
**1E5-60** Hydroboration of Alkenes with Bispinacolborane Catalyzed by a Cobalt Complex (Fac. Sci., Fukuoka Univ.) ○KAKU, Shogo; KOGA, Yuji; MATSUBARA, Kouki

## Friday, March 25, AM

## V, Fe

Chair: KAKIUCHI, Fumitoshi (9 : 00 ~ 10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(2E5-01, 2E5-02, 2E5-03, 2E5-04, 2E5-05, 2E5-06)

**2E5-01** Synthesis of Iron Complexes Bearing Two Different Non-innocent Ligands and Their Reactivity toward Alcohols (Sch. Sci., Kitasato Univ.) KAMITANI, Masahiro; ○KOBAYASHI, Masamichi; NAKAZAWA, Hiroshi; YUGE, Hidetaka

**2E5-02** Synthesis and Properties of Neutral Mixed-Valence Vanadium(IV/V) Oxo Cluster Complexes (Fac. Sci. Eng., Chuo Univ.) ○INOUE, Yuta; TAYA, Nobuto; KODAMA, Shintaro; ISHII, Youichi

## Ru

**2E5-03** Formation of a Ru(0) Complex Bearing an  $\eta^4$ -Phosphonium Ligand from the Reaction of a Ru(II)-PPh<sub>3</sub> Complex with Alkynes (Grad. Sch. Sci. Eng., Chuo Univ.; Dept. Lib. Arts, Saitama Med. Univ.; Grad. Sch. Of Humanities and Sci., Ochanomizu Univ.) ○TAKANO, Koichi; KODAMA, Shintaro; TSUCHIDA, Noriko; TAKANO, Keiko; ISHII, Youichi

**2E5-04** Synthesis of a Metallophosphine Ligand Containing a Ruthenium Bipyridine Fragment and Complexation to Palladium (Osaka Pref. Univ.) ○SARUWATARI, Shuhei; TAKADA, Youko; NISHIMORI, Rie; TAKEMOTO, Shin; MATSUZAKA, Hiroyuki

**2E5-05** Synthesis of distyrylbenzene derivatives using ruthenium-sulfonamide catalyst (Grad. Sch. Sci., Osaka Pref. Univ.) NAKAJIMA, Mitsuaki; SHIBATA, Eri; YUMOTO, Yoshihiro; ○TAKEMOTO, Shin; MATSUZAKA, Hiroyuki

## Rh

**2E5-06** Synthesis and reactivity of rhodium(-I) complex bearing  $\sigma$ -electron acceptor borane ligand. (Fac. Sci., Osaka Pref. Univ.) ○YAMAMOTO, Jun; ISHIKURA, Yuri; KAMEO, Hajime; MATSUZAKA, Hiroyuki

Chair: MATSUZAKA, Hiroyuki (10 : 10~11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(2E5-08, 2E5-09, 2E5-10, 2E5-11, 2E5-12, 2E5-13)

**2E5-08** Development of Rh organometallic molecular wires containing a macrocyclic tetracarbene ligand (Chem. Res. Lab., Tokyo Tech) ○OHMURA, Kohei; TANAKA, Yuya; AKITA, Munetaka

**2E5-09** Synthesis of a Cationic Hydrido(hydroborylene)rhodium Complex and Its Reactions with Alkynes (Grad. Sch. Sci., Tohoku Univ.) ○MUKAIDA, Naruyuki; WATANABE, Takahito; TOBITA, Hiromi

**2E5-10** Synthesis and Properties of Group 9 Metal Complexes with a Pillar[5] arene Ligand (Grad. Sch. Sci. Eng., Chuo Univ.) ○KONDO, Jun; SAEKI, Mayumi; KODAMA, Shintaro; ISHII, Youichi

**2E5-11** Structures and Reactivities of Rh(III) Complexes Formed from Vinylidene Rearrangement and 1,1-Insertion of Heteroarylalkynes (Grad. Sch. Sci. Eng., Chuo Univ.) ○NAKAMURA, Takayuki; KODAMA, Shintaro; ISHII, Youichi

**2E5-12** Anti-Markovnikov Hydroamination of Terminal Alkynes Catalyzed by Quinolinolato-Phosphine Rhodium Complexes and Its Mechanistic Studies (Fac. Sci. Tech., Keio Univ.) ○TAKANO, Shotaro; KOCHI, Takuya; KAKIUCHI, Fumitoshi

**2E5-13** Catalytic 1:1 and 2:1 Addition Reactions between Terminal Alkynes and Secondary Amines Using Rhodium Complexes Possessing Functionalized 8-Quinolinolate Ligands (Fac. Sci. Tech., Keio Univ.) ○HAMADA, Moe; MOCHIZUKI, Katsufumi; KOCHI, Takuya; KAKIUCHI, Fumitoshi

## Ti

Chair: OGOSHI, Sensuke (11 : 20~12 : 20)

\* 11:10-11:20: interval for laptop PC connection.(2E5-15, 2E5-16, 2E5-17, 2E5-18, 2E5-19, 2E5-20)

**2E5-15** Reactions of a Silaneimine-coordinated Half-sandwich-type Titanium Complex with Benzophenones and Isomerization of the Products (Fac. Sci. Tech., Hirosaki Univ.) ○OHTANI, Ryusuke; OHTA, Shun; OKAZAKI, Masaaki

**2E5-16** Reaction of Organic Groups with Cp Ligand on Titanocene Complexes (CRC, Hokkaido Univ.) ○NATAKA, Hiroki; SONG, Zhiyi; NAKAJIMA, Kiyohiko; TAKAHASHI, Tamotsu

**2E5-17** Catalytic activity of metallocene-type Ti(III) complexes towards olefin hydrosilylation reactions (IRC3, AIST) ○EGUCHI, Katsuya; NAKAJIMA, Yumiko; AOYAGI, Keiya; FURUKAWA, Haruhiko; SUGIE, Atsushi

## Pd, Pt, Ir

**2E5-18** Iridium-catalyzed hydrosilylation of allyl chloride and allyl acetate (IRC3, AIST; IRC3, AIST) ○NAKAJIMA, Yumiko; MATSUMOTO, Kazuhiro; URABE, Yasuko; ANDO, Wataru; SATO, Kazuhiko; SHIMADA, Shigeru

**2E5-19** Reactions of 16-electron selenairidacycle with H<sub>2</sub> and tertiary silane (Grad. Sch. Sci., Eng., Saitama Univ.) ○SHIBATA, Chika; NAKATA, Norio; ISHII, Akihiko

**2E5-20** Synthesis, structure, and reactivity of a silanethione-coordinated iridium complex by the reaction of a cationic iridium(I) complex with lithium hydrosilanethiolate (Grad. Sch. Sci. Tech., Hirosaki Univ.) ○TANIWAKI, Wataru; OHTA, Shun; OKAZAKI, Masaaki

## Friday, March 25, PM

Chair: WAKIOKA, Masayuki (13 : 30~14 : 30)

\* 13:20-13:30: interval for laptop PC connection.(2E5-28, 2E5-29, 2E5-30, 2E5-31, 2E5-33)

**2E5-28<sup>#</sup>** New Synthetic Approach to Carbazole-containing Chiral Hetero[7] helicenes by Pd-Catalyzed Cyclodehydrogenation (Grad. Sch. Sci. & Tech., Kumamoto Univ.; Grad. Sch. Sci. Eng., Yamaguchi Univ.; IMCE, Kyushu Univ.; Fac. Sci., Kumamoto Univ.) ○ARAE, Sachie; MORI, Takaaki; UEDA, Daiki; HAMAMOTO, Nobutsugu; FUJIMOTO, Hitoshi; SUMIMOTO, Michinori; IGAWA, Kazunobu; TOMOOKA, Katsuhiko; IRIE, Ryo

**2E5-29** Coordination Behavior of Cyclopentadienyl Ligands to Pd3 and Pd4 Clusters (Grad. Sch. Sci., Eng., Tokyo Tech) ○ISHIKAWA, Yuki; KIMURA, Seita; YAMAMOTO, Koji; MURAHASHI, Tetsuro

**2E5-30** Redox-controlled Metalation and Demetalation of a Sandwich Pd Cluster (Grad. Sch. Sci., Eng., Tokyo Tech) ○MASAI, Kohei; FUKUSHIMA, Azusa; YAMAMOTO, Koji; MURAHASHI, Tetsuro

**2E5-31\*** Synthesis of Surface-active transition metal carbene complexes and their application to aqueous catalytic reactions (RCPT, AIST) ○TAIRA, Toshiaki; YANAGIMOTO, Takaya; SAKAI, Kenichi; SAKAI, Hideki; ENDO, Akira; IMURA, Tomohiro

**2E5-33** Synthesis and Structure of Novel Tricyclic Disilene-Palladium Complex (Grad. Sch. Sci., Tohoku Univ.) ○YAMAGUCHI, Ryo; ISHIDA, Shintaro; IWAMOTO, Takeaki

Chair: YAMAMOTO, Koji (14 : 40~15 : 40)

\* 14:30-14:40: interval for laptop PC connection.(2E5-35, 2E5-36, 2E5-37, 2E5-38, 2E5-39, 2E5-40)

**2E5-35** Mixed-Ligand Approach to Highly Selective Palladium-Catalyzed Direct Arylation Polymerization: Elucidation and Control of Homocoupling Process (ICR, Kyoto Univ.) ○HIZUKA, Eisuke; WAKIOKA, Masayuki; OZAWA, Fumiyuki

**2E5-36** Development of Electron-poor Buchwald-type Ligand (Fac. Eng., Iwate Univ.) KORENAGA, Toshinobu; ○SASAKI, Ryo; SHIMADA, Kazuaki

**2E5-37** Development of Alternative Copolymerization of Isocyanide and Acetylene Catalyzed by Pd Complex (Grad. Sch. Sci., Osaka Univ.) ○KATAOKA, Yuki; KANBAYASHI, Naoya; OKAMURA, Taka-aki; ONITSUKA, Kiyotaka

**2E5-38** Palladium/Copper-catalyzed Oxidation of Vinylarenes to Benzaldehyde Derivatives Using Molecular Oxygen (Fac. Sci., Nara Women's Univ.) ○MURAKAMI, Yuka; NAKAOKA, Sonoe; URA, Yasuyuki; KATAOKA, Yasutaka

**2E5-39** Pd-catalyzed direct coupling of pyridine and azole: Oxidant-controlled regioselectivity (Grad. Sch. Sci., Nagoya Univ.) ○YAMADA, Shuya; MURAKAMI, Kei; ITAMI, Kenichiro

**2E5-40<sup>#</sup>** Iridium-catalyzed *N*-alkylation of 6-aminouracils with alcohol (Grad. Sch. Life Med. Sci., Doshisha Univ.) ○PUTRA, Anggi Eka; OE, Yohei; OHTA, Tetsuo

Chair: OKAMURA, Takaaki (15 : 50~16 : 50)

\* 15:40-15:50: interval for laptop PC connection.(2E5-42, 2E5-43, 2E5-44, 2E5-45, 2E5-47)

**2E5-42** Formation of oligosiloxane by the platinum complex of diphosphine having two ferrocene chelates (Grad. Sch. Sci., Hiroshima Univ.) ○BABA, Atsushi; ABE, Kanako; KUBO, Kazuyuki; KUME, Shoko; MIZUTA, Tsutomu

**2E5-43** Synthesis and Structures of Group 10 Metal Complexes Bearing a PNP Pincer-Type Phosphaalkene Ligand (Eind.-BPEP) (ICR, Kyoto Univ.) ○TANIGAWA, Ippei; TAGUCHI, Hiroomi; TAKEUCHI, Katsuhiko; TSUJIMOTO, Shota; MATSUO, Tsukasa; OZAWA, Fumiyuki

**2E5-44** Hydrosilylation of Alkenes in Water with a Self-Assembled Vesicular Amphiphilic Platinum Pincer Complex (LCCMS, IMS; JST-ACCEL) ○HAMASAKA, Go; UOZUMI, Yasuhiro

**2E5-45<sup>##</sup>** Long-Tethered P-B-P Ligands: Synthesis, Complexation and Catalysis (Fac. Sci. Eng., Chuo Univ.) ○KWAN HUANG, Enrique; KAWAI, Jack Yasushi; KAMAKURA, Sei; OGAWA, Hayato; YAMASHITA, Makoto

**2E5-47** Application of Pyrrole-Based P-N-P Pincer Ir Complexes as Catalyst for Dehydrogenation of Alkane (Fac. Sci. Eng., Chuo Univ.)

○NAKAYAMA, Shin; YAMASHITA, Makoto

Chair: KAYAKI, Yoshihito (17 : 00~18 : 00)

- \* 16:50-17:00: interval for laptop PC connection.(2E5-49, 2E5-50, 2E5-51, 2E5-52, 2E5-53, 2E5-54)
- 2E5-49** ortho-Metalation onto Asymmetric Dinuclear Iridium(I) Centers Supported by a Tetrakisphosphine Dpmpmp (Fac. Sci., Nara Women's Univ.) ○MATSUI, Aya; SAKAMOTO, Miyuki; NODA, Sayo; NAKAMAE, Kanako; KURE, Bunsho; NAKAJIMA, Takayuki; URA, Yasuyuki; TANASE, Tomoaki
- 2E5-50<sup>#</sup>** Activation of Hydrosilanes by Novel Dithiolate-Bridged Ni(Ir) Dinuclear Complexes Supported by a P<sub>2</sub>S<sub>2</sub> Tetradentate Ligand (Fac. Sci., Nara Women's Univ.) ○KURE, Bunsho; WATANABE, Natsuki; SANO, Mikie; NAKAMAE, Kanako; NAKAJIMA, Takayuki; TANASE, Tomoaki
- 2E5-51<sup>#</sup>** Synthesis, Structure, and Reactivity of Gallium-Iridium Heterobimetallic Complexes Utilizing an N,P-Multidentate Ligand (Grad. Sch. Sci., Eng., Tokyo Tech) ○SAITO, Narumasa; TAKAYA, Jun; IWASAWA, Nobuharu
- 2E5-52** Control of vinylidene rearrangement of internal alkynes at an Ir(III) complex having a fluorine-substituted 2-pyridylphenyl ligand (Grad. Sch. Sci. Eng., Chuo Univ.; Grad. Sch. Of Humanities and Sci., Ochanomizu Univ.; Dept. Lib. Arts, Saitama Med. Univ.) ○AKIYAMA, Seiji; IKEDA, Yousuke; KODAMA, Shintaro; TSUCHIDA, Noriko; TAKANO, Keiko; ISHII, Youichi
- 2E5-53** Reaction of a Cp\*Ir(III)-phenyl Complex with 2,5-Norbornadiene (Fac. Sci. Eng., Chuo Univ.) ○HONDA, Syunya; TAKANO, Koichi; KODAMA, Shintaro; ISHII, Youichi
- 2E5-54** Synthesis and Reactions of Iridium Complexes Having a Phosphine (silyl) Chelate Ligand Connected by a Xanthene Backbone (Grad. Sch. Sci., Tohoku Univ.) ○KIKUCHI, Kei; KOMURO, Takashi; TOBITA, Hiromi

Chair: NAKAJIMA, Takayuki (18 : 10~19 : 00)

- \* 18:00-18:10: interval for laptop PC connection.(2E5-56, 2E5-57, 2E5-58, 2E5-60)
- 2E5-56** Stereoselective Construction of a Si-centered Chirality Arising in the Oxidative Addition of Prochiral Secondary Silane (Grad. Sch. Human. Sci., Nara Women's Univ.) ○UEDA, Mutsumi; SAKANO, Nozomi; URA, Yasuyuki; KATAOKA, Yasutaka
- 2E5-57** Catalytic Hydrodefluorination of Fluoroarenes by Bifunctional Iridium Complexes Using Formate Salts or 2-Propanol as Hydrogen Sources (Grad. Sch. Sci., Eng., Tokyo Tech) ○MATSUNAMI, Asuka; KUWATA, Shigeki; KAYAKI, Yoshihito
- 2E5-58\*** Interconversion of CO<sub>2</sub>/H<sub>2</sub> and Formic Acid Catalyzed by Novel Iridium Complex with Imidazole Ligand (RCPV, AIST) ○ONISHI, Naoya; FUJITA, Etsuko; MUCKERMAN, James T.; HIMEDA, Yuichiro; SUNA, Yuki; TSURUSAKI, Akihiro

## Fe

- 2E5-60<sup>#</sup>** Substituent effect on the spin-crossover property of Fe-qsal complexes (Fac. Sci. Eng., Kinki Univ.; RIST, Kinki Univ.) ○KURODA-SOWA, Takayoshi; ISOBE, Rina; YAMAOKA, Norifumi; OKUBO, Takashi; MAEKAWA, Masahiko

### Saturday, March 26, AM synthesis and property

Chair: KAJIWARA, Takashi (9 : 00 ~9 : 40)

- \* 8:50-9:00: interval for laptop PC connection.(3E5-01, 3E5-02, 3E5-04)
- 3E5-01** X-ray analysis of organometallic compounds with the crystalline sponge method -Direct encapsulation from reaction solution- (Grad. Sch. Eng., The Univ. of Tokyo; ACCEL, JST) ○TAKAHASHI, Yuki; INOKUMA, Yasuhide; HOSHINO, Manabu; FUJITA, Makoto
- 3E5-02<sup>#</sup>** Photo-switchable polarity in the crystalline nanopores (Fac. Eng., The Univ. of Tokyo) ○HUANG, Hubiao; SATO, Hiroshi; AIDA, Takuzo
- 3E5-04** Hybridization of unsubstituted polythiophene with C<sub>60</sub> using porous metal complexes (Grad. Sch. Eng., Kyoto Univ.) ○SASAKI, Yotaro; UEMURA, Takashi; KITAGAWA, Susumu

### Saturday, March 26, PM

## Mo

Chair: TACHI, Yoshimitsu (13 : 00~14 : 00)

- \* 12:50-13:00: interval for laptop PC connection.(3E5-25, 3E5-26, 3E5-27, 3E5-29, 3E5-30)
- 3E5-25** Synthesis and Catalytic Activity of a Series of Dinitrogen-Bridged Dimolybdenum PCP Complexes (Grad. Sch. Eng., The Univ. of Tokyo) ○EIZAWA, Aya; ARASHIBA, Kazuya; KURIYAMA, Shogo; NAKAJIMA, Kazunari; NISHIBAYASHI, Yoshiaki
- 3E5-26** Clavage of molecular dinitrogen leading to molybdenum-nitride complex (Inst. Eng. Innovation, Sch. of Eng., Univ. of Tokyo) ○ARASHIBA, Kazuya; EIZAWA, Aya; NAKAJIMA, Kazunari; NISHIBAYASHI, Yoshiaki

## Ni, Pd, Rh, Ir

- 3E5-27\*** Catalytic Activities of Rh Complexes with Optically Active CpN (Ment)P Ligand (Grad. Sch. Industrial Tech., Nihon Univ.) ○KOYAMA, Kazuhiro; TSUNO, Takashi; BRUNNER, Henri
- 3E5-29** Ni(0)-Catalyzed Intramolecular Reductive Coupling of Aldehydes with Alkenes (Grad. Sch. Eng., Osaka Univ.) ○HAYASHI, Yukari; HOSHIMOTO, Yoichi; OHASHI, Masato; OGOSHI, Sensuke
- 3E5-30** Nickel-Catalyzed Hetero Pauson-Khand Reaction (Sch. Eng., Osaka Univ.) ○ASHIDA, Keita; SASAOKA, Yukari; HOSHIMOTO, Yoichi; OHASHI, Masato; OGOSHI, Sensuke

Chair: NAKAJIMA, Kazunari (14 : 10~15 : 10)

- \* 14:00-14:10: interval for laptop PC connection.(3E5-32, 3E5-33, 3E5-34, 3E5-35, 3E5-36)
- 3E5-32** Synthesis of Coordinatively Unsaturated Group 9 Metal Complexes with an SiNN-Type Pincer Ligand: C-D Bond Activation of Deuterated Benzene and Catalytic H/D Exchange (Grad. Sch. Sci., Tohoku Univ.) ○OSAWA, Tomohiro; KOMURO, Takashi; TOBITA, Hiromi
- 3E5-33** Enantio- and Diastereoselective Synthesis of Benzoxasiloles Catalyzed by Ni(0)/N-Heterocyclic Carbene (Grad. Sch. Eng., Osaka Univ.) ○OHNISHI, Akira; HOSHIMOTO, Yoichi; OHASHI, Masato; OGOSHI, Sensuke
- 3E5-34** Amine-Induced  $\alpha$ -Fluoro Elimination Reaction from Fluoroalkylated Nickelacycle Complex (Grad. Sch. Eng., Osaka Univ.; Grad. Sch. Eng., Osaka Univ.) ○UEDA, Yuta; KIKUSHIMA, Kotaro; OHASHI, Masato; OGOSHI, Sensuke
- 3E5-35** Development of a Catalytic Reaction via the Oxidative Cyclization of Tetrafluoroethylene and Ethylene with Ni(0) as a Key Step. (Grad. Sch. Eng., Osaka Univ.) ○KAWASHIMA, Takuya; KIKUSHIMA, Kotaro; OHASHI, Masato; OGOSHI, Sensuke
- 3E5-36<sup>#</sup>** Catalytic properties of palladium(II) complex ligated by 1,3-bis(diphenylphosphino)calix[4]arene (Grad. Sch. Eng., Tohoku Univ.) ○HIRASAWA, Kengo; ITO, Akito; TANAKA, Shinya; HATTORI, Tetsutaro

Chair: TANAKA, Shinya (15 : 20~16 : 20)

- \* 15:10-15:20: interval for laptop PC connection.(3E5-39, 3E5-40, 3E5-41, 3E5-42, 3E5-44)
- 3E5-39** Synthesis and Reactions of Ni Complexes Bearing Tridentate Mesoionic Carbene (Fac. Sci., Fukuoka Univ.) ○TAJIRI, Ayame; TESHIMA, Yuta; IWASAKI, Haruka; KOGA, Yuji; MATSUBARA, Kouki

## Cu, Au

- 3E5-40** Synthesis of Copper Perfluoroalkoxide via Addition to Perfluoro Acyl Fluoride (Sch. Eng., Osaka Univ.) ○ISHIDA, Naoyoshi; KIKUSHIMA, Kotaro; OHASHI, Masato; OGOSHI, Sensuke
- 3E5-41** Copper-mediated synthesis of 1,2-difunctionalized-1,1,2,2-tetrafluoroethylene derivatives from TFE (Grad. Sch. Eng., Osaka Univ.) ○ADACHI, Takuya; KIKUSHIMA, Kotaro; OHASHI, Masato; OGOSHI, Sensuke
- 3E5-42\*** Copper-Catalyzed Reformatsky Reaction via C-F Bond Cleavage of Trifluoromethylketone by Boryl Copper Species (Grad. Sch. Eng., Osaka Univ.) ○DOI, Ryohei; OHASHI, Masato; OGOSHI, Sensuke
- 3E5-44** Synthesis and catalytic applications of new Cu(I) complexes bearing 1,2,3-triazol-5-ylidene ligands (Fac. Sci., Fukuoka Univ.) ○TESHIMA, Yuta; TAJIRI, Ayame; IWASAKI, Haruka; KOGA, Yuji; MATSUBARA, Kouki

Chair: OGOSHI, Sensuke (16 : 30~17 : 40)

- \* 16:20-16:30: interval for laptop PC connection.(3E5-46, 3E5-47, 3E5-48, 3E5-49, 3E5-50, 3E5-51, 3E5-52)
- 3E5-46<sup>#</sup>** Copper-Catalyzed Boracarbonylation of Imines with Diborane and Carbon Dioxide. (RIKEN) ○CARRY, Beatrice; ZHANG, Liang; HOU, Zhaomin
- 3E5-47** Synthesis of copper complex and their substituent effect supported by alkyl chain elongated tripodal ligand (Fac. Sci., Osaka City Univ.) ○ENOMOTO, Ryo; KAKUTAKA, Kairi; NISHIKAWA, Keisuke; MORIMOTO, Yoshiki; TACHI, Yoshimitsu
- 3E5-48** Hydrogenation of Aldehydes and Ketones Promoted by Copper Catalysts Bearing Polymer-bound DBU Ligand (CRIEPI; Grad. Sch. Sci., Eng., Tokyo Tech) ○WATARI, Ryo; MATSUMOTO, Norio; KUWATA, Shigeki; KAYAKI, Yoshihito
- 3E5-49** Design and Synthesis of New Chiral Binaphthyl-NHC Ligands and Catalytic Activity of Their Au(I) Complexes (Grad. Sch. Advanced Sci. Eng., Waseda Univ.) ○USUI, Kensuke; YOSHIDA, Takuya; NAKADA, Masahisa
- 3E5-50** Design and Synthesis of New Chiral Bis-Binaphthyl-NHC Ligand and Catalytic Activity of Its Au(I) Complex (Grad. Sch. Advanced Sci. Eng., Waseda Univ.) ○OKITSU, Naoya; YOSHIDA, Takuya; USUI, Kensuke; NAKADA, Masahisa

## Rh, Pt

- 3E5-51** Synthesis and photophysical properties of bis(2-phenylpyridinato) platinum(II) complexes having dimethylboryl substituent (Fac. Eng., Nagasaki Univ.) ○TOKAI, Tatsuya; SAKUDA, Eri; HORIUCHI, Shinnosuke; ARIKAWA, Yasuhiro; UMAKOSHI, Keisuke
- 3E5-52** The study of light emitting properties of *fac*-Rh(ppy)<sub>3</sub> (International Coll. Arts Sci., Yokohama City Univ.) ○TANSO, Shota; AIHARA, Yusuke; SATO, Kyouhei; SHINOZAKI, Kazuteru

Sunday, March 27, AM

## synthesis and property (Re, Zr, La, Dy)

Chair: HIGUCHI, Masakazu (9 : 00 ~ 10 : 10)

- \* 8:50-9:00: interval for laptop PC connection.(4E5-01, 4E5-02, 4E5-03, 4E5-05, 4E5-06, 4E5-07)
- 4E5-01** Synthesis and Guest Responsivity of Luminescent Re(V) Porous Coordination Polymers (Fac. Sci., Kyushu Univ.) ○YAMATE, Hitomi; MIURA, Hiroki; MISHIMA, Akio; KOSHIYAMA, Tomomi; OHBA, Masaaki
- 4E5-02** Phase transition control and dielectric property of thiourea introduced in Porous Coordination Polymer UiO-66 (Grad. Sch. Eng., Kyushu Univ.; CMS, Khushu Univ.; PRESTO, JST) ○KUBO, Yuta; YAMADA, Tepei; KIMIUKA, Nobuo
- 4E5-03\*** Control of chirality of La(btbt) and ionic conductivity in the pore (Grad. Sch. Eng., Kyushu Univ.; CMS, Khushu Univ.; PRESTO, JST) ○YAMADA, Tepei; WAKIYAMA, Taro; KIMIZUKA, Nobuo
- 4E5-05** Crystal Structure and Proton Conductivity of Oxalate-bridged Coordination Polymers under High Pressure (Dep. Chem., Sch. Sci., Kyoto Univ.; JASRI/SPring-8) ○ASAKAWA, Yuta; MAESATO, Mitsuhiko; OKAWA, Hisashi; HIRAO, Naohisa; OHISHI, Yasuo; KITAGAWA, Hiroshi
- 4E5-06** Syntheses and SMM behaviors of linear Zn(II)-Ln(III)-Zn(II) trinuclear complexes which possess pseudo three-fold symmetry (Ln = Tb, Dy) (Grad. Sch. Human. Sci., Nara Women's Univ.; IMR, Tohoku Univ.) ○KAYAHARA, Saori; IRIE, Natsumi; THEN, Poh Ling; TAKEHARA, Chika; KATAOKA, Yumiko; KAJIWARA, Takashi; YAMAMURA, Tomoo
- 4E5-07** Single-Molecule Magnet Behavior and Spin Energy Diagram of [Dy<sub>2</sub>Ni]-Type Complexes (Grad. Sch. Arts and Sci., The Univ. of Tokyo) ○OKAZAWA, Atsushi; NOJIRI, Hiroyuki; ISHIDA, Takayuki; KOJIMA, Norimichi

Chair: YAMADA, Tepei (10 : 20 ~ 11 : 30)

- \* 10:10-10:20: interval for laptop PC connection.(4E5-09, 4E5-11, 4E5-12, 4E5-13, 4E5-15)
- 4E5-09\*** Magneto-structural relation for gadolinium(III) and radical complexes showing ferromagnetic coupling (Grad. Sch. Sci. Eng., The Univ. of Electro-Communications) ○KANETOMO, Takuya; YOSHITAKE, Toru; ISHIDA, Takayuki
- 4E5-11** Study on exchange interaction in rare earth complexes coordinated with aliphatic nitroxides (Grad. Sch. Sci. Eng., The Univ. of Electro-Communications) ○NAKAMURA, Takeshi; ISHIDA, Takayuki; NOJIRI, Hiroyuki
- 4E5-12** Synthesis and Structural Analysis of Terbium Fused-Porphyrin-based Complexes (Grad. Sch. Sci., Osaka Univ.) ○SAKATA, Naoya; LEE, Sunri; YAMASHITA, Kenichi; OGAWA, Takuji
- 4E5-13\*\*** Electronic Structure - Single Molecule Magnetic Property Correlations of Terbium Fused-Porphyrin-based Complexes (Sch. Sci., Osaka Univ.) ○LEE, Sunri; SAKATA, Naoya; YAMASHITA, Ken-ichi; OGAWA, Takuji
- 4E5-15** Magnetic properties of multiple oxidation species of phthalocyaninato multiple-decker complexes (Grad. Sch. Sci., Tohoku Univ.) ○HORII, Yoji; KATOH, Keichi; YAMASHITA, Masahiro

## synthesis and property Tb, Eu)

Chair: TANAKA, Kentaro (11 : 40 ~ 12 : 50)

- \* 11:30-11:40: interval for laptop PC connection.(4E5-17, 4E5-18, 4E5-19, 4E5-21, 4E5-23)
- 4E5-17** Luminescence Behavior of Terbium Complexes with Hexadentate Aromatic and Mesogenic Ligands in Liquid Crystalline states (Coll. Sci. Eng., Aoyama Gakuin Univ.; Grad. Sch. Eng., The Univ. of Tokyo) ○MIZUSHIMA, Soichi; YAMANE, Shogo; MITANI, Masato; UCHIDA, Junya; OGATA, Shuhei; ISHII, Ayumi; KATO, Takashi; HASEGAWA, Miki
- 4E5-18\*** Luminescence Mechanism of Eu, Tb and Tm Complexes with Deuterated 1,10-Phenanthroline in the Solid State (Coll. Sci. Eng., Aoyama Gakuin Univ.) ○OGATA, Shuhei; ISHII, Ayumi; LU, Cai Ling; HASEGAWA, Miki
- 4E5-19\*\*** High emission quantum yields and energy transfer efficiency of Eu(III) coordination polymers with heteroaromatic bridge (Sch. Eng., Hokkaido Univ.) ○HIRAI, Yuichi; NAKANISHI, Takayuki; KITAGAWA, Yuichi; FUSHIMI, Koji; HASEGAWA, Yasuchika
- 4E5-21\*** Luminescence properties of mononuclear europium(III) complexes with tetradentate Schiff base ligands in the solid state (Chiba Inst. of Tech.) ○TSUCHIMOTO, Masanobu; MIYAGAI, Natsuki; ITOH, Shuhei;

AOYAGI, Noboru; WATANABE, Masayuki; NAKAJIMA, Kiyohiko

- 4E5-23** Luminescence properties of Schiff base-europium(III) mononuclear complexes with a tertiary or quaternary ammonium counter cation in the solid state. (Chiba Inst. of Tech.) ○MIYAGAI, Natsuki; TSUCHIMOTO, Masanobu; ITOH, Shuhei; AOYAGI, Noboru; WATANABE, Masayuki; NAKAJIMA, Kiyohiko

## Room E6

Chishinkan1 Building 221

## Physical Chemistry -Structure-

Thursday, March 24, AM

## Gas-phase spectroscopy

Chair: NAGASAKA, Masanari (10 : 10 ~ 10 : 50)

- \* 10:00-10:10: interval for laptop PC connection.(1E6-08, 1E6-09, 1E6-10)
- 1E6-08** Intramolecular rotation in thioanisole derivatives studied by Penning ionization electron spectroscopy (Sci. Eng., The Univ. of Electro-Communications; Grad. Sch. Sci. Eng., The Univ. of Electro-Communications) ○TAKANO, Yosuke; ISHIGURO, Yuki; OTA, Masahiro; YAMAKITA, Yoshihiro
- 1E6-09** Photoelectron spectroscopy of Alq<sub>3</sub> anion in gas phase (Fac. Sci., The Univ. of Tokyo; Grad. Sch. Sci., The Univ. of Tokyo; Grad. Sch. Arts and Sci., The Univ. of Tokyo; ESICB, Kyoto Univ.) ○YANASE, Toshiaki; MURAMATSU, Satoru; NAKANISHI, Ryuzo; KOYASU, Kiichiro; NAGATA, Takashi; TSUKUDA, Tatsuya
- 1E6-10\*** Dispersed fluorescence spectra of metal containing free radical (Grad. Sch. Info. Sci., Hiroshima City Univ.) ○FUKUSHIMA, Masaru; ISHIWATA, Takashi

## X-ray scattering and absorption

Chair: TUKUDA, Tatsuya (11 : 00 ~ 12 : 00)

- \* 10:50-11:00: interval for laptop PC connection.(1E6-13, 1E6-15, 1E6-17)
- 1E6-13\*** Molecular Interactions in Liquid Benzene Studied by Soft X-ray Absorption and Infrared Spectroscopies (IMS) ○NAGASAKA, Masanari; YUZAWA, Hayato; MOCHIZUKI, Kenji; RUHL, Eckart; KOSUGI, Nobuhiro
- 1E6-15\*** Electronic structure of confined water in polyelectrolyte brush (Grad. Sch. Frontier Sci., The Univ. of Tokyo; IMCE, Kyushu Univ.) ○YAMAZOE, Kosuke; INUTSUKA, Yoshihiro; MIYAWAKI, Jun; HIGAKI, Yuji; CUI, Yitao; TAKAHARA, Atsushi; HARADA, Yoshihisa
- 1E6-17\*** Structural fluctuation of supercritical aqueous solution of n-pentane in entire concentration range (Grad. Sch. Adv. Integration Sci., Chiba Univ.) ○SHIBUTA, Satoshi; NISHIKAWA, Keiko; MORITA, Takeshi

Thursday, March 24, PM

## Solid interface

Chair: WATANABE, Kazuya (13 : 10 ~ 14 : 10)

- \* 13:00-13:10: interval for laptop PC connection.(1E6-26, 1E6-27, 1E6-29, 1E6-30)
- 1E6-26** Photoelectron spectral fine structure for  $\pi$ -conjugated organic molecules in gas phase (PMS, IMS; Grad. Sch. Adv. Integration Sci., Chiba Univ.; Sch. Physical Sci., SOKENDAI) ○YAMAGUCHI, Takuma; YONEZAWA, Keiichiro; SUDA, Yosuke; SATO, Kazushi; UEBA, Takahiro; KERA, Satoshi
- 1E6-27\*** The electronic structure of the metastable phase for the lead phthalocyanine film (Grad. Sch. Sci., Osaka Univ.) ○KAWAKITA, Noriaki; OKUI, Chiaki; YAMADA, Takashi; KATO, Hiroyuki; MUNAKATA, Toshiaki
- 1E6-29** Delocalized Unoccupied Electronic States in Rubrene Thin Film (Grad. Sch. Sci., Osaka Univ.) ○KINOSHITA, Mariko; ARARAGI, Kento; WATANABE, Yu; UEBA, Takahiro; YAMADA, Takashi; KOTO, Hiroyuki; MUNAKATA, Toshiaki
- 1E6-30\*\*** Structuring, Dynamics, Electric Double Layer Formation of Interfacial Ionic Liquid Faced to Various Electrode Surfaces Analyzed by Molecular Dynamics Calculation (Grad. Sch. Eng. Sci., Osaka Univ.; Grad. Sch. Eng., Osaka Univ.; RIKEN) MIYAMOTO, Hiroo; YOKOTA, Yasuyuki; IMANISHI, Akihito; INAGAKI, Kouji; MORIKAWA, Yoshitada; ○FUKUI, Ken-ichi

## Solid interface

Chair: ONISHI, Hiroshi (14 : 20 ~ 15 : 20)

- \* 14:10-14:20: interval for laptop PC connection.(1E6-33, 1E6-34, 1E6-35, 1E6-36, 1E6-37)
- 1E6-33** Weakly hydrogen-bonded water at lipid / water interface observed

with HD-SFG spectroscopy (Fac. Eng., Saitama Univ.) ○NOJIMA, Yuki; SUZUKI, Yudai; YAMAGUCHI, Shoichi

- 1E6-34** Polarization dependence of the HD-SFG spectrum of the air/water interface in the free OH region (Fac. Eng., Saitama Univ.) ○SUZUKI, Yudai; NOJIMA, Yuki; YAMAGUCHI, Shoichi
- 1E6-35** Nonlinear vibrational spectroscopic study on electrolyte concentration dependence of the interface structure of ionic liquid/electrolyte aqueous solution (Grad. Sch. Sci., Eng., Tokyo Tech) ○HASHI, Mitsuhiro; IWAHASHI, Takashi; SAKAI, Yasunari; NISHI, Naoya; OUCHI, Yukio
- 1E6-36** Electrochemical double resonance sum frequency generation spectroscopy to study the electronic structure at electrochemical interface (MANA, NIMS) ○NOGUCHI, Hidenori; UOSAKI, Kohei
- 1E6-37\*** Heterodyne detected sum frequency generation vibrational spectroscopy of H<sub>2</sub>O and HDO ice surfaces on Rh(111) (Dep. Chem., Sch. Sci., Kyoto Univ.) ○OTSUKI, Yuji; SUGIMOTO, Toshiki; WATANABE, Kazuya; MATSUMOTO, Yoshiyasu

### Solid interface

Chair: NOGUCHI, Hidenori (15 : 30~16 : 20)

- \* 15:20-15:30: interval for laptop PC connection.(1E6-40, 1E6-42, 1E6-44)
- 1E6-40\*** Adsorbed states and dehydrogenation of butenes on a Cu(410) surface (Sch. Sci., Osaka Univ.) ○TAKEYASU, Kotaro; OKADA, Michio
- 1E6-42\*** Adsorption of CH<sub>3</sub>Cl and its orientation on Cu(410) (Grad. Sch. Sci., Osaka Univ.) ○MAKINO, Takamasa; OKADA, Michio
- 1E6-44** Orientation of n-alkane molecules on a Au(111) surface (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○ENDO, Osamu; NAKAMURA, Masashi; AMEMIYA, Kenta; OZAKI, Hiroyuki

### Solid interface

Chair: OKADA, Michio (16 : 30~17 : 30)

- \* 16:20-16:30: interval for laptop PC connection.(1E6-46, 1E6-47, 1E6-48, 1E6-50)
- 1E6-46** Methanol decomposition process on a Pt/TiO<sub>2</sub>(110) surface studied by STM (Grad. Sch. Eng., Hokkaido Univ.) ○HONDA, Yoshihiro; TAKAKUSAGI, Satoru; ARIGA, Hiroko; ASAKURA, Kiyotaka
- 1E6-47** Imaging of Ce Oxidation State Distribution in a Pt-attached Ce<sub>2</sub>Zr<sub>2</sub>O<sub>x</sub> Catalyst Particle under Redox Reactions by Scanning Nano-XAFS (Grad. Sch. Sci., Nagoya Univ.) ○MATSUI, Hirosuke; ISHIGURO, Nozomu; ENOMOTO, Kaori; SEKIZAWA, Oki; URUGA, Tomoya; TADA, Mizuki
- 1E6-48\*** The identical-view imaging of three-dimensional PEFC Pt catalyst distributions and its electronic states in fresh and degraded MEAs by in situ CT-XAFS (Grad. Sch. Sci., Nagoya Univ.) ○MATSUI, Hirosuke; ISHIGURO, Nozomu; SEKIZAWA, Oki; URUGA, Tomoya; TADA, Mizuki
- 1E6-50\*** Picometer-scale Controls of Graphene Gates Providing Extremely High Molecular Separation (Grad. Sch. Sci., Chiba Univ.) SHIMIZU, Kengo; YAMAMOTO, Shotaro; KANO, Hirofumi; ○OHBA, Tomonori

## Friday, March 25, PM

### Gas-phase spectroscopy

Chair: TSUKIYAMA, Koichi (13 : 10~14 : 10)

- \* 13:00-13:10: interval for laptop PC connection.(2E6-26, 2E6-27, 2E6-28, 2E6-30)
- 2E6-26** Three-dimensional intermolecular potential energy surface of R<sub>g</sub>-CO (R<sub>g</sub>=N<sub>2</sub>, Ar, K<sub>2</sub>) (Grad. Sch. Sci. Tech., Gunma Univ.; Grad. Sch. Arts and Sci., The Univ. of Tokyo) ○OHTSUKI, Kohei; ENDO, Yasuki; SUMIYOSHI, Yoshihiro
- 2E6-27** High-resolution Laser Spectroscopy of B<sup>2</sup>E' -X<sup>2</sup>A<sub>2</sub>' transition of NO<sub>3</sub> radical (MPRC, Kobe Univ.) ○HIRATA, Michihiro; KASAHARA, Shunji; TADA, Kohei; ISHIWATA, Takashi; HIROTA, Eizi
- 2E6-28\*** Photoelectron spectra of NO<sub>3</sub>-Revised assignments. (RIEMT, AIST) ○YAMADA, Koichi; ROSS, Stephen
- 2E6-30\*\*** Vibrational Assignment for the NO<sub>3</sub> Radical in the Ground Electronic State (SOKENDAI) ○HIROTA, Eizi

### Gas-phase spectroscopy

Chair: SUMIYOSHI, Yoshihiro (14 : 20~15 : 20)

- \* 14:10-14:20: interval for laptop PC connection.(2E6-33, 2E6-35, 2E6-37)
- 2E6-33\*\*** An Effective Molecular Model for Nanosecond Laser Spectroscopy of Short-lived Nucleobase: Application to Anharmonic Vibrational Analysis in the Mid-IR Region (CEA Saclay (France)) ○ASAMI, Hiroya; TOKUGAWA, Munefumi; MASAKI, Yoshiaki; GLOAGUEN, Eric; SEIO, Kohji; SEKINE, Mitsuo; MONS, Michel
- 2E6-35\*** Collision induced state-to-state energy transfer from the ion-pair states of molecular iodine (Grad. Sch. Chem. Sci. Technol., Tokyo Univ. of Sci.) ○HOSHINO, Shoma; NAKANO, Yukio; ARAKI, Mitsunori; ISHIWATA, Takashi; TSUKIYAMA, Koichi
- 2E6-37\*\*** Study of Infrared Emission Spectroscopy for the B<sup>1</sup>Δ<sub>g</sub> - A<sup>1</sup>Π<sub>u</sub> and B<sup>1</sup>Σ<sub>g</sub><sup>+</sup> - A<sup>1</sup>Π<sub>u</sub> Systems of C<sub>2</sub> (Grad. Sch. Nat. Sci. Technol., Okayama Univ.; Dept. of Chem. and Biochem., Old Dominion Univ) CHEN, Wang;

KAWAGUCHI, Kentarou; BERNATH, Peter F.; ○TANG, Jian

### IR/Raman spectroscopy

Chair: IWATA, Koichi (15 : 30~16 : 40)

- \* 15:20-15:30: interval for laptop PC connection.(2E6-40, 2E6-41, 2E6-43, 2E6-45)
- 2E6-40** Matrix-isolation infrared study of formic acid hydrates (RIEMT, AIST) ○FUMIYUKI, Ito
- 2E6-41\*** Experimental Optimization of IR pMAIRS by Using an Optically Isotropic Thin Film Exhibiting Berreman's Effect (ICR, Kyoto Univ.) ○SHIOYA, Nobutaka; NORIMOTO, Shingo; IZUMI, Naoki; HADA, Miyako; SHIMOAKA, Takafumi; HASEGAWA, Takeshi
- 2E6-43\*** Study on the Molecular Interaction of Water with the Sulfonic Acid Group Involved in Nafion (ICR, Kyoto Univ.) ○SHIMOAKA, Takafumi; WAKAI, Chihiro; HASEGAWA, Takeshi
- 2E6-45\*\*** Chirality Evaluation of Hydrogen-bonding Supramolecules by Single Crystal X-ray Structure Analysis and Solid-state Vibrational Circular Dichroism Spectra (Grad. Sch. Sci., Eng., Ehime Univ.) ○SASAKI, Toshiyuki; MIYATA, Mikiji; HISAKI, Ichiro; TOHNAI, Norimitsu; SATO, Hisako

### SERS

Chair: OKAJIMA, Hajime (16 : 50~17 : 30)

- \* 16:40-16:50: interval for laptop PC connection.(2E6-48, 2E6-49, 2E6-50, 2E6-51)
- 2E6-48** *In-situ* Surface-Enhanced Raman Scattering Measurement on Electrochemically Controlled Strong Coupling between Dye Excitons and Localized Surface Plasmon Resonance (Sch. Sci., Hokkaido Univ.) ○KATO, Fumiya; WAKISAKA, Yumi; MINAMIMOTO, Hiro; MURAKOSHI, Kei
- 2E6-49** Tip-enhanced Raman scattering of the graphene with concavo-convex structure surface (Sch. Sci. Tech., Kwansei Gakuin Univ.; Health Research Inst., AIST; Sch. Eng., The Univ. of Shiga Pref.) ○WADA, Yoriko; UEMURA, Syouhei; VANTASIN, Sanpon; ITOH, Tamitake; JEYADEVAN, Balachandran; MORI, Daisuke; OZAKI, Yukihiko
- 2E6-50** Polarization dependence of tip-enhanced Raman scattering by dark-field scattering measurement (Sch. Sci. Tech., Kwansei Gakuin Univ.; UNISOKU Co., Ltd.; Health Research Inst., AIST) ○KITAHAMA, Yasutaka; KATAYAMA, Ryota; UEMURA, Shohei; SUZUKI, Toshiaki; ITOH, Tamitake; OZAKI, Yukihiko
- 2E6-51** Analysis of monolayer graphene island grown on 4H-SiC(0001)C-face by Tip-enhanced Raman spectroscopy (Sch. Sci. Tech., Kwansei Gakuin Univ.) ○UEMURA, Shohei; VANTASIN, Sanpon; TANAKA, Yoshito; KUTUMA, Yasunori; KITAHAMA, Yasutaka; KANEKO, Tadaaki; OZAKI, Yukihiko

### Solid interface

Chair: KATO, Hiroyuki (17 : 40~18 : 30)

- \* 17:30-17:40: interval for laptop PC connection.(2E6-53, 2E6-55, 2E6-56, 2E6-57)
- 2E6-53\*** Synthesis of graphene nanoribbon from a novel surface transformable molecule (IAE, Kyoto Univ.) ○NAKAE, Takahiro; SONG, Shaotang; KOJIMA, Takahiro; SAKAGUCHI, Hiroshi
- 2E6-55** Growth of vanadium oxide films on an Ag(100) surface (Coll. Sci., Rikkyo Univ.; Sch. Sci., Tokyo Tech) ○EDAMOTO, Kazuyuki; NAKAMURA, Takuya; SUGIZAKI, Yuichi; OZAWA, Kenichi
- 2E6-56** Change of electronic structure of Fe<sub>2</sub>P(10-10) with P segregation (Grad. Sch. Sci., Rikkyo Univ.) ○SUGIZAKI, Yuichi; MOTOYAMA, Hiroki; YAMATO, Chihiro; EDAMOTO, Kazuyuki; OZAWA, Ken-ichi
- 2E6-57** Resonant photoemission spectroscopy of Fe<sub>2</sub>P(10-10) surface (Coll. Sci., Rikkyo Univ.) ○MOTOYAMA, Hiroki; SUGIZAKI, Yuichi; EDAMOTO, Kazuyuki; OZAWA, Ken-ichi

## International Symposium on Molecular Science - Physical Chemistry / Theoretical Chemistry, Chemoinformatics, Computational Chemistry - Cosponsored by Japan Society for Molecular Science Saturday, March 26, AM

Chair: Suzuki, Toshinori (9 : 00~9 : 50)

- 3E6-01#** Opening Remarks (Tokyo Tech.) Fujii, Masaaki (09:00~09:10)
- 3E6-02#** **Keynote Lecture** Imaging the Stereodynamics of Bimolecular Reactions (IAMS, Academia Sinica, Taiwan) LIU, Kopin (09:10~09:50)

Chair: Iwata, Koichi (9 : 50~10 : 30)

- 3E6-06#** **Invited Lecture** Relation between the Product and the Counter-Product in Polyatomic Photodissociation (Hiroshima Univ.) Kohguchi, Hiroshi (09:50~10:10)
- 3E6-08#** **Invited Lecture** Ultrafast Photoelectron Imaging of Photodissociation Dynamics of CS<sub>2</sub> (Kyoto Univ.) Horio, Takuya (10:10~10:30)

Chair: Misaizu, Fuminori (10 : 40~11 : 20)

- 3E6-11#** **Keynote Lecture** Structural Dynamics and Intermolecular As-

sembly of Amyloidogenic Proteins in Multi Phases (Korea Univ., Korea)  
KIM, Hugh I. (10:40~11:20)

Chair: Kohguchi, Hiroshi (11:20~12:00)

- 3E6-15<sup>#</sup> Invited Lecture** Structural Characterization of the Histone Multimers by the Concerted Use of Mass Spectrometry and Simulation (Yokohama City Univ.) FUCHIGAMI, Sotaro (11:20~11:40)  
**3E6-17<sup>#</sup> Invited Lecture** Structures and Reactions of Metal Oxide Cluster Ions Studied by Ion Mobility Mass Spectrometry (Tohoku Univ.) Ohshimo, Keiji (11:40~12:00)

## Saturday, March 26, PM

Chair: Mizutani, Yasuhisa (13:00~14:20)

- 3E6-25<sup>#</sup> Keynote Lecture** Fluctuating Thermodynamics for Biological Processes (Sookmyung Women's Univ., Korea) HAM, Sihyun (13:00~13:40)  
**3E6-29<sup>#</sup> Invited Lecture** Nanoscale Wetting and Drying Processes Work as a Switch for Protein Functional Motions (Keio Univ.) OROGUCHI, Tomotaka (13:40~14:00)  
**3E6-31<sup>#</sup> Invited Lecture** Protein Design from Scratch: from Structure to Function (Institute for Molecular Science) KOSUGI, Takahiro (14:00~14:20)

Chair: Torii, Hajime (14:30~15:50)

- 3E6-34<sup>#</sup> Keynote Lecture** Microscopic Structure and Dynamics in Mixtures of Imidazolium Based Ionic Liquids with Polar Aprotic Solvents: NMR, Vibrational Spectroscopy and Molecular Modeling Analysis (Univ. of Lille 1) IDRISSE, Abdenacer (14:30~15:10)  
**3E6-38<sup>#</sup> Invited Lecture** Self-Consistent Determination of Atomic Charges of Ionic Liquid through Combination of Molecular Dynamics Simulation and Density Functional Theory (Osaka Univ.) ISHIZUKA, Ryosuke (15:10~15:30)  
**3E6-40<sup>#</sup> Invited Lecture** Molecular Dynamics Simulation for Insight into Light-induced Spin Crossover in Iron Complexes (Nagoya Univ.) Iuchi, Satoru (15:30~15:50)

Chair: Sugimoto, Manabu (16:00~17:30)

- 3E6-43<sup>#</sup> Keynote Lecture** Role of Substrate Adsorption on the Catalytic Efficiency, Stability and Dynamics of Metal Nanoclusters (International Institute of Information Technology Hyderabad, India) PRIYAKUMAR, Deva (16:00~16:40)  
**3E6-47<sup>#</sup> Invited Lecture** Interspecies Eco-Toxicity Prediction Models that consider the Role of Physicochemical Properties (Center for Environmental Risk Research, National Institute for Environmental Studies) Furuhashi, Ayako (16:40~17:00)  
**3E6-49<sup>#</sup> Invited Lecture** Effectively Expressed Environmental Modes to Describe the Essence of Large Molecular Systems (Shizuoka Univ.) Kawai, Shinnosuke (17:00~17:20)  
**3E6-51<sup>#</sup> Closing Remarks** (Gakuyuin Univ.; Shizuoka Univ.) Iwata, Koichi; Torii, Hajime (17:20~17:30)

## Physical Chemistry -Structure-

Sunday, March 27, AM

### Visible and ultraviolet spectroscopy

Chair: SAKAMOTO, Akira (9:40~10:50)

- \* 9:30-9:40: interval for laptop PC connection.(4E6-05, 4E6-06, 4E6-07, 4E6-08, 4E6-10, 4E6-11)  
**4E6-05** Electronic state of nano carbon and nano carbon/polymer nanocomposite studied by attenuated total reflectance (ATR) far- and deep-ultraviolet spectroscopy (Sch. Sci. Tech., Kwansai Gakuin Univ.) OKOBASHI, Kenta; TANABE, Ichiro; MORISAWA, Yusuke; SATO, Harumi; GOTO, Takeyoshi; OZAKI, Yukihiro  
**4E6-06** Study of electronic transitions of poly alkane glycol observed in the far ultraviolet region and interpretation differences between liquid and solid state. (Kinki Univ.) OUENO, Nami; MORISAWA, Yusuke  
**4E6-07** Estimation of pH Dependent Structure of Bromthymol Blue (Fac. Edu., Hirosaki Univ.; ICR, Kyoto Univ.) OSHIMADA, Toru; HASEGAWA, Takeshi  
**4E6-08<sup>\*</sup>** Development of water-soluble porphyrin-based exciton chirality methods for determining absolute configurations between side chains of basic amino acids in peptides (IIS, The Univ. of Tokyo) HATTORI, Shingo; AKAGAWA, Kengo; KUDO, Kazuaki; ISHII, Kazuyuki  
**4E6-10** Inhomogeneous structure of single-component lipid bilayer membrane observed with picosecond time-resolved fluorescence spectroscopy (Fac. Sci., Gakushuin Univ.; Chem. Res. Lab., Tokyo Tech) KITAMURA, Sho; KYOGOKU, Shinsuke; MANJUSHA, Joshi; NAKAMURA, Hiroyuki; IWATA, Koichi  
**4E6-11** Stark spectroscopy and field-induced fluorescence quenching for rubrene (Grad. Sch. of Eng., Muroran Inst. of Tech.) ITO, Ryuichi; NAKANO, Hideyuki; OIMORI, Toshifumi

## Nonlinear optics

Chair: OHTA, Koji (11:00~11:40)

- \* 10:50-11:00: interval for laptop PC connection.(4E6-13, 4E6-14, 4E6-15, 4E6-16)  
**4E6-13** Theoretical study on open-shell nature and nonlinear optical properties of phenalene isomers (Sch. Eng. Sci., Osaka Univ.) OMINAMIDA, Yuka; FUKUDA, Kotaro; ITO, Soichi; MATSUSHITA, Naoyuki; MATSUI, Hiroshi; KISHI, Ryohei; NAKANO, Masayoshi  
**4E6-14** Theoretical Study on Two-Photon Absorption in Open-Shell Singlet Phenalenyl Radical Dimers (Grad. Sch. Eng. Sci., Osaka Univ.) OMINAMIDA, Naoyuki; FUKUDA, Kotaro; ITO, Soichi; MATSUI, Hiroshi; KISHI, Ryohei; NAKANO, Masayoshi  
**4E6-15** Theoretical Study on Diradical Characters and Third-Order Nonlinear Optical Properties of bonds between Alkaline Metals through Organic Ligands (Grad. Sch. Eng. Sci., Osaka Univ.) OTAKAMUKU, Shota; KITAGAWA, Yasutaka; MATSUI, Hiroshi; NAGAMI, Takanori; FUJIYOSHI, Jun-ya; NAKANO, Masayoshi  
**4E6-16** Theoretical Study on the Correlation between Open-Shell Nature, the Second Hyperpolarizability and Proton Coupled Electron Transfer of Hydrogen-Bonded Aggregates (Grad. Sch. Eng. Sci., Osaka Univ.) OIZUMI, Shioh; ITO, Soichi; MATSUI, Hiroshi; KISHI, Ryohei; NAKANO, Masayoshi

## Sunday, March 27, PM

### Magnetic resonance

Chair: YAMANAKA, Shusuke (13:10~14:20)

- \* 13:00-13:10: interval for laptop PC connection.(4E6-26, 4E6-28, 4E6-29, 4E6-30, 4E6-31, 4E6-32)  
**4E6-26<sup>\*</sup>** Theoretical study on the spatial correlation between open-shell singlet character and magnetic shielding tensor of linear fused-ring conjugated hydrocarbon systems (Grad. Sch. Eng. Sci., Osaka Univ.) OFUKUDA, Kotaro; FUJIYOSHI, Jun-ya; NAGAMI, Takanori; NAKANO, Masayoshi  
**4E6-28** Theoretical study on the spatial correlation between open-shell singlet character and anisotropy of the induced current density of linear fused-ring conjugated hydrocarbons (Sch. Eng. Sci., Osaka Univ.) FUKUDA, Kotaro; FUJIYOSHI, Jun-ya; NAGAMI, Takanori; NAKANO, Masayoshi  
**4E6-29** A Study of Magnetic Properties of Rhenium (III,IV) Binuclear Complexes with Large ZFSs Using Single-Crystal ESR Spectroscopy in the Principal Axis System (Grad. Sch. Sci., Osaka City Univ.) OYAMANE, Takeshi; NAKAGAWA, Tomoki; SATO, Kazunobu; SUGISAKI, Kenji; KANZAKI, Yuki; TOYOTA, Kazuo; SHIOMI, Daisuke; YOSHIZAWA, Makoto; TADOKORO, Makoto; TAKUI, Takeji  
**4E6-30** A single-crystal ESR study of mixed-valence binuclear rhenium(III/IV) complexes with synchronized proton-electron transfer and the corresponding mononuclear rhenium(IV) complex (Grad. Sch. Sci., Osaka City Univ.) OYAMANE, Tomoki; YAMANE, Takeshi; SATO, Kazunobu; SUGISAKI, Kenji; KANZAKI, Yuki; TOYOTA, Kazuo; SHIOMI, Daisuke; YOSHIZAWA, Makoto; TADOKORO, Makoto; TAKUI, Takeji  
**4E6-31** An electronic structure of stable naphthalene diimide radical ion with phosphonium groups as studied by solution ESR/ENDOR spectroscopy (Grad. Sch. Sci., Osaka City Univ.) OTATSUMI, Shunsuke; SUGISAKI, Kenji; SATO, Kazunobu; TOYOTA, Kazuo; SHIOMI, Daisuke; SHARVAN, Kumar; SUDHIR, Kumar Keshri; PRITAM, Mukhopadhyay; TAKUI, Takeji  
**4E6-32** Enhanced Relaxation of NMR Signals of Hydrogen-Bonded Inorganic Solid Acid Salts Caused by Ammonium Ions (MCM, AIST) OHAYASHI, Shigenobu; JIMURA, Keiko

### IR/Raman spectroscopy

Chair: SHIROTA, Hideaki (14:30~15:20)

- \* 14:20-14:30: interval for laptop PC connection.(4E6-34, 4E6-35, 4E6-37, 4E6-38)  
**4E6-34** Structure Analysis of a Semiconductor Thin Film of a Porphyrin Derivative Using IR pMAIRS and GIXD (ICR, Kyoto Univ.) OHADA, Miyako; SHIOYA, Nobutaka; SHIMOAKA, Takafumi; EDA, Kazuo; HASEGAWA, Takeshi  
**4E6-35<sup>\*</sup>** Solvent dependence of absorption intensities and frequency of the fundamental and first overtone of OH stretching vibration of 2-methyl-2-propanol. (NIT, Kumamoto College, Josai Univ., Kwansai Gakuin Univ.) OFUTAMI, Yoshisuke; OZAKI, Yasushi; OZAKI, Yukihiro  
**4E6-37** Observations and calculations of photo-excited species of polycyclic  $\pi$ -conjugated molecules by using nano-second transient Raman spectroscopy (Coll. Sci. Eng., Aoyama Gakuin Univ.; Grad. Sch., Eng., Saitama Univ.) OKAJIMA, Hajime; YANG, Wanlu; SAKAMOTO, Akira  
**4E6-38** Measurement and analysis of infrared absorption spectra of the anionic species of triphenylene and sumanene; prototypes of planar and bowl-shaped conjugated molecules (Coll. Sci. Eng., Aoyama Gakuin Univ.; Grad. Sch. Eng., Osaka Univ.; CIMoS, IMS; Sch. Physical Sci., SOKENDAI) OSHIMOMURA, Azusa; OKAJIMA, Hajime; TAKASHINA, Naoto; HIGASHIBAYASHI, Shuhei; SAKURAI, Hidehiro; SAKAMOTO, Akira



## IR/Raman spectroscopy

Chair: MIZUTANI, Yasuhisa (15 : 30~16 : 30)

- \* 15:20-15:30: interval for laptop PC connection.(4E6-40, 4E6-42, 4E6-44, 4E6-45)
- 4E6-40\*** Characterizations of low-frequency spectra of aromatic cation based ionic liquids (Grad. Sch. Adv. Integration Sci., Chiba Univ.) ○SHIROTA, Hideaki
- 4E6-42\*\*** Low-frequency micro-Raman spectroscopy and terahertz spectroscopic imaging of pharmaceutical cocrystals (NTT Device Technology Laboratories) ○AJITO, Katsuhiko; NAKAMURA, Masahito; TAJIMA, Takuro; UENO, Yuko; KOIZUMI, Hiroshi
- 4E6-44** Analyses of the COO<sup>-</sup> stretching vibrational bands of the <sup>13</sup>C-labeled synthetic peptide analogues for the Ca<sup>2+</sup>-binding sites of Ca<sup>2+</sup>-binding proteins (Tokyo Med. and Dental Univ.) ○NARA, Masayuki; MORII, Hisayuki; SAKAMOTO, Akira; MIYAKAWA, Takuya; TANOKURA, Masaru
- 4E6-45#** Experimental Detection of the Intrinsic Difference in Raman Optical Activity of a Photoreceptor Protein under Preresonance and Resonance Conditions (Grad. Sch. Sci. Eng., Saga Univ.) ○HARAGUCHI, Shojiro; HARA, Miwa; SHINGAE, Takahito; KUMAUCHI, Masato; WOUTER D., Hoff; UNNO, Masashi

## Room E7

### Chishinkan1 Building 222

### Organic Crystals

#### Friday, March 25, AM

#### crystal structure

Chair: HISAKI, Ichiro (9 : 40 ~10 : 20)

- \* 9:30-9:40: interval for laptop PC connection.(2E7-05, 2E7-06, 2E7-07)
- 2E7-05** The structural phase transition of a bisazomethine dye having diethylamino groups (Sch. Eng., Yokohama Natl. Univ.) ○MINAMI, Takaya; MATSUMOTO, Shinya
- 2E7-06** Crystalstructural analysis of dehydration process of carbazochrome sodium sulfonate (Grad. Sch. Sci., Eng., Tokyo Tech) ○EGAMI, Akiko; SEKINE, Akiko; UEKUSA, Hidehiro
- 2E7-07\*** Structural phase transition into quintuple unit cell in di(butylcyclohexyl)methanol (Div. of Chem., Fac. Pure Appl. Sci., Univ. of Tsukuba) IKEDA, Takaaki; ARAI, Yuta; YAMAMURA, Yasuhisa; SAITOH, Hideki; HISHIDA, Mafumi; FUJITA, Takeshi; ICHIKAWA, Junji; ○SAITO, Kazuya
- Chair: TOHNAI, Norimitsu (10 : 30~11 : 20)
- \* 10:20-10:30: interval for laptop PC connection.(2E7-10, 2E7-11, 2E7-13)
- 2E7-10** Co-crystal design of water-insoluble  $\Delta^4$ -androstenedione and the crystal structure (Grad. Sch. Sci., Eng., Tokyo Tech) ○HASHIMOTO, Risa; SEKINE, Akiko; UEKUSA, Hidehiro
- 2E7-11\*\*** Unique crystal structures of synthetic glycolipids revealed by grazing incident wide angle X-ray diffraction analysis (Sch. Sci. Tech., Kwasei Gakuin Univ.) ○OGAWA, Shigesaburo; TAKAHASHI, Isao
- 2E7-13\*\*** The molecular geometries and the arrangements of the molecules in the crystals of *N,N'*-dialkylated and *N,N'*-dialkenylated diketopyrrolopyrrole derivatives (Grad. Sch. Fac. Env. and Info. Sci., Yokohama Natl. Univ.; Tokyo Printing Ink) ○JINDO, Takumi; OKADA, Naoya; TODA, Akehiro; IMAI, Kengo; SEKINE, Toshinari; MATSUMOTO, Shinya

#### Friday, March 25, PM

#### calculation, crystal growth

Chair: TSUE, Hirohito (13 : 40~14 : 20)

- \* 13:30-13:40: interval for laptop PC connection.(2E7-29, 2E7-31)
- 2E7-29\*** Polymorph control of organic crystals by laser trapping (Dep. Appl. Chem, National Chiao Tung Univ., Taiwan) ○SUGIYAMA, Teruki; YUYAMA, Ken-ichi; MASUHARA, Hiroshi
- 2E7-31\*** Magnitude and origin of attraction of chalcogen bond (AIST) ○TSUZUKI, Seiji; UCHIMARU, Tadafumi

#### chirality

Chair: IMAI, Yoshitane (14 : 30~15 : 30)

- \* 14:20-14:30: interval for laptop PC connection.(2E7-34, 2E7-35, 2E7-36, 2E7-37, 2E7-38, 2E7-39)
- 2E7-34** Absolute Asymmetric Synthesis of Amino Acid Derivatives Involving Reversible Conjugate Addition (Grad. Sch. Eng., Chiba Univ.; Dept. Eng. Edu. Center, Chiba Inst. of Tech.) ○KAJI, Yuki; KASASHIMA, Yoshio;

YOSHIDA, Yasushi; MINO, Takashi; SAKAMOTO, Masami

- 2E7-35** Chirality Control of Thiohydantoin Derivatives by Dynamic Crystallization (Grad. Sch. Eng., Chiba Univ.) ○UEMURA, Naohiro; YOSHIDA, Yasushi; MINO, Takashi; SAKAMOTO, Masami
- 2E7-36#** Enantiomeric Motion of Photomechanical Chiral Azobenzene Crystals (Center for Advanced Bio. Sci., Waseda Univ.) ○TANIGUCHI, Takuya; SHIRO, Motoo; KOSHIMA, Hideko; ASAH, Toru
- 2E7-37** Absolute Structures of Chiral Crystals Formed from Achiral Benzophenone Derivatives (Grad. Sch. Chem. Sci. Technol., Tokyo Univ. of Sci.) ○YOSHIOKA, Tokio; KINO, Yoshimi; TSUCHIYA, Sumeru; MATSUMOTO, Arimasa; SOAI, Kenso
- 2E7-38** Transition from Achiral to Chiral Phase of 4,4'-Dimethylbenzophenone Single Crystal (Grad. Sch. Chem. Sci. Technol., Tokyo Univ. of Sci.) ○KINO, Yoshimi; YOSHIOKA, Tokio; TSUCHIYA, Sumeru; MATSUMOTO, Arimasa; SOAI, Kenso
- 2E7-39** Organic synthesis of  $\alpha$ -oxoamides and the chiral crystal generation (KNCT) ○MIYAMOTO, Hisakazu

#### molecular recognition, assembly

Chair: UEKUSA, Hidehiro (15 : 40~16 : 40)

- \* 15:30-15:40: interval for laptop PC connection.(2E7-41, 2E7-42, 2E7-43, 2E7-44, 2E7-45)
- 2E7-41** Construction of Triangle-Shaped Porous Structure with Organic Salts composed of Divinylsulfonic Acid Derivatives and Triphenylmethylamine (Grad. Sch. Eng., Osaka Univ.) ○OKADA, Naoki; MIYANO, Tetsuya; HISAKI, Ichiro; MIYATA, Mikiji; TOHNAI, Norimitsu
- 2E7-42** Polymorphic layered assemblies of hydrogen-bonded hexagonal network composed of triphenylene derivative : Their structures and dynamic behaviors (Grad. Sch. Eng., Osaka Univ.; ISIR, Osaka Univ.) ○IKENAKA, Nobuaki; HISAKI, Ichiro; TOHNAI, Norimitsu; MIYATA, Mikiji
- 2E7-43** Crystal Structures and Inclusion Abilities of Robust Hydrogen-bonded Pillared-Layer Frameworks Constructed from  $\pi$ -Bridged Bis(malonamide)s (Grad. Sch. Chem. Sci. Technol., Tokyo Univ. of Sci.) ○SAIJO, Kei; SAITO, Hayato; ONO, Kosuke; TADOKORO, Makoto; KAWAI, Hidetoshi
- 2E7-44** Design for Inclusion Crystals based on Conformational Chirality Control in Binaphthalene-fused Malonamides (Grad. Sch. Chem. Sci. Technol., Tokyo Univ. of Sci.) ○SHIMIZU, Takahiro; FURUTA, Erika; ONO, Kosuke; FUKUSHIMA, Takanori; KAWAI, Hidetoshi
- 2E7-45\*** Electronic properties, crystal structure and solvent adsorption properties of anthraquinones with sulfoneamide groups (IMRAM, Tohoku Univ.; Grad. Sch. Med., Yamaguchi Univ.; RIES, Hokkaido Univ.) ○TAKEDA, Takashi; NORO, Shin-ichiro; KAWAMATA, Jun; NAKAMURA, Takayoshi; AKUTAGAWA, Tomoyuki

Chair: TOHNAI, Norimitsu (16 : 50~17 : 40)

- \* 16:40-16:50: interval for laptop PC connection.(2E7-48, 2E7-49, 2E7-50, 2E7-51)
- 2E7-48** Supra-molecular entities self-assembled from double calixarene possessing 16-carboxylates and multi-amine compounds (Grad. Sch. Eng., Kanagawa Univ.) ○ARAI, Hitoshi; NAGATSUKA, Takeo; JIN, Ren-hua
- 2E7-49** Solvent effect on crystallization process in 2,5-diamino-3,6-dicyanopyrazine dye having 4-chlorobenzyl group (Coll. Eng. Sci., Yokohama Natl. Univ.) ○ENDO, Natsuko; HIROSAWA, Risa; AKUNE, Yoko; MATSUMOTO, Shinya
- 2E7-50** Crystal Structure and Hydrogen Storage Behavior of Metalloporphyrins (Grad. Sch. Human and Environ. Stud., Kyoto Univ.; Fac. Integrated Human Studies, Kyoto Univ.; Sch. Eng., TUT; Grad. Sch. Nat. Sci. Technol., Okayama Univ.; NRI, AIST) ○OKETANI, Ryusei; YAMANAKA, Kazuaki; TAKAHASHI, Hiroki; KATAGIRI, Toshimasa; NORO, Yoshihiro; TSUZUKI, Seiji; TAMURA, Rui; TSUE, Hirohito
- 2E7-51\*** Three mechanisms of vapochromic organic crystals of quinolone antibacterial agents (Grad. Sch. Sci., Eng., Tokyo Tech) ○SAKON, Aya; SEKINE, Akiko; UEKUSA, Hidehiro

#### Saturday, March 26, PM

#### luminescence

Chair: KATAGIRI, Hiroshi (13 : 40~14 : 30)

- \* 13:30-13:40: interval for laptop PC connection.(3E7-29, 3E7-30, 3E7-32)
- 3E7-29** Optical properties of 2,5-diamino-3,6-dicyanopyrazine dyes having 2-halogenobenzyl substituents (Grad. Sch. Fac. Env. and Info. Sci., Yokohama Natl. Univ.) ○HIROSAWA, Risa; AKUNE, Yoko; MATSUMOTO, Shinya
- 3E7-30\*** Novel Fluorescence Domain "Excited Multimer" Formed upon Photoexcitation of Continuously-Stacked Organoboron Complex in Crystals (Grad. Sch. Eng., Osaka Pref. Univ.; The Research Inst. for Molecular Electronic Devices, Osaka Pref. Univ.) ○OHTA, Eisuke; SAKAI, Atsushi; YOSHIMOTO, Yuichi; TANAKA, Mirai; MATSUI, Yasunori; MIZUNO, Kazuhiko; IKEDA, Hiroshi
- 3E7-32\*\*** Structure of a cyanostilbene derivative and aggregation-induced emission enhancement (Fac. Sci., Kyushu Univ.; Chiba Inst. of Tech.) FUJIMOTO, Yuki; FURUKAWA, Kazuki; YAMAMOTO, Norifumi;

○SEKIYA, Hiroshi

## semiconductor, dielectric property

Chair: MATSUSHITA, Michio (14 : 40~15 : 10)

- \* 14:30-14:40: interval for laptop PC connection.(3E7-35, 3E7-36, 3E7-37)
- 3E7-35<sup>#</sup>** Dynamic structure and dielectric properties of supramolecular rotator cations with adamantyl group in the crystalline state (Grad. Sch. Env. Sci., Hokkaido Univ.; RIES, Hokkaido Univ.; IMRAM, Tohoku Univ.)  
○OHSHIMA, Yu; YAN, Yin-nan; KUBO, Kazuya; NORO, Shin-ichiro; AKUTAGAWA, Tomoyuki; NAKAMURA, Takayoshi
- 3E7-36** Synthesis, structure, and FET characteristics of asymmetric bent thienoacenes (Grad. Sch. Sci., Eng., Yamagata Univ.) ○OGAWA, Yuta; TAKIGUCHI, Erika; MAMADA, Masashi; TOKITO, Shizuo; KATAGIRI, Hiroshi
- 3E7-37<sup>#</sup>** The structural and physical properties of the cation radical salts of EDO-TTF-Cl with Ag(CN)<sub>2</sub> (LTM, Kyoto Univ.) ○ISHIKAWA, Manabu; NAKANO, Yoshiaki; URUICHI, Mikio; OTSUKA, Akihiro; YAMOCHI, Hideki

## magnetic property

Chair: OKADA, Keiji (15 : 20~16 : 00)

- \* 15:10-15:20: interval for laptop PC connection.(3E7-39, 3E7-40, 3E7-41)
- 3E7-39** Physicochemical Properties of Benzotriazinyl Radical Carrying Electron-Withdrawing Groups (Fac. Sci. Tech., Keio Univ.)  
○TSUCHIYA, Naoya; TAKAHASHI, Yusuke; MIURA, Youhei; YOSHIOKA, Naoki
- 3E7-40** Syntheses, structures and magnetic properties of stable radical derivatives having phenyl acetylene skeleton (Fac. Sci. Tech., Keio Univ.)  
○MIYASHIRO, Shogo; ISHII, Tomoaki; MIURA, Youhei; YOSHIOKA, Naoki
- 3E7-41\*** Magnetic Properties of All-Organic Radical Liquid Crystalline Gels: Relationship Between Positive Magneto-LC Effects and LC Domain Sizes (Grad. Sch. Human and Environ. Stud., Kyoto Univ.) ○TAKEMOTO, Yusa; UCHIDA, Yoshiaki; SHIMONO, Satoshi; KATO, Tatsuhisa; TAMURA, Rui

# Room F1

## Chishinkan3 Building 101

### Physical Organic Chemistry Structures and Properties

Thursday, March 24, AM

#### Quinone

Chair: IWANAGA, Tetsuo (9 : 00 ~ 10 : 10)

- \* 8:50-9:00: interval for laptop PC connection.(1F1-01, 1F1-02, 1F1-03, 1F1-04, 1F1-05, 1F1-06)
- 1F1-01** Structure, Properties, and Molecular Transformations of Cycloaddition Products of Benzopentalenequinone Derivative with Various Alkynes Bearing Aniline Moiety (1) (Grad. Sch. Sci. Tech., Gunma Univ.; IMCE, Kyushu Univ.) ○KIJIMA, Tomokazu; SHIOTA, Yoshihito; YOSHIZAWA, Kazunari; KATO, Shin-ichiro; NAKAMURA, Yosuke
- 1F1-02** Structures, Properties, and Molecular Transformations of Cycloaddition Products of Benzopentalenequinone Derivative with Various Alkynes Bearing Aniline Moiety (2) (Grad. Sch. Sci. Tech., Gunma Univ.)  
○KIJIMA, Tomokazu; SHIOTA, Yoshihito; YOSHIZAWA, Kazunari; KATO, Shin-ichiro; NAKAMURA, Yosuke
- 1F1-03** Syntheses and properties of halogenated 5,10-porphyrinquinones (Grad. Sch. Sci. Eng., TMU) ○YODA, Takuya; GOTO, Kenta; YAMASHITA, Ken-ichi; SUGIURA, Ken-ichi
- 1F1-04** Synthesis and Properties of Pyrene fused Quinoidal Porphyrin (Grad. Sch. Sci. Eng., TMU) ○SAKAMOTO, Shino; GOTO, Kenta; SUGIURA, Ken-ichi
- 1F1-05<sup>#</sup>** Synthesis and Properties of 3, 3', 5, 5'-tetrakis(pyrene-2-yl) diphenylquinone (Grad. Sch. Sci. Eng., TMU) ○HOSSAIN, Md. Awlad; GOTO, Kenta; SUGIURA, Ken-ichi
- 1F1-06** Synthesis and Physical Properties of 2,3-Dinaphthoquinones Having Bulky Substituents (Fac. Chem. Materials and Bioeng., Kansai Univ.)  
○NISHIMURA, Sota; OZEKI, Akifumi; UMEMA, Rui; NISHIYAMA, Yutaka

Chair: SUGIURA, Ken-ichi (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(1F1-08, 1F1-10, 1F1-11, 1F1-12, 1F1-13)
- 1F1-08<sup>#</sup>** Syntheses of orthoquinone containing aromatic compounds and their redox chromism (Grad. Sch. Sci. & Tech., Kumamoto Univ.; Grad. Sch. Sci. Eng., Yamaguchi Univ.; Grad. Sch. Pharm., Osaka Univ.) ○URAKAWA,

Kazuki; SUMIMOTO, Michinori; ARISAWA, Mitsuhiro; MATSUDA, Masaki; ISHIKAWA, Hayato

### Macrocyclic compound

- 1F1-10** Synthesis of Dinuclear NHC-Complexes bearing Catalytic Activity Sites inside of  $\pi$  conjugated cyclic structure (Grad. Sch. Eng., Kyoto Univ.)  
○INAMORI, Daiki; MIWA, Takuya; TERAU, Jun; FUJIHARA, Tetsuaki; TSUJI, Yasushi
- 1F1-11** Synthesis and Electrochemical Properties of Nitrogen-containing Macrocycles Incorporating Carbazole Units (Fac. of Sci., Okayama Univ. of Sci.) ○YAMAUCHI, Tomokazu; IWANAGA, Tetsuo; SUZUKI, Shuichi; OKADA, Keiji; TOYOTA, Shinji
- 1F1-12** Synthesis and Properties of Several Sizes of Cyclo-1,4-naphthylenes (Grad. Sch. Sci., Nagoya Univ.; WPI-ITbM, Nagoya Univ.; ERATO, JST)  
○OKADA, Keishu; YAGI, Akiko; SEGAWA, Yasutomo; ITAMI, Kenichiro
- 1F1-13** DFT Study on the Strain Energy of Carbon Nanobelts (Grad. Sch. Sci., Nagoya Univ.; WPI-ITbM, Nagoya Univ.; ERATO, JST) ○SEGAWA, Yasutomo; YAGI, Akiko; ITO, Hideto; ITAMI, Kenichiro

Chair: IMAHORI, Hiroshi (11 : 20~12 : 20)

\* 11:10-11:20: interval for laptop PC connection.(1F1-15)

- 1F1-15<sup>#</sup>** CSJ Award for Creative Works Exploratory Studies on Novel Functions through Design and Synthesis of Nanocarbon-Inspired Molecules (Grad. Sch. Sci., Tohoku Univ.) ○ISOBE, Hiroyuki

Thursday, March 24, PM

### Macrocyclic compound

Chair: SEGAWA, Yasutomo (13 : 40~14 : 30)

- \* 13:30-13:40: interval for laptop PC connection.(1F1-29, 1F1-30, 1F1-31, 1F1-32, 1F1-33)
- 1F1-29**  $\pi$ -Conjugated Planar Macrocyclic Trimer Composed of Anthracene-Acetylene-Pyridine-Acetylene Unit. (Fac. Sci., Shizuoka Univ.)  
○OHKUBO, Keisuke; TAKAKI, Yuta; KOBAYASHI, Kenji
- 1F1-30** Synthesis of Macrocyclic  $\pi$ -Conjugated Hexameric Anthracene Derivatives (Grad. Sch. Sci. Technol., Shizuoka Univ.) ○TAKAKI, Yuta; KOBAYASHI, Kenji
- 1F1-31** Complexation of [9]Cycloparaphenyleneacetylene Derivatives with Carbon Nanotubes (Grad. Sch. Eng., Kyoto Univ.) ○SAIKI, Kenzo; MIKI, Koji; BAEK, Jinseok; UMEYAMA, Tomokazu; NODA, Takeru; IMAHORI, Hiroshi; OHE, Kouichi
- 1F1-32** A macrocyclic hydrocarbon molecule for a high-capacity negative electrode in an all-solid-state lithium rechargeable battery (WPI-AIMR, Tohoku Univ.; Grad. Sch. Sci., Tohoku Univ.; ERATO, JST; IMR, Tohoku Univ.; RCPT, AIST) ○SATO, Sota; UNEMOTO, Atsushi; IKEDA, Takuji; ORIMO, Shin-ichi; ISOBE, Hiroyuki
- 1F1-33<sup>#</sup>** Synthesis and dynamic structures of a hybrid nano hoop molecule composed of anthanthreneylene and phenylene panels (WPI-AIMR, Tohoku Univ.; Grad. Sch. Sci., Tohoku Univ.; ERATO, JST) ○SARKAR, Parantap; SATO, Sota; KAMATA, Sho; MATSUNO, Taisuke; ISOBE, Hiroyuki

### Organic radical

Chair: OKADA, Keiji (14 : 40~15 : 40)

- \* 14:30-14:40: interval for laptop PC connection.(1F1-35, 1F1-36, 1F1-38, 1F1-39)
- 1F1-35** Contribution of diradical character in the dication state of macrocyclic oligothiophenes (Grad. Sch. Sci. Eng., TMU) SHIMIZU, Hideyuki; NISHINAGA, Tohru; ○IYODA, Masahiko
- 1F1-36\*** Dthienocycloheptatriene-Based NIR Dye: Synthesis and Its Transformation to a Stable Neutral Radical (Grad. Sch. Sci., Nagoya Univ.; WPI-ITbM, Nagoya Univ.) ○ASAI, Kengo; FUKAZAWA, Aiko; YAMAGUCHI, Shigehiro
- 1F1-38** Electronic Properties and Crystal Structure of a Air-stable Fused-polycyclic Neutral Radical with Dicyanomethylene Moieties (Fac. Eng., Aichi Inst. of Tech.; Center for Inst. Anal., Niigata Univ.) ○ANDO, Sayaka; NISHIDA, Shinsuke; FURUKAWA, Ko; MURATA, Tsuyoshi; MORITA, Yasushi
- 1F1-39\*** Synthesis and Properties of Trioxotriangulene Derivatives with Long Alkyl Chains (Fac. Eng., Aichi Inst. of Tech.) ○ENOZAWA, Hideo; MURATA, Tsuyoshi; MORITA, Yasushi

Chair: IYODA, Masahiko (15 : 50~16 : 50)

\* 15:40-15:50: interval for laptop PC connection.(1F1-42)

- 1F1-42<sup>#</sup>** CSJ Award for Creative Works Synthesis and Material Challenges of Open-Shell Organic  $\pi$ -Electronic Molecules and their Aggregates (Fac. Eng., Aichi Inst. of Tech.) ○MORITA, Yasushi

### Organic radical

Chair: MURATA, Tsuyoshi (17 : 00~17 : 30)

- \* 16:50-17:00: interval for laptop PC connection.(1F1-49, 1F1-50, 1F1-51)
- 1F1-49** Molecular and Electronic Structure of Radical Cations of Oligoacenes

(Grad. Sch. Eng., Kyoto Univ.) ○UEBE, Masashi; TAKAHASHI, Kazuki; KAWASHIMA, Kenji; ITO, Akihiro

- 1F1-50** Syntheses and Properties of Benzenobis[diphenylphosphine-Au(I)-(Nitronyl Nitroxide)-2-ide] Complexes (Grad. Sch. Sci., Osaka City Univ.) ○KIRA, Sayaka; SUZUKI, Shuichi; KOZAKI, Masatoshi; SHIOMI, Daisuke; SATO, Kazunobu; TAKUI, Takeji; OKADA, Keiji
- 1F1-51** Structures and Properties of Bis(trioxytriphenylamine)s: Neutral and Cationic Species (Grad. Sch. Sci., Osaka City Univ.) ○TANAKA, Nobuaki; SUZUKI, Shuichi; KOZAKI, Masatoshi; SHIOMI, Daisuke; SATO, Kazunobu; TAKUI, Takeji; OKADA, Keiji

Friday, March 25, AM

### Molecular structure and stereochemistry

Chair: TSUDA, Akihiko (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(2F1-01, 2F1-02, 2F1-03, 2F1-04, 2F1-05, 2F1-06)
- 2F1-01** Construction of Molecular Clamps based on L-shaped Pyrro[1,2-a][1,8]naphthyridine (Grad. Sch. Chem. Sci. Technol., Tokyo Univ. of Sci.) ○TATENO, Kotaro; OTANI, Takashi; ONO, Kosuke; SAITO, Takao; KAWAI, Hidetoshi
- 2F1-02** Synthesis and Dynamic Behavior of Gear-shaped Molecules with 4-Hydrindacenyl Rotors (Grad. Sch. Chem. Sci. Technol., Tokyo Univ. of Sci.) ○HANYU, Shingo; TAKAHASHI, Naohiro; ONO, Kosuke; KAWAI, Hidetoshi
- 2F1-03** Effects of Counter Anion and Substituent to a Cation- $\pi$  Interaction Using Molecular Balances (Department of Chemistry, Ochanomizu University) ○YAMAMOTO, Natsuo; YAMADA, Shinji
- 2F1-04<sup>#</sup>** Configurational analysis of polyhalogenated lipids by crystalline sponge method (Fac. Eng., The Univ. of Tokyo) ○XING, Hongzhu; HOSHINO, Manabu; FISCHER, Stefan; CARREIRA, Erick M; FUJITA, Makoto
- 2F1-05<sup>#</sup>** The syn-Addition Mechanism of the Metal-Free Diboration supported by the Crystalline Sponge Method (Grad. Sch. Eng., The Univ. of Tokyo; ACCEL, JST) CUENCA, Ana; ○DUPLAN, Vincent; ZIGON, Nicolas; HOSHINO, Manabu; FUJITA, Makoto; FERNÁNDEZ, Elena
- 2F1-06** Conformational properties of fused and heterocyclic aromatic squaramides (Grad. Sch. Of Humanities and Sci., Ochanomizu Univ.; IMCB, The Univ. of Tokyo; CAI, Chiba Univ.; IBB, Tokyo Med. and Dental Univ.) ○NAGAI, Aki; KANDA, Midori; FUJII, Shinya; MASU, Hyuma; KAGECHIKA, Hiroyuki; TANATANI, Aya

Chair: NAKANO, Koji (10 : 10 ~ 11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(2F1-08, 2F1-09, 2F1-10, 2F1-11, 2F1-12, 2F1-13)
- 2F1-08** Chirality generation based on molecular assemblies of Phenylacetylene Macrocycle(PAM) (Fac. Sci., Hokkaido Univ.) KATOONO, Ryo; ○KUSAKA, Keiichi; SUZUKI, Takanori
- 2F1-09** Synthesis and structure of *N*-hetero-ortho-phenylenes with 2-hydroxyl phenyl group (Grad. Sch. Sci. Eng., Chuo Univ.) ○OHTSUKA, Nobuhiko; KUSAKABE, Akinori; TOKORO, Yuichiro; FUKUZAWA, Shin-ichi
- 2F1-10** Study of N-H Mobile Protons in Guanidine-based Protic Ionic Liquids Aiming for Improvement of Electrical Conductivity in Anhydrous Condition (Grad. Sch. Eng., Yokohama Natl. Univ.) ○AKIBA, Yuka; KOU, Bun; KUROHA, Michiaki; GOTOH, Hiroaki; SAKAKIBARA, Kazuhisa
- 2F1-11** Synthesis of Helical Aromatic Amide Oligomer with Extended Cavity (Grad. Sch. Of Humanities and Sci., Ochanomizu Univ.) ○URUSHIBARA, Ko; MASU, Hyuma; MORI, Hiroto; AZUMAYA, Isao; TANATANI, Aya
- 2F1-12** Ion-Pairing Assemblies of  $\pi$ -Electronic Anions Stabilized by Intramolecular Hydrogen Bonding (Coll. Pharm. Sci., Ritsumeikan Univ.) MAEDA, Hiromitsu; ○TAKEDA, Yuka
- 2F1-13** Expansion of C-O bond length by "Scissor effects" in 2H-naphtho [1,8-bc]furan derivatives (Fac. Sci., Hokkaido Univ.) ○UCHIMURA, Yasuto; KATOONO, Ryo; SUZUKI, Takanori

Chair: KAWAI, Hidetoshi (11 : 20 ~ 12 : 20)

- \* 11:10-11:20: interval for laptop PC connection.(2F1-15, 2F1-16, 2F1-17, 2F1-19)
- 2F1-15** Determination of the absolute configuration of helical structure in helicene derivatives by using Raman optical activity (ROA) spectroscopy (Coll. Sci. Eng., Aoyama Gakuin Univ.; Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○ITAMI, Serena; OKAJIMA, Hajime; KUBOTA, Sae; NAKANO, Koji; SAKAMOTO, Akira
- 2F1-16** Photochemical Control over Conformational Dynamics of Antiaromatic Annulenes (Grad. Sch. Eng., The Univ. of Tokyo) ○UEDA, Michihisa; ITOH, Yoshimitsu; AIDA, Takuzo
- 2F1-17<sup>#</sup>** A Thermodynamically Stable Porous Molecular Crystal Featuring Weak Intermolecular Interactions (Grad. Sch. Eng., The Univ. of Tokyo) ○YAMAGISHI, Hiroshi; AIDA, Takuzo
- 2F1-19<sup>#</sup>** Dynamic and Static Behavior of the E-E' Bonds (E, E' = S and Se) in Glutathione Dichalcogenides, Elucidated by QTAIM Dual Functional Analysis (Fac. Sys. Eng., Wakayama Univ.) ○TSUBOMOTO, Yutaka; HAYASHI, Satoko; NAKANISHI, Waro

Friday, March 25, PM

### Heterocyclic compounds

Chair: YORIMITSU, Hideki (13 : 30 ~ 14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(2F1-28, 2F1-29, 2F1-30, 2F1-31, 2F1-32)
- 2F1-28<sup>#</sup>** Synthesis and Optical Properties of Aminopentaazaphenylene Derivatives (Grad. Sch. Eng., Kyoto Univ.) ○WATANABE, Hiroyuki; HIROSE, Masataka; TANAKA, Kazuo; CHUJO, Yoshiki
- 2F1-29** Synthesis of Aza[8]circulenes through Nucleophilic Aromatic Substitution Reaction (Grad. Sch. Eng., Nagoya Univ.) ○NAGATA, Yuya; KATO, Shohei; MIYAKE, Yoshihiro; SHINOKUBO, Hiroshi
- 2F1-30** Synthesis of Tetrathia[8]circulenes with Diverse Substituents and Their Properties in Solid State (Grad. Sch. Eng., Nagoya Univ.; Grad. Sch. Eng., Kyoto Univ.) ○KATO, Shohei; SERIZAWA, Yuma; SAKAMAKI, Daisuke; SEKI, Shu; MIYAKE, Yoshihiro; SHINOKUBO, Hiroshi
- 2F1-31** Synthesis of Tetrabenzofuranoethene (TBFE) Using McMurry Coupling Reaction Mediated by Hafnium and Its Aggregation-Induced Emission (Grad. Sch. Sci., The Univ. of Tokyo) ○HAMADA, Hiroyoshi; TSUJI, Hayato; MAKAMURA, Eiichi
- 2F1-32<sup>\*</sup>** Synthesis of Rigid Slit-butterfly Cyclobisazaanthracene and Flexible Hydrazinobisanthene (CIMO<sub>S</sub>, IMS) ○YAMAMOTO, Koji; HIGASHIBAYASHI, Shuhei

Chair: MIYAKE, Yoshihiro (14 : 40 ~ 15 : 40)

- \* 14:30-14:40: interval for laptop PC connection.(2F1-35, 2F1-36, 2F1-37, 2F1-38, 2F1-39)
- 2F1-35** Synthesis of Hybrid [5]Radialenes with Bispyrroloheteroles (Grad. Sch. Eng., Kyoto Univ.) ○HIGASHINO, Tomohiro; IMAHORI, Hiroshi
- 2F1-36** Photophysical and Electrochemical Properties of Bithiophene-linked Diketopyrrolopyrrole Oligomers (Grad. Sch. Mat. Sci., NAIST) ○ASADA, Toru; ARATANI, Naoki; YAMADA, Hiroko
- 2F1-37** Synthesis and Properties of Pyrrolopyrrole Aza-Dipyrin Metal Complexes (Grad. Sch. Eng., Kyushu Univ.) ○KARASAKI, Hideaki; FURUTA, Hiroyuki; SHIMIZU, Soji
- 2F1-38** Synthesis and properties of 1,5-diazafulvalene derivatives (Fac. Sci., Ehime Univ.) ○MATSUZAKI, Yuya; SHIDA, Yoichi; TAKASE, Masayoshi; MORI, Shigeki; UNO, Hidemitsu; OKUJIMA, Tetsuo
- 2F1-39<sup>\*</sup>** Synthesis and Properties of Tetrazolopyridine-fused  $\pi$ -Conjugated Compounds (ISIR, Osaka Univ.) ○TAMBA, Shunsuke; HAGIYA, Kazutaka; IE, Yutaka; ASO, Yoshio

Chair: ARATANI, Naoki (15 : 50 ~ 16 : 50)

- \* 15:40-15:50: interval for laptop PC connection.(2F1-42, 2F1-43, 2F1-44, 2F1-45, 2F1-46, 2F1-47)
- 2F1-42** Synthesis and Properties of Pyridine-Fused Benzothiadiazole Derivatives (ICR, Kyoto Univ.; PRESTO, JST) ○OKAZAKI, Shuhei; ARAMAKI, Yoshitaka; WAKAMIYA, Atsushi; MURATA, Yasujiro
- 2F1-43** D-A-D Type Organic Dyes using BF<sub>2</sub>-bridged Dipyrrolylethanedione as an Electron-Accepting Unit (ICR, Kyoto Univ.; PRESTO, JST) ○SHIMOGAWA, Hiroyuki; WAKAMIYA, Atsushi; MURATA, Yasujiro
- 2F1-44<sup>#</sup>** Synthesis and Properties of Dinaphtho-Fused Tetracene Derivatives (ICR, Kyoto Univ.) ○CHAO, Lumen; MURATA, Michihisa; WAKAMIYA, Atsushi; MURATA, Yasujiro
- 2F1-45** Synthesis and spectroscopic properties of dihydrophenazasilene-based derivatives carrying ester group (Fac. Sci. Tech., Keio Univ.) ○HOSODA, Takumi; SUZUKI, Ryota; MIURA, Youhei; YOSHIOKA, Naoki
- 2F1-46** Synthesis of benzimidazole oligomer with a polarization alignment (Chem. Res. Lab., Tokyo Tech) ○AMEMIYA, Fumihito; IMAOKA, Takane; YAMAMOTO, Kimihisa
- 2F1-47** Development of a dendritic donor-acceptor structure with potential gradient (Chem. Res. Lab., Tokyo Tech) ○HIGA, Takuya; ALBRECHT, Ken; YAMAMOTO, Kimihisa

### Cycloparaphenylene

Chair: SATO, Sota (17 : 00 ~ 18 : 00)

- \* 16:50-17:00: interval for laptop PC connection.(2F1-49, 2F1-50, 2F1-51, 2F1-52, 2F1-53)
- 2F1-49** Gram Scale Synthesis of [6]Cycloparaphenylene (ICR, Kyoto Univ.) ○KAYAHARA, Eiichi; PATEL, Vijay Kumar; YAMAGO, Shigeru
- 2F1-50** Synthesis of Cycloparaphenylene Derivatives Using Cyclic Platinum Complex and Reductive Aromatization (ICR, Kyoto Univ.) ○ONISHI, Hiroaki; SUN, Rensei; KAYAHARA, Eiichi; YAMAGO, Shigeru
- 2F1-51** Bromine Addition Reaction of Cycloparaphenylene (ICR, Kyoto Univ.) ○QU, Rui; KAYAHARA, Eiichi; YAMAGO, Shigeru
- 2F1-52** Synthesis and Chiroptical Properties of Dimeric Terthiophene Embedded into the Chiral [2.2]Paracyclophanes Macrocycle (Grad. Sch. Sci., Kitasato Univ.) ○KOBAYAKAWA, Kosuke; HASEGAWA, Masashi; MAZAKI, Yasuhiro
- 2F1-53<sup>#</sup>** Synthesis and Properties of Phenylethene Derivatives with a Planar Chiral Tetrasubstituted [2.2]Paracyclophane Framework (Grad. Sch. Eng., Kyoto Univ.) ○GON, Masayuki; MORISAKI, Yasuhiro; CHUJO, Yoshiki

Chair: KAYAHARA, Eiichi (18 : 10~18 : 40)

- \* 18:00-18:10: interval for laptop PC connection.(2F1-56, 2F1-57, 2F1-58)  
**2F1-56** Synthesis and structures of macrocyclic 2,7-anthrylene oligomers (Fac. of Sci., Okayama Univ. of Sci.) ○YAMAMOTO, Yuta; WAKAMATU, Kan; IWANAGA, Tetsuo; TOYOTA, Shinji  
**2F1-57** Synthesis and Properties of Dibenzo[*a,j*]phenazine-based D-A-D-A Type  $\pi$ -Conjugated Macrocycles (Grad. Sch. Eng., Osaka Univ.) ○IZUMI, Saika; TAKEDA, Youhei; MINAKATA, Satoshi  
**2F1-58\*** Belt-shaped Cyclonaphthylenes (WPI-AIMR, Tohoku Univ.; ERATO, JST; Grad. Sch. Sci., Tohoku Univ.) ○SUN, Zhe; SARKAR, Parantap; SUENAGA, Takuya; SATO, Sota; ISOBE, Hiroyuki

## Saturday, March 26, AM

### Borane

Chair: HATAKEYAMA, Takuji (9 : 00 ~10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(3F1-01, 3F1-02, 3F1-03, 3F1-04, 3F1-05, 3F1-06)  
**3F1-01** Group 13 Element Complexes of an N<sub>2</sub>O<sub>2</sub>-Type Dipyrrin Cyclic Dimer (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba; TIMS, Univ. of Tsukuba) ○SAIKAWA, Makoto; NAKAMURA, Takashi; YAMAMURA, Masaki; NABESHIMA, Tatsuya  
**3F1-02** Formation of Non-Complexing Planar Anions Based on Dipyrrolyl-diketone Boron Complexes (Coll. Pharm. Sci., Ritsumeikan Univ.) ○SASANO, Yoshifumi; MAEDA, Hiromitsu  
**3F1-03** Synthesis of Anion-Responsive Propanedione Derivatives with Two Kinds of Aryl Moieties (Coll. Pharm. Sci., Ritsumeikan Univ.) ○FUJIWARA, Masaya; MAEDA, Hiromitsu  
**3F1-04\*** Benzodipyrrole-Based Donor-Acceptor Type Boron Complexes for Near-Infrared Absorption and the Control of their Electronic Structures (Grad. Sch. Sci., The Univ. of Tokyo) ○NAKAMURA, Tomoya; FURUKAWA, Shunsuke; NAKAMURA, Eiichi  
**3F1-05\*** Synthesis and properties of two-boron-deficient carborane fused with benzothiophene (Grad. Sch. Eng., Kyoto Univ.) ○HASHIMOTO, Kazushi; NISHINO, Kenta; TANAKA, Kazuo; CHUJO, Yoshiki  
**3F1-06** Modulation of the Lewis Acidity of Triarylboranes in the Excited State (Grad. Sch. Sci., Nagoya Univ.; WPI-ITbM, Nagoya Univ.) ○MATSUO, Kyohei; SAITO, Shohei; YAMAGUCHI, Shigehiro

Chair: OSUKA, Atsuhiko (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(3F1-08)  
**3F1-08 CSJ Award for Creative Works** Photo- and Electro-Functional  $\pi$ -Electron Systems Based on Utilization of Main Group Elements and Structural Constraint (WPI-ITbM, Nagoya Univ.) ○YAMAGUCHI, Shigehiro

## Saturday, March 26, PM

### Borane

Chair: ONO, Katsuhiko (14 : 40~15 : 40)

- \* 14:30-14:40: interval for laptop PC connection.(3F1-35, 3F1-36, 3F1-37, 3F1-39)  
**3F1-35** Synthesis and Physical Properties of BN-embedded Hexabenzocoronenes by Electrophilic C-H Borylation (Sch. Sci. Tech., Kwasei Gakuin Univ.) ○NAKAJIMA, Kiichi; HATAKEYAMA, Takuji  
**3F1-36** Development of Electrophilic C-H Borylation of Diazapentacene Derivatives (Sch. Sci. Tech., Kwasei Gakuin Univ.) ○MATSUI, Kohei; NAKAJIMA, Kiichi; NAKATSUKA, Soichiro; TAKEDA, Naoki; HATAKEYAMA, Takuji  
**3F1-37\*** Synthesis and Characterization of Diphenylborane-fused Porphyrins (Dep. Chem., Sch. Sci., Kyoto Univ.) ○FUJIMOTO, Keisuke; YORIMITSU, Hideki; OSUKA, Atsuhiko  
**3F1-39\*** Structures and Optical Properties of Dicarboranyl-Arenes (Grad. Sch. Eng., Kyoto Univ.) ○NISHINO, Kenta; TANAKA, Kazuo; CHUJO, Yoshiki

Chair: WAKAMIYA, Atsushi (15 : 50~16 : 50)

- \* 15:40-15:50: interval for laptop PC connection.(3F1-42, 3F1-43, 3F1-44, 3F1-45, 3F1-46, 3F1-47)  
**3F1-42** Synthesis and Physical Properties of BN-embedded Triangulene (Sch. Sci. Tech., Kwasei Gakuin Univ.) ○KINOSHITA, Keisuke; NAKATSUKA, Soichiro; NAKAJIMA, Kiichi; HATAKEYAMA, Takuji  
**3F1-43** Synthesis of Phenoxaphosphine Analogs as Materials for Organic Electroluminescence (Sch. Sci. Tech., Kwasei Gakuin Univ.; JNC Petrochemical Corporation) ○NAKATSUKA, Soichiro; NOMURA, Shintaro; KAGEYAMA, Akiko; IKUTA, Toshiaki; HATAKEYAMA, Takuji  
**3F1-44** Synthesis and Optical Properties of Aggregation-Induced-Emissive Pyrene Derivatives (Sch. Eng., Kyoto Univ.) ○YAMAMOTO, Hideki; NISHINO, Kenta; TANAKA, Kazuo; CHUJO, Yoshiki  
**3F1-45\*** Synthesis and Optical Properties of Boron Diiminates (Grad. Sch. Eng., Kyoto Univ.) ○YAMAGUCHI, Madoka; ITO, Shunichiro; HIROISE, Amane; TANAKA, Kazuo; CHUJO, Yoshiki  
**3F1-46** Influence of Extended  $\pi$ -Conjugations on Properties of Organoboron

Compounds (Grad. Sch. Eng., Nagoya Inst. of Tech.) ○SUZUKI, Keiji; ONO, Katsuhiko

- 3F1-47** Curcumin Boron Complexes Showing Chromism and Sensitizer Properties (Grad. Sch. Eng., Nagoya Inst. of Tech.) ○TSUCHIKAWA, Masahiro; TAKAO, Aya; ONO, Katsuhiko

### Synthesis and properties

Chair: TANAKA, Kazuo (17 : 00~17 : 40)

- \* 16:50-17:00: interval for laptop PC connection.(3F1-49, 3F1-51)  
**3F1-49\*** Characterization of anionic species generated by alkali metal reduction of a tetracyclopenta[*def,jkl,pqr,vwx*]tetraphenylene derivative (Grad. Sch. Eng. Sci., Osaka Univ.) ○MIYOSHI, Hirokazu; KUBO, Takashi; TOBE, Yoshito  
**3F1-51\*** Synthesis and Properties of the  $\pi$ -conjugated Compounds Containing 1,2-dimethylenecyclobutane Units by Cyclodimerization of Allene Derivatives (Interdisciplinary Grad. Sch. Sci. and Eng., Tokyo Tech) ○EGUCHI, Hiroshi; NISHIYAMA, Hiroki; INAGI, Shinsuke; TOMITA, Ikuyoshi

## Sunday, March 27, AM

### Thiophenes and redox behaviors

Chair: MAEDA, Chihiro (9 : 00 ~10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(4F1-01, 4F1-02, 4F1-03, 4F1-04, 4F1-05, 4F1-06)  
**4F1-01** Synthesis and properties of thienoquinoid and bisquinoid derivative with a 3,3-bithienyl unit (Sch. Eng., Univ. of Hyogo) ○TABATA, Tatsuya; NISHIDA, Jun-ichi; KAWASE, Takeshi  
**4F1-02** Synthesis and Properties of Carbon-bridged 1,1'-Binaphtho[2,1-*b*]thiophenes (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○UEMATSU, Keisuke; NAKANO, Kouji  
**4F1-03** Synthesis and Solid-state Structures of Thiacyclononene-capped Oligothiophenes (Grad. Sch. Sci., Nagoya Univ.; WPI-ITbM, Nagoya Univ.) ○TODA, Yusuke; FUKAZAWA, Aiko; SEKIOKA, Anna; YAMAGUCHI, Shigehiro  
**4F1-04** Relationship between effective conjugation length and single-molecule electrical conductance in insulated long oligothiophenes (ISIR, Osaka Univ.; Grad. Sch. Eng. Sci., Osaka Univ.) ○OKAMOTO, Yuji; IE, Yutaka; YAMADA, Ryo; TADA, Hirokazu; ASO, Yoshio  
**4F1-05** Synthesis and Semiconducting Properties of Thienoacenes Containing a Benzo[2,1-*b*:3,4-*b'*]dithiophene Skeleton (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○TRUONG, Minh Anh; NAKANO, Kouji  
**4F1-06** Synthesis of a Ferrocene-bridged Macrocycle and Its Redox Potential (Grad. Sch. Urban Environmental Sci., TMU) ○TAKASHIMA, Hideaki; INAGAKI, Yusuke; SETAKA, Wataru

Chair: NAKANO, Kouji (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(4F1-08, 4F1-09, 4F1-10, 4F1-11, 4F1-12, 4F1-13)  
**4F1-08** Synthesis and gelling ability of thiocalix[n]thiophene having long alkyl chains (Grad. Sch. Sci., Kitasato Univ.) ○HONDA, Yoshiki; INOUE, Ryota; HASEGAWA, Masashi; MAZAKI, Yasuhiro

### Nonplanar conjugated compounds

- 4F1-09** Tetrabenzoheptalene: Effect of Fused Aromatic Rings on the Aromaticity (Grad. Sch. Sci., Nagoya Univ.) ○OSHIMA, Hiroya; FUKAZAWA, Aiko; YAMAGUCHI, Shigehiro  
**4F1-10** Synthesis and Photoluminescence Properties of [5]Carbohelicene Derivatives Substituted by a Maleimide Unit (Grad. Sch. Sci. Tech., Keio Univ.; IMRAM, Tohoku Univ.; Sch. Advanced Sci. Eng., Waseda Univ.) ○KUBOTA, Takako; SAKAI, Hayato; ARAKI, Yasuyuki; WADA, Takehiko; SAKANOUÉ, Tomo; TAKENOBU, Taishi; HASOBE, Taku  
**4F1-11** Synthesis of Cyclotetramer via Condensation Reaction of Fluorene-carboxaldehyde (Grad. Sch. Eng., Osaka Univ.) ○AMAYA, Toru; ○TANAKA, Takahiro  
**4F1-12** Synthesis of Novel Double Helicenes by Suzuki-Miyaura Cross-Coupling Reaction and Their Physical Properties (Grad. Sch. Sci., Osaka Pref. Univ.) ○KASHIHARA, Hitoshi; ASADA, Toshio; KAMIKAWA, Ken  
**4F1-13** Synthesis of Helical Oligopyrrole (Grad. Sch. Eng., Kyoto Univ.; ACT-C, JST) ○HIRAO, Naoya; TOMIFUJI, Rei; IWAMOTO, Takahiro; KURAHASHI, Takuya; MATUSBARA, Seiji

Chair: KAMIKAWA, Ken (11 : 20~12 : 20)

- \* 11:10-11:20: interval for laptop PC connection.(4F1-15, 4F1-16, 4F1-18, 4F1-19)  
**4F1-15** Synthesis and Properties of Corannulene-Based  $\pi$ -Systems Containing Heptagons (Grad. Sch. Sci., Nagoya Univ.; WPI-ITbM, Nagoya Univ.; ERATO, JST; Boston College) ○KATO, Kenta; SEGAWA, Yasutomo; SCOTT, Lawrence T.; ITAMI, Kenichiro  
**4F1-16\*** Collective Synthesis and Properties of  $\pi$ -Extended Multi-Helicenes (Grad. Sch. Sci., Nagoya Univ.; WPI-ITbM, Nagoya Univ.; ERATO, JST) ○FUJIKAWA, Takao; SEGAWA, Yasutomo; ITAMI, Kenichiro  
**4F1-18** Synthesis of chiral emissive figure-of-eight molecules based on

azahelicene (Grad. Sch. Eng., Nagoya Univ.) OUSHIYAMA, Ayako; YUASA, Junpei; KAWAI, Tsuyoshi; HIROTO, Satoru; SHINOKUBO, Hiroshi

**4F1-19**\* Synthesis and substituent effect of  $\pi$ -extended helicenes based on tetracenes (Grad. Sch. Eng., Nagoya Univ.) OHIROTO, Satoru; MATSUNO, Takashi; SHINOKUBO, Hiroshi

### Sunday, March 27, PM

#### BODIPY

Chair: AMAYA, Toru (13 : 30~14 : 30)

\* 13:20-13:30: interval for laptop PC connection.(4F1-28, 4F1-29, 4F1-30, 4F1-31, 4F1-32, 4F1-33)

**4F1-28** Synthesis and characterization of NIR absorbing tetra(thiophene)-derived dibenzo-BODIPY. (Urban Environmental Sci., TMU; Nippon Kayaku Co. Ltd.) OTOBINAGA, Shun; KUBO, Yuji; KANEKO, Masayoshi; SHIGAKI, Koichiro

**4F1-29** Synthesis and characterization of selenophene-containing dibenzo-BODIPY (Grad. Sch. Urban Environmental Sci., TMU) OYAMAZAWA, Sho; NAKASHIMA, Mika; KUBO, Yuji

**4F1-30** Synthesis of Carbazole-Containing BODIPYs (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) MAEDA, Chihiro; OUEDA, Tomomi; TODAKA, Takumi; TAKAISHI, Kazuto; EMA, Tadashi

**4F1-31** Synthesis and Solid-State Fluorescence of Carbazole-Containing BODIPYs (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) MAEDA, Chihiro; OTODAKA, Takumi; UEDA, Tomomi; TAKAISHI, Kazuto; EMA, Tadashi

**4F1-32** Synthesis and Property of N-Confused Porphyrin-aza-BODIPY Conjugate (Grad. Sch. Eng., Kyushu Univ.) OFUKUDA, Masaya; FURUTA, Hiroyuki

**4F1-33** Synthesis of Heterocycles-Substituted Aza-BODIPY (Sch. Eng., Kyoto Univ.) OHTANI, Shunsuke; YAMANE, Honami; TANAKA, Kazuo; CHUJO, Yoshiki

#### Synthesis

Chair: TAKAISHI, Kazuto (14 : 40~15 : 40)

\* 14:30-14:40: interval for laptop PC connection.(4F1-35, 4F1-36, 4F1-37, 4F1-38, 4F1-39, 4F1-40)

**4F1-35** Synthesis and Redox Properties of Novel  $\pi$ -Conjugated System Having several Dicyanofulvene frameworks (Grad. Sch. Sci., Kitasato Univ.) OENDO, Yasutaka; HASEGAWA, Masashi; MAZAKI, Yasuhiro

**4F1-36** Synthesis and Properties of Dehydrodibenzo[16]- and [20]annulenes Possessing Triyne and Tetrayne Linkages (Sch. Sci. Tech., Gunma Univ.) OKUMAGAI, Ryo; KATO, Shin-ichiro; NAKAMURA, Yosuke

**4F1-37** Syntheses and physicochemical properties of 9,9'-bifluorenylidene derivatives bearing twisted carbon-carbon double bond (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba; Org. Mat. Group, NIMS) OSUZUKI, Toshikane; TAKAI, Atsuro; FREAS, Dylan; TAKEUCHI, Masayuki

**4F1-38** Kinetic resolution of macrocyclic bisimidazole derivatives of winding-vine-shaped molecular asymmetry (Grad. Sch. Eng., Kobe Univ.) OMARUHASHI, Kazuki; OKAYAMA, Yoichi; INOUE, Ryo; JIN, Goanhong; OKANO, Kentaro; MORI, Atsunori

**4F1-39** Kinetic resolution of macrocyclic bithiophene derivatives of winding-vine-shaped molecular asymmetry (Grad. Sch. Eng., Kobe Univ.) OASHIDA, Shiomi; OKAYAMA, Yoichi; TOYOMORI, Yuka; OKANO, Kentaro; MORI, Atsunori

**4F1-40** Synthesis of phosphonated polyanilines (Grad. Sch. Eng., Osaka Univ.) AMAYA, Toru; OKURATA, Izumi; HIRAO, Toshikazu

## Room F2

Chishinkan3 Building 102

### Physical Organic Chemistry Structures and Properties

#### Thursday, March 24, AM

##### Fullerene

Chair: SAITO, Masaichi (9 : 00 ~10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(1F2-01, 1F2-02, 1F2-04, 1F2-06)

**1F2-01** Synthesis of hexabromosumanene and hexaarylsumanene derivatives (Grad. Sch. Eng., Osaka Univ.) OTODA, Hideaki; SHOJI, Yoshiaki; ISHIWARI, Fumitaka; YAKIYAMA, Yumi; FUKUSHIMA, Takanori; SAKURAI, Hidehiro

**1F2-02**\* Synthesis and assembling behavior of hexasubstituted sumanenes (Chem. Res. Lab., Tokyo Tech) SHOJI, Yoshiaki; OISHIWARI, Fumitaka; SAKURAI, Hidehiro; FUKUSHIMA, Takanori

**1F2-04**\* Synthesis and property of hydrazinobuckybowl (CIMoS, IMS; KEK) OHIGASHIBAYASHI, Shuhei; PANDIT, Palash; HARUKI, Rie; KUMAI, Reiji; ADACHI, Shin-ichi

**1F2-06** Regioselective Addition of Grignard Reagents with Azafullerenoids (Grad. Sch. Eng., Osaka Univ.) OIKUMA, Naohiko; NAKAGAWA, Koji; KOKUBO, Ken; OSHIMA, Takumi

Chair: MURATA, Michihisa (10 : 10~11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(1F2-08, 1F2-09, 1F2-10, 1F2-11, 1F2-12, 1F2-13)

**1F2-08** Synthesis of Heteronuclear Heterasumanenes by Stepwise Lithiation of Triphenylene and Their Properties (Grad. Sch. Sci., Eng., Saitama Univ.) OHAYASHI, Keisuke; FURUKAWA, Shunsuke; SAITO, Masaichi

**1F2-09** Synthesis of Triphosphasumanene Trisulfides and Their Two-Faced  $\pi$ -Surface (Grad. Sch. Sci., Eng., Saitama Univ.; Coll. of Liberal Arts, ICU; Grad. Sch. Sci., The Univ. of Tokyo; MCES, Tokyo Tech; Grad. Sch. Sci., Eng., Tokyo Tech) OSUDA, Yuki; FURUKAWA, Shunsuke; KOBAYASHI, Junji; KAWASHIMA, Takayuki; TADA, Tomofumi; FUJII, Shintaro; KIGUCHI, Manabu; SAITO, Masaichi

**1F2-10** Generation of a Tristanna(II)sumanene Hexaaion (Grad. Sch. Sci., Eng., Saitama Univ.) OCHIBA, Hironobu; FURUKAWA, Shunsuke; SAITO, Masaichi

**1F2-11** Synthesis and properties of various triazoliumfullerene cation (Grad. Sch. Eng., Osaka Univ.) OKADA, Toshihiko; INA, Saori; IKUMA, Naohiko; SAKURAI, Hidehiro

**1F2-12** Synthesis of buckyball C<sub>28</sub>H<sub>14</sub> having the partial structure of C<sub>70</sub> through the ring expansion reaction from sumanene (Grad. Sch. Eng., Osaka Univ.) OHISHIKAWA, Shota; OKABE, Yuki; YAKIYAMA, Yumi; HIGASHIBAYASHI, Shuhei; SAKURAI, Hidehiro

**1F2-13** Generation and Properties of Sumanenylcarbene (Grad. Sch. Eng., Osaka Univ.) TAKASHINA, Naoto; ABE, Manabu; HIGASHIBAYASHI, Shuhei; YAKIYAMA, Yumi; SAKURAI, Hidehiro

Chair: HIROTO, Satoru (11 : 20~12 : 20)

\* 11:10-11:20: interval for laptop PC connection.(1F2-15, 1F2-16, 1F2-17, 1F2-19, 1F2-20)

**1F2-15** Study on the Closing Reaction of Open-Cage C<sub>60</sub> Derivative (ICR, Kyoto Univ.; PRESTO, JST) OFUTAGOISHI, Tsukasa; MURATA, Michihisa; WAKAMIYA, Atsushi; MURATA, Yasujiro

**1F2-16** Dynamic Behavior of H<sub>2</sub>O Entrapped inside the Cage of Azafullerene C<sub>59</sub>N (ICR, Kyoto Univ.; PRESTO, JST) OHASHIKAWA, Yoshifumi; MURATA, Michihisa; WAKAMIYA, Atsushi; MURATA, Yasujiro

**1F2-17**\* Synthesis and Reactivity of Hydroxysumanene: New Reaction Site on Sumanene Skeleton (Grad. Sch. Eng., Osaka Univ.) ONGAMBSOMPRASERT, Niti; DANG, Jing-shuang; YAKIYAMA, Yumi; HIGASHIBAYASHI, Shuhei; SAKURAI, Hidehiro

**1F2-19** Direct hydroxylation and carbon-carbon bond formation at the internal carbon of sumanene framework (Sch. Eng., Osaka Univ.) OYOSHIDA, Yuki; NGAMBSOMPRASERT, Niti; HIGASHIBAYASHI, Shuhei; YAKIYAMA, Yumi; SAKURAI, Hidehiro

**1F2-20**\* Synthesis and properties of aryl-substituted triazasumanenes (Grad. Sch. Eng., Osaka Univ.) OKAEWMATI, Patcharin; QITAO, Tan; HIGASHIBAYASHI, Shuhei; YAKIYAMA, Yumi; SAKURAI, Hidehiro

### Thursday, March 24, PM

Chair: MATANO, Yoshihiro (13 : 30~14 : 30)

\* 13:20-13:30: interval for laptop PC connection.(1F2-28, 1F2-30, 1F2-31, 1F2-33)

**1F2-28**\* Properties and binding behavior with C<sub>60</sub> of nitrogen-embedded buckyball (Grad. Sch. Eng., Nagoya Univ.) OYOKOI, Hiroki; HIRAO, Yuya; HIROTO, Satoru; SAKAMAKI, Daisuke; SEKI, Shuhei; SHINOKUBO, Hiroshi

#### Porphyrin

**1F2-30** Synthesis and properties of interior-annulated N-confused porphyrin (Grad. Sch. Eng., Kyushu Univ.) OTACHIBANA, Toshihiro; ISHIDA, Masatoshi; TOGANO, Motoki; SHIMIZU, Soji; FURUTA, Hiroyuki

**1F2-31**\* Synthesis of Highly Planar Diarylamine-fused Porphyrins and Their Stable Radical Cations (Graduate School of Science, Kyoto University) OFUKUI, Norihito; YORIMITSU, Hideki; OSUKA, Atsuhiro

**1F2-33** Effects of conjugate bases on formation of monoprotonated dodecaphenylporphyrin (Div. of Chem., Fac. Pure Appl. Sci., Univ. of Tsukuba) OSUZUKI, Wataru; KOTANI, Hiroaki; ISHIZUKA, Tomoya; KOJIMA, Takahiko

Chair: TANAKA, Takayuki (14 : 40~15 : 40)

\* 14:30-14:40: interval for laptop PC connection.(1F2-35, 1F2-36, 1F2-37, 1F2-38, 1F2-39)

**1F2-35** Synthesis of Novel Porphyrinoids Containing Silicon and Phosphorus Atoms (Grad. Sch. Eng., Nagoya Univ.) OMORI, Hiroto; HIROTO, Satoru; TAKEDA, Youhei; MINAKATA, Satoshi; SHINOKUBO, Hiroshi

**1F2-36** Syntheses, Structures, and Reactions of 5,10,15,20-Tetraaryl-5,15-diazaporphyrinoid-nickel(II) Complexes. (Fac. Sci., Niigata Univ.; Fac. Sci.,

Kyushu Univ.; Center for Inst. Anal., Niigata Univ.) ○SATO, Takaharu; MATANO, Yoshiro; NAKANO, Haruyuki; HURUKAWA, Ko

**1F2-37** Synthesis and properties of unsymmetrically substituted 5,15-diazaporphyrin derivatives (Grad. Sch. Sci. and Technol., Niigata Univ.; Fac. Sci., Niigata Univ.; Fac. Sci., Kyushu Univ.) ○OMOMO, Satoshi; MATANO, Yoshiro; NAKANO, Haruyuki

**1F2-38** Synthesis and properties of tetrapyrrolyldiazaporphyrin (Grad. Sch. Eng., Nagoya Univ.) ○HIRAOKA, Yuya; MIYAKE, Yoshihiro; SHINOKUBO, Hiroshi

**1F2-39\*** Synthesis of Novel Porphyrinoids through Selective Reduction of Diazaporphyrins (Grad. Sch. Eng., Nagoya Univ.; Grad. Sch. Eng. Sci., Osaka Univ.) ○YAMAJI, Ayaka; MIYAKE, Yoshihiro; TSURUGI, Hayato; MASHIMA, Kazushi; SHINOKUBO, Hiroshi

Chair: TAKASE, Masayoshi (15 : 50~16 : 50)

\* 15:40-15:50: interval for laptop PC connection.(1F2-42, 1F2-43, 1F2-45, 1F2-47)

**1F2-42** Synthesis of TTF-Annulated Subphthalocyanine and its Redox Properties (Grad. Sch. Eng., Kyushu Univ.) ○UCHIHARA, Koya; FURUTA, Hiroyuki; SHIMIZU, Soji

**1F2-43\*** Synthesis and Properties of Aromatic Benzophthalocyanines with Various Structures (Grad. Sch. Pharm., The Univ. of Tokyo; RIKEN) ○TORIUMI, Naoyuki; YANAGI, Shunsuke; MURANAKA, Atsuya; HIRANO, Keiichi; UCHIYAMA, Masanobu

**1F2-45\*** Electronic and Conjugated Substituent Effects on the Photophysical Properties of Carbazole-Based Porphyrins (Grad. Sch. Nat. Sci. Technol., Okayama Univ.; Fac. Sci. Tech., Keio Univ.) ○MAEDA, Chihiro; MASUDA, Mikako; KURIHARA, Kosuke; MASUDA, Motoki; YOSHIOKA, Naoki

**1F2-47** Synthesis and Property of Binaphthyl-Strapped Porphyrins (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) MAEDA, Chihiro; ○SADANAGA, Kosuke; OGAWA, Kanae; TAKAISHI, Kazuto; EMA, Tadashi

Chair: MAEDA, Chihiro (17 : 00~17 : 50)

\* 16:50-17:00: interval for laptop PC connection.(1F2-49, 1F2-50, 1F2-51, 1F2-52, 1F2-53)

**1F2-49** Synthesis and characterization of benzoporphyrin rare earth metal complexes (Ehime Univ.) ○KOBAYASHI, Tomohiro; MORI, Shigeki; TAKASE, Masayoshi; OKUJIMA, Tetsuo; UNO, Hidemitsu

**1F2-50** Synthesis and Characterization of Corrole Derivative Bearing [3] Cumulene Structure (Fac. Sci., Kyoto Univ.) ○UETA, Kento; NAODA, Koji; TANAKA, Takayuki; OSUKA, Atsuhiko

**1F2-51** Synthesis and characterization of triply linked corrole dimer (Dep. Chem., Sch. Sci., Kyoto Univ.) ○OOI, Shota; TANAKA, Takayuki; OSUKA, Atsuhiko

**1F2-52** Synthesis and properties of stacked antiaromatic norcorrole dimer (Grad. Sch. Eng., Nagoya Univ.; Grad. Sch. Eng., Kyushu Univ.; Dept. Chem., Yonsei Univ.) ○NOZAWA, Ryo; HIROTO, Satoru; SHIMIZU, Soji; CHA, Won Young; KIM, Dongho; SHINOKUBO, Hiroshi

**1F2-53** Properties of the Largest Hückel Aromatic Molecule (Dep. Chem., Sch. Sci., Kyoto Univ.) ○SOYA, Takanori; OSUKA, Atsuhiko

## Friday, March 25, AM

### porphyrin

Chair: YONEDA, Tomoki (9 : 00 ~ 10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(2F2-01, 2F2-02, 2F2-03, 2F2-04, 2F2-05)

**2F2-01** Protonation Behavior of Thiaporphyrin and Benzothiaporphyrin (Grad. Sch. Sci., Eng., Ehime Univ.) ○TAGAWA, Kazunari; MORI, Shigeki; OKUJIMA, Tetsuo; TAKASE, Masayoshi; UNO, Hidemitsu

**2F2-02** Protonation Behaviors of Ring-Fused Porphyrins Bearing Fused Five-Membered Rings (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) ○SAEGUSA, Yuta; ISHIZUKA, Tomoya; KOTANI, Hiroaki; KOJIMA, Takahiko

**2F2-03** Stable and Neutral Aminyl Radicals Stabilized by Porphyrin and Subporphyrin (Dep. Chem., Sch. Sci., Kyoto Univ.; Center for Inst. Anal., Niigata Univ.) ○SHIMIZU, Daiki; FURUKAWA, Ko; OSUKA, Atsuhiko

**2F2-04** Synthesis and properties of cationic *meso*-tetrakis(*N*-pyridinium) porphyrins (Grad. Sch. Sci. Eng., TMU) YAMASHITA, Ken-ichi; ○TOMITA, Shohei; SUGIURA, Ken-ichi

**2F2-05\*** Synthesis and property of *N*-fused [24]pentaphyrin silicon complexes (Dep. Chem., Sch. Sci., Kyoto Univ.) ○ISHIDA, Shin-ichiro; OSUKA, Atsuhiko

Chair: ARATANI, Naoki (10 : 10~11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(2F2-08, 2F2-09, 2F2-10, 2F2-11, 2F2-12, 2F2-13)

**2F2-08** Synthesis and Photochemical Properties of a Water-Soluble and Saddle-Distorted Porphyrin (Div. of Chem., Fac. Pure Appl. Sci., Univ. of Tsukuba) ○OHKAWA, Shumpei; ISHIZUKA, Tomoya; OCHIAI, Hidemi; KOTANI, Hiroaki; KOJIMA, Takahiko; OHKUBO, Kei; FUKUZUMI, Shunichi

**2F2-09** Synthesis of barrene-fused 5,10-diarylporphyrins by Diels-Alder reactions (Grad. Sch. Sci. Eng., TMU) ○FUJII, Ryotaro; HOSHINO, Tetushi; GOTO, Kenta; SUGIURA, Ken-ichi

**2F2-10** Synthesis and Characterization of meso-Aryl-beta-Alkyl Hybrid Type Pentaphyrins (Grad. Sch. Pharm. Sci., Chiba Univ.) ○YONEDA, Tomoki; HOSHINO, Tyuji; NEYA, Saburo

**2F2-11** Tuning the quinonoid versus biradicaloid characters of porphyrins and hexaphyrins (Dep. Chem., Sch. Sci., Kyoto Univ.) ○NAODA, Koji; OSUKA, Atsuhiko

**2F2-12** Synthesis and properties of [28]hexaphyrin germanium and tin complexes (Fac. Sci., Kyoto Univ.) ○IZAWA, Mondo; ISHIDA, Shin-ichiro; TANAKA, Takayuki; OSUKA, Atsuhiko

**2F2-13** Preparation and physical properties of cyclo[8]pyrrole-polyoxometalate complex (Grad. Sch. Sci., Eng., Ehime Univ.; ADRES, Ehime Univ.; Grad. Sch. Sci., Osaka Univ.) ○MATSUMOTO, Hiroki; MIYAMOTO, Fumiya; YAMAZAKI, Yoshito; OGAWA, Takuji; MORI, Shigeki; TAKASE, Masayoshi; UNO, Hidemitsu; OKUJIMA, Tetsuo

Chair: KOTANI, Hiroaki (11 : 20~12 : 20)

\* 11:10-11:20: interval for laptop PC connection.(2F2-15, 2F2-16, 2F2-17, 2F2-18, 2F2-19, 2F2-20)

**2F2-15** Synthesis and properties of octaphyrin composed of  $\beta$ -connected 2,2'-dipyrrroles (Grad. Sch. Sci., Eng., Ehime Univ.) ○HIURA, Nobuhiro; MORI, Shigeki; TAKASE, Masayoshi; UNO, Hidemitsu; OKUJIMA, Tetsuo

**2F2-16** Photo and Electric Isomerizations of an Expanded Porphyrinoid Containing Diarylethene Components (Sch. Sci., Kobe Univ.) ○YAMANO, Mayu; EDA, Kazuo; TSUDA, Akihiko

**2F2-17** Ring expansion of a porphyrin skeleton by Corey-Fuchs rearrangement (Dep. Chem., Sch. Sci., Kyoto Univ.) ○UMETANI, Masataka; TANAKA, Takayuki; OSUKA, Atsuhiko

**2F2-18** Synthesis of Highly Bent Porphyrins(2.1.2.1) and Their Metal Complexes (Grad. Sch. Mat. Sci., NAIST) ○FURUKAWA, Wataru; KUZUHARA, Daiki; ARATANI, Naoki; YAMADA, Hiroko

**2F2-19** Synthesis of a doubly *N*-confused porphyrinoid with a benzene skeleton in the macrocyclic system (Grad. Sch. Sci., Eng., Ehime Univ.) ○HIRAOKA, Shogo; MORI, Shigeki; TAKASE, Masayoshi; OKUJIMA, Tetsuo; UNO, Hidemitsu

**2F2-20** Synthesis and Properties of Fused Subporphyrin Dimer (Dep. Chem., Sch. Sci., Kyoto Univ.) ○OKUDA, Yasuhiro; KITANO, Masaaki; TSURUMAKI, Eiji; OSUKA, Atsuhiko

## Friday, March 25, PM

Chair: MAEDA, Hiromitsu (13 : 30~14 : 30)

\* 13:20-13:30: interval for laptop PC connection.(2F2-28, 2F2-31, 2F2-32, 2F2-33)

**2F2-28** Young Scholar Lectures of CSJ Development of Functional Porphyrins and Catalytic Applications to Carbon Dioxide Fixations (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○MAEDA, Chihiro

**2F2-31** Complexation Behavior of Doubly  $\beta$ ,  $\beta$ -Sulfur-bridged Subporphyrin Dimer with Fullerene (Dep. Chem., Sch. Sci., Kyoto Univ.) ○YOSHIDA, Kota; OSUKA, Atsuhiko

**2F2-32** Boron-Arylations of Subporphyrins with Arylzinc Reagents (Dep. Chem., Sch. Sci., Kyoto Univ.) ○KOTANI, Ryota; YOSHIDA, Kota; TSURUMAKI, Eiji; OSUKA, Atsuhiko

**2F2-33** Synthesis and Characterization of Triphenylsilane-fused Porphyrins (Dep. Chem., Sch. Sci., Kyoto Univ.) ○KATO, Kenichi; YORIMITSU, Hideki; OSUKA, Atsuhiko

Chair: MORI, Shigeki (14 : 40~15 : 40)

\* 14:30-14:40: interval for laptop PC connection.(2F2-35, 2F2-36, 2F2-37, 2F2-38, 2F2-39, 2F2-40)

**2F2-35** Synthesis and Characterization of Phosphorus-embedded  $\pi$ -extended Porphyrins (Dep. Chem., Sch. Sci., Kyoto Univ.) ○KASUGA, Yuko; FUJIMOTO, Keisuke; FUKUI, Norihito; OSUKA, Atsuhiko

**2F2-36** Controlling the Properties of Antiaromatic Norcorroles by Substituent Effects (Grad. Sch. Eng., Nagoya Univ.) ○YOSHIDA, Takuya; HIROTO, Satoru; SHINOKUBO, Hiroshi

**2F2-37** Development of new peripheral functionalization reaction of antiaromatic norcorrole (Grad. Sch. Eng., Nagoya Univ.) ○KAWASHIMA, Hiroyuki; NOZAWA, Ryo; HIROTO, Satoru; SHINOKUBO, Hiroshi

**2F2-38** Chirality Induction of Cyclic  $\pi$ -Electronic Systems by Inner Modifications (1) (Coll. Pharm. Sci., Ritsumeikan Univ.) ○NAITO, Wakana; MAEDA, Hiromitsu

**2F2-39** Chirality Induction of Cyclic  $\pi$ -Electronic Systems by Inner Modifications (2) (Coll. Pharm. Sci., Ritsumeikan Univ.) ○NAITO, Wakana; MAEDA, Hiromitsu

### acene

**2F2-40** Synthesis and Photophysical Property of Perylene Oligomers (Fac. Sci. Tech., Keio Univ.; Tampere University of Technology) ○SAKAI, Hayato; TKACHENKO, Nikolai; HASOBE, Taku

Chair: ITO, Akihiro (15 : 50~16 : 50)

\* 15:40-15:50: interval for laptop PC connection.(2F2-42, 2F2-45, 2F2-46, 2F2-47)

**2F2-42#** Young Scholar Lectures of CSJ Studies on the synthesis and aromaticity of novel fused  $\pi$ -electronic systems (Dep. Chem., Sch. Sci., Kyoto Univ.) ○TANAKA, Takayuki**2F2-45** Study on direct C-H arylation of acenaphthylene-5,6-dicarboxylic imide by using Pd(II) catalysts (Grad. Sch. Eng., Univ. of Hyogo) ○YAMAMOTO, Yuma; KAWAJIRI, Ikumi; NISHIDA, Jun-ichi; KAWASE, Takeshi**2F2-46** Electron-Transfer Reduction Properties of Coroneneimide Derivatives (Grad. Sch. Sci. Tech., Keio Univ.; Grad. Sch. Eng., Osaka Univ.; ALCA, JST; SENTAN (JST); Graduate School of Science and Technology) ○YOSHIDA, Motoki; SAKAI, Hayato; OHKUBO, Kei; FUKUZUMI, Shunichi; HASOBE, Taku**2F2-47** Synthesis and Properties of 2,4,5,7,9,10-Hexaethynylpyrene Derivatives (Sch. Sci. Tech., Gunma Univ.) ○IRISAWA, Ken-ichi; KATO, Shin-ichiro; NAKAMURA, Yosuke

Chair: KOBAYASHI, Kenji (17 : 00~18 : 00)

\* 16:50-17:00: interval for laptop PC connection.(2F2-49, 2F2-51, 2F2-52, 2F2-53, 2F2-54)

**2F2-49#** Interface Engineering of Inverted Organic Solar Cells using V-Shaped Polyaromatic Amphiphile as Fullerene-catching Surface Modifier (Grad. Sch. Sci., The Univ. of Tokyo) ○JEON, Il; ZELJKOVIC, Sasa; KONDO, Kei; YOSHIZAWA, Michito; AKITA, Munetaka; MATSUO, Yutaka**2F2-51** Synthesis and Electronic Properties of 5,12-Diaminotetracenes (Grad. Sch. Eng., Kyoto Univ.) ○KAWASHIMA, Kenji; UEBE, Masashi; ITO, Akihiro**2F2-52** Synthesis of pyrrole-fused azacoronene derivatives containing 7-membered ring (Grad. Sch. Sci., Eng., Ehime Univ.) ○OKI, Kosuke; SASAKI, Yoshiki; TAKASE, Masayoshi; MORI, Shigeki; OKUJIMA, Tetsuo; UNO, Hidemitsu**2F2-53** Synthesis and properties of benzene-fused azacoronene (Grad. Sch. Eng., The Univ. of Tokyo) ○TOKIMARU, Yuki; ITO, Shingo; NOZAKI, Kyoko**2F2-54** Synthesis and fluorescence properties of tetrasulfone[9]helicenes (Grad. Sch. Sci. Tech., Keio Univ.; Sch. Advanced Sci. Eng., Waseda Univ.) ○YAMAMOTO, Yuki; SAKAI, Hayato; SAKANOUÉ, Tomo; TAKENOBU, Taishi; HASOBE, Taku

Chair: SAKAI, Hayato (18 : 10~18 : 40)

\* 18:00-18:10: interval for laptop PC connection.(2F2-56, 2F2-57, 2F2-58)

**2F2-56** Synthetic Study of Sterically-Protected Rubrene Derivatives (Grad. Sch. Sci., Shizuoka Univ.) ○OHSAWA, Hirokazu; KOBAYASHI, Kenji**2F2-57** Syntheses of Starburst-Type  $\pi$ -Conjugated Molecules with Multiple Electron-Donating Side Chains and One Electron-Accepting Anchor Chain (Grad. Sch. Sci., Shizuoka Univ.) ○INOUE, Shota; KOBAYASHI, Kenji**2F2-58** Synthesis and structure of 6,13-dihydropentacene-2,3,9,10-tetracarboximide derivatives (Grad. Sch. Env. Life Sci., Okayama Univ.) ○SHIRAI, Hitoshi; TAJIMA, Tomoyuki; KUBO, Kentaro; NISHIHARA, Katsuya; TAKAGUCHI, Yutaka

## Saturday, March 26, AM

## Self-assembly, Self-organization

Chair: ITOH, Yoshimitsu (9 : 00 ~ 10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(3F2-01, 3F2-02, 3F2-03, 3F2-04, 3F2-05, 3F2-06)

**3F2-01** Preparation of Urenylbenzene Derivatives and the Self-assembly Behavior in Response to External Stimuli (Grad. Sch. Pharm., Kyushu Univ.) ○MORISHITA, Kosuke; ARAKI, Takeru; KARASAWA, Satoru; KOGA, Noboru**3F2-02** Preparations of Thermo-responsive Bio-imaging Molecules and Their Physical Properties (Grad. Sch. Pharm., Kyushu Univ.) ○ARAKI, Takeru; MURAYAMA, Shuuhei; KARASAWA, Satoru; AOKI, Ichio; SAGA, Tsuneo; KOGA, Noboru**3F2-03** Preparation of organogelators consisting of the ferrocene unit and their properties in terms of redox reaction. (Grad. Sch. Eng., KIT) ○YAKEYA, Daisuke; MORIGUCHI, Tetsuji; ARAKI, Koji; TSUGE, Akihiko**3F2-04** Synthesis and Gelation-Induced Emission of Dendron Derivatives with a Anthracene Core (Fac. Eng., Yamagata Univ.) ○ANDO, Tomoaki; ITO, Kazuaki**3F2-05** Ionic Liquid Gel formed with TEMPO-substituted 1,2-Cyclohexanediamine derivative and its Electrochemical Property (Sch. Advanced Sci. Eng., Waseda Univ.) ○ICHINOI, Rieka; SASADA, Yoshito; NISHIDE, Hiroyuki**3F2-06** Development of supramolecular polymer of metal accumulating dendrimer using a cross-linking molecules (Chem. Res. Lab., Tokyo Tech) ○MENDORI, Shin; ALBRECHT, Ken; YAMAMOTO, Kimihisa

Chair: HAINO, Takeharu (10 : 10~11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(3F2-08, 3F2-11, 3F2-12)

**3F2-08#** CSJ Award for Young Chemists Structural Analysis and

Function Design of Self-Assembled Organic Materials Based on Electron Microscopy (Grad. Sch. Sci., The Univ. of Tokyo; Org. Int. Res. Pro., The Univ. of Tokyo) ○HARANO, Koji

**3F2-11** Investigation of Shape-Complementary Co-Crystallization Systems of Aliphatic Polycarbonyl Compounds (Grad. Sch. Eng., The Univ. of Tokyo) ○DOMOTO, Yuya; INOKUMA, Yasuhide; FUJITA, Makoto**3F2-12#** Figuration of layered assemblies of hydrogen-bonded hexagonal networks composed of  $C_3$ -symmetric  $\pi$ -conjugated hydrocarbons (Sch. Eng., Osaka Univ.; ISIR, Osaka Univ.) ○HISAKI, Ichiro; NAKAGAWA, Shoichi; IKENAKA, Nobuaki; TOHNAI, Norimitsu; MIYATA, Mikiji

Chair: HISAKI, Ichiro (11 : 20~11 : 50)

\* 11:10-11:20: interval for laptop PC connection.(3F2-15, 3F2-16, 3F2-17)

**3F2-15** Cooperative self-assembly of  $C_3$ -symmetrical benzotrithiophene derivative possessing phenylisoxazolyl moieties (Grad. Sch. Sci., Hiroshima Univ.) ○ADACHI, Hiroaki; IKEDA, Toshiaki; HAINO, Takeharu**3F2-16** Luminescent organogel based on perylenebisimide possessing phenylisoxaoles (Grad. Sch. Sci., Hiroshima Univ.) ○IKEDA, Toshiaki; MASUDA, Tetsuya; HAINO, Takeharu**3F2-17** Rod-Shaped Liquid Crystalline Molecules Adopting a Columnar Organization Mediated by Supramolecular Polymerization (Grad. Sch. Eng., The Univ. of Tokyo) ○YANO, Keiichi; ITOH, Yoshimitsu; ARAOKA, Fumito; AIDA, Takuzo

## Saturday, March 26, PM

## Acene

Chair: HASOBE, Taku (14 : 40~15 : 40)

\* 14:30-14:40: interval for laptop PC connection.(3F2-35, 3F2-36, 3F2-37, 3F2-39, 3F2-40)

**3F2-35** Synthesis and Characterization of  $\pi$ -conjugated Molecules Composed of Binaphthyl Skeleton (Grad. Sch. Eng., Osaka Univ.) MORIUCHI, Toshiyuki; ○TAYANO, Yoshiki; HIRANO, Misato**3F2-36** Synthesis and properties of triazatruxene derivatives (Grad. Sch. Eng., Osaka Univ.) MORIUCHI, Toshiyuki; ○KOBAYASHI, Kazuki; HIRANO, Misato**3F2-37\*** Synthesis and Properties of Azulene-fused Tetracene Diimide Derivatives (IMCE, Kyushu Univ.; Grad. Sch. Med., Yamaguchi Univ.) ○TANI, Fumito; KOIDE, Taro; TAKESUE, Moritaka; SATOMI, Koichiro; SUZUKI, Yasutaka; KAWAMATA, Jun; MURAFUJI, Toshihiro**3F2-39** Synthesis and properties of co-facial azulene dyads (Grad. Sch. Sci., Kitasato Univ.) ○KASHIWAGI, Itsuki; TSUCHIYA, Takahiro; HASEGAWA, Masashi; MAZAKI, Yasuhiro**3F2-40** Structures and properties of binuclear paddlewheel complexes with azulene ligand (Grad. Sch. Sci., Kitasato Univ.; RIES, Hokkaido Univ.) ○KAWANO, Reiya; TSUCHIYA, Takahiro; NORO, Shin-ichiro; MAZAKI, Yasuhiro

Chair: MORIUCHI, Toshiyuki (15 : 50~16 : 50)

\* 15:40-15:50: interval for laptop PC connection.(3F2-42, 3F2-43, 3F2-44, 3F2-45, 3F2-46)

**3F2-42** Synthesis and Properties of Anthracene-Based Radial Pi-Clusters (Grad. Sch. Sci., Osaka Univ.) ○TOMOHIKO, Nishiuchi; YASUKAZU, Hirao; TAKASHI, Kubo**3F2-43** Synthesis and Spectroscopic Properties of 9,10 -Diphenylanthracene Dimers with a Phenyl Linker (Fac. Sci. Tech., Keio Univ.) ○YOSHINO, Keisuke; SAKAI, Hayato; HASOBE, Taku**3F2-44** Synthesis and Properties of Indacene Derivatives Fused with Phenanthrenes (Grad. Sch. Sci. Tech., Gunma Univ.) ○MIYAUCHI, Hidenori; KATO, Shin-ichiro; NAKAMURA, Yosuke**3F2-45** Synthesis and properties of tripodal anchors maintaining conjugation for application to single-molecule electronics (ISIR, Osaka Univ.) ○KAWAGUCHI, Nana; IE, Yutaka; ASO, Yoshio**3F2-46#** Cyclodehydrogenation of Oligo(naphthalene-2,3-diyl)s Leading to Novel Polycyclic Aromatic Hydrocarbons (Grad. Sch. Eng., The Univ. of Tokyo; Department of Physics, University of Basel) ○TAKAHASHI, Keisuke; ITO, Shingo; KAWAI, Shigeki; MEYER, Ernst; NOZAKI, Kyoko

Chair: TANI, Fumito (17 : 00~17 : 40)

\* 16:50-17:00: interval for laptop PC connection.(3F2-49, 3F2-51, 3F2-52)

**3F2-49#** Bottom-Up Synthesis of Graphene Nanoribbons with Varying Widths and Edge Structures (Max Planck Institute for Polymer Research) ○NARITA, Akimitsu; HU, Yunbin; YANG, Bo; SCHWAB, Matthias; FENG, Xinliang; MUELLEN, Klaus**3F2-51** Synthesis of Unsymmetrical Anthracenes via Intramolecular Cyclization of Bisdehydro[10]annulenes and Their Photophysical Properties (Grad. Sch. Sci., Nagoya Univ.) ○TAKEKOSHI, Mayu; OSHIMA, Hiroya; FUKAZAWA, Aiko; YAMAGUCHI, Shigehiro**3F2-52** Discotic Liquid Crystals Containing a Planarized 9-Phenylanthracene (Grad. Sch. Sci., Nagoya Univ.; Grad. Sch. Eng., The Univ. of Tokyo; WPI-ITbM, Nagoya Univ.) ○IWAHARA, Hideaki; YOSHIO, Masafumi; KATO, Takashi; YAMAGUCHI, Shigehiro

Sunday, March 27, AM

## Organic conductor, Semi-conductor

Chair: SUGIURA, Ken-ichi (9:00~10:00)

\* 8:50-9:00: interval for laptop PC connection.(4F2-01, 4F2-02, 4F2-03, 4F2-05)

- 4F2-01** Development of High-Mobility Organic Transistors Based on New Heteroacenes (IFRC, Kyushu Univ.; Grad. Sch. Eng., Kyushu Univ.)  
○OHYAMA, Tatsuya; YANG, Yuseok; YASUDA, Takuma
- 4F2-02** Synthesis of new D-A- $\pi$ -A type organic dyes containing dithienomole and their application to DSSCs (Grad. Sch. Eng., Hiroshima Univ.)  
○ADACHI, Yohei; OHSHITA, Joji; OYAMA, Yousuke; SHIBAYAMA, Naoyuki
- 4F2-03\*** Microflow Syntheses of Alkyl-Substituted Tetrathienonaphthalenes and Evaluations of Their Organic Semiconductor Characteristics (Grad. Sch. Eng., Osaka Pref. Univ.; The Research Inst. for Molecular Electronic Devices, Osaka Pref. Univ.; Grad. Sch. Sci., Osaka Pref. Univ.; Sch. Eng., Osaka Pref. Univ.)  
○YAMAMOTO, Atsushi; MATSUI, Yasunori; ASADA, Toshio; TAKAGI, Kenichiro; SUENAGA, Yu; KUMEDA, Motoki; OHTA, Eisuke; NAITO, Hiroyoshi; KOSEKI, Shiro; IKEDA, Hiroshi
- 4F2-05\*** Synthesis, Properties, and OLED Applications of U-shaped Dibenzophenazine-cored D-A-D Type Thermally Activated Delayed Fluorescence Molecules (Grad. Sch. Eng., Osaka Univ.; Phys. Dep., Durham Univ.; Fac. Chem., Silesian Univ. Tech.)  
○TAKEDA, Youhei; OKAZAKI, Masato; MINAKATA, Satoshi; DATA, Przemyslaw; MONKMAN, Andrew

## Photoproperty

Chair: AIZAWA, Naoya (10:10~11:10)

- \* 10:00-10:10: interval for laptop PC connection.(4F2-08, 4F2-09, 4F2-10, 4F2-11, 4F2-12, 4F2-13)
- 4F2-08** Chemical modifications of 1,1'-bi-2-pyrenol and their solvatochromic fluorescence (Grad. Sch. Sci. Eng., TMU)  
○FUWA, Miki; IMAI, Yoshitane; GOTOU, Kenta; SUGIURA, Ken-ichi
- 4F2-09<sup>#</sup>** An isomer of bipyrenol: the synthesis, optical resolution and chiroptical properties of 4,4'-bipyrene-5,5'-diol (Grad. Sch. Sci. Eng., TMU)  
○HASSAN, Kamrul; IMAI, Yoshitane; GOTO, Kenta; SUGIURA, Ken-ichi
- 4F2-10** Synthesis, optical resolution, and chiroptical properties of biperylenols (Grad. Sch. Sci. Eng., TMU)  
○FUJIMAKI, Keisuke; HASSAN, Kamrul; IMAI, Yoshitane; GOTO, Kenta; SUGIURA, Ken-ichi
- 4F2-11** Synthesis of a  $\pi$ -extended binaphthyl derivative and their chiroptical properties based on its axial chirality (Grad. Sch. Eng., Kyoto Univ.)  
○UCHIDA, Yosuke; HIROSE, Takashi; MATSUDA, Kenji
- 4F2-12** Delayed photoluminescence behavior based on mix solids containing two kinds of phthalimide compounds (Grad. Sch. Eng., Univ. of Hyogo; Grad. Sch. Eng., Osaka Pref. Univ.)  
○KITA, Yasuyuki; NISHIDA, Jun-ichi; NISHIDA, Shota; IKEDA, Hiroshi; KAWASE, Takeshi
- 4F2-13<sup>#</sup>** Synthesis and characterization of symmetrical squaraine dyes along with their interaction with BSA (Grad. Sch. Life Sci. Sys. Eng., KIT)  
○MARYALA, Sai Kiran; SATO, Daisuke; PANDEY, Shyam S.; HAYASE, Shuzi; KATO, Tamaki

Chair: IKEDA, Hiroshi (11:20~12:30)

- \* 11:10-11:20: interval for laptop PC connection.(4F2-15, 4F2-16, 4F2-17)
- 4F2-15** Synthesis and Fluorescence property of Chiral Oligonaphthodioxepins (Grad. Sch. Nat. Sci. Technol., Okayama Univ.)  
TAKAISHI, Kazuto; YAMAMOTO, Takahiro; HAYASHI, Kyohei; MAEDA, Chihiro; EMA, Tadashi
- 4F2-16** Synthesis and Fluorescence Properties of a 9,9-Dimethylfluorene-bridged Molecular Gyrotop (Grad. Sch. Urban Environmental Sci., TMU)  
○YOSHIZAWA, Reina; INAGAKI, Yusuke; SETAKA, Wataru
- 4F2-17\*** Solid state emission and AIEE property of 5,12-diacetyldihydroquinaxalinoquinaxaline derivatives (Fac. Sci. Tech., Keio Univ.)  
○MIURA, Youhei; YOSHIOKA, Naoki

Sunday, March 27, PM

Chair: MIURA, Youhei (13:30~14:30)

- \* 13:20-13:30: interval for laptop PC connection.(4F2-28, 4F2-29, 4F2-30, 4F2-31)
- 4F2-28** Control of solid-liquid phase transition of aggregation-induced emission molecules tethering bulky alkyl chain (Sch. Sci., Hokkaido Univ.)  
○MACHIDA, Takashi; OURA, Tsuyoshi; KOKADO, Kenta; SADA, Kazuki
- 4F2-29<sup>#</sup>** Design and photophysical characterization far-red sensitive squaraine dyes with small energy barrier for dye regeneration (Grad. Sch. LSSE, Kyushu Institute of Technology)  
○PANDEY, Shyam S.; MORIMOTO, Takuya; MARYALA, Saikiran; HAYASE, Shuzi
- 4F2-30** Synthesis and Photophysical Properties of Thioester-bridged Dithienylethenes (Grad. Sch. Sci., Nagoya Univ.; WPI-ITbM, Nagoya Univ.)  
○KAWAUCHI, Hiroaki; FUKAZAWA, Aiko; YAMAGUCHI, Shigehiro
- 4F2-31** Synthesis of A Thiophene Analogue of Phospha-Rhodamine with NIR

Fluorescence and High Photoresistance (WPI-ITbM, Nagoya Univ.)  
○NAMBA, Yasumasa; FUKAZAWA, Aiko; ASAI, Kengo; TAKI, Masayasu; YAMAGUCHI, Shigehiro

# Room F3

## Chishinkan3 Building 103

## Physical Organic Chemistry Structures and Properties

Thursday, March 24, AM

## Organic Radical and Molecular Magnet

Chair: ISHIDA, Takayuki (9:00~10:00)

\* 8:50-9:00: interval for laptop PC connection.(1F3-01, 1F3-02, 1F3-03, 1F3-04, 1F3-06)

- 1F3-01** Magneto-structural correlation in bis[alchoxy] substituted phenyl nitronyl nitroxide derivatives (Fac. Sci. Tech., Keio Univ.)  
○SHIMIZU, Yuki; SAITO, Takatada; MIURA, Youhei; YOSHIOKA, Naoki
- 1F3-02** Synthesis and properties of 1,3,5-triphenyl-6-oxoverdazyl derivatives carrying an aromatic ring. (Grad. Sch. Sci. Tech., Keio Univ.)  
○HARUKI, Akihito; MIURA, Youhei; YOSHIOKA, Naoki
- 1F3-03** Synthesis and properties of bis(dimethylfluorenyl)nitroxide derivatives (Fac. Sci. Tech., Keio Univ.)  
○IKEGAMI, Hiroki; ADACHI, Kouki; MIURA, Youhei; YOSHIOKA, Naoki
- 1F3-04\*** Substituent Effect and Magneto-Structural Correlation in Benzotriazinyll Radical Derivatives (Fac. Sci. Tech., Keio Univ.)  
○TAKAHASHI, Yuzuki; TSUCHIYA, Naoya; MIURA, Youhei; YOSHIOKA, Naoki
- 1F3-06** Spin-multiplicity of Tetra-radicals in Paraphenylene Structures (Fac. Sci., Hiroshima Univ.)  
○MATSUMOTO, Misaki; NAKAMURA, Takeshi; OKAMOTO, Kazushige; ABE, Manabu

Chair: YOSHIOKA, Naoki (10:10~11:10)

- \* 10:00-10:10: interval for laptop PC connection.(1F3-08, 1F3-10, 1F3-11, 1F3-13)
- 1F3-08\*** Morphology Control and Electronic Properties of Vapor-Deposited Thin-Films of Spin-Delocalized Stable Organic Neutral Radicals (Fac. Eng., Aichi Inst. of Tech.; KFTRAL, KANEKA CORP.)  
○ITO, Hiroshi; MIYATA, Takahiro; KEISHIMA, Miwa; TSUJI, Ryotaro; MURATA, Tsuyoshi; MORITA, Yasushi
- 1F3-11\*** Chiral Mixed-Valence Salts based on the One-dimensional  $\pi$ -Stacked Radical Polymer Constructed by Fused-polycyclic  $\pi$ -Radicals (Fac. Eng., Aichi Inst. of Tech.)  
○TORII, Takeshi; HIRAMATSU, Shouya; MURATA, Tsuyoshi; MORITA, Yasushi
- 1F3-11\*** Organic Rechargeable Batteries Using Air-Stable Organic Neutral Radicals and Graphite (Fac. Eng., Aichi Inst. of Tech.; KFTRAL, KANEKA CORP.)  
○NISHIYAMA, Junya; NOBUKUNI, Hirofumi; KEISHIMA, Miwa; TSUJI, Ryotaro; MURATA, Tsuyoshi; MORITA, Yasushi
- 1F3-13** Syntheses and Properties of Radical-substituted Phenothiazine Radical Cation Derivatives (Grad. Sch. Sci., Osaka City Univ.; Grad. Sch. Sci., Osaka Pref. Univ.)  
○TAHARA, Takuma; SUZUKI, Shuichi; KOZAKI, Masatoshi; HOSOKOSHI, Yuko; MIYAKE, Yota; OKADA, Keiji

Chair: MURATA, Tsuyoshi (11:20~12:20)

- \* 11:10-11:20: interval for laptop PC connection.(1F3-15, 1F3-16, 1F3-17, 1F3-19, 1F3-20)
- 1F3-15** Study on a diamagnetic ring-closure form of bisphenoxy radical biradicals (Grad. Sch. Sci. Eng., The Univ. of Electro-Communications)  
○KAWAKAMI, Hinako; MUROYAMA, Hiroki; ISHIDA, Takayuki
- 1F3-16** Synthesis, structure and magnetic properties of m-phenylene-bridged nitroxides. (Grad. Sch. Sci. Eng., The Univ. of Electro-Communications)  
○YOSHITAKE, Toru; ISHIDA, Takayuki
- 1F3-17\*** Computational Investigation of the Structural Dependence of Switching Efficiency of Exchange Interaction and Hyperpolarizability on Diarylethenes (Grad. Sch. Eng., Kyoto Univ.; CRC, Hokkaido Univ.; CEISAM, Univ. Nantes)  
○NISHIZAWA, Shohei; FIHEY, Arnaud; JACQUEMIN, Denis; HASEGAWA, Jun-ya; MATSUDA, Kenji
- 1F3-19** Formation and conductivity switching of tetrabenzoporphyrin radical nanowire (Grad. Sch. Sci., The Univ. of Tokyo)  
○INOUE, Kento; ZHEN, Yonggang; GUO, Yunlong; HARANO, Koji; NAKAMURA, Eiichi
- 1F3-20** The Control of Conductance Photoswitching Direction in Diarylethene Molecule bound to Gold Nanoparticles Owing to the Difference of Anchoring Position (Grad. Sch. Eng., Kyoto Univ.; PRESTO, JST)  
○TOYAMA, Taichi; HIGASHIGUCHI, Kenji; NAKAMURA, Tsukuru; MATSUDA, Kenji



## Thursday, March 24, PM

## Photophysical Properties

Chair: KATO, Shin-ichiro (13 : 30~14 : 30)

\* 13:20-13:30: interval for laptop PC connection.(1F3-28, 1F3-29, 1F3-30, 1F3-31, 1F3-32, 1F3-33)

**1F3-28** Dependence of the Charge Separation Efficiency on the Donor-Acceptor Interaction (Grad. Sch. Eng., Kyoto Univ.) ○HIGASHINO, Tomohiro; YAMADA, Tomoki; YAMAMOTO, Masanori; IMAHORI, Hiroshi**1F3-29** Photophysical Processes and Electron Transfer Properties of Covalently Linked Peryleneimide Dimers (Grad. Sch. Sci. Tech., Keio Univ.; Sch. Advanced Sci. Eng., Waseda Univ.; Department of Chemistry and Bioengineering) ○HORINOUCHE, Haruki; SAKAI, Hayato; SAKANOU, Tomo; TAKENOBU, Taishi; TKACHENKO, Nikolai; HASOBE, Taku**1F3-30** Synthesis, structures, and properties of intensely luminescent 1,4-dialkoxyl-2,5-diborylbenzenes (KIT) ○TAMAGAWA, Tomokazu; SHIGITANI, Ryosuke; SHIMIZU, Masaki**1F3-31** Photophysical properties of bis(styryl)benzene-type pyridinium salts in aggregates (KIT) ○NAKANO, Yoshiki; SHIMIZU, Masaki**1F3-32** Synthesis and photophysical properties of germylene-bridged 2-arylimides (KIT) SHIMIZU, Masaki; ○RYUSE, Daiki**1F3-33** Near-IR light-induced electron transfer reaction using a distorted phthalocyanine (IMS; SOKENDAI; ACT-C, JST) ○ENOMOTO, Takafumi; KONDO, Mio; MASAOKA, Shigeyuki

Chair: ONO, Katsuhiko (14 : 40~15 : 40)

\* 14:30-14:40: interval for laptop PC connection.(1F3-35, 1F3-36, 1F3-37, 1F3-38, 1F3-39, 1F3-40)

**1F3-35** Synthesis and Properties of Various Electron-withdrawing Heteroaromatics Fused with Thienopyrrole Moieties and Their Oligomers (Grad. Sch. Sci. Tech., Gunma Univ.) ○TAMURA, Misaki; KATO, Shin-ichiro; NAKAMURA, Yosuke**1F3-36** Synthesis and Properties of Metal Complexes of Dipyridophenazine Derivatives Fused with Thienopyrrole Moieties (Grad. Sch. Sci. Tech., Gunma Univ.) ○TAMURA, Misaki; KATO, Shin-ichiro; NAKAMURA, Yosuke**1F3-37** Quantitation of trace amounts of acid in organic solvents using iminopyrroles (Grad. Sch. Eng. Sci., Osaka Univ.) ○ANZAI, Kento; KAWAMORITA, Soichiro; KOMIYA, Naruyoshi; NAOTA, Takeshi**1F3-38** Highly Efficient Room Temperature Phosphorescence of Halogen- and Precious Metal-free Organic Solids (KIT) ○SHIGITANI, Ryosuke; SHIMIZU, Masaki; MIYAKE, Yusuke; TAJIMA, Kunihiko**1F3-39** Thermally activated delayed fluorescence of diamino(bis(aryl)benzenes (KIT) ○KIMURA, Akinori; SHIMIZU, Masaki; SCHINABECK, Alexander; MATARANGA-POPA, N.-I.; YERSIN, Hartmut**1F3-40** Synthesis, structure, and photophysical properties of diarylaminoisophthalic acid diesters (KIT) ○NAKATANI, Masaki; SHIMIZU, Masaki

Chair: SHIMIZU, Masaki (15 : 50~16 : 50)

\* 15:40-15:50: interval for laptop PC connection.(1F3-42, 1F3-43, 1F3-44, 1F3-46, 1F3-47)

**1F3-42** Synthesis and properties of alkoxy-substituted anthraquinone and anthracene dimers (Grad. Sch. Eng., Univ. of Shiga Pref.; Grad. Sch. Eng., Univ. of Hyogo; Fac. Eng. Nagoya Inst. of Tech.) ○HIRAMATSU, Hayato; FURUKAWA, Wataru; TAKEHARA, Munenori; INOUE, Yoshinori; CHITOSHI, Kitamura; NISHIDA, Zyunichi; KAWASE, Takeshi; ONO, Katsuhiko**1F3-43** Crystal Structures and Fluorescence Emission Properties of Dithienylhexatrienes (AIST; Grad. Sch. Eng., Osaka Univ.) ○SONODA, Yoriko; ZHOU, Ying; TOHNAI, Norimitsu**1F3-44\*** Higher Excited State Involved with Photocycloreversion Reaction of a Cyclopropane Possessing Benzophenone Moiety (Grad. Sch. Eng., Osaka Pref. Univ.; The Research Inst. for Molecular Electronic Devices, Osaka Pref. Univ.) ○MATSUI, Yasunori; OISHI, Tohru; OHTA, Eisuke; IKEDA, Hiroshi**1F3-46** Charge carrier transport properties of solution-processed crystalline thin films based on heteroacene organic semiconductors (IFRC, Kyushu Univ.; Fac. Eng., Kyushu Univ.; I<sub>2</sub>CNER, Kyushu Univ.) ○MORI, Tatsuya; OYAMA, Tatsuya; YANG, Yuseok; KOMIYAMA, Hideaki; YASUDA, Takuma**1F3-47** Synthesis, properties, structures, and n-type semiconducting characteristics of  $\pi$ -conjugated compounds having perfluoroalkyl-substituted dicyanovinylidene terminal groups. (ISIR, Osaka Univ.) ○UCHIDA, Ayana; IE, Yutaka; NITANI, Masashi; ASO, Yoshio

Chair: HISAKI, Ichiro (17 : 00~18 : 00)

\* 16:50-17:00: interval for laptop PC connection.(1F3-49, 1F3-50, 1F3-52, 1F3-53, 1F3-54)

**1F3-49** Synthesis, Properties, and n-Type Field-effect Transistor Characteristics of Novel Quinoidal Conjugation Compounds Having a Structural Unit of Benzothiophene (ISIR, Osaka Univ.) ○YAMAMOTO, Keitaro; IE,

Yutaka; NITANI, Masashi; KAKIUCHI, Fumitoshi; ASO, Yoshio

**1F3-50\*\*** Naphtho[1,2-c:5,6-c']bis[1,2,5]thiadiazole-based Non-fullerene Electron Acceptor for Organic Solar Cell (ISIR, Osaka Univ.) ○CHATTERJEE, Shreyam; IE, Yutaka; KARAKAWA, Makoto; ASO, Yoshio**1F3-52** Synthesis, properties, and photovoltaic characteristics of copolymers having fluorine-containing benzodioxocycloalkene-annelated thiophene as an acceptor unit (ISIR, Osaka Univ.) ○MORIKAWA, Koki; IE, Yutaka; KARAKAWA, Makoto; ASO, Yoshio**1F3-53** Photoreaction of azanaphthalenylamine derivatives (Grad. Sch. Pharm., Kyushu Univ.) ○HAGIHARA, Ryusuke; AKIYAMA, Hidetosi; KARASAWA, Satoru; KOGA, Noboru**1F3-54** Synthesis and properties of carbon-bridged oligo(meta-phenylenevinylene)s aiming to realize long COPV with fluorescence in short wavelength region (Grad. Sch. Sci., The Univ. of Tokyo) ○TACHIBANA, Yuki; KOJIMA, Tatsuo; TSUJI, Hayato; NAKAMURA, Eiichi

Chair: ASO, Yoshio (18 : 10~18 : 50)

\* 18:00-18:10: interval for laptop PC connection.(1F3-56, 1F3-57, 1F3-59)

**1F3-56** The effect of 2-and 6-substituents on fluorescent quinazolines (Sci. Tec., Sophia Univ.) ○OTAKE, Ryo; MOTOYAMA, Miho; DOAN, Thuhong; WITULSKI, Bernhard; SUZUKI, Yumiko**1F3-57\*\*** Photophysical Properties of Polymer Materials Based on Carbon-Bridged Oligo(p-Phenylenevinylene)s (COPVs) (Grad. Sch. Sci., The Univ. of Tokyo) ○NISHIOKA, Hiroki; TSUJI, Hayato; NAKAMURA, Eiichi**1F3-59** Synthesis and Photophysical Property of Porphyrin Derivatives Utilizing Carbon-bridged Oligo(p-phenylenevinylene) (COPV) as Light-harvesting Antenna (Grad. Sch. Sci., The Univ. of Tokyo) ○ICHIMURA, Anna; SUKEGAWA, Junpei; KUDO, Mizuki; TSUJI, Hayato; NAKAMURA, Eiichi

## Friday, March 25, AM

## Molecular Conductors

Chair: KAWASE, Takeshi (9 : 10 ~ 10 : 00)

\* 9:00-9:10: interval for laptop PC connection.(2F3-02, 2F3-03, 2F3-05)

**2F3-02** Measurement of the single molecular device using COPV (Grad. Sch. Sci., The Univ. of Tokyo; Interdisciplinary Grad. Sch. Sci. and Eng., Tokyo Tech) ○HASHIMOTO, Kohei; TSUJI, Hayato; NAKAMURA, Eiichi; OUYANG, Chun; MAJIMA, Yutaka**2F3-03\*** Organic transistors using liquid crystalline phenyl-BTBT derivatives having a solubilizing group in a side chain (Imaging Sci. & Eng. Lab., Tokyo Tech) ○INO, Hiroaki; USUI, Takayuki; HANNA, Jun-ichi**2F3-05\*\*** Synthesis, Properties, and OLED Characteristics of 2,2'-Bipyridine-Based Electron-Transport Materials with Molecular Shape Anisotropy (Grad. Sch. Sci., Eng., Yamagata Univ.; ROEL) ○WATANABE, Yuichiro; SASABE, Hisahiro; YOKOYAMA, Daisuke; BEPPU, Teruo; KATAGIRI, Hiroshi; KIDO, Junji

## Photophysical Properties

Chair: IKEDA, Hiroshi (10 : 10~11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(2F3-08, 2F3-10, 2F3-12, 2F3-13)

**2F3-08\*\*** Luminescent open-shell radicals: Elucidation of factors that determine the emission properties and photostability (Grad. Sch. Sci., The Univ. of Tokyo) ○KUSAMOTO, Tetsuro; HATTORI, Yohei; OGINO, Yasuyo; NISHIHARA, Hiroshi**2F3-10\*** Photochemical-Stability Enhancement of Pentacene by Introducing Two Nitronyl Nitroxide Radical Substituents (Grad. Sch. Sci., Osaka City Univ.) ○SHIMIZU, Akihiro; ITO, Akitaka; TEKI, Yoshio**2F3-12** Synthesis and properties of soluble 2-bromotetracene derivatives (Grad. Sch. Eng., Univ. of Shiga Pref.; Grad. Sch. Eng., Univ. of Hyogo) ○HONDA, Tasuku; TAKEHARA, Munenori; INOUE, Yoshinori; KITAMURA, Chitoshi; KAWASE, Takeshi**2F3-13** Synthesis and Properties of 4,4'-Bipyrimidine Derivatives Bearing Carbazole Moieties (Sch. Sci. Tech., Gunma Univ.) ○HASEGAWA, Yoshimasa; HIYOSHI, Hidetaka; UMEZU, Kazuto; KATO, Shin-ichiro; NAKAMURA, Yosuke

Chair: SAKAI, Hayato (11 : 20~12 : 20)

\* 11:10-11:20: interval for laptop PC connection.(2F3-15, 2F3-16, 2F3-17, 2F3-18, 2F3-20)

**2F3-15** Near Infrared-to-Visible Photon Upconversion utilizing direct S<sub>0</sub>-T<sub>1</sub> transition (Grad. Sch. Eng., Kyushu Univ.; CMS, Khushu Univ.; PRESTO, JST) ○AMEMORI, Shogo; YANAI, Nobuhiro; KIMIZUKA, Nobuo**2F3-16** Triplet sensitization by core-shell quantum dots for photon upconversion (Grad. Sch. Eng., Kyushu Univ.; CMS, Khushu Univ.; PRESTO, JST) ○OKUMURA, Keisuke; YANAI, Nobuhiro; KIMIZUKA, Nobuo**2F3-17** Vis-to-UV Photon Upconversion by Using a TADF Molecule as a Triplet Sensitizer (Grad. Sch. Eng., Kyushu Univ.; CMS, Khushu Univ.; PRESTO, JST; OPERA, Kyushu Univ.; ERATO, JST) ○KOZUE, Mariko; YANAI, Nobuhiro; KABE, Ryota; ADACHI, Chihaya; KIMIZUKA, Nobuo**2F3-18\*** Efficient light-emission via reverse intersystem crossing from higher

triplet states in PTZ-BZP (Grad. Sch. Eng., Kyoto Univ.; ESICB, Kyoto Univ.) ○SATO, Tohru

- 2F3-20** Fluorescence via Reverse Intersystem Crossing from Higher Triplet States in Bisanthracene Derivatives (Sch. Eng., Kyoto Univ.) ○HAYASHI, Rika; SATO, Tohru; HARUTA, Naoki; SATO, Hirofumi; PU, Yong-jin

### Friday, March 25, PM

Chair: SEKI, Tomohiro (13 : 30~14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(2F3-28, 2F3-29, 2F3-31, 2F3-32, 2F3-33)
- 2F3-28** Synthesis of Pentacene-Alkanethiolate Monolayer-Protected Gold Nanoparticles for Singlet Fission (Grad. Sch. Sci. Tech., Keio Univ.; Dept. Chem. Bioeng., Tampere Univ. Tech.) ○KATO, Daiki; SAKAI, Hayato; NIKOLAI, Tkachenko; HASOBE, Taku
- 2F3-29\*** Concentration-Quenching Mechanism of Thermally Activated Delayed Fluorescence from Organic Donor-Acceptor Molecules (IFRC, Kyushu Univ.) ○AIZAWA, Naoya; LEE, Ji Young; YASUDA, Takuma
- 2F3-31** Unique Luminescent Properties of Organic Semiconductor Molecules Containing Boron-Cluster Units (IFRC, Kyushu Univ.; IFS, Kyushu Univ.) ○FURUE, Ryuhei; PARK, In Seob; LEE, Ji Young; AIZAWA, Naoya; YASUDA, Takuma
- 2F3-32** Solid-State Fluorescence Changes of V-Shaped Anthracene Dimers with Alkyl Chains by External Stimuli (Chem. Res. Lab., Tokyo Tech) ○SEKIGUCHI, Shoya; KONDO, Kei; YOSHIZAWA, Michito; AKITA, Munetaka
- 2F3-33** Terminal Modification of a V-Shaped Anthracene Dimer Having Alkyl Chains and Their Properties (Chem. Res. Lab., Tokyo Tech) ○HITOSE, Shota; SEKIGUCHI, Shoya; YOSHIZAWA, Michito; AKITA, Munetaka

Chair: KURATA, Hiroyuki (14 : 40~15 : 40)

- \* 14:30-14:40: interval for laptop PC connection.(2F3-35, 2F3-37, 2F3-39, 2F3-40)
- 2F3-35\*** Intramolecular Singlet Fission in Angular Pentacene Dimers for Controlled Excited-State Dynamics (Grad. Sch. Sci. Tech., Keio Univ.; IMRAM, Tohoku Univ.; Grad. Sch. Eng., Osaka Univ.; Dept. Chem. Bioeng. Tampere Univ.) ○SAKUMA, Takao; SAKAI, Hayato; ARAKI, Yasuyuki; MORI, Tadashi; WADA, Takehiko; TKACHENKO, Nikolai; HASOBE, Taku
- 2F3-37\*\*** Multi-Stimuli-Responsive Luminescent Properties of D-A-D Type Dibenzo[*a,j*]phenazine Derivatives (Grad. Sch. Eng., Osaka Univ.) ○OKAZAKI, Masato; TAKEDA, Youhei; MINAKATA, Satoshi
- 2F3-39** Temperature-Sensitive Mechanochromism of Gold(I) Isocyanide Complex Possessing a Hetero Aromatic Ring (Grad. Sch. Eng., Hokkaido Univ.) ○KOBATASHI, Kou; SEKI, Tomohiro; ITO, Hajime
- 2F3-40** Reversible Mechanochromism of Biphenyl Gold(I) Isocyanide Complex and Solvent-Induced Eleven Crystal Phase Transitions with Emission Color Changes (Grad. Sch. Eng., Hokkaido Univ.) ○JIN, Mingoo; SEKI, Tomohiro; ITO, Hajime

Chair: MATSUDA, Kenji (15 : 50~16 : 50)

- \* 15:40-15:50: interval for laptop PC connection.(2F3-42, 2F3-43, 2F3-45, 2F3-46, 2F3-47)
- 2F3-42** The construction of nanoparticles using TICT type BODIPYs (FIRST, Konan Univ.) ○MATSUMOTO, Ai; KAWAMURA, Koji; MURASHIMA, Takashi
- 2F3-43\*** Mechanofluorochromism of Indolylbenzothiadiazole Derivatives (Grad. Sch. Eng., Yokohama Natl. Univ.) ○ITO, Suguru; YAMADA, Takeshi; TAGUCHI, Tomohiro; UBUKATA, Takashi; YAMAGUCHI, Yoshitaka; ASAMI, Masatoshi
- 2F3-45** Synthesis and Emission Properties of 3,3'-Diaryl-2,2'-biindole Derivatives (Grad. Sch. Eng., Yokohama Natl. Univ.) ITO, Suguru; ○YAMADA, Takeshi; ASAMI, Masatoshi
- 2F3-46** Synthesis, Structures and Photophysical Properties of Dibenzoannelated Cyanostilbene Derivatives (FUT) ○KURATA, Hiroyuki; TOKAWA, Kohei
- 2F3-47\*** Synthesis and Photophysical Properties of Diiminate Complexes Containing Group 13 Elements (Grad. Sch. Eng., Kyoto Univ.) ○ITO, Shunichi; HIROSE, Amane; YAMAGUCHI, Madoka; TANAKA, Kazuo; CHUJO, Yoshiki

Chair: UBUKATA, Takashi (17 : 00~18 : 00)

- \* 16:50-17:00: interval for laptop PC connection.(2F3-49, 2F3-51, 2F3-53, 2F3-54)
- 2F3-49\*\*** Blue Emissive Pyrene-based Liquid Crystal Based on an Intramolecular CH- $\pi$  Interaction (Grad. Sch. Eng., The Univ. of Tokyo) ○SHIBUYA, Yoshiki; ITOH, Yoshimitsu; AIDA, Takuzo
- 2F3-51\*** Fluorescence behavior of 5,10-disubstituted [5]helicenederivatives in solution and the effect of self-assembly on their irradiative and non-radiative rate constants (Grad. Sch. Eng., Kyoto Univ.) ○HIROSE, Takashi; ITO, Natsuki; KUBO, Hiromu; SATO, Tohru; MATSUDA, Kenji
- 2F3-53** Design and synthesis of heavy atom-free photosensitizer using a hyperfine coupling in intramolecular CT compounds (Grad. Sch. Biosci. Biotech., Tokyo Tech) ○TSUGA, Yuki; AKENO, Hiroshi; KANAMORI,

Takashi; OHKUBO, Akihiro; YUASA, Hideya

- 2F3-54** Development of high-performance Triarylmethane dyes toward photosensitizers for Photodynamic Therapy without depending on Oxygen (Grad. Sch. Eng., Yokohama Natl. Univ.) ○KIKUMOTO, Kazuho; SAKAKIBARA, Kazuhisa; GOTOH, Hiroaki

Chair: ITOH, Yoshimitsu (18 : 10~18 : 50)

- \* 18:00-18:10: interval for laptop PC connection.(2F3-56, 2F3-57, 2F3-58, 2F3-59)
- 2F3-56** Study on the color modulation mechanism of firefly bioluminescence with a substituent effect approach (Grad. Sch. Sci. Eng., The Univ. of Electro-Communications) ○KAKIUCHI, Michio; YAMAJI, Minoru; MAKI, Syojiro; HIRANO, Takashi

### Nanostructure and their Physical Properties

- 2F3-57** Crystallization of a coordination cage via spherical aggregates built from a tripodal ligand and silver(I) salt (Kagawa Sch. Pharm. Sci., Tokushima Bunri Univ.; CAI, Chiba Univ.) ○TOMINAGA, Masahide; ANDO, Hisanori; ITOH, Tsutomu; OHARA, Kazuaki; YAMAGUCHI, Kentaro
- 2F3-58** Site-selective assembly of heterologous amino acids in a channel-type molecular crystal (Grad. Sch. Sci., The Univ. of Tokyo) ○NAKATA, Kousuke; TASHIRO, Shohei; SHIONOYA, Mitsuhiko
- 2F3-59** Synthesis of oligopeptide tethering lipophilic electrolyte (Sch. Sci., Hokkaido Univ.) ○FUKUSHIMA, Kanta; SUNAGA, Soukurou; NAMBU, Takanori; KOKADO, Kenta; SADA, Kazuki

### Saturday, March 26, AM

#### Nanostructures and their physical properties

Chair: MAEDA, Hiromitsu (9 : 00 ~10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(3F3-01, 3F3-03, 3F3-04, 3F3-05)
- 3F3-01\*\*** Studies on Phase Behavior and Charge Transport Properties in a Binary System of Discotic Liquid Crystalline Macrocyces (IFMRI, AIST) ○SHIN, Woong; HIGUCHI, Yumi; KAWANO, Kouki; SOSA-VARGAS, Lydia; ITANI, Hiromichi; FUJII, Akihiko; OZAKI, Masanori; SHIMIZU, Yo
- 3F3-03\*** Molecular Design and Systematic Fluorescence Profiling for a Perylene-based donor-acceptor system via Amplified fluorescence Response to the Molecular Recognition Events (IAS, Kyushu Univ.) ○ROY, Bappaditya; SHINKAI, Seiji
- 3F3-04** Mechanistic and Structural Analyses of Circular Supramolecular Polymers (Grad. Sch. Eng., Chiba Univ.) ○ARATSU, Keisuke; HOLLAMBY, Martin; YAGAI, Shiki
- 3F3-05\*\*** Light-Driven Folding-Unfolding in Supramolecular Polymer (Grad. Sch. Eng., Chiba Univ.) ○ADHIKARI, Bimalendu; YAGAI, Shiki

Chair: YOSHIZAWA, Michito (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(3F3-08, 3F3-10, 3F3-12)
- 3F3-08\*** Ion-Pairing Assemblies Based on Interlocked [2+1]-Type Receptor-Anion Complexes (Coll. Pharm. Sci., Ritsumeikan Univ.) ○YAMAKADO, Ryohei; MAEDA, Hiromitsu
- 3F3-10\*** Cooperative Supramolecular Polymerization via Formation of Hydrogen-bonded Supramacrocycles (Grad. Sch. Eng., Chiba Univ.) ○YAMAUCHI, Mitsuaki; YAGAI, Shiki
- 3F3-12\*\*** Rational Design of H- and J-type Aggregates by the Lateral Increase of Benzene Ring (Grad. Sch. Eng., Chiba Univ.) ○PRABHU, Deepak Dayanandan; YAGAI, Shiki

### Saturday, March 26, PM

Chair: YAGAI, Shiki (14 : 30~15 : 30)

- \* 14:20-14:30: interval for laptop PC connection.(3F3-34, 3F3-35, 3F3-36, 3F3-38)
- 3F3-34** Searching a new crystalline sponge through crystallographic database (Grad. Sch. Eng., The Univ. of Tokyo; PRESTO, JST) ○MATSUMURA, Kazuki; INOKUMA, Yasuhide; FUJITA, Makoto
- 3F3-35** Crystal Structure of Cycloparaphenylene in the Desolvated State (Grad. Sch. Sci., Nagoya Univ.) ○SAKAMOTO, Hiroto; OZAKI, Noriaki; ITAMI, Kenichiro
- 3F3-36\*** Crystal structure and Thermally-induced Phase Transition in Iodine Containing Cycloparaphenylenes (Grad. Sch. Sci., Nagoya Univ.) ○OZAKI, Noriaki; SAKAMOTO, Hiroto; ITAMI, Kenichiro
- 3F3-38\*\*** Macroscopic ordering of helical pores for arraying guest molecules noncentrosymmetrically (RIKEN CEMS) ○CHO, Joonil; LI, Chunji; YAMADA, Kuniyo; ISHIDA, Yasuhiro

Chair: HIROSE, Takashi (15 : 40~16 : 40)

- \* 15:30-15:40: interval for laptop PC connection.(3F3-41, 3F3-42, 3F3-43, 3F3-45)
- 3F3-41** Study on Synthesis of Two-Dimensional Polymer by Photocycloaddition at Air/Water Interface (Grad. Sch. Eng. Sci., Osaka Univ.) ○KUNIMOTO, Kazuki; TAHARA, Kazukuni; TOBE, Yoshito
- 3F3-42** Chemical Modification of Graphite Surface Using Aryl Radicals with

Various Functional Groups (Grad. Sch. Eng. Sci., Osaka Univ.; PRESTO, JST) ○KUBO, Yuki; LINDNER, Benjamin Daniel; TAHARA, Kazukuni; TOBE, Yoshito

- 3F3-43<sup>#</sup>** Synthesis of acene-type graphene nanoribbon by surface-induced homochiral polymerization (IAE, Kyoto Univ.) ○SONG, Shaotang; NAKAE, Takahiro; KOJIMA, Takahiro; SAKAGUCHI, Hiroshi
- 3F3-45\*** Solubilization and Optical Tuning of Graphene Quantum Dots through Decarboxylative-Arylation (Grad. Sch. Eng., Nagoya Univ.) ○ODA, Kazuma; HIROTO, Satoru; SHINOKUBO, Hiroshi

Chair: TAHARA, Kazukuni (16 : 50~17 : 40)

\* 16:40-16:50: interval for laptop PC connection.(3F3-48, 3F3-49, 3F3-50, 3F3-52)

- 3F3-48** Surface Confined Self-Assembly Composed of Diarylethenes at the Liquid/Solid Interface: Dependence of Photoresponsiveness on Substitution Position of Thienyl Group (Grad. Sch. Eng., Kyoto Univ.) ○MAEDA, Naoki; HIROSE, Takashi; MATSUDA, Kenji

- 3F3-49<sup>#</sup>** Cooperative Self-Assemblies at the Liquid/solid Interface Controlled by Multidirectional Hydrogen Bond: STM Observation of Anisotropic Domain Growth (Grad. Sch. Eng., Kyoto Univ.) ○NISHITANI, Nobuhiko; HIROSE, Takashi; MATSUDA, Kenji

- 3F3-50\*** Co-assembly of perylene bisimide dyads with different linker length (Grad. Sch. Eng., Chiba Univ.) ○LIN, Xu; YAGAI, Shiki

- 3F3-52** Self-assembly and metal-ion-complexation of perylene bisimide dyad linked through oligo(ethylene glycol) chain (Grad. Sch. Eng., Chiba Univ.) ○FUKUDA, Ippei; KARATSU, Takashi; YAGAI, Shiki

### Sunday, March 27, AM

Chair: KOZAKI, Masatoshi (9 : 20 ~10 : 20)

\* 9:10-9:20: interval for laptop PC connection.(4F3-03, 4F3-04, 4F3-05, 4F3-06, 4F3-07, 4F3-08)

- 4F3-03** Analytical study of fundamental reactivity of zerumbone derivatives (3) (Grad. Sch. Agr. Sci., Kinki Univ.) ○NISHIKAWA, Atsuya; YAMAMOTO, Chieko; TSUZUKI, Terutaka; KITAYAMA, Takashi

- 4F3-04** Synthesis and Property of Organic Molecule Protected-Cu<sub>2</sub>O Nanoparticle Hybrid Polymer Nanotubes (Fac. Sci. Eng., Kinki Univ.) ○IMAMURA, Yuta; NAKAHODO, Tsukasa; FUJIHARA, Hisashi

- 4F3-05** Synthesis and Optical Property of Porphyrin Polymer Nanotube Composites Containing Gold Nanorods and Titanium Oxide Nanoparticles (Kinki Univ.) ○YOSHIDA, Yuya; NAKAHODO, Tsukasa; FUJIHARA, Hisashi

- 4F3-06** Synthesis of Chiral Plasmonic Magnetite and Polymer Hybrid Nanotubes (Fac. Sci. Eng., Kinki Univ.) ○KISHIMOTO, Naoya; NAKAHODO, Tsukasa; FUJIHARA, Hisashi

- 4F3-07** Synthesis and Property of C<sub>2</sub>Chiral Polymer Nanotubes (Kinki Univ.) ○YAMANAKA, Tomohiro; NAKAHODO, Tsukasa; FUJIHARA, Hisashi

- 4F3-08** Stille Cross-Coupling Reaction using Palladium Nanoparticles in Supercritical Reaction Field (Fac. Sci. Eng., Kinki Univ.) ○KONDO, Ryota; NAKAHODO, Tsukasa; FUJIHARA, Hisashi

Chair: KUZUHARA, Daiki (10 : 30~11 : 10)

\* 10:20-10:30: interval for laptop PC connection.(4F3-10, 4F3-11, 4F3-12, 4F3-13)

- 4F3-10** Hydrogen Evolution Using a Supramolecular Photosensitizing System based on the (6,5)-enriched Single Walled Carbon Nanotubes (Grad. Sch. Env. Life Sci., Okayama Univ.) ○TANGO, Yuto; TAJIMA, Tomoyuki; MURAKAMI, Noritake; KUBO, Yosuke; KURUNIAWAN, Kiki; MIYAKE, Hideaki

- 4F3-11** Photosensitized Hydrogen Evolution from Water Using (6,5)-enriched Single-Walled Carbon Nanotube/Fullerodendron/Pt(II) Coaxial Nanohybrids (Grad. Sch. Env. Life Sci., Okayama Univ.) ○MURAKAMI, Noritake; TAJIMA, Tomoyuki; TANGO, Yuto; KUBO, Yosuke; KURUNIAWAN, Kiki; MIYAKE, Hideaki; TAKAGUCHI, Yutaka

- 4F3-12** Synthesis of Dendrimeric Trimer with Both Monomeric and Dimeric Porphyrin Cores (Grad. Sch. Sci., Osaka City Univ.) ○KIMURA, Ryo; SUZUKI, Shuichi; OKADA, Keiji; KOZAKI, Masatoshi

- 4F3-13** Development of coordination copolymer showing photon upconversion (Grad. Sch. Eng., Kyushu Univ.) ○HOSOYAMADA, Masanori; YANAI, Nobuhiro; KIMIZUKA, Nobuo

### Molecular Photophysical Properties

Chair: OKADA, Keiji (11 : 20~12 : 20)

\* 11:10-11:20: interval for laptop PC connection.(4F3-15, 4F3-16, 4F3-17, 4F3-18, 4F3-19, 4F3-20)

- 4F3-15** Unclassical control of circularly polarized luminescence(CPL) of chiral peptide-pyrene organic fluorophore (Fac. Sci. Eng., Kinki Univ.) ○KITAMURA, Sayaka; NISHIKAWA, Tomoki; KITAMATSU, Mizuki; FUJIKI, Michiya; IMAI, Yoshitane

- 4F3-16** Circularly polarized luminescence(CPL) property of chiral amphiphilic binaphthyl organic fluorophores (Fac. Sci. Eng., Kinki Univ.) ○OKAZAKI, Mamoru; TSUZUMOTO, Shintaro; FUJIKI, Michiya; IMAI, Yoshitane

- 4F3-17** Preparation of chiral paracyclophane-lanthanoid hybrid luminophore and its circularly polarized luminescence (CPL) properties (Kinki University) ○KONO, Yuki; KITAMURA, Sayaka; FUJIKI, Michiya; IMAI, Yoshitane

- 4F3-18** Preparation of cryptochiral binaphthyl-pyrene organic fluorophore and its circularly polarized luminescence(CPL) property (Fac. Sci. Eng., Kinki Univ.) ○NAKANISHI, Shoma; NAKABAYASHI, Kazuki; SUZUKI, Nozomu; GUO, Sib; FUJIKI, Michiya; IMAI, Yoshitane

- 4F3-19** Synthesis and Photophysical Properties of a CPL Emitting [4] Rotaxane Consisting of two Alkynylperylene and two  $\gamma$ -CDs (Grad. Sch. Pharm. Sci., Univ. of Toyama; Grad. Sch. Sci. Eng., Univ. of Toyama) ○HAYASHI, Koichiro; UCHIDA, Taka-aki; IWAMURA, Munetaka; NOZAKI, Koichi; INOUE, Masahiko

- 4F3-20** Zinc Ion Induces Circular Dichroism and Circular Polarized Luminescence of Pyrene Derivatives (Grad. Sch. Mat. Sci., NAIST; PRESTO, JST) ○IMAI, Yuki; NAKANO, Yuka; KAWAI, Tsuyoshi; YUASA, Junpei

### Sunday, March 27, PM

#### Nanostructures and their physical properties

Chair: YAGAI, Shiki (13 : 30~14 : 30)

\* 13:20-13:30: interval for laptop PC connection.(4F3-28, 4F3-30, 4F3-31, 4F3-32, 4F3-33)

- 4F3-28<sup>#</sup>** Molecular motion in columnar liquid-crystalline phases and 2D crystallization of tetrasalphen macrocycles (Grad. Sch. Sci., Nagoya Univ.; Grad. Sch. Eng., Nagoya Univ.) ○KAWANO, Shin-ichiro; NAKAYA, Masato; ONOE, Jun; TANAKA, Kentaro

- 4F3-30** Layering of metallomacrocycles with bridging ligands to develop nanospaces (Grad. Sch. Sci., Nagoya Univ.) ○FUKUSHIMA, Tomoaki; KAWANO, Shin-ichiro; TANAKA, Kentaro

- 4F3-31** Synthesis via dynamic covalent chemistry, structure, and function of macrocycles involving bis(acylamino)pyridine frameworks (Grad. Sch. Sci., Nagoya Univ.) ○SUEMATSU, Motoki; KAWANO, Shin-ichiro; TANAKA, Kentaro

- 4F3-32** Stereoselective Synthesis and Host Ability of a C-shaped Molecular Receptor with Anthracene Panels (Chem. Res. Lab., Tokyo Tech) ○JONO, Keisuke; SUZUKI, Akira; YOSHIZAWA, Michito; AKITA, Munetaka

- 4F3-33<sup>#</sup>** Synthesis and Reversible Structural Changes of a Molecular Tube Possessing Four Acridinium Panels (Chem. Res. Lab., Tokyo Tech) ○KURIHARA, Kohei; YAZAKI, Kohei; YOSHIZAWA, Michito; AKITA, Munetaka

Chair: NOBUHIRO, Yanai (14 : 40~15 : 30)

\* 14:30-14:40: interval for laptop PC connection.(4F3-35, 4F3-36, 4F3-37, 4F3-38, 4F3-39)

- 4F3-35** Supramolecular Polymerization of Supermacrocylic Assemblies Possessing Azobenzene Moieties (Fac. Eng., Chiba Univ.) YAGAI, Shiki; ○KANAOKA, Norimichi; KARATSU, Takashi

- 4F3-36** Self-assembly and Photoresponsive Behavior of Azobenzene-erylene Bisimide Dyad (Fac. Eng., Chiba Univ.) YAGAI, Shiki; ○SHIMADZU, Ryunosuke; KARATSU, Takashi

- 4F3-37** Exploration of Photoinduced Inversion of Supramolecular Helicity (Fac. Eng., Chiba Univ.) YAGAI, Shiki; ○INOUE, Daisuke; YAMAUCHI, Mitsuaki; KARATSU, Takashi

- 4F3-38** Self-assembly and photovoltaic application of multiple-hydrogen-bonding oligothiophenes (Grad. Sch. Eng., Chiba Univ.; Grad. Sch. Sci., Eng., Yamagata Univ.; CREST, JST) ○OUCHI, Hayato; KIZAKI, Akihiro; LIN, Xu; NAKAYAMA, Kenichi; YAGAI, Shiki

- 4F3-39** Synthesis and Properties of Layered Tetrathiafulvalenophanes (Grad. Sch. Sci., Eng., Ehime Univ.) ○TOKUNAGA, Saki; SHIRAHATA, Takashi; MISAKI, Yohji

## Room F4

Chishinkan3 Building 104

### Physical Organic Chemistry Structures and Properties

Thursday, March 24, AM

#### Anion Recognition

Chair: KATO, Shin-ichiro (9 : 30 ~10 : 30)

\* 9:20-9:30: interval for laptop PC connection.(1F4-04, 1F4-05, 1F4-06, 1F4-07, 1F4-08, 1F4-09)

- 1F4-04** Synthesis of Anion-Responsive  $\pi$ -Electronic Molecules Introducing Chain-Like Conjugate Units (Coll. Pharm. Sci., Ritsumeikan Univ.) MAEDA, Hiromitsu; ○AKIYAMA, Kazuya

- 1F4-05<sup>#</sup>** Pyrrole-Based Anion-Responsive Molecules with Multiple Interaction Sites (Coll. Pharm. Sci., Ritsumeikan Univ.) ○VELLANKI, Lakshmi;

MAEDA, Hiromitsu

- 1F4-06** Synthesis of Anion-Responsive  $\pi$ -Electronic Molecules Comprising Alternately Arranged Pyrrole and Diketone Moieties (Coll. Pharm. Sci., Ritsumeikan Univ.) ○KINOSHITA, Keita; MAEDA, Hiromitsu
- 1F4-07** Multipoint Recognition of Organic Anions by Porphyrin-Cadmium (II) Complexes (Grad. Sch. Sci., Osaka City Univ.) SHINODA, Satoshi; ○YOSHIMURA, Keita
- 1F4-08** Synthesis of Cyclic Anion-Responsive  $\pi$ -Electronic Molecules (Coll. Pharm. Sci., Ritsumeikan Univ.) MAEDA, Hiromitsu; ○KANAME, Shunsuke
- 1F4-09** Synthesis of Amide-Contained Anion-Responsive  $\pi$ -Electronic Molecules (Coll. Pharm. Sci., Ritsumeikan Univ.) MAEDA, Hiromitsu; ○KUNO, Atsuko

Chair: SHINODA, Satoshi (10 : 40~11 : 40)

- \* 10:30-10:40: interval for laptop PC connection.(1F4-11, 1F4-12, 1F4-13, 1F4-14, 1F4-15)
- 1F4-11** Synthesis of Anion-Responsive  $\pi$ -Systems Forming Dimension-Controlled Assemblies (Coll. Pharm. Sci., Ritsumeikan Univ.) ○TANI, Yasunao; MAEDA, Hiromitsu
- 1F4-12** Synthesis of Pyrrole-Based Charged  $\pi$ -Electronic Systems (Coll. Pharm. Sci., Ritsumeikan Univ.) MAEDA, Hiromitsu; ○OKUBO, Takayuki
- 1F4-13** Synthesis of 2,3,1-benzodiazaborine-typed anion sensor (Urban Environmental Sci., TMU) ○SATTA, Yusuke; MATSUMOTO, Hiroto; NISHIYABU, Ryuhei; JAMES, Tony D.; KUBO, Yuji
- 1F4-14** Synthesis, Self-association, and Anion Recognition of Conjugated Macrocycles Composed of Carbazole and Triazolium Moieties (Sch. Sci. Tech., Gunma Univ.) ○JIN, Satoshi; KATO, Shin-ichiro; NAKAMURA, Yosuke
- 1F4-15<sup>#</sup>** Synthesis and characterization of N-Heteroacene Derivatives (Fac. Eng., Kagawa Univ.; Fac. Sci., Tokyo Univ. of Sci.) ○ISODA, Kyosuke; TADOKORO, Makoto

### Thursday, March 24, PM

Chair: YAMANAKA, Masamichi (12 : 50~13 : 40)

- \* 12:40-12:50: interval for laptop PC connection.(1F4-24, 1F4-25, 1F4-26, 1F4-28)
- 1F4-24** Photo-triggered DNA Complexation inside a Giant Vesicle containing Photo-sensitive Microcapsule (Fac. Sci., Kanagawa Univ.) ○SUZUKI, Kentaro; MACHIDA, Kotaro; YAMAGUCHI, Kazuo; SUGAWARA, Tadashi
- 1F4-25** Correlation between octanol/water partition coefficient and introduction rate of hydrophobic molecules in liposomes (Grad. Sch. Eng., Hiroshima Univ.) ○ASHIZAWA, Kengo; SUGIKAWA, Kouta; IKEDA, Atsushi
- 1F4-26<sup>\*</sup>** Oligosaccharide Sensing by Tetraphenylethylene-Curdlan Conjugates in Aqueous Media (Grad. Sch. Eng., Osaka Univ.) ○FUKUHARA, Gaku; KUROHARA, Hiroki; NUMATA, Munenori; MORI, Tadashi; BOHNE, Cornelia; INOUE, Yoshihisa
- 1F4-28** Synthesis of a novel pyrene sulfonic acid moiety and its fluorescence behavior in the presence of polyamines (Fac. Life Med. Sci., Doshisha Univ.) ○HAMAGUCHI, Naoto; OTA, Tetsuo; OE, Yohei

Chair: FUKUHARA, Gaku (13 : 50~14 : 50)

- \* 13:40-13:50: interval for laptop PC connection.(1F4-30, 1F4-31, 1F4-32, 1F4-33, 1F4-34, 1F4-35)
- 1F4-30** Synthesis and Chiral Recognition of Fluorescent Chiral Macrocyclic Compounds (Grad. Sch. Nat. Sci. Technol., Okayama Univ.; Grad. Sch. Sci., Eng., Yamagata Univ.; Dept. Chem., Bowling Green State Univ.) EMA, Tadashi; ○YOKOYAMA, Maki; WATANABE, Sagiri; MAEDA, Chihiro; TAKAISHI, Kazuto; MINAMI, Tsuyoshi; AKDENIZ, Ali; ANZENBACHER, JR, Pavel
- 1F4-31** Selective recognition of scandium ion by tripodal tricarboxylic acid (Fac. Sci., Shizuoka Univ.) ○SANO, Shuhei; YAMANAKA, Masamichi
- 1F4-32** Formation of C3-Symmetric Imine via Dynamic Covalent Bond (Fac. Sci., Shizuoka Univ.) ○NAKADA, Keiko; YAMANAKA, Masamichi
- 1F4-33** Self-Assembly of Supramolecular Giant Ring Based on Hydrogen-Bonded Hetero-Capsule and Dumbbell Type Guest (Grad. Sch. Sci., Shizuoka Univ.) ○KAJIHARA, Takanori; KOBAYASHI, Kenji
- 1F4-34** Synthesis of Supramolecular Giant Rings Based on Dynamic Imine Bonds. (Fac. Sci., Shizuoka Univ.) ○FUJIMURA, Koki; KAJIHARA, Takanori; KOBAYASHI, Kenji
- 1F4-35** Effect of Long Alkyl Side Chains in Self-Assembly of Calix[4]resorcinarene (Grad. Sch. Sci., Shizuoka Univ.) ○HIROTA, Shiori; KOBAYASHI, Kenji

### Catenane · Rotaxane

Chair: SAWADA, Tomohisa (15 : 00~15 : 50)

- \* 14:50-15:00: interval for laptop PC connection.(1F4-37, 1F4-38, 1F4-39, 1F4-40, 1F4-41)
- 1F4-37** Synthesis of Rotaxanes by the Entering Method Based on Characteristics of Selenium-Sulfur Bonds (Grad. Sch. Sci., Eng., Tokyo Tech) ○NODA, Satoshi; SASE, Shohei; GOTO, Kei
- 1F4-38** Synthetic Study of Oligorotaxanes Utilizing Characteristics of Highly

Coordinated Silicon Compounds (Grad. Sch. Sci., Eng., Tokyo Tech) ○YAMASHITA, Kohei; SASE, Shohei; GOTO, Kei

- 1F4-39** Effects of Structure of Axle Components on Shuttling Dynamics in Rotaxane Type Molecular Machines (Grad. Sch. Eng. Sci., Osaka Univ.) HIROSE, Keiji; ○KANO, Ryohei; YOUNG, Philip Geoffrey; TOBE, Yoshito
- 1F4-40** Intramolecular hydroamination of unsymmetrical allylurethane with a macrocycle catalyst and reaction behavior of threaded intermediate (Grad. Sch. Sci., Eng., Tokyo Tech) ○IWASAKI, Hikaru; AOKI, Daisuke; SOGAWA, Hiromitsu; TAKATA, Toshikazu
- 1F4-41** Selective Mizoroki-Heck reaction using a Pd-containing macrocycle catalyst (Grad. Sch. Sci., Eng., Tokyo Tech) ○MIZUNO, Shunya; AOKI, Daisuke; SOGAWA, Hiromitsu; TAKATA, Toshikazu

Chair: SASE, Shohei (16 : 00~16 : 50)

- \* 15:50-16:00: interval for laptop PC connection.(1F4-43, 1F4-44, 1F4-45, 1F4-47)
- 1F4-43** Topologically chiral rotaxane derived from desymmetrization based on the relative position change of the component (Grad. Sch. Sci., Eng., Tokyo Tech) ○IWASE, Takuya; NAKAZONO, Kazuko; TAKATA, Toshikazu
- 1F4-44** *O*-Acylation of alcohol using polymer-supported rotaxane catalyst (Grad. Sch. Sci., Eng., Tokyo Tech) ○KONAKAZAWA, Masahiro; NAKAZONO, Kazuko; TAKATA, Toshikazu
- 1F4-45<sup>#</sup>** Synthesis of Rotaxane-type Amine Chiral *N*-oxide and Its Application to Asymmetric Allylation (Grad. Sch. Sci., Eng., Tokyo Tech; Grad. Sch. Sci., Eng., Tokyo Tech) ○XU, Kun; NAKAZONO, Kazuko; TAKATA, Toshikazu
- 1F4-47** Induction of a helical structure by formation of a [2]rotaxane consisting of a biscrown and a bisammonium ion. (Grad. Sch. Eng., Univ. of Fukui) ○TSUKAMOTO, Toshihiro; SASAHARA, Ryota; MIYAGAWA, Shinobu; SUZUKI, Yu; KAWASAKI, Tsuneomi; TOKUNAGA, Yuji

Chair: SOGAWA, Hiromitsu (17 : 00~17 : 50)

- \* 16:50-17:00: interval for laptop PC connection.(1F4-49, 1F4-51, 1F4-53)
- 1F4-49<sup>\*</sup>** Synthesis of the [2]Rotaxane-Cu Complex and the Conversion of the Copper Complex to the Hetero [3]Rotaxane (Grad. Sch. Chem. Sci. Technol., Tokyo Univ. of Sci.) ○YAMASHITA, Yoshiaki; MUTOH, Yuichiro; YAMASAKI, Ryu; KASAMA, Takeshi; SAITO, Shinichi
- 1F4-51<sup>\*</sup>** Selective Synthesis of Rotacatenane Isomers (Fac. Sci., Tokyo Univ. of Sci.) ○HAYASHI, Ryuto; SLAVIK, Petr; MUTOH, Yuichiro; KASAMA, Takeshi; SAITO, Shinichi
- 1F4-53** Synthesis of [2]Catenanes by the Intramolecular Sonogashira-Type Reaction (Fac. Sci., Tokyo Univ. of Sci.) ○ITOU, Ken; MUTOH, Yuichiro; SAITO, Shinichi

Chair: MUTOH, Yuichiro (18 : 00~18 : 50)

- \* 17:50-18:00: interval for laptop PC connection.(1F4-55, 1F4-56, 1F4-57, 1F4-59)
- 1F4-55** Synthesis of the Most Complex Molecular Topology: a Peptide [4] Catenene with Crossing Number 12 (Grad. Sch. Eng., The Univ. of Tokyo) ○YAMAGAMI, Motoya; SAWADA, Tomohisa; FUJITA, Makoto
- 1F4-56** Synthesis of reactive Polycatenane and ring expansion / cleavage. (Grad. Sch. Fac. Sci., Kanagawa Univ.) ○SAKURAI, Masayoshi; KIHARA, Nobuhiro
- 1F4-57<sup>\*</sup>** Self-assembly synthesis of metallomacrocycles: Oxidative structural locking and synthesis of a topologically chiral ladder catenane (Grad. Sch. Sci., Nagoya Univ.; RCMS, Nagoya Univ.; Grad. Sch. Nat. Sci. Technol., Kanazawa Univ.; Grad. Sch. Sci., Eng., Saitama Univ.) ○NISHINO, Toshio; YAMADA, Yasuyuki; AKINE, Shigehisa; SHIMOKAWA, Koya; TANAKA, Kentaro
- 1F4-59** Synthesis and self-assembly of metallomacrocycles with a molecular cavity surrounded by diphenylanthracenes (Grad. Sch. Sci., Nagoya Univ.) ○HARADA, Takahiro; KAWANO, Shin-ichiro; NISHINO, Toshio; TANAKA, Kentaro

### Friday, March 25, AM

#### Porphyrin, Phthalocyanine

Chair: YAMADA, Yasuyuki (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(2F4-01, 2F4-02, 2F4-03, 2F4-04, 2F4-05, 2F4-06)
- 2F4-01** Synthesis of an allosteric receptor with a sterically bulky shielding unit and allosteric regulation by the regulatory molecule (Grad. Sch. Sci., Osaka City Univ.) ○SASAKI, Yoshito; KOZAKI, Masatoshi; SUZUKI, Shuichi; OKADA, Keiji
- 2F4-02** Doubly or Singly Cavitand-Capped Porphyrin Capsules via Hydrogen Bonds (Fac. Sci., Shizuoka Univ.) ○NAKABAYASHI, Kakeru; KISHIMOTO, Kazuki; KOBAYASHI, Kenji
- 2F4-03** Self-Assembled Molecular Gear: a 4:1 Complex of Rh-Tetraarylporphyrin and Tetra(p-pyridyl)cavitand (Grad. Sch. Sci., Shizuoka Univ.) ○NAKAMURA, Munehika; KISHIMOTO, Kazuki; YOZA, Kenji; KOBAYASHI, Kenji
- 2F4-04** Aromatic Micelles: Water-Solubilization of Metallo-Phthalocyanines

and Their Larger Derivatives (Chem. Res. Lab., Tokyo Tech) ○KONDO, Kei; YOSHIZAWA, Michito; AKITA, Munetaka

**2F4-05** Synthesis of pH-Responsive Aromatic Micelles and their Encapsulation/Release of Large Molecules (Chem. Res. Lab., Tokyo Tech) ○KISHIMOTO, Mai; KONDO, Kei; YOSHIZAWA, Michito; AKITA, Munetaka

**2F4-06** Solvent-induced Structural Change of Coordination-Organized Supramolecular Porphyrin Wires (Grad. Sch. Chem. Sci. Technol., Tokyo Univ. of Sci.) ○SHIMAZAKI, Tatsumi; ISHII, Hidekazu; SATAKE, Akiharu

Chair: MIYAKE, Hiroyuki (10 : 10~11 : 00)

\* 10:00-10:10: interval for laptop PC connection.(2F4-08, 2F4-09, 2F4-10, 2F4-11, 2F4-12)

**2F4-08** Temperature Effects on Self-Aggregation of Synthetic Zinc <sup>3+</sup>-Hydroxy-Chlorins in Silicone Oil (Fac. Sci. Tech., Ryukoku Univ.; Grad. Sch. Life Sci., Ritsumeikan Univ.) MIYATAKE, Tomohiro; ○YAMAMOTO, Yusuke; TAMIYAKI, Hitoshi

**2F4-09** Self-aggregates of Metallochlorins Possessing a Hydrophilic PEG Chain (Fac. Sci. Tech., Ryukoku Univ.; Grad. Sch. Life Sci., Ritsumeikan Univ.) MIYATAKE, Tomohiro; ○SASAKI, Takaaki; OKADA, Kazuki; TAMIYAKI, Hitoshi

**2F4-10** Synthesis of zinc chlorophyll-*a* derivatives possessing a pyridyl group and their response to additional acids or bases (Coll. Life Sci., Ritsumeikan Univ.) TAMIYAKI, Hitoshi; ○KAMATANI, Yusuke; WADA, Ayaka

**2F4-11** Dimerization of synthetic zinc chlorophyll derivatives possessing an amino group in less polar organic solvents (Grad. Sch. Life Sci., Ritsumeikan Univ.) ○WATANABE, Hiroaki; TAMIYAKI, Hitoshi

**2F4-12** Synthesis and physical properties of chlorophyll oligomers connected by amide bonds (Coll. Life Sci., Ritsumeikan Univ.) TAMIYAKI, Hitoshi; ○TATEBE, Tomohiro

Chair: TASHIRO, Shohei (11 : 10~12 : 10)

\* 11:00-11:10: interval for laptop PC connection.(2F4-14, 2F4-16, 2F4-18)

**2F4-14**<sup>##</sup> First Investigation of Handedness Chirality Effect of SWNTs by the Supramolecular Structures of Porphyrin Derivatives (Grad. Sch. Sci., Osaka Univ.) ○ABD EL MAGEED, Ahmed I. A.; INOSE, Tomoko; OGAWA, Takuji

**2F4-16**<sup>##</sup> Divergent time-evolution of a kinetically trapped supramolecular assembly (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba; Org. Mat. Group, NIMS) ○FUKUI, Tomoya; SUGIYASU, Kazunori; TAKEUCHI, Masayuki

**2F4-18**<sup>\*</sup> Redox Bistability of a Porphyrin-Phthalocyanine Stacked Diad Joint in a Fourfold Rotaxane (Grad. Sch. Sci., Nagoya Univ.; RCMS, Nagoya Univ.) ○YAMADA, Yasuyuki; ISHIHARA, Yu; WATANABE, Noriyuki; TANAKA, Kentaro

## Friday, March 25, PM

### host-guest

Chair: SAKATA, Yoko (13 : 20~14 : 20)

\* 13:10-13:20: interval for laptop PC connection.(2F4-27, 2F4-29, 2F4-31)

**2F4-27**<sup>##</sup> Anthracene-based Disilver-macrocycle: Photochemical Oxidation of its Framework to Regulate Guest Binding Behaviors (Grad. Sch. Sci., The Univ. of Tokyo) ○OMOTO, Kenichiro; TASHIRO, Shohei; SHIONOYA, Mitsuhiro

**2F4-29**<sup>##</sup> Host-guest properties of metal-thiolate macrocyclic clusters (Fac. Env. Earth Sci., Hokkaido Univ.; Grad. Sch. Env. Sci., Hokkaido Univ.) ○SHICHIBU, Yukatsu; YOSHIDA, Keisuke; OZAWA, Shun; KONISHI, Katsuaki

**2F4-31**<sup>\*</sup> Helicity Control of Cyclic Compounds Bearing the Dynamic Thiahelix Unit through Chirality Transfer (Grad. Sch. Sci., Eng., Tokyo Tech) ○NAMBU, Yoko; TAKAHASHI, Kaori; TAKATA, Toshikazu

Chair: SHIGENO, Masanori (14 : 30~15 : 30)

\* 14:20-14:30: interval for laptop PC connection.(2F4-34, 2F4-35, 2F4-36, 2F4-37, 2F4-38, 2F4-39)

**2F4-34** Recognition of Organic Cations by New Macrocyclic Dinuclear Metallohosts Having a 24-crown-8 Scaffold (Grad. Sch. Nat. Sci. Technol., Kanazawa Univ.) ○KOBAYASHI, Seiya; SAKATA, Yoko; AKINE, Shigehisa

**2F4-35** Synthesis of New Macrocyclic Dinuclear Metallohost Having Xanthene Scaffold towards Development of Highly Planar Host Molecule (Grad. Sch. Nat. Sci. Technol., Kanazawa Univ.) ○NAKANO, Masato; SAKATA, Yoko; AKINE, Shigehisa

**2F4-36** Synthesis of Novel Cage-type Cyclodextrins and Examination of Their Inclusion Ability (Grad. Sch. Eng., Osaka Univ.) ○ITO, Shogo; KIDA, Toshiyuki

**2F4-37** Chiral Recognition by C<sub>2</sub>-Symmetric Chiral Diamines with Polycyclic Aromatic Rings (Grad. Sch. Eng., Yokohama Natl. Univ.) ITO, Suguru; ○IKEDA, Kengo; ASAMI, Masatoshi

**2F4-38** Synthesis and functionalization of a new anthracene-based cyclophane (Fac. Sci., Fukuoka Univ.) ○NAKAMURA, Kazuhiro; HAYASHIDA, Osamu

**2F4-39** Synthesis and evaluation of guest recognition on heterojunction

cyclodextrin dimers (Fac. Eng., Saitama Univ.) ○FUSE, Yasuyuki; ISHIMARU, Yoshihiro

Chair: KIDA, Toshiyuki (15 : 40~16 : 40)

\* 15:30-15:40: interval for laptop PC connection.(2F4-41, 2F4-43, 2F4-44, 2F4-45, 2F4-46)

**2F4-41**<sup>##</sup> Electrophilic Activation of Aromatic Guest Molecules Utilizing a Macrocyclic Boronic Ester Containing Difluorobenzothiadiazole Moiety (Grad. Sch. Sci., Eng., Tokyo Tech) ○UCHIKURA, Tatsuhiko; ONO, Kosuke; TAKAHASHI, Kohei; IWASAWA, Nobuharu

**2F4-43** Construction of Cage-type Boroxine Molecules and their Dynamic Structure Change Utilizing Complex Formation with Lewis Base (Sch. Sci., Tokyo Tech) ○SHIMO, Shunsuke; ONO, Kosuke; TAKAHASHI, Kohei; IWASAWA, Nobuharu

**2F4-44** Construction of a Macrocyclic Boronic Ester Containing Thiadiazole Dioxide Moiety and its Guest Inclusion Behavior (Grad. Sch. Sci., Eng., Tokyo Tech) ○OCHIAI, Junichi; UCHIKURA, Tatsuhiko; ITO, Suguru; ONO, Kosuke; TAKAHASHI, Kohei; IWASAWA, Nobuharu

**2F4-45** Synthesis of Macrocyclic Boronic Esters Containing Crown Ether Moieties and their Acceleration of the Diels-Alder Reaction. (Grad. Sch. Sci., Eng., Tokyo Tech) ○NAKAJO, Ryosuke; TAKAHASHI, Kohei; ONO, Kosuke; IWASAWA, Nobuharu

**2F4-46** Withdrawn

Chair: TAKAHASHI, Kohei (16 : 50~17 : 40)

\* 16:40-16:50: interval for laptop PC connection.(2F4-48, 2F4-49, 2F4-51, 2F4-52)

**2F4-48**<sup>##</sup> An Inclusion Complex Formation between a Helical st-PMMA and Peptide-Bound Fullerene Derivatives (Grad. Sch. Eng., Nagoya Univ.) ○MAMIYA, Fumihiko; IWATA, Yoshiaki; OUSAKA, Naoki; YASHIMA, Eiji

**2F4-49**<sup>\*</sup> Modulation of intervalence charge transfer properties of biferrocenium derivatives using boron chemistry (Grad. Sch. Mat. Sci., NAIST) ○TAHARA, Keishiro; YABUMOTO, Shiomi; TERASHITA, Nazuna; KIKUCHI, Jun-ichi

**2F4-51** Preparation of tetraphenylethylene-containing boronate sensors (Urban Environmental Sci., TMU) ○KAWAI, Meiko; KUBO, Yuji

**2F4-52** Helical Self-Organization of Alternating Pyridine-Oxadiazole Strands (Grad. Sch. Eng., Nagoya Inst. of Tech.) ○OGAWA, Yudai; OHKITA, Masakazu

Chair: OUSAKA, Naoki (17 : 50~18 : 50)

\* 17:40-17:50: interval for laptop PC connection.(2F4-54, 2F4-55, 2F4-56, 2F4-57, 2F4-58, 2F4-59)

**2F4-54** Concentration Threshold and Amplification Phenomena during Helix-dimer Formation of Sulfonamidohelicene Tetramer (Grad. Sch. Pharm. Sci., Tohoku Univ.) KUSHIDA, Yo; ○SHIGENO, Masanori; YAMAGUCHI, Masahiko

**2F4-55** Chiral symmetry breaking during the hetero-double-helix and self-assembly formation exhibited by racemic mixture of aminomethylenehelicene oligomers (Grad. Sch. Pharm. Sci., Tohoku Univ.) ○KUSHIDA, Yo; SHIGENO, Masanori; YAMAGUCHI, Masahiko

**2F4-56** Fibril Film Formation of Pseudoenantiomeric Oxymethylenehelicene Oligomers Involving Discontinuous Heterogeneous Nucleation-growth at Liquid-solid Interface (Grad. Sch. Pharm. Sci., Tohoku Univ.) SHIGENO, Masanori; ○SAWATO, Tsukasa; YAMAGUCHI, Masahiko

**2F4-57** synthesis and aggregation of Bis(branched-oligoethynylhelicenes) (Grad. Sch. Pharm. Sci., Tohoku Univ.) SHIGENO, Masanori; ○KONDO, Yutaro; AMEMIYA, Ryo; YAMAGUCHI, Masahiko

**2F4-58** Self-assembly and chiroptical property of luminescent molecule possessing phenylisoxazoles (Grad. Sch. Sci., Hiroshima Univ.) ○HIRANO, Kyohei; ADACHI, Yohei; NAKAMURA, Masashi; IKEDA, Toshiaki; OHSHITA, Joji; HAINO, Takeharu

**2F4-59** Synthesis of Chiral Metal Complex with Azobenzene Terminals and Photo-Responsive Complex Helicity (Grad. Sch. Sci., Osaka City Univ.) ○HASHIMOTO, Takaharu; KIKUI, Yuki; SHINODA, Satoshi; TSUKUBE, Hiroshi; MIYAKE, Hiroyuki

## Saturday, March 26, AM

### Self-organization, Nano structure

Chair: MOROHASHI, Naoya (9 : 00~9 : 50)

\* 8:50-9:00: interval for laptop PC connection.(3F4-01, 3F4-02, 3F4-03, 3F4-04, 3F4-05)

**3F4-01** The Self-assembly Process of Hexagonal Pt(II) Macrocyclic Complexes: (1)Experimental Approach (Grad. Sch. Arts and Sci., The Univ. of Tokyo) ○BABA, Ayako; KOJIMA, Tatsuo; HIRAOKA, Shuichi

**3F4-02** The Self-assembly Process of Hexagonal Pt(II) Macrocyclic Complexes: (2)Theoretical Approach (Sch. Eng., Kyoto Univ.) ○IIOKA, Tatsuya; MATSUMURA, Yoshihiro; BABA, Ayako; HIRAOKA, Shuichi; SATO, Hirofumi

**3F4-03** Formation of Laminated 2D Hexagonal Packing Structure Based on Hexagonal Pillar[6]arene (Coll. Sci. Eng., Kanazawa Univ.) ○MARUYAMA, Keisuke; TAKASHIMA, Syu; OGOSHI, Tomoki;

YAMAGISHI, Tada-aki

- 3F4-04** Cooperative Host-Guest Complexation of Calix[4]arene-based Triple-stranded Helicates (Grad. Sch. Sci., Hiroshima Univ.) ○YAMASAKI, Yutaro; SEKIYA, Ryo; HAINO, Takeharu
- 3F4-05** Synthesis of an insulated  $\pi$ -conjugated bimetallopolymer bearing Pt-acetylide and Ru-pyridine bonds (Grad. Sch. Eng., Kyoto Univ.) ○YOKOYAMA, Takuya; MASAI, Hiroshi; TERAU, Jun; FUJIHARA, Tetsuaki; TSUJI, Yasushi

### Self-organization, Nano structure

Chair: SOGAWA, Hiromitsu (10 : 00~10 : 50)

- \* 9:50-10:00: interval for laptop PC connection.(3F4-07, 3F4-08, 3F4-09, 3F4-10, 3F4-11)
- 3F4-07** The Self-assembly Process of Pd2L4 Cage Complex with V-sharped Ditopic Ligand (Grad. Sch. Arts and Sci., The Univ. of Tokyo) ○KAI, Shumpei; KOJIMA, Tatsuo; HIRAOKA, Shuichi
- 3F4-08** Theoretical study on the Self-assembly Process of Pd2L4 Cage Complex with V-sharped Ditopic Ligand (Grad. Sch. Nanobiosci., Yokohama City Univ.) ○SAKUMA, Yui; MASHIKO, Takako; HIRAOKA, Shuichi; NAGASHIMA, Umpei; TACHIKAWA, Masanori
- 3F4-09** Self-assembly Process of Pd<sub>2</sub>L<sub>4</sub> Cage Complex Constructed from U-shaped Ditopic Ligand (Grad. Sch. Arts and Sci., The Univ. of Tokyo) ○NAKAGAWA, Masanori; KOJIMA, Tatsuo; HIRAOKA, Shuichi
- 3F4-10** Synthesis of a photoresponsive molecular shuttle containing pillar[6]arene (Coll. Sci. Eng., Kanazawa Univ.) ○NISHIDA, Shungo; KOTERA, Daisuke; OGOSHI, Tomoki; YAMAGISHI, Tada-aki
- 3F4-11** Alkane Adsorption Behavior by Solid State Pillar[5]arenes With Various Substituents. (Coll. Sci. Eng., Kanazawa Univ.) ○HAMADA, Yuki; SUETO, Ryuta; OGOSHI, Tomoki; YAMAGISHI, Tada-aki

### Saturday, March 26, PM

Chair: NAKAMURA, Takashi (14 : 30~15 : 30)

- \* 14:20-14:30: interval for laptop PC connection.(3F4-34, 3F4-36, 3F4-37, 3F4-38)
- 3F4-34\*** Synthesis of cyclodextrin-coated [3]rotaxane-type alkynylpyrenes as a highly UV-stable and circumstance-insensitive fluorophore (Grad. Sch. Med. Pharm. Sci. Edu., Univ. of Toyama) ○YOSHIZAWA, Atsushi; FUJIMOTO, Kazuhisa; SAKATA, Takuma; MATSUMOTO, Shinya; SHIRO, Motoo; INOUE, Masahiko
- 3F4-36** Encapsulation of Luminescent Ir(III) Complexes within a Hexameric Resorcinarene Capsule (Grad. Sch. Eng., Nagasaki Univ.) ○TANAKA, Hirota; HORIUCHI, Shinnosuke; SAKUDA, Eri; ARIKAWA, Yasuhiro; UMAKOSHI, Keisuke
- 3F4-37\*** The extremely high thermal stability of water soluble nanocube based on gear-shaped amphiphiles (Grad. Sch. Arts and Sci., The Univ. of Tokyo) ○ZHAN, Yiyang; KOJIMA, Tatsuo; HIRAOKA, Shuichi
- 3F4-38\*** Theoretical study on substituent and solvent effects for nanocube formed with gear-shaped amphiphile molecules (Grad. Sch. Nanobiosci., Yokohama City Univ.) ○MASHIKO, Takako; HIRAOKA, Shuichi; NAGASHIMA, Umpei; TACHIKAWA, Masanori

Chair: OGOSHI, Tomoki (15 : 40~16 : 40)

- \* 15:30-15:40: interval for laptop PC connection.(3F4-41, 3F4-43, 3F4-45, 3F4-46)
- 3F4-41\*\*** Through-space chirality transfer of  $\alpha$ -cyclodextrin-based [3]rotaxane and its structural dependency (Grad. Sch. Sci., Eng., Tokyo Tech) ○AKAE, Yosuke; SOGAWA, Hiromitsu; TAKATA, Toshikazu
- 3F4-43\*** Synthesis of spiropyran-rotaxane conjugate and effect of the rotaxane switch (Grad. Sch. Sci., Eng., Tokyo Tech) ○ZHU, Nan; NAKAZONO, Kazuko; TAKATA, Toshikazu
- 3F4-45** The Self-assembly Process of a Pd<sub>4</sub>L<sub>8</sub> Double Walled Square Complex (Grad. Sch. Arts and Sci., The Univ. of Tokyo) ○KAI, Shumpei; SHIGETA, Taro; KOJIMA, Tatsuo; HIRAOKA, Shuichi
- 3F4-46** Self-Assembly Process of a Pd<sub>4</sub>L<sub>8</sub> Tetrahedron-Shaped Complex (Grad. Sch. Arts and Sci., The Univ. of Tokyo) ○TATEISHI, Tomoki; KOJIMA, Tatsuo; HIRAOKA, Shuichi

### Molecular Recognition

Chair: KOJIMA, Tatsuo (16 : 50~17 : 40)

- \* 16:40-16:50: interval for laptop PC connection.(3F4-48, 3F4-49, 3F4-50, 3F4-51, 3F4-52)
- 3F4-48** A Macrocyclic Hexanuclear Zinc Complex that Recognizes Guests in its Cavity by Coordination Bonds (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba; TMS, Univ. of Tsukuba) ○KANEKO, Yuya; NAKAMURA, Takashi; NISHIBORI, Eiji; NABESHIMA, Tatsuya
- 3F4-49** Direction-Selective Recognition of Axial Molecules by a C<sub>3v</sub> Symmetric Bowl-Shaped Macrocyclic (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba; TMS, Univ. of Tsukuba) ○YAMAGUCHI, Gento; NAKAMURA, Takashi; NABESHIMA, Tatsuya
- 3F4-50** Inclusion of carboxylic acids with crystals of thiacalix[4]arene; control of inclusion capability by crystal polymorph (Grad. Sch. Eng., Tohoku Univ.) ○EBATA, Kohei; MOROHASHI, Naoya; HATTORI, Tetsutaro

- 3F4-51** Highly selective inclusion of amines with carboxylic acid derivatives having a 2,2'-thiodiphenol structure (Grad. Sch. Eng., Tohoku Univ.) ○SONEHARA, Hayato; NANBU, Kazuki; MOROHASHI, Naoya; HATTORI, Tetsutaro
- 3F4-52** Synthesis of a Box-Shaped Host with Terpyridine-Pt units and Its Recognition of Pentacene (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba; TMS, Univ. of Tsukuba) ○SUZUKI, Sayuri; YAMAKI, Yusuke; NAKAMURA, Takashi; YAMAMURA, Masaki; NABESHIMA, Tatsuya

### Sunday, March 27, AM

#### Nanospace and Guest Recognition

Chair: KAMBE, Tetsuya (9 : 00 ~10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(4F4-01, 4F4-02, 4F4-03, 4F4-04, 4F4-05, 4F4-06)
- 4F4-01** Synthetic Development of Protectants for Crystalline Sponges (Grad. Sch. Eng., The Univ. of Tokyo; PRESTO, JST) ○KUROHA, Mizuki; INOKUMA, Yasuhide; FUJITA, Makoto
- 4F4-02** Specific Fixation of Steroid's Orientations within a Self-assembled Host (Grad. Sch. Eng., The Univ. of Tokyo) ○KATO, Taito; SAWADA, Tomohisa; FUJITA, Makoto
- 4F4-03** Modular Assembly of a Peptide-tethered Self-assembled Complex (Grad. Sch. Eng., The Univ. of Tokyo) ○MORI, Masatoshi; SAWADA, Tomohisa; FUJITA, Makoto
- 4F4-04\*** "Plug and Play" Crystalline Sponges for Recognition of Carboxylic Acid and Polyol Guests. (Grad. Sch. Eng., The Univ. of Tokyo; ACCEL, JST) ○YAN, Kaking; SUN, Hongmei; HOSHINO, Manabu; INOKUMA, Yasuhide; FUJITA, Makoto
- 4F4-05\*** X-ray structure analysis of nucleophilic substrates by the crystalline sponge method (Grad. Sch. Eng., The Univ. of Tokyo) ○KHUTIA, Anupam; KIKUCHI, Takashi; HOSHINO, Manabu; FUJITA, Makoto
- 4F4-06** Hydrophilic Polymers Accumulation within a Porous Peptide Coordination Network (Grad. Sch. Eng., The Univ. of Tokyo) ○MIYAJI, Tatsuki; SAWADA, Tomohisa; FUJITA, Makoto

#### Nanospace and Guest Recognition

Chair: ABE, Hajime (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(4F4-08, 4F4-09, 4F4-10, 4F4-11, 4F4-12)
- 4F4-08\*** Determination of Absolute Configuration of Quaternary Carbons by Crystalline Sponge Method (Grad. Sch. Eng., The Univ. of Tokyo; Grad. Sch. Eng., Nagoya Univ.; ISIR, Osaka Univ.; ACCEL, JST) SAIRENJI, Shihou; ○KIKUCHI, Takashi; HOSHINO, Manabu; ANDO, Yuichiro; OHMATSU, Kohsuke; OOI, Takashi; YOSHIDA, Yasushi; TAKIZAWA, Shinobu; ARTEAGA, Fernando; KISHI, Kenta; ABOZEID, Mohamed Ahmed; SASAI, Hiroaki; FUJITA, Makoto
- 4F4-09** Screening of Peptide Sequence Strongly Bound to M<sub>6</sub>L<sub>4</sub> cages (Grad. Sch. Eng., The Univ. of Tokyo) ○SUZUKI, Ryouto; FUJITA, Daishi; FUJITA, Makoto
- 4F4-10\*** A crystal nose: structural elucidation of volatile organic compounds with the crystalline sponge method (Grad. Sch. Eng., The Univ. of Tokyo; ACCEL, JST) ○ZIGON, Nicolas; HOSHINO, Manabu; FUJITA, Makoto
- 4F4-11\*** Development of Co-crystallization Agents Based on Polyoxometalates and Organic Multivalent Cations (Grad. Sch. Eng., The Univ. of Tokyo; PRESTO, JST) ○DAS, Rajorshi; INOKUMA, Yasuhide; FUJITA, Makoto
- 4F4-12\*\*** Hexahedron-Octahedron Conversion in Self-assembled Molecular Capsules (Grad. Sch. Eng., The Univ. of Tokyo) ○WANG, Shitao; SAWADA, Tomohisa; FUJITA, Makoto

Chair: KUSUKAWA, Takahiro (11 : 20~12 : 10)

- \* 11:10-11:20: interval for laptop PC connection.(4F4-15, 4F4-16, 4F4-17, 4F4-18)
- 4F4-15** Synthesis of Lipophilic and Hydrophilic M3L2-Type Metal Cages Possessing Pyridyl Groups for the Coordination Sites and their Saccharide Recognition Ability (Grad. Sch. Med. Pharm. Sci. Edu., Univ. of Toyama) ○HASHIKAWA, Daisuke; MASUDA, Kentaro; ABE, Hajime; INOUE, Masahiko
- 4F4-16** Synthesis of a Twisted M3L2-Typed Metal Cage Possessing Quinolyl Groups and its Induced Circular Dichroism by Recognition of Saccharides (Grad. Sch. Med. Pharm. Sci. Edu., Univ. of Toyama) ○MASUDA, Kentaro; HASHIKAWA, Daisuke; ABE, Hajime; INOUE, Masahiko
- 4F4-17** Studies on the excited state dynamics of aromatic compound included cyclodextrin complexes by high sensitive/time-resolve Circular Dichroism (CD) measurement (IMRAM, Tohoku Univ.) ○KURONUMA, Makoto; SATO, Takehito; ARAKI, Yasuyuki; SAKAMOTO, Seiji; WADA, Takehiko
- 4F4-18\*** Molecular-shape Selectivity by Cavities of Rigid Dendrimers (Chem. Res. Lab., Tokyo Tech) ○KATOH, Yuto; KAMBE, Tetsuya; IMAOKA, Takane; YAMAMOTO, Kimihisa

Sunday, March 27, PM

Molecular Recognition

Chair: INOKUMA, Yasuhide (13 : 20~14 : 10)

- \* 13:10-13:20: interval for laptop PC connection.(4F4-27, 4F4-28, 4F4-29, 4F4-30)
- 4F4-27** Carboxylic Acid Recognition of a Diamidine Having a 1,8-Diarylanthracene Unit (KIT) ○ARAMOTO, Hiroki; KUSUKAWA, Takahiro
- 4F4-28** Carboxylic Acid Recognition of a Diamidine Having 1,8-Diphenyl-naphthalene Unit in Protic Solvents (KIT) ○MATOBA, Keisuke; KUSUKAWA, Takahiro
- 4F4-29** Diphosphonic Acid and Dicarboxylic Acid Recognition of a Diamidine Having an Anthracene Unit in a Protic Solvent (KIT) ○NAKAGUCHI, Keita; KUSUKAWA, Takahiro
- 4F4-30\*** Design of a Novel Sensing System through a Combination of Dynamic Covalent Bond Formation and Aggregation-Induced Emission (AIE) (ISIT Nanotechnology Lab.; IAS, Kyushu Univ.; Fac. Eng., Sojo Univ.) ○YOSHIHARA, Daisuke; SHINKAI, Seiji

Molecular Recognition

Chair: SAKAMOTO, Seiji (14 : 20~15 : 10)

- \* 14:10-14:20: interval for laptop PC connection.(4F4-33, 4F4-35, 4F4-36)
- 4F4-33\*** Biomolecular Recognition of an Amphiphilic Pyridine-Acetylene-Phenol Alternating Oligomer in Water (Grad. Sch. Pharm. Sci., Univ. of Toyama) ○YUKI, Ohishi; ABE, Hajime; INOUE, Masahiko
- 4F4-35** Development of Phenol-Ethynylene-Pyridine Macrocyclic Hosts Recognizing Saccharides by Multiple Push-Pull-Type Hydrogen Bonding (Grad. Sch. Med. Pharm. Sci. Edu., Univ. of Toyama) ○YONEDA, Tetsuhiro; OHISHI, Yuki; ABE, Hajime; INOUE, Masahiko
- 4F4-36\*** Fluorescence sensory system orchestrated by molecular self-assembly (IAS, Kyushu Univ.; ISIT Nanotechnology Lab.) ○NOGUCHI, Takao; SHINKAI, Seiji

Chair: HIROSE, Keiji (15 : 20~15 : 50)

- \* 15:10-15:20: interval for laptop PC connection.(4F4-39, 4F4-40, 4F4-41)
- 4F4-39** Supramolecular chain-growth polymerization with Bowl-shaped Monomers (Fac. Eng., The Univ. of Tokyo; RIKEN CEMS) ○SUZUKI, Yukinaga; KANG, Jiheong; MIYAJIMA, Daigo; AIDA, Takuzo
- 4F4-40** Imparting Photoresponsiveness to Liquid Crystalline Materials with Luminescent Mechanochromism (Fac. Eng., Chiba Univ.) YAGAI, Shiki; ○KOBAYASHI, Takuji; KARATSU, Takashi
- 4F4-41** Ternary complex composed of hydrocarbon receptors and carbonaceous ligand (WPI-AIMR, Tohoku Univ.; ERATO, JST; Grad. Sch. Sci., Tohoku Univ.) ○MATSUMO, Taisuke; YOKOYAMA, Atsutoshi; SATO, Sota; ISOBE, Hiroyuki

Chair: IMAOKA, Takane (16 : 00~16 : 50)

- \* 15:50-16:00: interval for laptop PC connection.(4F4-43, 4F4-44, 4F4-45, 4F4-46, 4F4-47)
- 4F4-43** Enzymatic activity of CLE confined within  $M_{12}L_{24}$  spherical complex (Grad. Sch. Eng., The Univ. of Tokyo) ○FUJII, Yuya; FUJITA, Daishi; FUJITA, Makoto
- 4F4-44** Inner Functionalization of Crystalline Peptide Helical Networks (Grad. Sch. Eng., The Univ. of Tokyo) ○AKINAGA, Shuji; SAWADA, Tomohisa; FUJITA, Makoto
- 4F4-45** Synthesis of a boronate dipyrin sensor for colorimetric detection of  $H_2O_2$  (Urban Environmental Sci., TMU) ○SAKAKIBARA, Kaori; YOSHIZUMI, Takaya; KUBO, Yuij
- 4F4-46** Structures and functions of photoreactive crystalline nanopores (Grad. Sch. Eng., The Univ. of Tokyo) ○MATSUI, Toshiya; SATO, Hiroshi; AIDA, Takuzo
- 4F4-47** Interlocked Triple-Stranded Helical Supermolecule Constructed from Tripodal Bipyridine Complexes (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba; TMS, Univ. of Tsukuba) ○KIMURA, Hikaru; NAKAMURA, Takashi; NABESHIMA, Tatsuya

**Room F5**  
Chishinkan3 Building 105

Physical Organic Chemistry Reaction Mechanism

Friday, March 25, AM

Chair: MATSUI, Yasunori (10 : 00~11 : 00)

- \* 9:50-10:00: interval for laptop PC connection.(2F5-07, 2F5-08, 2F5-09, 2F5-11)
- 2F5-07** Neighboring Fluorine Substituent Effect on the Stability of (Aryl)(1,4-diphenyl-1H-1,2,3-triazol-5-yl)carbene (Grad. Sch. Eng., Mie Univ.;

Community-University Research Cooperation Center, Mie Univ.)

- SAKANE, Kenta; HIRAI, Katsuyuki; KITAGAWA, Toshikazu
- 2F5-08** Incorporation of di(9-anthryl)diazomethane, a precursor of the most persistent triplet carbene, into mesoporous silica and characterization of carbene generated by its photolysis. (Grad. Sch. Eng., Mie Univ.; Community-University Research Cooperation Center, Mie Univ.) ○JINPO, Takashi; HIRAI, Katsuyuki; KITAGAWA, Toshikazu
- 2F5-09\*** Dihydroxylation of alkenes by sodium chlorite with scandium triflate (Grad. Sch. Eng., Osaka Univ.; Graduate School of Science and Technology; Acenet Inc.) ○OHKUBO, Kei; HIROSE, Kensaku; SHIBATA, Takekatsu; TAKAMORI, Kiyoto; FUKUZUMI, Shunichi
- 2F5-11\*** Effects of 3-Amkino Substituent on the Photoinduced Bond Cleavage of 2-Benzyloxy-Naphthalene (Fac. Sci., Niigata Univ.) ○USUI, Satoshi; KUNIMINE, Takuya; MUROHASHI, Takahiro; SUZUKI, Takahiro

Chair: FUJITA, Morifumi (11 : 10~12 : 10)

- \* 11:00-11:10: interval for laptop PC connection.(2F5-14, 2F5-16, 2F5-17, 2F5-18)
- 2F5-14\*** Spin-state Effect on Stereoselectivity in Photochemical Denitrogenation of Azoalkanes (Grad. Sch. Sci., Hiroshima Univ.) ○ABE, Manabu; MIZUNO, Takemi
- 2F5-16** Direct oxygenation of benzene to phenol by oxygen using dihydroacridine derivatives as an electron source (Grad. Sch. Eng., Osaka Univ.; Faculty of Science and Technology; ALCA, SENTAN, JST) ○HIROSE, Kensaku; OHKUBO, Kei; FUKUZUMI, Shunichi
- 2F5-17** Nitrogen atom effect on the reactivity of localized singlet diradicals (Fac. Sci., Hiroshima Univ.) ○YOSHIDOMI, Shohei; ABE, Manabu
- 2F5-18\*** Mechanism for Generation of Phenonium Ion-Containing Salts in Single-Electron Transfer-Oxidation Reaction of Cage Compounds (Grad. Sch. Eng., Osaka Pref. Univ.; The Research Inst. for Molecular Electronic Devices, Osaka Pref. Univ.) ○KURAMOTO, Yutaro; MATSUI, Yasunori; OHTA, Eisuke; IKEDA, Hiroshi

Friday, March 25, PM

Chair: OHKUBO, Kei (13 : 30~14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(2F5-28, 2F5-30, 2F5-31, 2F5-32, 2F5-33)
- 2F5-28\*** Novel transient absorption technique, RIPT method, and simultaneous measurements of transient absorption and luminescence of metal complexes with intense luminescence (UNISOKU Co., Ltd.; Grad. Sch. Eng., Osaka Univ.; Faculty of Science and Technology; SENTAN, JST) ○NAKAGAWA, Tatsuo; SUENOBU, Tomoyoshi; OKAMOTO, Kido; HANADA, Hiroaki; FUKUZUMI, Shunichi
- 2F5-30** Reactivity of Diradicals in Macrocyclic Ring System (Grad. Sch. Sci., Hiroshima Univ.) ○ONISHI, Keita; HATANO, Sayaka; ABE, Manabu
- 2F5-31** Cyclic structure effect on the reactivity of cyclopentane-1,3-diyl diradicals (Grad. Sch. Sci., Hiroshima Univ.) ○HARADA, Yuta; ABE, Manabu
- 2F5-32** Reactions of Arenepolydiazonium Ions in Imidazolium-Based Ionic Liquid (Grad. Sch. Eng., Mie Univ.) ○ENOMOTO, Yoshihito; NAKAGAWA, Nana; OKAZAKI, Takao; KITAGAWA, Toshikazu
- 2F5-33** Synthesis and Solvatochromism of 4-[2-(1-Methylpyridinium-4-yl)ethynyl]phenolate Derivatives (Fac. Eng., Mie Univ.) ○NONOGAKI, Marine; OKZAKI, Takao; KITAGAWA, Toshikazu

Chair: KANENO, Daisuke (14 : 40~15 : 20)

- \* 14:30-14:40: interval for laptop PC connection.(2F5-35, 2F5-36, 2F5-38)
- 2F5-35\*** Free energy landscape and Cis-Trans isomerization reaction rate of azobenzenes : weak solute-solvent coupling cases (Ind. Tech. Ctr. Nagasaki; Grad. Sch. Eng., Nagasaki Univ.) ○SHIGEMITSU, Yasuhiro; OHGA, Yasushi
- 2F5-36\*** Theoretical study of non-TST behavior for caged compounds. (Dept. Eng. Edu. Center, Chiba Inst. of Tech.) ○SHUHEI, Itoh
- 2F5-38** Dynamic path bifurcation of the vinyl-type rearrangement/cyclization/fragmentation reaction of the vinyl diazonium ion derivatives (Coll. Sci., Rikkyo Univ.) ○SATO, Makoto; YAMATAKA, Hiroshi

Chair: USUI, Satoshi (15 : 30~16 : 20)

- \* 15:20-15:30: interval for laptop PC connection.(2F5-40, 2F5-42, 2F5-43)
- 2F5-40\*** Computational Study of Substituent Effects on Gas-Phase Stabilities of Phenylaminomethyl Cations (Sci. Res. Ctr., Hosei Univ.; IMCE, Kyushu Univ.) ○NAKATA, Kazuhide; FUJIO, Mizue
- 2F5-42** Enantioselective Oxyarylation of Alkenes Using Optically Active Hypervalent Iodine(III) (Grad. Sch. Mat. Sci., Univ. of Hyogo) ○SHIMOGAKI, Mio; FUJITA, Morifumi; SUGIMURA, Takashi
- 2F5-43\*** Synthesis of Aza-Heterocyclic Compounds Using Pseudo-Intramolecular Process (Sch. Env. Sci. Eng., KUT; Res. Inst. of KUT) ASAHARA, Haruyasu; ○NISHIWAKI, Nagatoshi

# Room F6

## Chishinkan3 Building 106

### Organic Chemistry -Reaction and Synthesis- Heterocyclic Compounds

Thursday, March 24, PM

Chair: ASAHARA, Haruyasu (13 : 30~14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(1F6-28, 1F6-29, 1F6-30, 1F6-31, 1F6-32, 1F6-33)
- 1F6-28** Addition Effect of Formic Acid in the Manganese(III) Acetate Oxidation System (Dept. Sci., Fac. Sci., Kumamoto Univ.) ○WADA, Ryosei; NISHINO, Hiroshi
- 1F6-29** Synthesis of Novel Indole Lactones Using Mn(III)-Based Oxidative Radical Coupling Reaction (Dept. Chem., Grad. Sch. Sci. & Tech., Kumamoto Univ.) ○INOUE, Takeshi; NISHINO, Hiroshi
- 1F6-30** Synthesis of spiro compounds and spiro compounds using Mn(III)-based oxidative radical reaction (Dept. Chem., Grad. Sch. Sci. & Tech., Kumamoto Univ.) ○YOKOTE, Suzuka; NISINO, Hiroshi
- 1F6-31<sup>#</sup>** Synthesis of Silylfurans via Ruthenium-Catalyzed Transfer Oxygenative [2 + 2 + 1] Cycloaddition of Silyldiynes (Grad. Sch. Pharm. Sci., Nagoya Univ.) ○MATSUI, Kazuma; SHIBUYA, Masatoshi; YAMAMOTO, Yoshihiko
- 1F6-32<sup>#</sup>** Benzofuran-fused Sillole and Germole derivate (Grad. Sch. Eng., Hiroshima Univ.) ○ZHANG, Fei-bao; OHSHITA, Joji
- 1F6-33** Facile Preparation of Polycyclic Difuran Compounds via Nucleophilic Addition to Haloalkynes Followed by Cyclization Involving C-H Activation (Grad. Sch. Biosci. Biotech., Tokyo Tech; PRESTO, JST) HATA, Takeshi; TATSUMI, Yuta; ○TAKAHASHI, Naoto; SHIGETA, Masayuki; URABE, Hirokazu

Chair: YOSHIMATSU, Mitsuhiro (14 : 40~15 : 40)

- \* 14:30-14:40: interval for laptop PC connection.(1F6-35, 1F6-36, 1F6-37, 1F6-38, 1F6-40)
- 1F6-35** Efficient Synthesis of 3-Allylbenzofuran Using Hydrazone-Palladium Catalyst (Grad. Sch. Eng., Chiba Univ.) MINO, Takashi; ○WATANABE, Kohei; IKEMATSU, Tatsuya; YOSHIDA, Yasushi; SAKAMOTO, Masami
- 1F6-36** Synthesis of 2-Aminofuran Derivatives Utilizing [1,2]-Phospha-Brook Rearrangement and Gold-Catalyzed Cyclization (Grad. Sch. Sci., Tohoku Univ.) ○ISHIKAWA, Sho; AOKI, Takuma; KONDOH, Azusa; TERADA, Masahiro
- 1F6-37** Development of the C2 site selective nucleophilic addition reaction for indole derivatives (RCIS, Okayama Univ.) ○MORIOKU, Kumika; MORIMOTO, Naoki; NISHINA, Yuta
- 1F6-38<sup>#</sup>** Synthesis of Polyfunctionalized Pyrrolizidines via Chemoselective Cyclization of Pyrrole derivatives (Sch. Env. Sci. Eng., KUT) ○ASAHARA, Haruyasu; TANI, Shinki; UMEZU, Kazuto; NISHIWAKI, Nagatoshi
- 1F6-40** Synthesis of Fused Pyrrolidine Derivatives via Cinnamylamides of Ethenetricarboxylate in Sequential Processes (Nara Univ. of Educ.; Grad. Sch. Eng., Osaka Pref. Univ.) YAMAZAKI, Shoko; ○OHASHI, Shinnosuke; SUGIURA, Hiroataka

Chair: YAMAMOTO, Yoshihiko (15 : 50~16 : 50)

- \* 15:40-15:50: interval for laptop PC connection.(1F6-42, 1F6-43, 1F6-44, 1F6-45, 1F6-47)
- 1F6-42** Intramolecular Diels-Alder Reaction of Cinnamylamides of Ethenetricarboxylate in Sequential Processes (Nara Univ. of Educ.; Grad. Sch. Eng., Osaka Pref. Univ.) YAMAZAKI, Shoko; ○SUGIURA, Hiroataka; ISHIZUKA, Keisuke; OGAWA, Akiya
- 1F6-43** Synthesis of poly-substituted pyrroles using  $\alpha, \gamma$ -diazido- $\alpha, \beta$ -unsaturated esters (Grad. Sch. Sci., Eng., Aoyama Gakuin Univ.) ○KISHII, Naomi; SASAKI, Ikuo; SUGIMURA, Hideyuki
- 1F6-44** Intramolecular Cyclization of Sulfanyl Dienes Triggered by Allylamination (Fac. Edu., Gifu Univ.) ○GO, Takashi; YOSHIMATSU, Mitsuhiro
- 1F6-45<sup>\*</sup>** Organic Synthesis Using Propargyl Hydrazides: Alkylations and Halogenations (Fac. Edu., Gifu Univ.) KIYOKAWA, Kosuke; GOTO, Yusuke; ○YOSHIMATSU, Mitsuhiro
- 1F6-47** Photo-oxidative coupling reaction of arenes with  $\alpha$ -position of carbonyls (Gifu Pharm. Univ.) ○SUDO, Yusuke; YAMAGUCHI, Eiji; ITOH, Akichika

Chair: HATA, Takeshi (17 : 00~17 : 50)

- \* 16:50-17:00: interval for laptop PC connection.(1F6-49, 1F6-51, 1F6-52, 1F6-53)
- 1F6-49<sup>\*</sup>** Facile Construction of a Dibenzofuran-fused Medium-membered Ring by Brønsted Acid-promoted Intramolecular Friedel-Crafts Alkenylation (National Institute of Technology, Anan College) ○OTANI, Takashi; CHO, Kinryo; UEKI, Kanako; SAITO, Takao
- 1F6-51** Development of C-2 Selective Trifluoromethylation of Six-membered

- Heteroaromatic Compounds (Grad. Sch. Pharm., The Univ. of Tokyo)  
○SHIRAI, Takahiro; KUNINOBU, Yoichiro; KANAI, Motomu
- 1F6-52** Development of C-4 Selective Trifluoromethylation of Six-membered Heteroaromatic Compounds (Grad. Sch. Pharm., The Univ. of Tokyo)  
○NAGASE, Masahiro; KUNINOBU, Yoichiro; KANAI, Motomu
- 1F6-53** Synthesis of 2-Aminopyridines Directed to the Synthesis of  $\beta$ -Carbolines (Grad. Sch. Eng., Mie Univ.) ○FUKUTOMI, Makoto; HACHIYA, Iwao; SHIMIZU, Makoto

Friday, March 25, AM

Chair: SAKAI, Norio (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(2F6-01, 2F6-02, 2F6-03, 2F6-04, 2F6-05, 2F6-06)
- 2F6-01** Reaction of 1,3-diphenyltetrazolium mesoionic nitrene metal complexes (Grad. Sch. Eng., Nagoya Inst. of Tech.) ○KAGAWA, Midori; ARAKI, Shuki; HIRASHITA, Tsunehisa
- 2F6-02** Synthesis of Novel Chiral Imidazolium Salts Bearing a Bulky Bornane Substituent (Grad. Sch. Eng., Iwate Univ.) SHIMADA, Kazuaki; ○FUKUMA, Kodai; KORENAGA, Toshinobu
- 2F6-03** Reactions of Grignard reagents in mesoionic liquids (Grad. Sch. Eng., Nagoya Inst. of Tech.) ○IMAEDA, Masaki; HIRASHITA, Tsunehisa; ARAKI, Shuki
- 2F6-04** Hypervalent Iodine-Mediated Cycloisomerization-Amination Reaction of Propargyl Amides (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○OKAMURA, Yuki; SAITO, Akio
- 2F6-05** Development of Highly Reactive Imino Iodane reagent and Its Application to Heterocyclic Synthesis (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○BABA, Takafumi; KAMBARA, Yui; SAITO, Akio
- 2F6-06** Facile Synthesis and Characterization of Azahelicenes by Oxidative Cyclization Using Hypervalent Iodine Reagents (Sch. Advanced Sci. Eng., Waseda Univ.) ○TSUYUKI, Ami; IWACHI, Taiki; TATENO, Kotaro; OTANI, Takashi; KAWAI, Hidetoshi; SAITO, Takao; KANYIVA, Kyallo-Stephen; SHIBATA, Takanori

Chair: HIRASHITA, Tsunehisa (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(2F6-08, 2F6-09, 2F6-10, 2F6-11, 2F6-12, 2F6-13)
- 2F6-08** One-Pot Preparation of Tetrazole Derivatives from Aldehydes with Trivalent Iodines I(III) (Grad. Sch. Sci., Chiba Univ.) ○IMAI, Tarō; MORIYAMA, Katsuhiko; TOGO, Hideo
- 2F6-09** Transition-Metal-Free One-Pot Transformation of Propargyl Alcohol into Benzopyrans with Diaryl Iodonium Salts and NIS (Grad. Sch. Sci., Chiba Univ.) ○SASAKI, Teppei; MORIYAMA, Katsuhiko; TOGO, Hideo
- 2F6-10** Sulfenylation of olefins with *N*-sulfenylbenzimidazoles (Grad. Sch. Fac. Sci. Technol., Tokyo Univ. of Sci.; IRC3, AIST) ○SUZUKI, Shin-ya; TANAKA, Shinji; ANDO, Wataru; SAKAI, Norio; SHIMIZU, Masao
- 2F6-11** [4+1] Cycloaddition Reaction of Isocyanides: Efficient Synthesis of Benzothiophene Derivatives (Grad. Sch. Nat. Sci. Technol., Kanazawa Univ.) ○SHITAYA, Saori; OKUNO, Takumi; SOETA, Takahiro; UKAJI, Yutaka
- 2F6-12** Development of Novel Ugi-type Reaction by Using Isocyanates: Efficient Synthesis of Highly Functionalized 1,2,4-Triazinone Derivatives (Grad. Sch. Nat. Sci. Technol., Kanazawa Univ.) ○TAKASHITA, Suguru; SOETA, Takahiro; UKAJI, Yutaka
- 2F6-13** Synthesis and Characterization of Thiazole-thiophene Ring-fused Compounds Bearing a Variety of Aryl Groups (Fac. Eng., Gifu Univ.) ○KAGA, Shigesaki; KAWAI, Yasuhiro; SHIBAHARA, Fumitoshi; MURAI, Toshiaki

Chair: SOETA, Takahiro (11 : 20~12 : 20)

- \* 11:10-11:20: interval for laptop PC connection.(2F6-15, 2F6-16, 2F6-17, 2F6-18, 2F6-19, 2F6-20)
- 2F6-15** Syntheses and properties of difluoro borane complex based on 2,5-bis(4-propyl-2-pyrrolyl)thiophene (Grad. Sch. Sci., Eng., Saitama Univ.) ○HAYASAKA, Kazuki; ISHIMARU, Yoshihiro
- 2F6-16** Synthesis and Physicochemical Properties of D-A Copolymers Based on Thienophosphole as an Acceptor (Grad. Sch. Eng., Osaka Univ.) ○HATANAKA, Kota; TAKEDA, Youhei; MINAKATA, Satoshi
- 2F6-17** Development of NIR fluorescent dye with dimethylamino group (Grad. Sch. Eng., Kyushu Sangyo Univ.) ○NAOMOTO, Kensuke; ISOBE, Shinichiro
- 2F6-18** Regio-convergent Substitution Reactions of Halothiophenes with Phosphide Anions (Nippon Chemical Industrial Co., Ltd.; Fac. Sci., Chiba Univ.; CAI, Chiba Univ.) ○IMAMOTO, Tsuneo; HORIUCHI, Yumi; TAMURA, Ken; SUGIYA, Masashi; MASU, Hyuma
- 2F6-19** Optical and Aggregation Behavior of porphyrins in Ionic Liquids (Fac. Eng., Oita Univ.) ○ITO, Koki; NOBUOKA, Kaoru; KITAOKA, Satoshi; ISHIKAWA, Yuichi
- 2F6-20** Synthesis and properties of new fullerene linked pyrrole-fused-porphyrins (Grad. Sch. Sci., Eng., Saitama Univ.) ○NOMURA, Takahiro; FUJIHARA, Takashi; ISHIMARU, Yoshihiro



## Friday, March 25, PM

Chair: SHIBAHARA, Fumitoshi (13 : 30~14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(2F6-28, 2F6-29, 2F6-30, 2F6-31, 2F6-32, 2F6-33)
- 2F6-28** Novel Pyrrolidine-Thiazole Linked Chiral Catalyst and Application for Asymmetric Michael Reaction (Fac. Eng., Oita Univ.) ○OBATA, Shunsuke; NOBUOKA, Kaoru; KITAOKA, Satoshi; ISHIKAWA, Yuichi
- 2F6-29<sup>#</sup>** Synthesis of planar-chiral phase-transfer catalysts having hydroxyl groups and application to asymmetric alkylation (Sch. Advanced Sci. Eng., Waseda Univ.) ○KOMAKI, Seiju; KANOMATA, Nobuhiro
- 2F6-30** Formation of cyclic carbonyl ylides from *N*-diazoacyloxazolidinones followed by chiral Lewis acid-catalyzed alcohol addition reactions (Fac. Eng., Shinshu Univ.) ○YOSHIDA, Takayuki; ARISUE, Kaoru; TODA, Yasunori; SUGA, Hiroyuki
- 2F6-31<sup>#</sup>** Asymmetric Synthesis of Spiro-type Chiral Ligands via Catalytic Desymmetrization (Grad. Sch. Sci., Osaka Univ.) ○MOHON CHAKI, Bijan; WAKITA, Kazuhiko; TAKENAKA, Kazuhiro; TAKIZAWA, Shinobu; SASAI, Hiroaki
- 2F6-32** Synthesis of planar-chiral dipyrindylamine having fixed ansa-bridge and its application to catalytic asymmetric cyclopropanation (Sch. Advanced Sci. Eng., Waseda Univ.) KANOMATA, Nobuhiro; ○TADANO, Ayumu
- 2F6-33** Chirality Transfer of Optically Active Isoxazolines by Ene Reaction (Grad. Sch. Sci., Tohoku Univ.) ○GIMA, Shinya; NAKAMURA, Itaru; TERADA, Masahiro

Chair: OOHASHI, Masato (14 : 40~15 : 40)

- \* 14:30-14:40: interval for laptop PC connection.(2F6-35, 2F6-36, 2F6-37, 2F6-38, 2F6-40)
- 2F6-35** Development of a Synthetic Method for Chiral  $\alpha$ -Methylene- $\gamma$ -Butyrolactams via Catalytic Enantioselective Amide Allylation of  $\alpha$ -Iminoamides (Grad. Sch. Eng., Shizuoka Univ.; Grad. Sch. Sci. Technol., Shizuoka Univ.) SENGOKU, Tetsuya; ○KOKUBO, Kana; MURATA, Yusuke; TAKAHASHI, Masaki; YODA, Hidemi
- 2F6-36<sup>#</sup>** Pd(II)-SPRIX Catalyzed Enantioselective Fujiwara-Moritani Annulation of Alkenylindoles (ISIR, Osaka Univ.) ○ABOZEID, Mohamed Ahmed; TAKIZAWA, Shinobu; SASAI, Hiroaki
- 2F6-37<sup>#</sup>** Enantioselective 1,3-Dipolar Cycloaddition of Azomethine Imines Utilizing Tartaric Acid Ester as a Chiral Auxiliary (Grad. Sch. Nat. Sci. Technol., Kanazawa Univ.) ○TONG, Thu Thi Minh; SOETA, Takahiro; UKAJI, Yutaka
- 2F6-38<sup>#\*</sup>** Catalytic Asymmetric Hydroarylation of Enyne-Arenes based on the Formation of Chiral Vinylidene *o*-Quinone Methides (Grad. Sch. Sci. & Tech., Kumamoto Univ.; Grad. Sch. Sci. Eng., Yamaguchi Univ.; Fac. Integrated Arts Sci., Hiroshima Univ.) BEPPU, Shota; ARAE, Sachie; FUJIMOTO, Hitoshi; SUMIMOTO, Michinori; NEHIRA, Tatsuo; IGAWA, Kazunobu; TOMOOKA, Katsuhiko; ○IRIE, Ryo
- 2F6-40** Catalytic Cycloisomerization of *o*-Alkynylstilbene based on the Formation of Chiral Vinylidene *o*-Quinone Methides (Grad. Sch. Sci. & Tech., Kumamoto Univ.) ○BEPPU, Shota; ARAE, Sachie; IGAWA, Kazunobu; TOMOOKA, Katsuhiko; IRIE, Ryo

Chair: IGAWA, Kazunobu (15 : 50~16 : 50)

- \* 15:40-15:50: interval for laptop PC connection.(2F6-42, 2F6-43, 2F6-44, 2F6-46, 2F6-47)
- 2F6-42** Asymmetric Friedel-Crafts reaction of indoles with *N*-Boc imines using chiral NCN-pincer palladium complex (Grad. Sch. Sci., Chiba Univ.) ○KAKINO, Junki; ARAI, Takayoshi
- 2F6-43** Enzyme-catalyzed kinetic resolution towards the synthesis of the precursor of (R)-mepenzolate (Fac. Pharm., Keio Univ.) ○YAMASHITA, Yasunobu; HANAYA, Kengo; SHOJI, Mitsuru; SUGAI, Takeshi
- 2F6-44<sup>#\*</sup>** Imidazo[1,5-*a*]pyridin-3-ylidenes as Strong Accepting Ligands for Transition-Metal Complexes (Fac. Eng., Gifu Univ.) ○KOTO, Yuma; SHIBAHARA, Fumitoshi; MURAI, Toshiaki
- 2F6-46** Synthetic study of xanthone natural product termalcalcolanone A via NHC catalysis (Sci. Tec., Sophia Univ.; Sch. Pharm. Sci., Univ. Shizuoka) ○ITO, Saki; KITAMURA, Taiki; MANABE, Kei; SUZUKI, Yumiko
- 2F6-47** Reaction of *N*-Phosphine Oxide Substituted Imidazolylidenes with Lewis Acids (Grad. Sch. Eng., Osaka Univ.) ○KINOSHITA, Takuya; HOSHIMOTO, Yoichi; OHASHI, Masato; OGOSHI, Sensuke

Chair: NAKAMURA, Itaru (17 : 00~18 : 00)

- \* 16:50-17:00: interval for laptop PC connection.(2F6-49, 2F6-50, 2F6-51, 2F6-52, 2F6-53, 2F6-54)
- 2F6-49** Direct Synthesis of Carboxylic-Phosphinic Mixed Anhydride from Carbon Dioxide and *N*-Phosphine Oxide Substituted Imidazolylidene (Grad. Sch. Eng., Osaka Univ.) ○ASADA, Takahiro; HOSHIMOTO, Yoichi; OHASHI, Masato; OGOSHI, Sensuke
- 2F6-50** Development of *N*-Phosphine Imide Substituted Imidazolylidenes (Grad. Sch. Eng., Osaka Univ.) ○HINOAGAMI, Takaya; HOSHIMOTO, Yoichi; OHASHI, Masato; OGOSHI, Sensuke
- 2F6-51** NHC-Catalyzed Benzoin Reaction under Solvent-Free Conditions (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○NANJO, Yoshiko; TERAU, Yuta; KIMURA, Ryo; MAEDA, Chihiro; TAKAISHI, Kazuto;

EMA, Tadashi

- 2F6-52** Synthesis of Kinetically Stabilized Nitrile *N*-oxides from Nitroalkane Precursors and Effect of Substituent on the Reactivity (Grad. Sch. Sci., Eng., Tokyo Tech) ○TSUTSUBA, Toyokazu; SOGAWA, Hiromitsu; TAKATA, Toshikazu
- 2F6-53** Regioselective Ring-Opening Reaction of Diethyl Nitrocyclopropanedicarboxylate (Sch. Env. Sci. Eng., KUT) ○KAMIDATE, Rikiya; ASAHARA, Haruyasu; NISHIWAKI, Nagatoshi
- 2F6-54** Synthesis of 3-Cyano-5-acylloxazole Using Cyano-*aci*-nitroacetate (Sch. Env. Sci. Eng., KUT) ○IWAI, Kento; ASAHARA, Haruyasu; NISHIWAKI, Nagatoshi

## Saturday, March 26, AM

Chair: SAITO, Shinichi (9 : 50 ~ 10 : 50)

- \* 9:40-9:50: interval for laptop PC connection.(3F6-06, 3F6-07, 3F6-08, 3F6-09, 3F6-10, 3F6-11)
- 3F6-06** Synthesis of Polysubstituted Pyridines via 2,3-Rearrangement of *O*-Homoallylic Oximes (Sch. Sci., Tohoku Univ.) ○OYAMA, Yoshiharu; ZHANG, Dong; NAKAMURA, Itaru; TERADA, Masahiro
- 3F6-07** Total Synthesis of Onichine via Hetero Diels-Alder Reaction of Isotellurazoles as a Key Step (Grad. Sch. Eng., Iwate Univ.) SHIMADA, Kazuaki; ○TANEICHI, Yusuke; KORENAGA, Toshinobu
- 3F6-08** Cobalt-Catalyzed Oxidative Annulation of *N*-Methyl Anilines with Olefins leading to Quinoline Derivatives (Fac. Sci. Technol., Tokyo Univ. of Sci.) ○MATSUMOTO, Shun; OGIWARA, Yohei; SAKAI, Norio
- 3F6-09** Synthesis and Properties of  $\pi$  Extended Imidazo[1,5-*a*]pyridines (Fac. Eng., Gifu Univ.) ○SAKAI, Yuusuke; SHIBAHARA, Fumitoshi; MURAI, Toshiaki
- 3F6-10** Ultrasound-induced gelation with functionalized riboflavins and their application to catalytic aerobic hydrogenation of alkenes (Grad. Sch. Eng. Sci., Osaka Univ.) ○FUJIKI, Misa; KITAGAWA, Takahiro; KAWAMORITA, Soichiro; IMADA, Yasushi; NAOTA, Takeshi
- 3F6-11** Synthesis of flavinium salts by aerobic oxidation (Fac. Eng., Tokushima Univ.) ○OONISHI, Takahiro; ARAKAWA, Yukihiko; MINAGAWA, Keiji; IMADA, Yasushi

Chair: KIYOKAWA, Kensuke (11 : 00~12 : 00)

- \* 10:50-11:00: interval for laptop PC connection.(3F6-13, 3F6-14, 3F6-15, 3F6-17, 3F6-18)
- 3F6-13** Development of Photoresponsive Nitric Oxide Donor (Sch. Sci., Kobe Univ.) ○TAKAZAWA, Saori; MATSUBARA, Ryosuke; ANDO, Akihiro; HAYASHI, Masahiko
- 3F6-14** Development of synthetic method for alkynylfuroxan (Sch. Sci., Kobe Univ.) ○EGUCHI, Shuhei; MATSUBARA, Ryosuke; ANDO, Akihiro; HAYASHI, Masahiko
- 3F6-15<sup>\*</sup>** Synthesis of the Large Phenanthroline Derivatives (Fac. Sci., Tokyo Univ. of Sci.) ○YAMAZAKI, Yukari; MUTOH, Yuichiro; SAITO, Shinichi
- 3F6-17** Synthesis of aza[5]helicenes (Grad. Sch. Eng., KIT) ○KOBAYASHI, Mitsuaki; HUKUMA, Hiroaki; YUASA, Ryohei; OKAUCHI, Tatsuo; KITAMURA, Mitsuru
- 3F6-18<sup>#</sup>** Catalytic and Enantioselective Synthesis of Heterohelicene Derivatives (ISIR, Osaka Univ.; ISIR, Osaka Univ.) ○ICHINOSE, Kazuya; SAKO, Makoto; TAKIZAWA, Shinobu; SASAI, Hiroaki

## Room F7

### Chishinkan3 Building 107

## Organic Chemistry -Reaction and Synthesis- Heteroatom Compounds

### Friday, March 25, AM

Chair: NAKAHODO, Tsukasa (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(2F7-01, 2F7-02, 2F7-03, 2F7-04, 2F7-05, 2F7-06)
- 2F7-01** Regio- and stereoselective synthesis of vicinal (*Z*)-dihaloalkenyl silanes from silyl ethynylarenes (Grad. Sch. Sci. Tech., Ryukoku Univ.) ○IDE, Masataka; IWASAWA, Tetsuo
- 2F7-02** Synthesis of *P*-Stereoogenic Cyclic Phosphines Containing Conjugated Linkers (Grad. Sch. Eng., Kyoto Univ.) ○FUKUYAMA, Misuzu; KATO, Ryosuke; MORISAKI, Yasuhiro; CHUJO, Yoshiki
- 2F7-03** Synthesis and Reaction of Hydroaluminum Compounds with Bulky Rind Groups (Fac. Sci. Eng., Kinki Univ.) ○MURIOSAKI, Takahiro; KANEDA, Shohei; HASHIZUME, Daisuke; MATSUO, Tsukasa
- 2F7-04** Reaction of Fenchone Hydrazone with Tellurium Tetrachloride: Property and Reaction of Telluradiazole (Fac. Sci., Fukuoka Univ.) ○YAHATA, Shuhei; NAGAHORA, Noriyoshi; SHIOJI, Kosei; OKUMA, Kentaro
- 2F7-05** Catalytic Transoximation to Aldehyde and Ketone (Grad. Sch. Sci. Tech., Ryukoku Univ.) ○OISHI, Naoki; HYODO, Kengo; UCHIDA, Kingo

**2F7-06** Catalytic Synthesis of Nitrile via Transoximation (Fac. Sci. Tech., Ryukoku Univ.) ○TOGASHI, Kosuke; OISHI, Naoki; HYODO, Kengo; UCHIDA, Kingo

Chair: NAGAHORA, Noriyoshi (10 : 10~11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(2F7-08, 2F7-09, 2F7-10, 2F7-12, 2F7-13)

**2F7-08** Synthesis of 5-Aminothiazoles with Sulfur-containing Substituents and Elucidation of Their Properties. (Fac. Eng., Gifu Univ.) ○FURUKAWA, Hidekazu; YAMAGUCHI, Kirara; MURAI, Toshiaki

**2F7-09** Synthesis and elucidation of properties of 5-aminothiazoles derived from the conversion of the methoxy group on the aromatic ring at the 2-position (Fac. Eng., Gifu Univ.) ○NAKASHIMA, Naoto; YAMAGUCHI, Kirara; MURAI, Toshiaki

**2F7-10\*** 5-Aminochalcogenozoles showing unique photophysical properties: synthesis and properties (Fac. Eng., Gifu Univ.) ○YAMAGUCHI, Kirara; MURAI, Toshiaki

**2F7-12** Novel Synthetic Approach to Selenosugar Derivatives with Six-membered Ring via Cycloaddition Reaction of Selenoaldehydes (Grad. Sch. Nat. Sci. Technol., Kanazawa Univ.) ○SATOMI, Daichi; FURUYAMA, Taniyuki; MAEDA, Hajime; SEGI, Masahito

**2F7-13** Synthesis, structure and reactivity of trichalcogenophosphites bearing 9-triptycyl groups (Fac. Sci. Eng., Toyo Univ.) ○TASHIRO, Hiroki; SUGAMATA, Koh; ISHII, Shigeru

Chair: SUZUKI, Katsunori (11 : 20~12 : 10)

\* 11:10-11:20: interval for laptop PC connection.(2F7-15, 2F7-17, 2F7-18, 2F7-19)

**2F7-15\*** Synthesis and properties of porphyrin polymer nanotubes with photo antenna function (Kinki Univ.) ○TAKEUCHI, Noritaka; NAKAHODO, Tsukasa; FUJIHARA, Hisashi

**2F7-17** Synthesis of Chiral Bidentate Ligands Containing P=S or P=Se Group with Chiral Phosphorus Center (Grad. Sch. Nat. Sci. Technol., Kanazawa Univ.) ○KOYAMA, Kenji; HURUYAMA, Taniyuki; MAEDA, Hajime; SEGI, Masahito

**2F7-18** Development of Novel Chiral Hypervalent Iodine(V) Reagents and Their Applications for Enantioselective Reactions (Fac. Eng., Chiba Univ.) ○MAGARA, Akina; YOSHIDA, Yasushi; MINO, Takashi; SAKAMOTO, Masami

**2F7-19** Synthesis of Chiral Yb Composite Polymer Nanotubes (Kinki Univ.) ○SHINTANI, Nozomu; NAKAHODO, Tsukasa; FUJIHARA, Hisashi

## Friday, March 25, PM

Chair: TOKITOH, Norihiro (13 : 20~14 : 10)

\* 13:10-13:20: interval for laptop PC connection.(2F7-27)

**2F7-27\*** Special Lecture Terminal Phosphinidene and Phosphinidenoid Complexes. (University Bonn) ○STREUBEL, Rainer

Chair: NAKATA, Norio (14 : 20~15 : 10)

\* 14:10-14:20: interval for laptop PC connection.(2F7-33, 2F7-35, 2F7-36, 2F7-37)

**2F7-33\*** Alkyne Activation Reactions by a Two-Coordinate Boron Cation (Chem. Res. Lab., Tokyo Tech) ○TANAKA, Naoki; SHOJI, Yoshiaki; HASHIZUME, Daisuke; FUKUSHIMA, Takanori

**2F7-35** Investigation of Reactivity of Hypervalent Iodines Bearing an Imidazolium Moiety in Oxidative Reaction (Grad. Sch. Eng., Osaka Univ.) NISHIMOTO, Yoshihiro; ○HARA, Junki; YASUDA, Makoto

**2F7-36** Synthesis and Reactivity of Diazomethane Bearing the Bulky Rind Group (Fac. Sci. Eng., Kinki Univ.) ○SANO, Yuya; YOSHIDA, Emika; MAEDE, Tomoki; HAYAKAWA, Naoki; MATSUO, Tsukasa

**2F7-37** Generation and Reactivity of a Thyl Radical Stabilized by a Bulky Pentiptycene Framework (Grad. Sch. Sci., Eng., Tokyo Tech) ○MORITA, Takahiro; SASE, Shohei; TAKAHASHI, Hirona; KAWAI, Akio; GOTO, Kei

Chair: MAEDA, Hajime (15 : 20~16 : 20)

\* 15:10-15:20: interval for laptop PC connection.(2F7-39, 2F7-41, 2F7-42, 2F7-44)

**2F7-39\*** Practical synthesis and properties of arsoles (KIT) ○IMOTO, Hiroaki; ISHIDOSHIRO, Makoto; NAKA, Kensuke

**2F7-41** Synthesis and Properties of 2,4-diphenylpenta-2,4-diene-1-thione Incorporated in a Dibenzobarrelene Skeleton (Grad. Sch. Sci., Eng., Saitama Univ.) ○SHIBATA, Mari; NAKATA, Norio; ISHII, Akihiko

**2F7-42\*** Cross-coupling of Aryl Sulfides with Grignard Reagents under NHC-Transition Metal Catalysis (Dep. Chem., Sch. Sci., Kyoto Univ.) ○BARALLE, Alexandre; YORIMITSU, Hideki; OSUKA, Atsuhiko

**2F7-44\*** Hypervalent Iodine-Mediated Fluorination of Styrene Derivatives (Grad. Sch. Sci. Eng., Saga Univ.) ○KITAMURA, Tsugio; MUTA, Kensuke; OYAMADA, Juzo

Chair: KIMURA, Takeshi (16 : 30~17 : 30)

\* 16:20-16:30: interval for laptop PC connection.(2F7-46, 2F7-48, 2F7-49, 2F7-50, 2F7-51)

**2F7-46\*** Activation of Dihydrogen by Barrelene-type Dialumenes Serving as

Masked Dialumenes (ICR, Kyoto Univ.) ○NAGATA, Koichi; AGOU, Tomohiro; GUO, Jing-dong; SASAMORI, Takahiro; NAGASE, Shigeru; TOKITOH, Norihiro

**2F7-48** Synthesis and Properties of 1,4-di-2-thienyl-1-thio-1,3-butadiene Derivatives Incorporated in a Dibenzobarrelene Skeleton. (Grad. Sch. Sci., Eng., Saitama Univ.) ○OGASAWARA, Tasuku; NAKATA, Norio; ISHII, Akihiko

**2F7-49** Synthesis and Property of Novel Photoresponsive Fluorescence Molecules Utilizing Se-N Hypervalent Bond Function (Kinki Univ.) ○OKAZAKI, Kenta; NAKAHODO, Tsukasa; FUJIHARA, Hisashi

**2F7-50** Synthesis and properties of heavier analogues of 2-benzopyrylium salt (Fac. Sci., Fukuoka Univ.) NAGAHORA, Noriyoshi; ○TAKEMOTO, Ikue; SHIOJI, Kosei; OKUMA, Kentaro

**2F7-51** Elucidation of Reactivities of a Primary-alkyl-substituted Selenenic Acid by Taking Advantage of a Large Molecular Cavity (Grad. Sch. Sci., Eng., Tokyo Tech) ○KIMURA, Ryutarō; SASE, Shohei; GOTO, Kei

Chair: YOSHIDA, Yasushi (17 : 40~18 : 40)

\* 17:30-17:40: interval for laptop PC connection.(2F7-53, 2F7-54, 2F7-55, 2F7-56, 2F7-57, 2F7-58)

**2F7-53** Synthesis and property of boryl substituted-phosphinophoshide (Grad. Sch. Sci. Eng., Chuo Univ.; Fac. Sci. Eng., Chuo Univ.) ○ASAMI, Shunsuke; OKAMOTO, Masafumi; SUZUKI, Katunori; YAMASHITA, Makoto

**2F7-54** Creation of a Novel  $\sigma$ -Delocalized Radical Cation using a Pentaselenylbenzene Platform. (Grad. Sch. Sci., Eng., Saitama Univ.) ○SUZUKI, Takumi; FURUKAWA, Shunsuke; SAITO, Masaichi

**2F7-55** Kinetic resolution of optically active methyl 2-arylsulfinylacetate and its application for asymmetric synthesis (Fac. of Eng., Okayama Univ. of Sci.) ○NOKAMI, Junzo

**2F7-56** A new piperidine synthesis by radical cascade reaction of tin radical to 1,6-enynes (Fac. Eng., Yamaguchi Univ.) ○ITAYA, Tomoyuki; YOSHINAGA, Tatsuro; MIYAZAKI, Koichirou; KAWAMOTO, Takuji; KAMIMURA, Akio

**2F7-57** Synthesis and Reaction of an *N*-Thiosulfinylaniline Bearing 9-Triptycylmethyl Groups on the *Ortho*-positions (Coll. Sci., Rikkyo Univ.) ○HARA, Natsuko; MINOURA, Mao

**2F7-58** Synthesis of Isolable Difluoromethylated Boryl Compound Based on Difluoromethylation. (Grad. Sch. Sci., Eng., Tokyo Tech) ○KATO, Naoto; ITO, Shigekazu; MIKAMI, Koichi

## Saturday, March 26, AM

Chair: UCHIYAMA, Yosuke (9 : 00 ~ 10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(3F7-01, 3F7-02, 3F7-03, 3F7-04, 3F7-06)

**3F7-01** Synthesis and fluorescence sensing properties of triethylenetriazine derivatives with metal-ion binding sites (Fac. Eng., Iwate Univ.) MURAOKA, Hiroki; ○SASAKI, Hikaru; OGAWA, Satoshi

**3F7-02** Novel Reactions Of Quinone Imine Dyes With Thioglycolic Acids (School of Human Environ. Sci., Mukogawa Women's University) ○HIOKI, Rie; SEGUCHI, Kazuyoshi; KOBAYASHI, Ayaka

**3F7-03** Synthesis of phosphonate monoesters and their applications as organocatalyst (Fac. Eng., Gifu Univ.) ○KAZUMA, Kuwabara; YUUKI, Maekawa; YUUKI, Hirai; TOSHIKI, Murai

**3F7-04\*** Construction of chiral carbon centers to optically active selenophosphonates via generation of the carbanion (Fac. Eng., Gifu Univ.) ○MAEKAWA, Yuuki; MURAI, Toshiaki

**3F7-06** Synthesis and Properties of Bowl-shaped Triarylphosphine Derivatives Bridged by Oxygen and Sulfur Atoms (Div. of Chem., Fac. Pure Appl. Sci., Univ. of Tsukuba) ○HASEGAWA, Toru; YAMAMURA, Masaki; NABESHIMA, Tatsuya

Chair: TAJIMA, Tomoyuki (10 : 10~11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(3F7-08, 3F7-10, 3F7-11, 3F7-12)

**3F7-08\*** Synthesis, Structure, and Reactivity of *N*-Substituted Amidinopyrroles and Amidinium Tetrazolides (Sch. Sci., Kitasato Univ.; Dep. Chem., Alabama Univ.) SAWAMURA, Yukihiro; KIKUCHI, Yuichi; ABE, Shinya; ○UCHIYAMA, Yosuke; RUNYON, Jason; DOLPHIN, Joshua; SCHINNEN, Christoph; ARDUENGO, Anthony

**3F7-10** Preparation and Electrochemical Property of Benzodiselenete Derivatives (#Organization for Research Promotion, Iwate Univ.) ○KIMURA, Takeshi

**3F7-11** Ortho-Functionalization of Nitrogen-Containing Heterocycle by Using Unsymmetrical Diborane and Iocyanide (Fac. Sci. Eng., Chuo Univ.; Grad. Sch. Sci. Eng., Chuo Univ.) ○KATSUMA, Yuhei; ASAKAWA, Hiroki; YAKASHITA, Makoto

**3F7-12\*** Development of oxidative coupling reaction for late-stage functionalization of complex molecules (Grad. Sch. Pharm., Kyushu Univ.) ○WATANABE, Kenji; KIMIJIMA, Takumi; DAS, Amrita; TSUDA, Makoto; OHSHIMA, Takashi

Chair: MURAOKA, Hiroki (11 : 20~12 : 20)

\* 11:10-11:20: interval for laptop PC connection.(3F7-15, 3F7-16, 3F7-17,

3F7-18, 3F7-19, 3F7-20)

- 3F7-15** C-C Bond Formation between Aryl Sulfoxides and Phenols by an Extended Pummerer Reaction (Graduate School of Science, Kyoto University) ○YANAGI, Tomoyuki; OTSUKA, Shinya; KASUGA, Yuko; FUJIMOTO, Keisuke; MURAKAMI, Kei; YORIMITSU, Hideki; OSUKA, Atsuhito
- 3F7-16** Pummerer-type Aromatic Sulfenylation of Aryl Sulfoxides with Aryl Sulfides as Nucleophiles (Dep. Chem., Sch. Sci., Kyoto Univ.) ○KAWASHIMA, Hitomi; YORIMITSU, Hideki
- 3F7-17** Model Study of the Reaction Processes of Antioxidant Enzymes by Taking Advantage of a "Cradled Selenocysteines" (Grad. Sch. Sci., Eng., Tokyo Tech; Chem. Res. Lab., Tokyo Tech) ○KARASAKI, Takafumi; SASE, Shohei; FUSE, Shinichiro; TANAKA, Hiroshi; GOTO, Kei
- 3F7-18** Model Study of a Sulfenyl Iodide Derived from Internal Cysteine by Taking Advantage of a "Cradled Cysteine" (Grad. Sch. Sci., Eng., Tokyo Tech) ○WATANABE, Nozomu; SASE, Shohei; GOTO, Kei
- 3F7-19** Structures and Reactivities of Macrocyclic Compounds possessing Multiple Disulfide Units and ortho-Substituted Benzene Rings (Grad. Sch. Sci. Eng., TMU) ○AKUTSU, Kanako; HIRABAYASHI, Kazunori; SHIMIZU, Toshio
- 3F7-20** Syntheses of Thiocrown Ethers having Sulfonium Groups (Grad. Sch. Sci. Eng., TMU) ○SUGANO, Nanami; HIRABAYASHI, Kazunori; SHIMIZU, Toshio

## Saturday, March 26, PM

Chair: YAMASHITA, Makoto (13 : 30~14 : 40)

- \* 13:20-13:30: interval for laptop PC connection.(3F7-28, 3F7-31, 3F7-32, 3F7-33)
- 3F7-28<sup>#</sup>** Young Scholar Lectures of CSJ Synthesis, structure, and reactivity of novel electron-deficient boron compounds (Chem. Res. Lab., Tokyo Tech) ○SHOJI, Yoshiaki
- 3F7-31** Synthesis, structure and redox properties of cyclic ferrocene trimer bridged by oligothiophene spacer (Fac. Eng., Iwate Univ.) OGAWA, Satoshi; ○YAMASHITA, Kouhei; OZAWA, Kouhei; MURAOKA, Hiroki
- 3F7-32** Synthesis and Reactivity of Cyclic S<sup>II</sup>-C<sup>0</sup>-S<sup>II</sup> Carbene Exhibit Four-Electron Donor Ability (Coll. Industrial Tech., Nihon Univ.) ○SUZUKI, Hayato; FUJII, Takayoshi
- 3F7-33\*** Synthesis and Application of Novel Aliphatic Steric Protection Groups Based on Triptycene Framework for Stabilization of Highly Reactive Species Containing Group 16 Elements (Coll. Sci., Rikkyo Univ.) ○ISHIHARA, Michihiro; MINOURA, Mao

Chair: SASAKI, Shigeru (16 : 50~17 : 40)

- \* 16:40-16:50: interval for laptop PC connection.(3F7-48, 3F7-50, 3F7-51, 3F7-52)
- 3F7-48\*** Synthesis and Functionalization of Hexavalent Tellurium Mono- and Dicationic Species Bearing All Carbon Ligands (Coll. Sci., Rikkyo Univ.) ○KOBAYASHI, Sho; MINOURA, Mao
- 3F7-50** Synthesis and Properties of 2,4,6-tri(arylligothieryl)-pyrimidine and -pyridine derivatives with D- $\pi$ -A system (Fac. Eng., Iwate Univ.) MURAOKA, Hiroki; ○OBARA, Takumi; OGAWA, Satoshi
- 3F7-51** Synthesis and Properties of Novel Unsymmetrical Diborane(4) by Using Boryllithium (Fac. Sci. Eng., Chuo Univ.; Grad. Sch. Sci. Eng., Chuo Univ.) ○KISU, Haruki; YAMASHITA, Makoto
- 3F7-52** Deprotonation of Hydrocarbons by Using Boryl Anion (Grad. Sch. Sci. Eng., Chuo Univ.; Fac. Sci. Eng., Chuo Univ.; Grad. Sch. Eng., The Univ. of Tokyo; Grad. Sch. Sci., Tohoku Univ.) ○OHSATO, Takuto; OKUNO, Yuri; ISHIDA, Shintaro; IWAMOTO, Takeaki; YAMASHITA, Makoto; NOZAKI, Kyoko

## Sunday, March 27, AM

Chair: FURUKAWA, Shunsuke (9 : 00 ~10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(4F7-01, 4F7-02, 4F7-03, 4F7-04, 4F7-05, 4F7-06)
- 4F7-01** Synthesis of a Bulky Aromatic Compound Bearing 9-Triptycylmethyl Groups on the *meta*-Positions (Coll. Sci., Rikkyo Univ.) ○SUZUKI, Fumiaki; MINOURA, Mao
- 4F7-02<sup>#</sup>** Synthesis of optically active tertiary silanes with highly circularly polarized luminescent properties (Grad. Sch. Sci., The Univ. of Tokyo) ○KOGA, Shinya; SHIMADA, Masaki; ISHII, Ryoma; YAMANOI, Yoshinori; NISHIHARA, Hiroshi
- 4F7-03** Enantioselective Aza-Friedel-Crafts Reaction of Cyclic Ketimines with Pyrroles using the novel imidazoline-phosphoric acid catalysts (Fac. Eng. Nagoya Inst. of Tech.) ○MATSUDA, Nazumi; OHARA, Mutsuyo; NAKAMURA, Shuichi
- 4F7-04** Synthesis and Structural Determination of Stibonium Cation having ppy Ligands (Grad. Sch. Sci. Eng., TMU) ○SAKABE, Masato; NOMURA, Kotohiro; SATO, Soichi
- 4F7-05** Development of new method for the synthesis of poly(p-phenylene sulfide) via polysulfonium salt (Fac. Eng., Iwate Univ.) OGAWA, Satoshi; ○ONO, Taichi; MURAOKA, Hiroki
- 4F7-06** Stereoselective Synthesis of Boron Azaenolates and Their Application toward Aldol-type Reaction (Sch. Eng., Kyoto Univ.) ○MIYAKAWA,

Sho; NAKAMURO, Takayuki; MIURA, Tomoya; MURAKAMI, Masahiro

Chair: NAKA, Kensuke (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(4F7-08, 4F7-10, 4F7-11, 4F7-12)
- 4F7-08<sup>#</sup>** Tautomerization and Reaction of kinetic Stabilized Enesulfenic Acid (Coll. Sci., Rikkyo Univ.) ○YUKIMOTO, Mariko; MINOURA, Mao
- 4F7-10** Functionalization of 1,3-dithiole-2-thione via Deprotonative Zincation (Dep. Chem., Sch. Sci., Kyoto Univ.) ○OTSUKA, Shinya; YORIMITSU, Hideki; OSUKA, Atsuhito
- 4F7-11** Regioselective Radical Addition of Diphosphine Monoxides to Alkenes (Grad. Sch. Eng., Osaka Pref. Univ.) ○SATO, Yuki; KAWAGUCHI, Shin-ichi; NOMOTO, Akihiro; OGAWA, Akiya
- 4F7-12<sup>#</sup>** Elucidation of Reactivities of Cysteine-Derived Reactive Intermediates by Taking Advantage of "Cradled Cysteines" (Grad. Sch. Sci., Eng., Tokyo Tech) ○SANO, Tsukasa; SASE, Shohei; GOTO, Kei

Chair: OSUGA, Hideji (11 : 20~12 : 20)

- \* 11:10-11:20: interval for laptop PC connection.(4F7-15, 4F7-16, 4F7-17, 4F7-18, 4F7-19, 4F7-20)
- 4F7-15** Synthesis of a novel dinuclear gold(I) complex possessing organoarsenic ligands (KIT) ○NISHIYAMA, Shintaro; IMOTO, Hiroaki; NAKA, Kensuke
- 4F7-16** Practical synthesis of organoarsenic compounds by arsenic nucleophiles from cyclooligoarsine. (KIT) ○TANAKA, Susumu; IMOTO, Hiroaki; NAKA, Kensuke
- 4F7-17** Synthesis of a Benzenethiol and an Arene Sulfenic Acid Bearing 9-Triptycylmethyl Groups on the *ortho*-Positions (Coll. Sci., Rikkyo Univ.) ○IRIE, Tatsuya; YUKIMOTO, Mariko; MINOURA, Mao
- 4F7-18** Convenient Synthesis of Tetraaryldiborane(4) and Its Reduction (Grad. Sch. Sci. Eng., Chuo Univ.; Fac. Sci. Eng., Chuo Univ.) ○TSUKAHARA, Nana; ASAKAWA, Hiroki; YAMASHITA, Makoto
- 4F7-19<sup>#</sup>** Combination of a Phosphorane and Triphenylborane for the Activation of Amine-Borane Complexes (Grad. Sch. Sci., The Univ. of Tokyo) ○O'BRIEN, Nathan; KANO, Naokazu
- 4F7-20** Synthesis and reactions of sterically protected phosphines bearing 4-bromoaryl group (Grad. Sch. Sci., Tohoku Univ.) ○SASAKI, Shigeru

## Sunday, March 27, PM

Chair: NOMOTO, Akihiro (13 : 30~14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(4F7-28, 4F7-29, 4F7-30, 4F7-31, 4F7-32, 4F7-33)
- 4F7-28** Thermal Stability of Tetraaryltelluriums(IV) (Coll. Sci., Rikkyo Univ.) ○HAYAKAWA, Kotona; MINOURA, Mao
- 4F7-29** Synthesis of novel chiral quaternary phosphonium salts and asymmetric hydrolysis of esters using them (Grad. Sch. Sci., Kyushu Univ.) ○HIDANI, Yuki; TESHIMA, Gaku; TOKUNAGA, Makoto
- 4F7-30** Catalytic Cross-coupling Reaction of Aryl Sulfoxides with Arylzinc Reagents (Dep. Chem., Sch. Sci., Kyoto Univ.) ○YAMAMOTO, Keita; OTSUKA, Shinya; FUJINO, Daishi; YORIMITSU, Hideki; OSUKA, Atsuhito
- 4F7-31** Transition-Metal-Catalyzed Amination of Aryl Sulfoxides (Dep. Chem., Sch. Sci., Kyoto Univ.) ○YOSHIDA, Yuto; OTSUKA, Shinya; YORIMITSU, Hideki; OSUKA, Atsuhito
- 4F7-32** Syntheses and Encapsulation into Carbon Nanotubes of  $\pi$ -Conjugated Compounds bearing Thiocarbonyl Groups (Grad. Sch. Sci. Eng., Yamaguchi Univ.; Grad. Sch. Env. Life Sci., Okayama Univ.) ○MIYAKE, Hideaki; TAJIMA, Tomoyuki; TAKAGUCHI, Yutaka
- 4F7-33** Synthesis of triarylsilanes by in situ arsenic iodination method and their transition metal catalyzed reactions (KIT) ○YAMAZAWA, Chieko; TANAKA, Susumu; KATO, Takuji; IMOTO, Hiroaki; NAKA, Kensuke

Chair: SATO, Soichi (14 : 40~15 : 40)

- \* 14:30-14:40: interval for laptop PC connection.(4F7-35, 4F7-36, 4F7-37, 4F7-38, 4F7-39, 4F7-40)
- 4F7-35** Synthesis of aggregation induced emission active arylchalcogenoamide derivatives (KIT) ○NOHMI, Katsuya; IMOTO, Hiroaki; NAKA, Kensuke
- 4F7-36** Highly Regioselective Hydrothiolation of Vinyl Compounds Catalyzed by Transition Metal Complexes (Sch. Eng., Osaka Pref. Univ.) ○FUJIIWARA, Keiko; TAMAI, Taichi; NOMOTO, Akihiro; OGAWA, Akiya
- 4F7-37** Generation of a phosphorus-substituted germylene-tungsten complex (ICR, Kyoto Univ.; University Bonn) ○SUZUKI, Yuko; SASAMORI, Takahiro; RAINER, Streubel; TOKITOH, Norihiro
- 4F7-38** Asymmetric hydrolysis of amino acid ester derivatives using novel quaternary ammonium salts derived from cinchona alkaloids (Grad. Sch. Sci., Kyushu Univ.) ○FURUTACHI, Yuhō; HIDANI, Yuki; TOKUNAGA, Makoto
- 4F7-39** Synthesis and Properties of Hexasubstituted Benzodithiophene Derivatives Having Methyl Groups at  $\beta$ -Positions. (Fac. Sys. Eng., Wakayama Univ.) ○MISONO, Masahiro; OSUGA, Hideji; ATARASHI, Hironori; SAKAMOTO, Hidehumi
- 4F7-40** Synthesis and Functionalization of Chiral Polymer Nanotubes with

Coordination Site (Kinki Univ.) ○SATO, Syotaro; NAKAHODO, Tsukasa; FUJIHARA, Hisashi

## Room H1

### Chishinkan3 Building 201

## Organic Chemistry -Reaction and Synthesis- Aliphatic and Alicyclic Compounds

Thursday, March 24, AM

Chair: MATSUMOTO, Arimasa (9 : 30 ~ 10 : 30)

\* 9:20-9:30: interval for laptop PC connection.(1H1-04, 1H1-05, 1H1-06, 1H1-07, 1H1-08, 1H1-09)

**1H1-04<sup>#</sup>** Spontaneous Generation and Multiplication of Enantioenriched  $\alpha$ -Amino Nitrile: Possible Route for the Absolute Asymmetric Synthesis of  $\alpha$ -Amino Acid via Strecker Synthesis (Grad. Sch. Eng., Univ. of Fukui) ○TAKAMATSU, Naoya; AIBA, Shohei; KAWASAKI, Tsuneomi; TOKUNAGA, Yuji

**1H1-05** Formation and Amplification of Enantioenriched  $\alpha$ -Amino Nitrile, a Chiral Precursor of Strecker Synthesis, Induced by L- and D- $\alpha$ -(*p*-Tolyl) glycine: Self-replication of  $\alpha$ -Amino Acid (Grad. Sch. Eng., Univ. of Fukui) ○AIBA, Shohei; TAKAMATSU, Naoya; SASAI, Taichiro; TOKUNAGA, Yuji; KAWASAKI, Tsuneomi

**1H1-06** *N*-Alkylation of  $\beta, \gamma$ -Alkenyl  $\alpha$ -Iminoester and Subsequent Regioselective Nucleophilic Addition to Conjugated Iminium Salt (Grad. Sch. Eng., Mie Univ.) ○ARATAKE, Kana; MIZOTA, Isao; SHIMIZU, Makoto

**1H1-07** Umpolung Reaction of  $\alpha$ -Hydrazonoester: Novel Synthesis of  $\alpha$ -Aminoamide (Grad. Sch. Eng., Mie Univ.) ○MIZUKOSHI, Nanami; MIZOTA, Isao; SHIMIZU, Makoto

**1H1-08<sup>#</sup>** Diastereoselective Nucleophilic Addition Reaction with Chiral Iminium Salts Direct to the Asymmetric Synthesis of (-)-S22178 (Grad. Sch. Eng., Mie Univ.) ○KAWAMURA, Takato; SHIMIZU, Makoto

**1H1-09** Development of Organoaluminum-mediated [2+2] Cycloaddition Reaction of Cyclopropenes (Natural Science & Technology, Kanazawa University; Faculty of Science, The Tokyo University of Science) ○SEKIYA, Takuya; ENDO, Kohei; UKAJI, Yutaka

Chair: KAWASAKI, Tsuneomi (10 : 40 ~ 11 : 40)

\* 10:30-10:40: interval for laptop PC connection.(1H1-11, 1H1-12, 1H1-13, 1H1-14, 1H1-15, 1H1-16)

**1H1-11<sup>#</sup>** Synthesis of *N*-Boc-Amines by Reactions of Organomagnesium Reagents with *N*-Boc-Aminals and Their Oxidation to *N*-Boc-Ketimines (Dep. Chem., Sch. Sci., Kyoto Univ.) ○KOBAYASHI, Ryohei; KANO, Taichi; MARUOKA, Keiji

**1H1-12<sup>#</sup>** Catalyst-Controlled, Enantioselective and Diastereodivergent Conjugate Addition of Aldehydes to Electron-Deficient Olefins (Dep. Chem., Sch. Sci., Kyoto Univ.) ○MARUYAMA, Hiroki; KANO, Taichi; MARUOKA, Keiji

**1H1-13<sup>#</sup>** Brønsted Acid-Catalyzed Mannich Reaction Through Dual Activation of Aldehydes and *N*-Boc-imines (Dep. Chem., Sch. Sci., Kyoto Univ.) ○AOTA, Yusuke; KANO, Taichi; MARUOKA, Keiji

**1H1-14** High-throughput Screening Approach for Asymmetric Autocatalysis Using Various Chiral Triggers (Grad. Sch. Chem. Sci. Technol., Tokyo Univ. of Sci.) ○FUJIWARA, Satoshi; MATSUMOTO, Arimasa; MAKAROV, Alexey; ZAWATZKY, Kerstin; WELCH, Christopher; SOAI, Kenso

**1H1-15** Spontaneous Absolute Asymmetric Synthesis of Pyrimidyl Alkanol Using Diisopropylzinc Vapor in Conjunction with Asymmetric Autocatalysis (Grad. Sch. Chem. Sci. Technol., Tokyo Univ. of Sci.) ○KAIMORI, Yoshiyasu; HIYOSHI, Yui; FUJIWARA, Satoshi; MATSUMOTO, Arimasa; SOAI, Kenso

**1H1-16** Asymmetric Autocatalysis Initiated by Chiral Crystal of Achiral Dibutylhydroxytoluene (Fac. Sci., Tokyo Univ. of Sci.) ○TAKEDA, Sora; HARADA, Shunya; MATSUMOTO, Arimasa; SOAI, Kenso

Thursday, March 24, PM

Chair: SUZUKI, Takeyuki (12 : 50 ~ 13 : 50)

\* 12:40-12:50: interval for laptop PC connection.(1H1-24, 1H1-25, 1H1-26, 1H1-28, 1H1-29)

**1H1-24** Achiral Glycine Acts as the Origin of Homochirality in Conjunction with Asymmetric Autocatalysis (Grad. Sch. Chem. Sci. Technol., Tokyo Univ. of Sci.) ○OZAKI, Hanae; TSUCHIYA, Sumeru; TAKEDA, Sora; LAHAV, Meir; ASAH, Toru; MATSUMOTO, Arimasa; SOAI, Kenso

**1H1-25** The Control of the Molecular Chirality by the Electric Field using Triglycine Sulfate Crystal in Conjunction with Asymmetric Autocatalysis (Grad. Sch. Chem. Sci. Technol., Tokyo Univ. of Sci.) ○SHIMADA, Seiya; HARA, Natsuki; KAIMORI, Yoshiyasu; MATSUMOTO, Arimasa; KAWASAKI, Tsuneomi; ASAH, Toru; SOAI, Kenso

**1H1-26<sup>\*\*</sup>** Asymmetric Induction and Amplification with Asymmetric Autocatalysis and Its Mechanistic Study (Fac. Sci., Tokyo Univ. of Sci.)

○MATSUMOTO, Arimasa; SOAI, Kenso

**1H1-28** The Synthesis of  $\alpha$ -Quaternary Unsaturated Amino Esters Utilizing the Tandem *N*-Alkylation/Claisen Rearrangement of  $\alpha$ -Imino Allyl Ester (Grad. Sch. Eng., Mie Univ.) ○KOBAYASHI, Yoshinari; MIZOTA, Isao; SHIMIZU, Makoto

**1H1-29** Diastereoselective Tandem *N*-Alkylation/Michael Addition of  $\alpha$ -Imino Thioester with Grignard Reagents (Grad. Sch. Eng., Mie Univ.) ○TSUJIMOTO, Yusuke; MIZOTA, Isao; SHIMIZU, Makoto

Chair: KANO, Taichi (14 : 00 ~ 15 : 00)

\* 13:50-14:00: interval for laptop PC connection.(1H1-31, 1H1-33, 1H1-34, 1H1-35, 1H1-36)

**1H1-31<sup>\*\*</sup>** Synthetic studies and stereochemistry of carba-paracyclophanes (Grad. Sch. Sci., Eng., Tokyo Tech) ○JUNG, Sunna; UEDA, Yasuyuki; OHMORI, Ken; SUZUKI, Keisuke

**1H1-33** Synthetic studies on the oligomerization of the optically active carba paracyclophane (Grad. Sch. Sci., Eng., Tokyo Tech) ○UEDA, Yasuyuki; JUNG, Sunna; OHMORI, Ken; SUZUKI, Keisuke

**1H1-34** Selective Tandem *N*-Alkylation/Homo- and Cross-Coupling Reaction of  $\alpha$ -Aldimino Thioesters. (Grad. Sch. Eng., Mie Univ.) ○HIGASHINO, Asako; MIZOTA, Isao; SHIMIZU, Makoto

**1H1-35** Asymmetric Autocatalysis Initiated by Chiral Crystal of Achiral Diphenyl Disulfide (Fac. Sci., Tokyo Univ. of Sci.) ○MORI, Yusuke; KOMURO, Yurika; TANAKA, Rika; MATSUMOTO, Arimasa; SOAI, Kenso

**1H1-36<sup>#</sup>** Catalytic asymmetric synthesis of natural products using Ir catalyzed Tishchenko-type reaction (ISIR, Osaka Univ.) SUZUKI, Takeyuki; ○DOI, Takahiro; MR, Ismiyarto; ZHOU, Da-yang; ASANO, Kaori; SASAI, Hiroaki

Chair: TAKIKAWA, Hiroshi (15 : 10 ~ 16 : 10)

\* 15:00-15:10: interval for laptop PC connection.(1H1-38, 1H1-40, 1H1-41, 1H1-42, 1H1-43)

**1H1-38<sup>\*\*</sup>** Formal Total Synthesis of Artocarpin (Grad. Sch. Eng., Mie Univ.) ○MIZOTA, Isao; SHIMIZU, Makoto

**1H1-40<sup>#</sup>** Synthetic Study of Matemone Containing an Oxindole Using Intramolecular Cyclization via 1,2-Aza-Brook Rearrangement as a Key Reaction (Grad. Sch. Eng., Mie Univ.) ○IMAZATO, Hayao; SHIMIZU, Makoto

**1H1-41** Synthesis of Cyclic Enoxines by Nitrosoallene-mediated Substitution Reactions (Grad. Sch. Mat. Sci., NAIST) ○UEDA, Sho; TANIMOTO, Hiroki; KAKIUCHI, Kiyomi

**1H1-42** Synthesis of novel ascocofuranone derivatives having antitrypanosomal activity (Fac. Eng., Tottori Univ.) ○IKEDA, Kouhei; HAGA, Yasushi; YAMAMOTO, Masaichi; KITA, Kiyoshi; IZAWA, Hironori; IFUKU, Shinsuke; MORIMOTO, Minoru; SAIMOTO, Hiroyuki

**1H1-43** Formation of Indan Skeleton from 2-Aryl-2-propanol Derivatives with HI (Grad. Sch. Eng., Chiba Univ.; Godo Shigen Co., Ltd.) MATSUMOTO, Shoji; ○NAITO, Masafumi; AKAZOME, Motohiro; OTANI, Yasuhiko

Chair: MIZOTA, Isao (16 : 20 ~ 17 : 20)

\* 16:10-16:20: interval for laptop PC connection.(1H1-45, 1H1-46, 1H1-47, 1H1-48, 1H1-49, 1H1-50)

**1H1-45** Synthesis and fluorescent properties of 2'-deoxyuridines containing 3-methylbenzofuran derivatives at the C-5 position. (Grad. Sch. Biosci. Biotech., Tokyo Tech) ○MIYAMURA, Daichi; KANAMORI, Takashi; MASAKI, Yoshiaki; SEKINE, Mitsuo; SEIO, Kohji

**1H1-46** Development of novel 7-membered ring synthesis (Fac. Eng., Kogakuin Univ.) ○OOTSUKI, Rio; HIGUCHI, Sumika; TAKAYAMA, Kan; YASUI, Eiko; NAGUMO, Shinji

**1H1-47** Synthesis of 1-Alkene-3,4-Diols from  $\gamma$ -Silyl Epoxyalcohol Derivatives and the DMSO Anion (Grad. Sch. Biosci. Biotech., Tokyo Tech) ○NANBA, Yutaro; OGAWA, Narihito; KOBAYASHI, Yuichi

**1H1-48** Synthesis of Serotonin Antagonist LY426965 Using Stereoselective Allylic Substitution (Grad. Sch. Biosci. Biotech., Tokyo Tech) ○YAMAGUCHI, Kai; OGAWA, Narihito; KOBAYASHI, Yuichi

**1H1-49** Generation and Application of Substituted Trifluoromethyl Isobenzofurans (Grad. Sch. Sci. Tech., Gunma Univ.) ○HIKOBÉ, Yoshimasa; SHINADA, Shun; INABA, Masanori; NISHINA, Yuta; AMII, Hideki

**1H1-50** New entry to stable nitrile oxides via oxidative ring opening of benzocyclobutenone oxime (Grad. Sch. Sci., Eng., Tokyo Tech) ○SEKI, Ryota; TAKIKAWA, Hiroshi; SUZUKI, Keisuke

Chair: TANIMOTO, Hiroki (17 : 30 ~ 18 : 20)

\* 17:20-17:30: interval for laptop PC connection.(1H1-52, 1H1-53, 1H1-54, 1H1-55, 1H1-56)

**1H1-52** Synthetic application of  $\alpha$ -thiophenyldifluoromethyl arenes (Grad. Sch. Sci. Tech., Gunma Univ.) ○UEYAMA, Kouhei; KIMURA, Hitomi; SUGIISHI, Tsuyuka; AMII, Hideki

**1H1-53** Synthesis of long chain 1, $\omega$ -alkanediols (Tohoku Univ.) ○SHINOZAKI, Yasuhiro; YAMAGUCHI, Masahiko; SHIGENO, Masanori

**1H1-54** Synthesis, Stereochemical Behavior, and Stereospecific Transformation of 3-Aza[7]orthocyclophane (IMCE, Kyushu Univ.; Grad. Sch. Eng. Sci., Kyushu Univ.) ANO, Yusuke; OGAWA, Kouhei; MORITA, Ryota;

○YOSHIOKA, Yukari; IGAWA, Kazunobu; TOMOOKA, Katsuhiko

**1H1-55** Design and Synthesis of 1,3-Ketoamide having Dynamically Axial Chirality (IMCE, Kyushu Univ.; Fac. Eng., Kyushu Univ.) KAWASAKI, Yuuya; ○MUTAGUCHI, Misaki; IGAWA, Kazunobu; TOMOOKA, Katsuhiko

**1H1-56** Synthesis of Bicyclo[n.3.0]alkanones via Intramolecular Conjugate Addition of  $\alpha, \beta$ -Unsaturated Weinreb Amides (Sch. Sci., Hokkaido Univ.) ○MORIJI, Kazuki; ABE, Taiki; ITOH, Ryusei; YOSHIMURA, Fumihiko; TANINO, Keiji

### Friday, March 25, AM

Chair: SUEKI, Shunsuke (9:00 ~ 10:00)

\* 8:50-9:00: interval for laptop PC connection.(2H1-01, 2H1-02, 2H1-03, 2H1-04, 2H1-05)

**2H1-01** DFT study of chiral bis(aminoimino)binaphthol-zinc trinuclear catalyzed asymmetric iodolactonization (Coll. Sci., Rikkyo Univ.)

○KAMEI, Yuto; WATANABE, Ohji; SUGIYAMA, Noriyuki; ARAI, Takayoshi; YABE, Shinnosuke; YAMANAKA, Masahiro

**2H1-02** Function of chiral bis(aminoimino)binaphthol-zinc trinuclear complex in catalytic asymmetric halolactonization (Grad. Sch. Sci., Chiba Univ.)

○WATANABE, Ohji; SUGIYAMA, Noriyuki; KAMEI, Yuto; YABE, Shinnosuke; YAMANAKA, Masahiro; ARAI, Takayoshi

**2H1-03** Lewis acid-catalyzed Cyclization Reactions of Amides of Ethenetricarboxylates via Intramolecular Hydride Transfer (Nara Univ. of Educ.; Grad. Sch. Mat. Sci., NAIST) YAMAZAKI, Shoko; ○NAITO, Taku; NIINA, Mamiko; KAKIUCHI, Kiyomi

**2H1-04** Iron-Catalyzed Hetero-Diels-Alder Reaction (Grad. Sch. Eng., Kyoto Univ.; ACT-C, JST) ○TOMIFUJI, Rei; KURODA, Daiki; KURAHASHI, Takuya; MATSUBARA, Seijiro

**2H1-05\*** EtAlCl<sub>2</sub> and 2,6-dibromopyridine-mediated dehydrogenative carboxylation of alkenes with carbon dioxide (Grad. Sch. Eng., Tohoku Univ.)

○TANAKA, Shinya; TANAKA, Yuuki; WATANABE, Kota; HATTORI, Tetsutaro

Chair: KURAHASHI, Takuya (10:10 ~ 11:10)

\* 10:00-10:10: interval for laptop PC connection.(2H1-08, 2H1-09, 2H1-10, 2H1-11, 2H1-12, 2H1-13)

**2H1-08** Chemoselective Nucleophilic Activation of Carboxylic Acids for Aldol Reaction (Grad. Sch. Pharm., The Univ. of Tokyo) ○NAGAI, Hideoki; MORITA, Yuya; SHIMIZU, Yohei; KANAI, Motomu

**2H1-09** Catalytic Aromatic Perfluoroalkylation using Aryl Bromides (Grad. Sch. Sci. Tech., Gunma Univ.) ○KOMODA, Kazuki; KUBOTA, Yui; SUGIISHI, Tsuyuka; SERIZAWA, Hiroki; AIKAWA, Kohsuke; MIKAMI, Koichi; AMII, Hideki

**2H1-10** Asymmetric synthesis of medium-sized carbocycles by 4pai-electrocyclization based on memory of chirality strategy (Grad. Sch. Pharm. Sci., Kyoto Univ.) ARICHI, Norihito; ITO, Tomohiro; YAMADA, Ken-ichi; YAMAOKA, Yusuke; ○TAKASU, Kiyosei

**2H1-11\*** Intending the entropy control using 2,4-pentanediol tether for the remote stereocontrol of intramolecular reactions (Grad. Sch. Mat. Sci., Univ. of Hyogo) ○SONG, Kuifeng; SUGIMURA, Takashi

**2H1-12** Lewis Acid-Catalyzed Defluorinative Triallylation of Trifluoromethylbenzene Derivatives (Fac. Sci., Gakushuin Univ.) ○UMI, Taishi; YAMADA, Takayuki; SUGA, Takuya; SAITO, Kodai; AKIYAMA, Takahiko

**2H1-13** Development of Negishi-type catalytic aromatic perfluoroarylations of aryl halides with perfluoroaryl reagents. (Grad. Sch. Sci., Eng., Tokyo Tech) ○YOKOTA, Yuki; AIKAWA, Kohsuke; MIKAMI, Koichi

Chair: AMII, Hideki (11:20 ~ 12:20)

\* 11:10-11:20: interval for laptop PC connection.(2H1-15, 2H1-17, 2H1-18, 2H1-19, 2H1-20)

**2H1-15\*** Orbital phase theory for the  $\pi$ -facial selectivity of 5-acetoxycyclopentadiene (Fac. Eng., Gifu Univ.) ○NARUSE, Yuji

**2H1-17** Syntheses of novel  $\pi$ -conjugated molecules by cycloaddition of didehydroisobenzofuran (Sch. Sci. Tech., Kwansei Gakuin Univ.) HAMURA, Toshiyuki; ○MIYAKAWA, Kaoru; MATSUOKA, Suguru

**2H1-18\*** Synthetic Study on Dolastatin 16 (Fac. Env. Earth Sci., Hokkaido Univ.) ○CASALME, Loida; UMEZAWA, Taiki; MATSUDA, Fuyuhiko

**2H1-19** Synthesis of Modified Tamoxifen Derivatives Using Three-component Coupling Reaction among meta-Substituted Aromatic Aldehydes, Allyltrimethylsilane and Methoxybenzene (Fac. Sci., Tokyo Univ. of Sci.) SHIINA, Isamu; ○MIZUSAWA, Akihito; OTA, Nozomi; SHIBATA, Natsumi; NAKATA, Kenya

**2H1-20** Synthesis of Modified Tamoxifen Derivatives and Its Peptide Conjugated Compounds (Fac. Sci., Tokyo Univ. of Sci.) SHIINA, Isamu; MIZUSAWA, Akihito; ○OTA, Nozomi; NAKATA, Kenya

### Friday, March 25, PM

Chair: IGAWA, Kazunobu (13:30 ~ 14:30)

\* 13:20-13:30: interval for laptop PC connection.(2H1-28, 2H1-29, 2H1-30, 2H1-32, 2H1-33)

**2H1-28** The substitution of alkyl phosphates with diarylmethyl anions and the

stereoselectivity (Grad. Sch. Biosci. Biotech., Tokyo Tech) ○WADA, Kyohei; KAWASHIMA, Hidehisa; OGAWA, Narihito; KOBAYASHI, Yuichi

**2H1-29** Straightforward Synthesis of Dipeptides Using Amino Acid Sodium Salts (Fac. Sci., Osaka Pref. Univ.) FUKUYAMA, Takahide; RYU, Ilhyong; ○KURATSU, Mai; FURUKAWA, Shinya; INEYAMA, Takashi

**2H1-30\*** Transfer hydrogenation and condensation reaction mediated by N-heterocyclic carbene as a reducing reagent (Grad Sch. Eng., Nagoya Inst. of Tech.) ○KATO, Terumasa; MATSUOKA, Shin-ichi; SUZUKI, Masato

**2H1-32** Stereoselective Aldol Reactions of the CF<sub>3</sub>-containing Cyclic Glutaramide with Pseudo C<sub>2</sub> symmetry (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○INOUE, Yuta; HATAYAMA, Takahiro; TAKASUKA, Tomoko; YAMAZAKI, Takashi

**2H1-33** Direct perfluoroalkylation of C(sp<sup>2</sup>)-H bonds using a highly electrophilic hypervalent iodine reagent (Dep. Chem., Sch. Sci., Kyoto Univ.) ○KASHIWAGI, Hirotaka; SAKAMOTO, Ryu; MARUOKA, Keiji

Chair: NOKAMI, Toshiaki (14:40 ~ 15:40)

\* 14:30-14:40: interval for laptop PC connection.(2H1-35, 2H1-36, 2H1-37, 2H1-38, 2H1-39)

**2H1-35** Synthesis of a novel C<sub>2</sub>-symmetric cis,cis-2,2'-spirobiindane-1,1'-diamine (Grad. Sch. Fac. Env. and Info. Sci., Yokohama Natl. Univ.) ○KURAUCHI, Kento; TAKUMA, Shunsuke; HOSHINO, Yujiro; HONDA, Kiyoshi

**2H1-36\*** Synthesis of eight-membered cyclic vinylsulfones and their photoluminescence (Fac. of Eng., Okayama Univ. of Sci.; Fac. of Sci., Okayama Univ. of Sci.) ○ORITA, Akihiro; WAKAMATSU, Kan; OHTA, Shinya; NISHIDA, Takanori; TOMIYAMA, Katsutoshi; SHINOHARA, Kenta

**2H1-37** One-pot Synthesis of Heteroatom-embedded Nine-membered Cycloalkynes (IMCE, Kyushu Univ.; Grad. Sch. Eng. Sci., Kyushu Univ.) IGAWA, Kazunobu; KASHIWAGI, Takeru; NI, Runyan; MITSUDA, Naoto; ○AOYAMA, Shin; TOMOOKA, Katsuhiko

**2H1-38** Functionalization and Application of Heteroatom-embedded Nine-membered Cycloalkynes (IMCE, Kyushu Univ.; Grad. Sch. Eng. Sci., Kyushu Univ.) ○KASHIWAGI, Takeru; NI, Runyan; MITSUDA, Naoto; AYOYAMA, Shin; IGAWA, Kazunobu; TOMOOKA, Katsuhiko

**2H1-39\*** An Efficient Synthetic Route to Polycyclic Aromatic Compounds via Successive Cycloadditions of Isobenzofurans (Sch. Sci. Tech., Kwansei Gakuin Univ.) ○EDA, Shohei; HANEDA, Hiroshi; ARATANI, Masato; EGUCHI, Fumiaki; HAMURA, Toshiyuki

Chair: HOSAKAWA, Seijiro (15:50 ~ 16:40)

\* 15:40-15:50: interval for laptop PC connection.(2H1-42, 2H1-43, 2H1-44, 2H1-45, 2H1-46)

**2H1-42** Carbon-Carbon Bond Forming Difluoromethylation using Fluoromethyl and Ruppert-Prakash Reagent (Grad. Sch. Sci., Eng., Tokyo Tech) ○MARUYAMA, Kenichi; NITTA, Junki; AIKAWA, Kohsuke; MIKAMI, Koichi

**2H1-43** Selective Synthesis of partially fluorinated carbohydrates (Grad. Sch. Eng., Tottori Univ.) ○TAKAYANAGI, Keisuke; HAYASHI, Shiho; HARADA, Akinori; NOKAMI, Toshiaki; ITOH, Toshiyuki

**2H1-44** Synthesis of optically active partially fluorinated carbohydrates with altrose-type structure (Fac. Eng., Tottori Univ.) ○HAYASHI, Shiho; TAKAYANAGI, Keisuke; HARADA, Akinori; NOKAMI, Toshiaki; ITOH, Toshiyuki

**2H1-45** Synthetic Study of Pipestelide B (Sch. Adv. Eng., Kogakuin Univ.) ○KIMURA, Naoki; YASUI, Eiko; NAGUMO, Shinji

**2H1-46** Improved Synthesis of Sekothrixide, 14-membered macrolide (Sch. Adv. Eng., Kogakuin Univ.) ○KATSUMI, Daisuke; OZAWA, Masahiro; NAKASONE, Kazuki; YASUI, Eiko; MIYASHITA, Masaaki; NAGUMO, Shinji

Chair: YASUI, Eiko (16:50 ~ 17:30)

\* 16:40-16:50: interval for laptop PC connection.(2H1-48, 2H1-49, 2H1-51)

**2H1-48** Total synthesis of PDIM A (Grad. Sch. Advanced Sci. Eng., Waseda Univ.) ○SANO, Shoichiro; NAKAMURA, Tatsuya; IEKI, Takanori; NAKAGOME, Hanae; KUBOTA, Kei; SADAYUKI, Tomoko; HOSOKAWA, Seijiro

**2H1-49\*** Low-mode conformational search method with semiempirical quantum mechanical calculations: application to enantioselective organocatalysis (IMCE, Kyushu Univ.) ○KAMACHI, Takashi; YOSHIZAWA, Kazunari

**2H1-51** Synthesis of Planar Chiral (1,10)Anthracenophane and Its Stereochemical Behavior (Sch. Sci. Tech., Kwansei Gakuin Univ.) HAMURA, Toshiyuki; ○NISHIDA, Ibuki; MATSUOKA, Suguru; OGAWA, Kouhei; IGAWA, Kazunobu; TOMOOKA, Katsuhiko

Chair: HAMURA, Toshiyuki (17:40 ~ 18:20)

\* 17:30-17:40: interval for laptop PC connection.(2H1-53, 2H1-55, 2H1-56)

**2H1-53\*** Exploitation of parallel synthetic method for all four fully substituted (*E*), (*Z*)-alkenes and its application to expeditious parallel synthesis for pharmaceuticals (Sch. Sci. Tech., Kwansei Gakuin Univ.) ○ASHIDA, Yuichiro; SATO, Yuka; NAKATSUJI, Hidefumi; TANABE, Yoo

**2H1-55** Evaluation of reactivity and durability of HBr/1,4-dioxane solution (Grad. Sch. Sci., Osaka Pref. Univ.) ○NISHIO, Yuya; MIFUNE, Ryota; MATSUBARA, Hiroshi; SATO, Taisuke; SOGA, Shin-ichi

**2H1-56** Aerobic oxidation of alcohols in mesoionic liquids (Grad Sch. Eng., Nagoya Inst. of Tech.) ○ITO, Masaki; HIRASHITA, Tsunehisa; ARAKI, Shuki

### Saturday, March 26, AM

Chair: IGAWA, Kazunobu (9 : 00 ~ 10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(3H1-01, 3H1-02, 3H1-03, 3H1-04, 3H1-06)

**3H1-01** Development of Catalytic 1,4-Addition Reactions of Alkylazaarenes (Grad. Sch. Sci., The Univ. of Tokyo) ○SUZUKI, Hirotsugu; YAMASHITA, Yasuhiro; KOBAYASHI, Shu

**3H1-02** Development of Catalytic Asymmetric 1,4-Addition Reactions of Alkylsulfonamides (Grad. Sch. Sci., The Univ. of Tokyo) YAMASHITA, Yasuhiro; ○IGARASHI, Ryo; SUZUKI, Hirotsugu; KOBAYASHI, Shu

**3H1-03** Development of Catalytic Addition Reactions of Simple Amides with Substituted Alkenes (Grad. Sch. Sci., The Univ. of Tokyo) ○SATO, Io; SUZUKI, Hirotsugu; YAMASHITA, Yasuhiro; KOBAYASHI, Shu

**3H1-04**<sup>#</sup> Development of Stereoselective Carbon-Carbon Bond Forming Reactions of Weakly Acidic Compounds using Strong Base Catalysts (Grad. Sch. Sci., The Univ. of Tokyo) ○YAMASHITA, Yasuhiro; SUZUKI, Hirotsugu; SATO, Io; KOBAYASHI, Shu

**3H1-06** Catalytic Enantioselective Arylation of Ketones with Aryltitanium Reagents Generated from Bromide Precursors (KIT) ○MATSUDA, Atsushi; USHIMARU, Tomoya; HARADA, Toshiro

Chair: YAMASHITA, Yasuhiro (10 : 10 ~ 11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(3H1-08, 3H1-09, 3H1-11, 3H1-12)

**3H1-08** Nucleophilic Substitution of Dialkoxysilane and Its Stereochemical Course (IMCE, Kyushu Univ.; Grad. Sch. Eng. Sci., Kyushu Univ.) IGAWA, Kazunobu; TAKADA, Jyunko; ○SHIGEMATSU, Kazuki; TOMOOKA, Katsuhiko

**3H1-09**<sup>#</sup> Enantioselective Synthesis of Chiral Silacyclopentanes (Grad. Sch. Eng. Sci., Kyushu Univ.; IMCE, Kyushu Univ.) ○YOSHIHIRO, Daisuke; ABE, Yusuke; IGAWA, Kazunobu; TOMOOKA, Katsuhiko

**3H1-11** Control of axial stereochemistry of biphenyls by the formation of medium-size bridge (Sch. Pharm., TUPLS) ○TANAKA, Nozomi; YAMAGUCHI, Satoru; YANAI, Hikaru; SUZUKI, Keisuke; MATSUMOTO, Takashi

**3H1-12**<sup>#</sup> Cationic mononuclear ruthenium carboxylates as catalyst prototypes for self-induced hydrogenation of carboxylic acids (Grad. Sch. Sci., Nagoya Univ.; RCMS, Nagoya Univ.) ○NARUTO, Masayuki; NOYORI, Ryoji; SAITO, Susumu

Chair: IWASAKI, Takanori (11 : 20 ~ 12 : 20)

\* 11:10-11:20: interval for laptop PC connection.(3H1-15, 3H1-16, 3H1-17, 3H1-18, 3H1-19, 3H1-20)

**3H1-15** Development and Mechanistic Study of Zinc Lewis Acid/metal Amide Hybrid-catalyzed Aldol-type Additions of the Schiff Base of 2-Picolylamine to Aldehydes (Grad. Sch. Sci., The Univ. of Tokyo) ○MINAMI, Kodai; SAITO, Yuki; YAMASHITA, Yasuhiro; KOBAYASHI, Shu

**3H1-16**<sup>#</sup> Stereoselective 1,4-Addition of Glycine Schiff Bases using Solid Base Catalysts (Grad. Sch. Sci., The Univ. of Tokyo) ○BORAH, Parijat; YAMASHITA, Yasuhiro; KOBAYASHI, Shu

**3H1-17**<sup>#</sup> Calcium-catalyzed Asymmetric Epoxidation of Electron-deficient Olefins with Hydrogen Peroxide as the Terminal Oxidant (Grad. Sch. Sci., The Univ. of Tokyo) ○MACOR, Joseph; YAMASHITA, Yasuhiro; KOBAYASHI, Shu

**3H1-18** Iodo-Mannich Reaction of  $\gamma$ -Alkoxy- $\alpha$ ,  $\beta$ -Alkynyl Ketone Derivatives by the Use of Titanium Tetraiodide (Grad. Sch. Eng., Mie Univ.) ○SAKATA, Keito; YASHIRO, Kai; HACHIYA, Iwao; SHIMIZU, Makoto

**3H1-19** Lewis Acid-Promoted C-F Bond Activation of Trifluoromethylcyclopropanes: Difluorohomoallylation of Arenes (Div. of Chem., Fac. Pure Appl. Sci., Univ. of Tsukuba) ○OKI, Rie; HATTA, Hibiki; FUCHIBE, Kohei; ICHIKAWA, Junji

**3H1-20** Nucleophilic Addition Reaction to Iminium Salts Generated from Cyclic Amino Silyl Enol Ethers and Its Application to Asymmetric Synthesis (Grad. Sch. Eng., Mie Univ.) ○UCHIMIZU, Shota; SHIMIZU, Makoto

### Saturday, March 26, PM

Chair: MATSUBARA, Ryosuke (13 : 30 ~ 14 : 30)

\* 13:20-13:30: interval for laptop PC connection.(3H1-28, 3H1-30, 3H1-31, 3H1-32, 3H1-33)

**3H1-28**<sup>#</sup> Enantioselective Cyanosilylation of Ketones with Extremely Reactive Hypervalent Silicate Catalyzed by Chiral Lithium(I) Phosphoryl Phenoxide (Grad. Sch. Eng., Nagoya Univ.; CREST, JST) ○YAMAKAWA, Katsuya; HATANNO, Manabu; ISHIHARA, Kazuaki

**3H1-30** Highly Regioselective Alkyl Addition to Poly-conjugated Esters with Grignard Reagent-derived Zinc(II) Ate Complexes (Grad. Sch. Eng., Nagoya Univ.; CREST, JST) ○MIZUNO, Mai; HATANNO, Manabu; ISHIHARA, Kazuaki

**3H1-31** Synthesis of fatty acids containing cyclopropane ring through Ni-catalyzed cross-coupling reaction (Grad. Sch. Eng., Osaka Univ.)

○TERAHIGASHI, Shohei; IWASAKI, Takanori; KUNYASU, Hitoshi; KAMBE, Nobuaki

**3H1-32** Umpolung Reaction of the  $\alpha$ -Imino Thioester Having Cyclopropyl Group Followed by Tandem Reaction and Its Application (Grad. Sch. Eng., Mie Univ.) ○YANAGI, Yusuke; MIZOTA, Isao; SHIMIZU, Makoto

**3H1-33** Environmentally Benign Oxidation Reaction Using Bithmuth Salt as a Catalyst (Faculty of Integrated Arts and Sciences, Tokushima Univ.) ○UENO, Masaharu; KITA, Akiko; MUROI, Tyouki; OHMURA, Satoshi; WADA, Makoto; MIYOSHI, Norikazu

Chair: UENO, Masaharu (17 : 00 ~ 17 : 40)

\* 16:50-17:00: interval for laptop PC connection.(3H1-49, 3H1-51, 3H1-52)

**3H1-49**<sup>#</sup> A one-pot synthesis of 5-membered lactones using biomass-derived sugar as a carbon nucleophile (Interdisciplinary Grad. Sch. Sci. and Eng., Tokyo Tech) ○YAMAGUCHI, Sho; MATSUO, Takeaki; MOTOKURA, Ken; SAKAMOTO, Yasuharu; MIYAJI, Akimitsu; BABA, Toshihide

**3H1-51**<sup>#</sup> Synthesis of 2,3-Unsaturated Sugars Using Aluminium Aryloxides (Sch. Sci., Kobe Univ.) ○MD IDROS, Afiq; NAMITO, Yoichi; MATSUBARA, Ryosuke; HAYASHI, Masahiko

**3H1-52** Synthesis of rare sugar by catalytic asymmetric dihydroxylation (Grad. Sch. Sci., Kobe Univ.) ○NAMITO, Yoichi; NAGAHASHI, Takaaki; MICHIGAMI, Kyosuke; MATSUBARA, Ryosuke; HAYASHI, Masahiko

### Sunday, March 27, AM

Chair: HATANNO, Manabu (9 : 00 ~ 10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(4H1-01, 4H1-02, 4H1-04, 4H1-05)

**4H1-01**<sup>#</sup> Copper Catalyzed Synthesis of Pyrazole Derivatives Using Molecular Oxygen as Environmentally Friendly Oxidant (Syn. Org. Chem. Lab., RIKEN) ○PÜNNER, Florian; SOHTOME, Yoshihiro; SODEOKA, Mikiko

**4H1-02**<sup>#</sup> Development of Copper- or Palladium-Catalyzed Difluoromethylation of Aryl Halides using Difluoromethyl Zinc Reagent (Grad. Sch. Sci., Eng., Tokyo Tech) ○SERIZAWA, Hiroki; KOKI, Ishii; AIKAWA, Kohsuke; MIKAMI, Koichi

**4H1-04** Palladium-Catalyzed Negishi-type Difluoromethylation with Difluoroiodomethane (Grad. Sch. Sci., Eng., Tokyo Tech) ○NITTA, Junki; SERIZAWA, Hiroki; AIKAWA, Kousuke; MIKAMI, Koichi

**4H1-05**<sup>#</sup> Development of asymmetric Davis oxidation catalyzed by a chiral-alphenanthroline/Cu complex (Grad. Sch. Eng., Nagoya Univ.) ○NAGANAWA, Yuki; AOYAMA, Tomotaka; NISHIYAMA, Hisao

Chair: SOHTOME, Yoshihiro (10 : 10 ~ 11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(4H1-08, 4H1-10, 4H1-11, 4H1-13)

**4H1-08**<sup>#</sup> Design of a new bimetallic catalyst for asymmetric transformations (Mol. Cat. Res. Center, Chubu Univ.) ○BHADRA, Sukalyan; YAMAMOTO, Hisashi

**4H1-10** Synthesis and Evaluation of Planar-Chiral Phosphite Ligands Having [n]Paracyclophane Scaffold (Sch. Advanced Sci. Eng., Waseda Univ.) ○FUKAI, Mikio; SEKINE, Ryosuke; HAZRA, Madhurima; KANYIVA, Kyalo-Stephen; SHIBATA, Takanori

**4H1-11**<sup>#</sup> Enantioselective Addition-Cyclization Cascade Reaction of Styrenes with Aldimines Catalyzed by Chiral Supramolecular Potassium Magnesium Binaphthylsulfonates (Nagoya Univ. VBL; Grad. Sch. Eng., Nagoya Univ.) ○NISHIKAWA, Keisuke; HATANNO, Manabu; ISHIHARA, Kazuaki

**4H1-13** Enantioselective Aza-Friedel-Crafts Reaction of Imines with Indoles Catalyzed by Chiral Potassium Binaphthylsulfonates (Grad. Sch. Eng., Nagoya Univ.) ○MOCHIZUKI, Takuya; NISHIKAWA, Keisuke; HATANNO, Manabu; ISHIHARA, Kazuaki

Chair: AMII, Hideki (11 : 20 ~ 12 : 20)

\* 11:10-11:20: interval for laptop PC connection.(4H1-15, 4H1-17, 4H1-19, 4H1-20)

**4H1-15**<sup>#</sup> Utilization of Carbon Dioxide Based on Alkyne Activation by Silver Catalysts (Fac. Sci. Tech., Keio Univ.) ○SEKINE, Kohei; SADAMITSU, Yuta; YAMADA, Tooru

**4H1-17**<sup>#</sup> Tandem Isomerization/Enantioselective Cycloaddition Reaction of 3-Butynyl-1H-pyrazole Promoted by Chiral  $\pi$ -Cu(II) Catalysts (Grad. Sch. Eng., Nagoya Univ.) ○OGURA, Yoshihiro; HORI, Masahiro; ISHIHARA, Kazuaki

**4H1-19**<sup>#</sup> Enantioselective  $\alpha$ -Halogenation Reaction of Acyl-1H-pyrazoles Promoted by Chiral  $\pi$ -Cu(II) Catalysts (Grad. Sch. Eng., Nagoya Univ.) ○WANG, Yanzhao; OGURA, Yoshihiro; ISHIHARA, Kazuaki

**4H1-20** MgCl<sub>2</sub>-Catalyzed Synthesis of Cyclic Carbonates from CO<sub>2</sub> and Epoxides (Grad. Sch. Eng., Kyoto Univ.) ○INOKUCHI, Masaki; MIZOE, Taiga; NOGI, Keisuke; FUJIHARA, Tetsuaki; TERAOKA, Jun; TSUJI, Yasushi

### Sunday, March 27, PM

Chair: HACHIYA, Iwao (13 : 30 ~ 14 : 30)

\* 13:20-13:30: interval for laptop PC connection.(4H1-28, 4H1-29, 4H1-30,

4H1-31, 4H1-32, 4H1-33)

- 4H1-28** Synthesis of Trifluoromethylthiolated Compounds using (Trifluoromethyl)zinc Reagent. (Grad. Sch. Sci., Eng., Tokyo Tech) ○TOYA, Wataru; AIKAWA, Kousuke; MIKAMI, Koichi
- 4H1-29** Synthesis and application of tetrafluoroethylenated acetylene derivatives (KIT) ○EGASHIRA, Gen; KONNO, Tsutomu
- 4H1-30** An efficient preparation of tetrafluoroethylenated aromatics based on copper-catalyzed cross coupling reactions with organozinc reagents (KIT) ○TAMAMOTO, Ken; KONNO, Tsutomu
- 4H1-31** Cobalt-catalyzed hydrosilylation of various fluorine-containing ketones (KIT) ○KUMON, Tatsuya; KONNO, Tsutomu
- 4H1-32** Benzylic trifluoromethylation of phenols (Univ. of Shizuoka) ○IDE, Takafumi; EGAMI, Hiromichi; KAWATO, Yuji; HAMASHIMA, Yoshitaka
- 4H1-33** Difunctionalization of olefins using hypervalent chloroiodane compound (Univ. of Shizuoka) ○UKU, Minako; YONEDA, Takahiro; KAWATO, Yuji; EGAMI, Hiromichi; HAMASHIMA, Yoshitaka

Chair: YAMANAKA, Masahiro (14 : 40~15 : 40)

- \* 14:30-14:40: interval for laptop PC connection.(4H1-35, 4H1-36, 4H1-37, 4H1-38, 4H1-39, 4H1-40)
- 4H1-35** Immobilization of a Chiral Titanium Catalyst Derived from 3-Aryl H<sub>8</sub>-BINOL on Silica Gel (KIT) ○AKAI, Junichiro; WATANABE, Satoshi; HARADA, Toshiro
- 4H1-36** Desymmetrization of *meso* Imide Derivatives by Asymmetric Reductions and Its Applications (Grad. Sch. Eng., Mie Univ.) ○SHINDO, Hiroaki; HACHIYA, Iwao; SHIMIZU, Makoto
- 4H1-37** Lewis Acid-mediated highly stereoselective oxy-homo-Michael addition of nucleophiles to optically active donor-acceptor cyclopropanes (Fac. Textile Sci. Technol., Shinshu Univ.) ○TAKADA, Seiji; IWATA, Kiitsu; YUBUNE, Toshihide; NISHII, Yoshinori
- 4H1-38** Highly stereoselective 1,5-addition of nucleophiles to optically active donor-acceptor cyclopropanes using Cu-catalyst/RMgBr. (Fac. Textile Sci. Technol., Shinshu Univ.) ○IWATA, Kiitsu; TAKADA, Seiji; NISHII, Yoshinori
- 4H1-39** Transesterification of Chelatable Substrates Catalyzed by Trioctylmethylammonium Methyl Carbonate (Grad. Sch. Eng., Nagoya Univ.) ○YOSHIDA, Yurika; OGURA, Yoshihiro; HATANO, Manabu; ISHIIHARA, Kazuaki
- 4H1-40** Transesterification Catalyzed by Highly Active Tetramethylammonium Methyl Carbonate (Grad. Sch. Eng., Nagoya Univ.) ○TABATA, Yuji; YAMASHITA, Kenji; HATANO, Manabu; ISHIIHARA, Kazuaki

Chair: HAMASHIMA, Yoshitaka (15 : 50~16 : 50)

- \* 15:40-15:50: interval for laptop PC connection.(4H1-42, 4H1-43, 4H1-44, 4H1-45, 4H1-46, 4H1-47)
- 4H1-42** Development of Chiral Ag(I)-Bisamidine Catalyzed Asymmetric Friedel-Crafts Alkylation of Indoles with  $\alpha$ -Substituted- $\beta$ -Nitroacrylates (Grad. Sch. Sci., Rikkyo Univ.) ○NOMOTO, Takumi; YAMANAKA, Masahiro
- 4H1-43** Reversal of Enantioselectivity in Zn-Bisamidinate Catalyzed Asymmetric Hydrophosphonylation of  $\alpha$ -ketoester (Grad. Sch. Sci., Rikkyo Univ.) ○ICHINOSE, Atsushi; YAMANAKA, Masahiro
- 4H1-44** Development of Novel Trifluoromethylation Reagents having Iodonium Ylide Structure (Grad. Sch. Eng., Nagoya Inst. of Tech.) ○SUZUKI, Shugo; SAIDALIMU, Ibrahim; TOKUNAGA, Etsuko; SHIBATA, Norio
- 4H1-45** Development of catalyzed asymmetric enantioselective three-component coupling reactions of fluoromethylpyruvate, olefins and arenes (Grad. Sch. Sci., Eng., Tokyo Tech) ○KONDO, Daisuke; AIKAWA, Kousuke; MIKAMI, Koichi
- 4H1-46** Development of Catalytic Asymmetric Alkylation with Fluoroalkyl ketones (Grad. Sch. Sci., Eng., Tokyo Tech) ○YABUUCHI, Kohei; TORII, Kota; AIKAWA, Kousuke; MIKAMI, Koichi
- 4H1-47** Application of Fluoroalkylated Boron Compounds to C-C bond Formation (Grad. Sch. Sci. Tech., Gunma Univ.) ○KAWAUCHI, Daisuke; SATO, Mizuki; SAKAI, Tatsuya; NAKAJIMA, Chieno; AMII, Hideki

## Room H2

Chishinkan3 Building 202

### Organic Chemistry -Reaction and Synthesis- Aliphatic and Alicyclic Compounds

Thursday, March 24, AM

Chair: NAGASAWA, Kazuo (9 : 30 ~10 : 30)

- \* 9:20-9:30: interval for laptop PC connection.(1H2-04, 1H2-06, 1H2-07, 1H2-08, 1H2-09)
- 1H2-04\*** Asymmetric Net Cycloaddition Synthesis of 1,5-Benzothiazepines toward Library Construction (Grad. Sch. Eng., Kyoto Univ.) ○FUKATA, Yukihiro; ASANO, Keisuke; MATSUBARA, Seiji

- 1H2-06** Development of peptide catalysts through exploration and fine-tuning with large-scale peptide libraries (IIS, The Univ. of Tokyo) ○SATOU, Junichi; AKAGAWA, Kengo; KUDO, Kazuaki
- 1H2-07\*** Development of Peptide Catalysts for Activating Substrates via Michael-Type Addition (IIS, The Univ. of Tokyo) ○DU, Zhaonan; AKAGAWA, Kengo; KUDO, Kazuaki
- 1H2-08** Chiral amine-urea-mediated asymmetric 1,3-dipolar cycloaddition reactions of nitrile oxides with 2-hydroxystyrenes (Fac. Eng., Shinshu Univ.) ○HASHIMOTO, Yohei; TODA, Yasunori; SUGA, Hiroyuki
- 1H2-09** Phosphonium salt-catalyzed carbon dioxide fixation at atmospheric pressure for the synthesis of cyclic carbonates (Fac. Eng., Shinshu Univ.) ○KOMIYAMA, Yutaka; TODA, Yasunori; SUGA, Hiroyuki

Chair: ASANO, Keisuke (10 : 40~11 : 40)

- \* 10:30-10:40: interval for laptop PC connection.(1H2-11, 1H2-13, 1H2-14, 1H2-15)
- 1H2-11\*** Exploration of asymmetric reactions in water using water-insoluble chiral catalysts (Grad. Sch. Sci., The Univ. of Tokyo) ○KITANOSONO, Taku; KOBAYASHI, Shu
- 1H2-13** Analytical Study of Diels-Alder Reactions under Heterogeneous Conditions Using a Real-time Reaction Monitoring Method with Mass Spectrometry (Grad. Sch. Sci., The Univ. of Tokyo) ○MASUDA, Koichiro; KOBAYASHI, Shu
- 1H2-14** Development of oxidative kinetic resolution of  $\beta$ - and  $\gamma$ -disubstituted tetralone derivatives using guanidine-bisurea bifunctional organocatalyst (Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○HOSOYA, Keisuke; ODAGI, Minami; NAGASAWA, Kazuo
- 1H2-15\*** Asymmetric fluoroacetylation with a bifunctional hydroxyl carboxylate catalyst (Univ. of Shizuoka) ○EGAMI, Hiromichi; ASADA, Junshi; SATO, Kentaro; HASHIZUME, Daisuke; KAWATO, Yuji; HAMASHIMA, Yoshitaka

Chair: NAGASAWA, Kazuo (11 : 50~12 : 20)

- \* 11:40-11:50: interval for laptop PC connection.(1H2-18)
- 1H2-18** CSJ Award for Young Chemists Development of Modular Chiral Ionic Ligands and Catalysts for Hitherto Difficult Catalytic Asymmetric Transformations (WPI-ITbM, Nagoya Univ.) ○OHMATSU, Kousuke

### Thursday, March 24, PM

Chair: SUGA, Hiroyuki (13 : 30~14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(1H2-28, 1H2-29, 1H2-30, 1H2-32, 1H2-33)
- 1H2-28** Development and Application of Catalytic Racemization of N-Unprotected Amino Esters (WPI-ITbM, Nagoya Univ.; Grad. Sch. Eng., Nagoya Univ.; CREST, JST) ○NAGATO, Yuya; OHMATSU, Kousuke; OOI, Takashi
- 1H2-29** Extended Modularity of Ion-Paired Chiral Ligands for Pd-Catalyzed Asymmetric Allylations (WPI-ITbM, Nagoya Univ.; Grad. Sch. Eng., Nagoya Univ.; CREST, JST) ○KUSANO, Yuya; OHMATSU, Kousuke; OOI, Takashi
- 1H2-30\*** Multiple Absolute Stereocontrol in Pd-Catalyzed Asymmetric [3+2] Cycloadditions Using Chiral Onium-Phosphine Hybrid Ligand (WPI-ITbM, Nagoya Univ.; Grad. Sch. Eng., Nagoya Univ.; CREST, JST) ○IMAGAWA, Naomichi; OHMATSU, Kousuke; OOI, Takashi
- 1H2-32** Enantioselective Diels-Alder Reaction Induced by Chiral Supramolecular Lewis Acid Catalysts Based on the Coordination Bond between the Cyano Moiety and Borane (Grad. Sch. Eng., Nagoya Univ.; CREST, JST) ○HAYASHI, Kazushi; SAKAMOTO, Tatsuhiro; MAKINO, Yuma; HATANO, Manabu; ISHIIHARA, Kazuaki
- 1H2-33** Diastereo-, Enantio-, Regio-, Site-, and Substrate-Selective Diels-Alder Reaction Induced by Chiral Supramolecular Lewis Acid Catalysts (Grad. Sch. Eng., Nagoya Univ.; CREST, JST) ○SAKAMOTO, Tatsuhiro; HATANO, Manabu; ISHIIHARA, Kazuaki

Chair: ASANO, Keisuke (14 : 40~15 : 40)

- \* 14:30-14:40: interval for laptop PC connection.(1H2-35, 1H2-36, 1H2-37, 1H2-38, 1H2-39, 1H2-40)
- 1H2-35** Chiral phosphoric acid catalyzed asymmetric nucleophilic addition of trifluoromethylated ketimines (Fac. Sci., Gakushuin Univ.) ○KIYOTA, Yuki; SAITO, Kodai; SUGA, Takuya; AKIYAMA, Takahiko
- 1H2-36** Kinetic Resolution of Secondary Alcohols through Intramolecular Transesterification Catalyzed by Chiral Bronsted Acid (Grad. Sch. Sci., Tohoku Univ.) ○ITO, Shigetomo; OTA, Yusuke; KONDOH, Azusa; TERADA, Masahiro
- 1H2-37** Chiral Phosphinic Acid-Phosphoric Acid Catalyzed Enantioselective Hetero Diels-Alder Reaction of Aryl Glyoxal and Siloxydiene (Grad. Sch. Sci., Tohoku Univ.; LCCMS, IMS) ○NARUMI, Tomohiro; MOMIYAMA, Norie; TERADA, Masahiro
- 1H2-38** Development of Carbon-Carbon Bond Forming Reactions Utilizing Homoenate Equivalents Generated by [1,2]-Phospha-Brook Rearrangement (Grad. Sch. Sci., Tohoku Univ.) ○AOKI, Takuma; KONDOH, Azusa; TERADA, Masahiro
- 1H2-39** Enantioselective Aza-Friedel-Crafts Reaction of  $\alpha$ -Ketimino Esters with Furan Catalyzed by Chiral C<sub>2</sub>-Symmetric Binaphthyl-2,2'-bis

(phosphate)s (Grad. Sch. Eng., Nagoya Univ.) OKAMOTO, Haruka; HATANO, Manabu; ISHIHARA, Kazuaki

**1H2-40** Enantioselective Aza-Friedel-Crafts Reaction of  $\alpha$ -Ketimino Esters with Furan Catalyzed by Chiral  $C_1$ -Symmetric Binaphthyl-2,2'-bis(phosphate)s (Grad. Sch. Eng., Nagoya Univ.) OKAWAKAMI, Tarō; OKAMOTO, Haruka; HATANO, Manabu; ISHIHARA, Kazuaki

Chair: SUMII, Yuji (15 : 50~16 : 50)

\* 15:40-15:50: interval for laptop PC connection.(1H2-42, 1H2-44, 1H2-46, 1H2-47)

**1H2-42<sup>#</sup>** Chiral Phosphoric Acid-Catalyzed Enantioselective Synthesis of 1,4-Dithiepanes from Ring-Expansion Reaction of 1,3-Dithiane Derivatives: Reaction and Mechanistic Insight (Grad. Sch. Sci., Tohoku Univ.; Grad. Sch. Eng., Iwate Univ.) OLI, Feng; KORENAGA, Toshinobu; TERADA, Masahiro

**1H2-44<sup>#</sup>** Chiral Nucleophilic Amidophosphate-Catalyzed Enantioselective Iodocyclization (Grad. Sch. Eng., Nagoya Univ.) OLU, Yanhui; NAKATSUJI, Hidefumi; OKUMURA, Yukimasa; ISHIHARA, Kazuaki

**1H2-46** Aryl Selenide-Iodine Cooperative Catalysts for Chlorocyclization of Tryptamine Derivatives (Grad. Sch. Eng., Nagoya Univ.) OOMURA, Shuhei; HORIBE, Takahiro; ISHIHARA, Kazuaki

**1H2-47** Nucleophilic Calcogen Catalysts for Iodochlorination of Unactivated Alkenes (Grad. Sch. Eng., Nagoya Univ.) OTSUJI, Yasutaka; HORIBE, Takahiro; ISHIHARA, Kazuaki

Chair: OHMATSU, Kohsuke (17 : 00~17 : 50)

\* 16:50-17:00: interval for laptop PC connection.(1H2-49, 1H2-50, 1H2-51, 1H2-52, 1H2-53)

**1H2-49** Enantioselective Formal [3+2]-Cycloaddition of  $\beta, \gamma$ -Epoxy Sulfoxones with Imines Catalyzed by Chiral Bronsted Base (Grad. Sch. Sci., Tohoku Univ.) OKAHIRA, Shiiri; OISHI, Masafumi; KONDOH, Azusa; TERADA, Masahiro

**1H2-50** Asymmetric Decarboxylative Protonation of  $\alpha$ -Halo- $\beta$ -keto Esters with Organocatalyst (Toyoohashi Univ. of Tech.) OSASAKI, Nozomi; SHIBATOMI, Kazutaka; IWASA, Seiji

**1H2-51** Asymmetric synthesis of fluoroalkyl phthalides (Grad. Sch. Sci. Tech., Gunma Univ.) OSAKAI, Tatsuya; INABA, Masanori; SHIBATA, Norio; AMII, Hideki

**1H2-52** Phosphine-catalyzed Anti-Carboration of Alkynes with Organoboranes (Fac. Sci., Hokkaido Univ.) YAMAZAKI, Ayaka; NAGAO, Kazunori; OHMIYA, Hirohisa; SAWAMURA, Masaya

**1H2-53** Synthesis of 1,1-Diborylalkenes through a Bronsted Base-Catalyzed Reaction between Terminal Alkynes and Bis(pinacolato)diboron (Fac. Sci., Hokkaido Univ.) MORINAGA, Akira; NAGAO, Kazunori; OHMIYA, Hirohisa; SAWAMURA, Masaya

Chair: AMII, Hideki (18 : 00~18 : 40)

\* 17:50-18:00: interval for laptop PC connection.(1H2-55, 1H2-56, 1H2-58)

**1H2-55** N-Heterocyclic Carbene-Catalyzed Mono-Acylation of Vicinal Diols (Grad. Sch. Sci., Chiba Univ.) OKUWANO, Satoru; MASUDA, Toshinobu

**1H2-56<sup>#</sup>** Enantioselective Acylation of Alcohols with Highly Active Chiral Nucleophilic Catalysts (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) FUJII, Kazuki; MANDAI, Hiroki; SUGA, Seiji

**1H2-58** Desymmetrization of *meso*-1,2-diols with Highly Active Chiral Nucleophilic Catalysts (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) YASUHARA, Hiroshi; FUJII, Kazuki; MANDAI, Hiroki; SUGA, Seiji

## Friday, March 25, AM

Chair: YAMANAKA, Masahiro (9 : 00 ~ 10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(2H2-01, 2H2-02, 2H2-03, 2H2-04, 2H2-05, 2H2-06)

**2H2-01** Design of Chiral Bronsted Acid Catalysts for Asymmetric Diels-Alder Reaction of Trisubstituted Nitroalkenes (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) FUJII, Yudai; KUDOH, Takayuki; SAKAKURA, Akira

**2H2-02** Development of Intramolecular Dehydro Diels-Alder Reaction of Indolyl-1,6-diyne for the Synthesis of Substituted Carbazoles (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) FUJISAWA, Syo; KUDOH, Takayuki; SAKAKURA, Akira

**2H2-03** Substituted trans-Cyclooctenes as Novel Organic Lewis Base Catalysts (Grad. Sch. Eng., Kyoto Univ.) EINARU, Shunsuke; ASANO, Keisuke; MATSUBARA, Seiji

**2H2-04** Synthesis of Disubstituted trans-Cyclooctenes toward the Development of Novel Organic Lewis Base Catalysts (Grad. Sch. Eng., Kyoto Univ.) SHITAMICHI, Kenta; EINARU, Shunsuke; ASANO, Keisuke; MATSUBARA, Seiji

**2H2-05** Asymmetric Synthesis of 1,3-Polyol Building Blocks by Chiral Phosphoric Acid Catalysts (Grad. Sch. Eng., Kyoto Univ.) MATSUMOTO, Akira; ASANO, Keisuke; MATSUBARA, Seiji

**2H2-06<sup>#</sup>** The Chiral Amine-Catalyzed Enantioselective Rauhut-Currier Reaction (ISIR, Osaka Univ.) KISHI, Kenta; TAKIZAWA, Shinobu; ARTEAGA, Fernando; SASAI, Hiroaki

Chair: KUDOH, Takayuki (10 : 10~11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(2H2-08, 2H2-09, 2H2-10, 2H2-11, 2H2-12, 2H2-13)

**2H2-08** Exploration of Secondary Amine Organocatalyst Using Solid-Phase Catalysis/CD HTS for Asymmetric Mannich Reaction (Grad. Sch. Sci., Chiba Univ.) INOUE, Takahiro; ARAI, Takayoshi

**2H2-09** Synthesis of main-chain polymers having chiral imidazolidinone salt for asymmetric reaction using ionic bond(IX) (Toyoohashi Univ. of Tech.) TAKENAKA, Nagisa; HARAGUCHI, Naoki; ITSUNO, Shinichi

**2H2-10** Synthesis of polymers containing sulfonamide type cinchona alkaloid and their application to asymmetric reaction (Dept. Env. Life Sci., Toyoohashi Univ. of Tech.) TAKATA, Shohei; HARAGUCHI, Naoki; ITSUNO, Shinichi

**2H2-11** Synthesis of polymeric chiral ligands containing TsDPEN structure and their application to enantioselective catalysis (Toyoohashi Univ. of Tech.) TAKAHASHI, Shotaro; HARAGUCHI, Naoki; ITSUNO, Shinichi

**2H2-12<sup>#</sup>** Enantioselective Intramolecular Cyclization of Alkynyl Esters Catalyzed by Chiral Bronsted Base (Grad. Sch. Sci., Tohoku Univ.) TRAN, Hoa Thi Quynh; KIMURA, Kyoko; KONDOH, Azusa; TERADA, Masahiro

**2H2-13** Theoretical Study of Carboxylic Acid-Phosphoric Acid Catalyzed Asymmetric Hetero Diels-Alder Reaction (Grad. Sch. Sci., Rikkyo Univ.) NODA, Hirofumi; TERADA, Masahiro; MOMIYAMA, Norie; YAMANAKA, Masahiro

Chair: ARAI, Takayoshi (11 : 20~12 : 20)

\* 11:10-11:20: interval for laptop PC connection.(2H2-15, 2H2-17, 2H2-18, 2H2-19, 2H2-20)

**2H2-15<sup>\*</sup>** Development of the First Non-enzymatic Dynamic Asymmetric Esterification of Racemic 2-(1H-Pyrrol-1-yl)alkanoic Acids Using MA-BTM Combined System (Fac. Sci., Tokyo Univ. of Sci.) TOKUMARU, Eri; SHIINA, Isamu

**2H2-17** Dynamic Asymmetric Esterification of Racemic 2-Indolylpropanoic Acids Using MA-BTM Combined System (Fac. Sci., Tokyo Univ. of Sci.) TOKUMARU, Eri; SAITO, Takahiro; YOKOYAMA, Yuka; SHIINA, Isamu

**2H2-18** Kinetic Resolution of Racemic Gentsyl Alcohol Derivatives Using Asymmetric Esterification (Fac. Sci., Tokyo Univ. of Sci.) SHIINA, Isamu; ISHIKAWA, Ryo; NAKATA, Kenya

**2H2-19** Asymmetric Synthesis of Fused Piperidine Derivatives by the Internal Redox Process (Fac. Sci., Gakushuin Univ.) ISOGAI, Ryo; MORI, Keiji; AKIYAMA, Takahiko

**2H2-20** Phosphine-Catalyzed Acylcyanation of Alkynoates (Fac. Sci., Hokkaido Univ.) MURAYAMA, Hiroaki; NAGAO, Kazunori; OHMIYA, Hirohisa; SAWAMURA, Masaya

## Friday, March 25, PM

Chair: HARAGUCHI, Naoki (13 : 30~14 : 30)

\* 13:20-13:30: interval for laptop PC connection.(2H2-28, 2H2-30, 2H2-31, 2H2-33)

**2H2-28<sup>\*</sup>** Boron Tribromide-assisted Chiral Phosphoric Acid Catalysts for Enantioselective Diels-Alder Reaction toward Alkaloid Synthesis (Grad. Sch. Eng., Nagoya Univ.; CREST, JST) OGOTO, Yuta; HATANO, Manabu; ISHIHARA, Kazuaki

**2H2-30** Remote Boron Lewis Acid-Assisted Chiral Phosphoric Acid Catalysts for Enantioselective Diels-Alder Reaction (Grad. Sch. Eng., Nagoya Univ.; CREST, JST) ISHIHARA, Hideyuki; HATANO, Manabu; ISHIHARA, Kazuaki

**2H2-31<sup>\*</sup>** Diastereodivergent Catalysis of Chiral Aminophosphonium Salts for Highly Regio- and Stereoselective 1,6-Additions (WPI-ITbM, Nagoya Univ.; Grad. Sch. Eng., Nagoya Univ.; CREST, JST) YOSHIOKA, Ken; URAGUCHI, Daisuke; OOI, Takashi

**2H2-33** Stereoselective Mannich-type Reaction of Oxindoles under the Catalysis of Chiral Ammonium Betaines (WPI-ITbM, Nagoya Univ.; Grad. Sch. Eng., Nagoya Univ.; CREST, JST) OKATO, Kohsuke; TORII, Masahiro; URAGUCHI, Daisuke; OOI, Takashi

Chair: KOIKE, Takashi (14 : 40~15 : 40)

\* 14:30-14:40: interval for laptop PC connection.(2H2-35, 2H2-36, 2H2-37, 2H2-38, 2H2-39, 2H2-40)

**2H2-35<sup>#</sup>** Novel Boronic Acid-catalyzed Amide Condensation Reaction (Grad. Sch. Eng., Nagoya Univ.) WANG, Ke; LU, Yanhui; ISHIHARA, Kazuaki

**2H2-36** Secondary Amine-Boronic Acid Cooperative Catalysis for [4 + 2] Dehydrative Cycloaddition of  $\alpha, \beta, \gamma, \delta$ -Unsaturated Carboxylic Acids with Ketones (Grad. Sch. Eng., Nagoya Univ.) NAKATA, Yuto; LU, Yanhui; HORIBE, Takahiro; ISHIHARA, Kazuaki

**2H2-37** Photoinduced perfluoroalkylation of aldehydes via enamines (Grad. Sch. of Humanities and Sci., Ochanomizu Univ.) MATSUI, Haruna; YAJIMA, Tomoko

**2H2-38** Site-Selective C-H to C-C Conversion by Radicals: A Dual Approach Based on Polar and Steric Effect (Grad. Sch. Sci., Osaka Pref. Univ.) YAMADA, Keiichi; FUKUYAMA, Takahide; RYU, Ilhyong

**2H2-39** Photocatalyzed C-H Arylation of Alkanes with Heterocycles (Fac. Sci., Osaka Pref. Univ.) FUJII, Saki; YAMADA, Keiichi; FUKUYAMA,



Takahide; RYU, Ilhyong

- 2H2-40** Reductive Difluoromethylation of Unsaturated Hydrocarbons by Photoredox Catalyst (Grad. Sch. Sci., Osaka Pref. Univ.; Daikin Industries, Ltd.) SUMINO, Shuhei; ○UNO, Misae; FUKUYAMA, Takahide; RYU, Ilhyong; MATSUURA, Makoto; YAMAMOTO, Akinori; KISHIKAWA, Yosuke

Chair: SASAI, Hiroaki (15 : 50~16 : 50)

\* 15:40-15:50: interval for laptop PC connection.(2H2-42, 2H2-44, 2H2-46)

- 2H2-42<sup>##</sup>** Photocatalytic C-N Bond Formation at Room Temperature (Grad. Sch. Sci., Nagoya Univ.; RCMS, Nagoya Univ.) ○MORIOKA, Yuna; WANG, Lyuming; TSAREV, Vasily; CANER, Joaquim; WANG, Qing; USHIMARU, Richiro; KUDO, Akihiko; NOYORI, Ryoji; NAKA, Hiroshi; SAITO, Susumu

- 2H2-44<sup>##</sup>** Photo-radical Trifluoromethylation catalyzed by Trifluoroethoxy-coated subphthalocyanine (Fac. Eng. Nagoya Inst. of Tech.) ○MATSUZAKI, Kohei; HIROMURA, Tomoya; TOKUNAGA, Etsuko; SHIBATA, Norio

- 2H2-46<sup>##</sup>** Regioselective photocatalytic transfer hydrogenolysis of allylic alcohols (Grad. Sch. Sci., Nagoya Univ.) ○TAKADA, Yuki; CANER, Joaquim; NAKA, Hiroshi; NOYORI, Ryoji; SAITO, Susumu

Chair: MIYAKE, Yoshihiro (17 : 00~17 : 50)

\* 16:50-17:00: interval for laptop PC connection.(2H2-49, 2H2-50, 2H2-51, 2H2-53)

- 2H2-49** Synthesis of CF<sub>3</sub>-containing Spiroethers by Photoredox Catalysis (Chem. Res. Lab., Tokyo Tech) ○NOTO, Naoki; KOIKE, Takashi; AKITA, Munetaka

- 2H2-50** Oxy-Trifluoromethylation of Allenes by Photoredox Catalysis (Chem. Res. Lab., Tokyo Tech) ○TOMITA, Ren; KOIKE, Takashi; AKITA, Munetaka

- 2H2-51<sup>##</sup>** Organic Dye Catalyzed  $\alpha$ -Allylation of  $\alpha$ -Halo Carbonyl Compounds under Visible Light Irradiation (Grad. Sch. Eng., Osaka Univ.) ○ESUMI, Naoto; SUZUKI, Itaru; YASUDA, Makoto

- 2H2-53<sup>#</sup>** Design of Flavin-Amine Integrated Catalysts for Photoredox Reactions (Fac. Eng., Tokushima Univ.) ○TAGAMI, Takuma; ARAKAWA, Yukihiko; MINAGAWA, Keiji; IMADA, Yasushi

Chair: YAJIMA, Tomoko (18 : 00~18 : 40)

\* 17:50-18:00: interval for laptop PC connection.(2H2-55, 2H2-56, 2H2-58)

- 2H2-55** DFT Study of BINOL-phosphoryl-boronate Catalyzed 1,4-Reduction of  $\alpha$ ,  $\beta$ -Unsaturated Ketone. (Grad. Sch. Sci., Rikkyo Univ.) ○YAMAMOTO, Eri; YAMANA, Masahiro

- 2H2-56<sup>##</sup>** Highly Enantioselective Steglich Rearrangement with Poly(quinaxaline-2,3-diyl)-based Helically Chiral DMAP Derivatives (Grad. Sch. Eng., Kyoto Univ.) ○MURAKAMI, Ryo; YAMAMOTO, Takeshi; SUGINOME, Michinori

- 2H2-58** Photoinduced C(sp<sup>3</sup>)-H azidation for installation of nitrogen functionalities to carbon skeletons (Grad. Sch. Sci. Eng., Yamaguchi Univ.) ○WATANABE, Mizuki; KAMIJO, Kaori; TAO, Keisuke; MURAFUJI, Toshihiro; KAMIJO, Shin

## Saturday, March 26, AM

Chair: SHIBATOMI, Kazutaka (9 : 00 ~10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(3H2-01, 3H2-02, 3H2-03, 3H2-04, 3H2-06)

- 3H2-01** Development of Oxidative Dearomatization Reaction Using Hypochlorite Salt Catalysts (Grad. Sch. Eng., Nagoya Univ.; CREST, JST) ○SAHARA, Naoto; UYANIK, Muhammet; ISHIIHARA, Kazuaki

- 3H2-02** Hypoiodite-Catalyzed Oxidative  $\alpha$ -Azidation of Carbonyl Compounds (Grad. Sch. Eng., Nagoya Univ.; CREST, JST) ○HATTORI, Yuhei; TSUKAHARA, Mayuko; UYANIK, Muhammet; ISHIIHARA, Kazuaki

- 3H2-03** Catalytic  $\alpha$ -Chlorination of Carbonyl Compounds with Sodium Hypochlorite Pentahydrate (Grad. Sch. Eng., Nagoya Univ.) ○NAKASHIMA, Fumio; UYANIK, Muhammet; ISHIIHARA, Kazuaki; KUWAHATA, Mitsuyoshi; EJIMA, Yasukazu

- 3H2-04<sup>##</sup>** A Chiral Selenium Catalyst for Highly Enantioselective Oxidative Cyclization (Dep. Chem., Sch. Sci., Kyoto Univ.) ○KAWAMATA, Yu; HASHIMOTO, Takuya; MARUOKA, Keiji

- 3H2-06** One-Pot Metal-Free Transformation of Ethylarenes into Aromatic Primary Amides via C-C Bond Cleavage (Grad. Sch. Sci., Chiba Univ.) ○SHIMOKAWA, Shohei; MORIYAMA, Katsuhiko; TOGO, Hideo

Chair: URAGUCHI, Daisuke (10 : 10~11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(3H2-08, 3H2-09, 3H2-10, 3H2-12, 3H2-13)

- 3H2-08** Oxidative Dual-Functionalization of Ethers via Aerobic Oxidation of Bromide Ion (Fac. Sci., Chiba Univ.) ○HAMADA, Tsukasa; MORIYAMA, Katsuhiko; TOGO, Hideo

- 3H2-09** I<sub>2</sub>-Catalyzed Vicinal Diamination of Olefins Utilizing Chloramine-Ns (Grad. Sch. Eng., Osaka Univ.) ○HIRAYAMA, Arata; MIWA, Hayato; MINAKATA, Satoshi

- 3H2-10<sup>##</sup>** Chiral Hypoiodite-Catalyzed Enantioselective Oxidative Cyclization

and Mechanistic Study (Grad. Sch. Eng., Nagoya Univ.; CREST, JST)

○HAYASHI, Hiroki; SUZUKI, Daisuke; UYANIK, Muhammet; ISHIIHARA, Kazuaki

- 3H2-12** Chiral Hypoiodite-Catalyzed Enantioselective Oxidative Dearomatization of Indole Derivatives (Grad. Sch. Eng., Nagoya Univ.; CREST, JST) ○UKEGAWA, Naoya; UYANIK, Muhammet; ISHIIHARA, Kazuaki

- 3H2-13** Chiral Hypoiodite-Catalyzed Enantioselective Oxidative Cycloetherification (Grad. Sch. Eng., Nagoya Univ.; CREST, JST) ○IWATA, Hirokazu; HAYASHI, Hiroki; UYANIK, Muhammet; ISHIIHARA, Kazuaki

Chair: UYANIK, Muhammet (11 : 20~12 : 20)

\* 11:10-11:20: interval for laptop PC connection.(3H2-15, 3H2-16, 3H2-17, 3H2-18, 3H2-19, 3H2-20)

- 3H2-15** GlycolCleavage Using Sodium Hypochlorite Catalyzed by Iodobenzene (Fac. Sci. Tech., SIST; Fac. Sci. Tech., SIST) MATSUSHIMA, Ryoji; OSUGI, Rie; SEKIYAMA, Hideo; ○KIRIHARA, Masayuki

- 3H2-16** Electrophilic Bromination Using Sodium Hypochlorite Pentahydrate and Sodium Bromide (Fac. Sci. Tech., SIST) ○AKIYAMA, Tomomi; SUZUKI, Risa; KINOSHITA, Yukari; KIRIHARA, Masayuki

- 3H2-17** Fluorinative Ring-Cleavage of Cyclopropylmethanols (Fac. Sci. Tech., SIST) ○MURAMATSU, Yukari; KIKKAWA, You; KITAGAWA, Saori; KIRIHARA, Masayuki

- 3H2-18** Nitroxyl Radical-Catalyzed Six-membered Ring Bromolactonization of Alkenyl Carboxylic Acids (Grad. Sch. Sci., Chiba Univ.) ○KURAMOCHI, Masako; MORIYAMA, Katsuhiko; TOGO, Hideo

- 3H2-19** Aerobic Oxidation of Sulfides Catalyzed by N5-unsubstituted neutral flavins (Fac. Eng., Tokushima Univ.) ○YAMANOMOTO, Ken; ARAKAWA, Yukihiko; MINAGAWA, Keiji; IMADA, Yasushi

- 3H2-20** Ritter-Type Amination of C-H Bonds at Tertiary Carbon Centers Using Iodic Acid and *N*-Hydroxyphthalimide (Grad. Sch. Eng., Osaka Univ.) ○TAKEMOTO, Kenta; ITO, Ryo; KIYOKAWA, Kensuke; MINAKATA, Satoshi

## Saturday, March 26, PM

Chair: MORIYAMA, Katsuhiko (13 : 30~14 : 30)

\* 13:20-13:30: interval for laptop PC connection.(3H2-28, 3H2-29, 3H2-30, 3H2-31, 3H2-32, 3H2-33)

- 3H2-28** *N*-Sulfonyl  $\alpha$ -Iminoester-derived Chiral Oxaziridines: Catalytic Asymmetric Synthesis and Application as a Chiral Oxidant (WPI-ITbM, Nagoya Univ.; Grad. Sch. Eng., Nagoya Univ.; CREST, JST) ○NAOYA, Tanaka; URAGUCHI, Daisuke; OOI, Takashi

- 3H2-29** Development of Catalytic Asymmetric Glycolate Aldol Reaction Based on Umpolung Reactivity of Enediol Intermediate (WPI-ITbM, Nagoya Univ.; Grad. Sch. Eng., Nagoya Univ.; CREST, JST) ○YAMADA, Kohei; URAGUCHI, Daisuke; OOI, Takashi

- 3H2-30** Regio-, Stereo-, and Enantioselective 1,6-Addition to Conjugated Enynyl *N*-Acylpyrazoles (WPI-ITbM, Nagoya Univ.; Grad. Sch. Eng., Nagoya Univ.; CREST, JST) ○SHIBAZAKI, Ryo; URAGUCHI, Daisuke; OOI, Takashi

- 3H2-31** Theoretical Study on Guanidine-Bisthiourea Bifunctional Organocatalysts in Asymmetric Friedel-Crafts Reaction (Coll. Sci., Rikkyo Univ.) ○NAKANO, Katsuhiko; ODAGI, Minami; NAGASAWA, Kazuo; YAMANAKA, Masahiro

- 3H2-32** Synthetic studies of gracilamine using asymmetric aza-Friedel-Crafts reaction in the presence of guanidine-bisthiourea bifunctional organocatalyst (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○YAMAMOTO, Yoshiharu; ODAGI, Minami; NAKANO, Kazuhiko; YAMANAKA, Masahiro; NAGASAWA, Kazuo

- 3H2-33<sup>#</sup>** Organocatalytic decarboxylative halogenation of  $\beta$ -keto carboxylic acids (Dept. Env. Life Sci., Toyohashi Univ. of Tech.) ○SHIBATOMI, Kazutaka; KAWASAKI, Yohei; SASAKI, Nozomi; IWASA, Seiji

## Sunday, March 27, AM

Chair: MOMIYAMA, Norie (9 : 00 ~10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(4H2-01, 4H2-02, 4H2-03, 4H2-05, 4H2-06)

- 4H2-01** Enantioselective Synthesis of Hexahydrochromenones through Simultaneous Construction of Three Chiral Centers (Grad. Sch. Eng., Kyoto Univ.) ○FUJII, Yuki; ASANO, Keisuke; MATSUBARA, Seiji

- 4H2-02** Asymmetric Synthesis of 2,2,4,6-Tetrasubstituted Tetrahydropyrans by Bifunctional Organocatalysts (Grad. Sch. Eng., Kyoto Univ.) ○NASU, Teruhisa; FUJII, Yuki; ASANO, Keisuke; MATSUBARA, Seiji

- 4H2-03<sup>\*</sup>** Enantioselective Synthesis of Axially Chiral Hetero-biaryls by Bifunctional Organocatalysts (Grad. Sch. Eng., Kyoto Univ.) ○MIYAJI, Ryota; ASANO, Keisuke; MATSUBARA, Seiji

- 4H2-05** Chiral Hypervalent Iodine(III)-Catalyzed Enantioselective Oxidative Dearomatization of 1,4-Hydroquinone Derivatives (Grad. Sch. Eng., Nagoya Univ.; CREST, JST) ○MIZUNO, Masahiro; UYANIK, Muhammet; ISHIIHARA, Kazuaki

- 4H2-06** Chiral Hypervalent Iodine(III)-catalyzed Oxidative Kinetic Resolution of Biaryl Hydroxy Carboxylic Acids (Grad. Sch. Eng., Nagoya Univ.) ○SAEDA, Kirara; UYANIK, Muhammet; ISHIIHARA, Kazuaki

Chair: MORI, Atsunori (10 : 10~11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(4H2-08, 4H2-09, 4H2-10, 4H2-11, 4H2-13)

**4H2-08** Electrophilic Cyanation of Enol Silyl Ethers Catalyzed by Boron Lewis Acid Using Hypervalent Iodine Reagent (Grad. Sch. Eng., Osaka Univ.) ○MATSUBARA, Hiroki; NAGATA, Takaya; KIYOKAWA, Kensuke; MINAKATA, Satoshi**4H2-09** Direct oxidation of 1,1'-bi-2-naphthol derivatives at the 8 and/or 8' positions (Dept. of Chem. Eng., Nara National College of Technology) ○MASUI, Yu; KISHIMOTO, Kouki; SHIBAJI, Kouki; KAMEI, Toshiyuki; SHIMADA, Toyoshi**4H2-10** Synthesis of  $\beta$ -Ketonitriles by Electrophilic Cyanation of Boron Enolates (Grad. Sch. Eng., Osaka Univ.) ○NAGATA, Takaya; WATANABE, Tomoki; KIYOKAWA, Kensuke; MINAKATA, Satoshi**4H2-11\*** IBS-Catalyzed Regioselective Oxidation of Phenols and Its Synthetic Application (Grad. Sch. Eng., Nagoya Univ.; CREST, JST) ○MUTSUGA, Tatsuya; UYANIK, Muhammet; ISHIHARA, Kazuaki**4H2-13** Oxidative Generation of *ortho*-Quinone Methides and Application to Tandem Reactions (Grad. Sch. Eng., Nagoya Univ.; CREST, JST) ○NISHIOKA, Kohei; UYANIK, Muhammet; ISHIHARA, Kazuaki

Chair: KAMEI, Toshiyuki (11 : 20~12 : 20)

\* 11:10-11:20: interval for laptop PC connection.(4H2-15, 4H2-16, 4H2-18, 4H2-19, 4H2-20)

**4H2-15** C-H bond functionalization at 1-position of tetrahydroisoquinoline derivatives with azodicarboxylate as an oxidant (Fac. Sci., Gakushuin Univ.) ○IIZUKA, Sunao; SUGA, Takuya; AKIYAMA, Takahiko**4H2-16\*\*** Chiral Brønsted acid catalyzed enantioselective reaction of enamide with azlactone or thiazolone (Grad. Sch. Sci., Tohoku Univ.; LCCMS, IMS) ○KIKUCHI, Jun; MOMIYAMA, Norie; TERADA, Masahiro**4H2-18** Chiral Phosphoric Acid Catalyzed Enantiodivergent Synthesis of Chiral Biaryls based on Transfer Hydrogenation (Fac. Sci., Gakushuin Univ.) ○ITAKURA, Tsubasa; MORI, Keiji; AKIYAMA, Takahiko**4H2-19** Construction of Quaternary Stereogenic Center *via* Intramolecular  $S_N2'$  Reaction using Chiral Brønsted Acid Catalyst (Grad. Sch. Sci., Tohoku Univ.) ○SHIMIZU, Masahiro; KONDOH, Azusa; TERADA, Masahiro**4H2-20** Brønsted Acid Catalyzed Aerobic Hydrogenation of Olefins by In Situ Generated Diimide (Fac. Eng., Tokushima Univ.) ○KOHDA, Takahiro; ARAKAWA, Yukihiro; MINAGAWA, Keiji; IMADA, Yasushi

### Sunday, March 27, PM

Chair: NOKAMI, Toshiki (13 : 30~14 : 30)

\* 13:20-13:30: interval for laptop PC connection.(4H2-28, 4H2-29, 4H2-30, 4H2-31, 4H2-32, 4H2-33)

**4H2-28** Development of Hydration Reactions in Water with New Photo-Harvesting Catalysts (Grad. Sch. Sci., The Univ. of Tokyo) ○XU, Pengyu; KITANOSONO, Taku; KOBAYASHI, Shu**4H2-29** Chiral Palladium(II)-Catalyzed Asymmetric 1,4-Addition Reactions of Indoles in Water. (Grad. Sch. Sci., The Univ. of Tokyo) ○MIYO, Masumi; KITANOSONO, Taku; KOBAYASHI, Shu**4H2-30\*** Synthesis and Application of Immobilized Chiral 2,2'-Bipyridine Ligands (Grad. Sch. Sci., The Univ. of Tokyo) ○ZHU, Lei; KITANOSONO, Taku; KOBAYASHI, Shu**4H2-31** Oxidation of secondary alcohols using a photo-excited ketone (Grad. Sch. Sci. Eng., Yamaguchi Univ.) ○TAKAO, Go; TAO, Keisuke; MURAFUJI, Toshihiro; KAMIJO, Shin**4H2-32** New Methodology for Construction of *trans*-Fused Skeletons by means of Photochemically Promoted Coupling Reaction between Acylsilanes and Boronates (Fac. Sci., Gakushuin Univ.) ○SHIMIZU, Tsukasa; ISHIDA, Kento; KUSAMA, Hiroyuki**4H2-33** Zinc Iodide(II)-Catalyzed Intermolecular Coupling of Acylsilanes with Aldehydes under Photoirradiation Conditions (Fac. Sci., Gakushuin Univ.) ○TOBITA, Fumiya; ISHIDA, Kento; KUSAMA, Hiroyuki

Chair: ISHIDA, Kento (14 : 40~15 : 40)

\* 14:30-14:40: interval for laptop PC connection.(4H2-35, 4H2-36, 4H2-37, 4H2-38, 4H2-39, 4H2-40)

**4H2-35** Trityl Halides / Thioureas: A Convenient Source for Trityl Cation-Catalyzed Intramolecular Carbonyl-Ene Cyclization and [2+2]-Cycloaddition (Fac. Sci., Kochi Univ.) ○HORINOUCHE, Ryo; NOMOTO, Yuya; NISHIYAMA, Nobuo; KOTSUKI, Hiroyoshi**4H2-36** Synthesis of fluorinated cycloalkenes via radical ring opening reaction of gem-difluorocyclopropane and subsequent RCM reaction (Grad. Sch. Eng., Tottori Univ.) ○MASUHARA, Yoshihiro; NOKAMI, Toshiki; ITOH, Toshiyuki**4H2-37** Synthesis of mono-fluorocycloalkenes via  $S_N2'$  type allylation or vinylation of gem-difluoroalkenes and subsequent RCM reaction (Fac. Eng., Tottori Univ.) ○TANAKA, Toshiki; MASUHARA, Yoshihiro; ITOH, Toshiyuki; NOKAMI, Toshiki**4H2-38** Reductive Decyanation Reactions of Maronitriles Using TTMSS (Grad. Sch. Med., Yamaguchi Univ.) ○SHIMAYA, Yudai; KAWAMOTO, Takuji; KAMIMURA, Akio**4H2-39** Synthetic application of the redox type isomerization of  $\gamma$ -trifluoromethylated allylic alcohols (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and

Technol.) ○HAMADA, Yoko; YAMAZAKI, Takashi; TAKASUKA, Tomoko

**4H2-40** Radical Reductive Decyanation of Aliphatic Nitriles Using Borohydride (Grad. Sch. Med., Yamaguchi Univ.) ○ORITANI, Kyohei; KAWAMOTO, Takuji; KAMIMURA, Akio

Chair: KITANOSONO, Taku (15 : 50~16 : 20)

\* 15:40-15:50: interval for laptop PC connection.(4H2-42, 4H2-43, 4H2-44)  
**4H2-42** Radical Trifluoromethylation Using Vinyl Triflates (Grad. Sch. Med., Yamaguchi Univ.) ○SASAKI, Rio; KAWAMOTO, Takuji; KAMIMURA, Akio**4H2-43** Visible photoinduced iodoperfluoroalkylation of terminal alkene and alkyne using organic dyes as photoredox catalysts (Grad. Sch. Of Humanities and Sci., Ochanomizu Univ.) ○IKEGAMI, Mako; YAJIMA, Tomoko**4H2-44** Peroxydisulphate Mediated C-C bond Formation *via* Single Electron Oxidation of Alkenes (Grad. Sch. Sci., Osaka Pref. Univ.) ○NAKAKOJI, Daiki; UEDA, Mitsuhiro; RYU, Ilhyong

## Room H3

Chishinkan3 Building 203

### Organic Chemistry -Reaction and Synthesis- High-Throughput Synthesis

Thursday, March 24, AM

Chair: FUKUYAMA, Takahide (11 : 20~12 : 20)

\* 11:10-11:20: interval for laptop PC connection.(1H3-15, 1H3-18, 1H3-20)

**1H3-15\*** Young Scholar Lectures of CSJ Development of Green-Sustainable Transition-Metal Catalyzed Reaction Systems (IMS) ○OSAKO, Takao**1H3-18\*** Continuous Operations of Anionic Polymerization Using a Flow Microreactor (Grad. Sch. Eng., Kyoto Univ.) ○NAGAKI, Aiichiro; NAKAHARA, Yuichi; FURUSAWA, Mai; SAWAKI, Tomoya; YAMAMOTO, Tetsuya; TOUKAIRIN, Hideaki; TADOKORO, Shinsuke; SHIMAZAKI, Toshiya; ITO, Toshihide; OTAKE, Masakazu; ARAI, Hidenori; TODA, Naoya; OHTSUKA, Keita; TAKAHASHI, Yusuke; MORIWAKI, Yuya; TSUCHIHASHI, Yuta; HIROSE, Katsuyuki; YOSHIDA, Jun-ichi**1H3-20** Flash Generation and Reactions of Functional Alkylolithiums in Flow (Grad. Sch. Eng., Kyoto Univ.) ○TSUCHIHASHI, Yuta; NAGAKI, Aiichiro; YOSHIDA, Jun-ichi

Thursday, March 24, PM

Chair: OSAKO, Takao (14 : 20~15 : 20)

\* 14:10-14:20: interval for laptop PC connection.(1H3-33, 1H3-34, 1H3-35, 1H3-36, 1H3-38)

**1H3-33** Development of selective hydrogenation of nitriles to primary ammonium salts using heterogeneous Pd catalysts under continuous flow conditions (Grad. Sch. Sci., The Univ. of Tokyo; GSC Social Cooperation Laboratory) ○SAITO, Yuki; MORII, Yasuharu; ISHITANI, Haruro; KOBAYASHI, Shu**1H3-34** Continuous flow hydrogenation using heterogenous Pd catalysts: Reduction of benzyl ethers and nitro compounds (Grad. Sch. Sci., The Univ. of Tokyo; The Univ. of Tokyo, GSC Social Cooperation Lab.) ISHITANI, Haruro; ○OZEKI, Masahiro; SAITO, Yuki; OYAMADA, Hidekazu; KOBAYASHI, Shu**1H3-35** Development of carbon-carbon bond forming reactions using solid base catalysts under flow conditions and an application to continuous synthesis of biologically active compounds (Grad. Sch. Sci., The Univ. of Tokyo; The Univ. of Tokyo, GSC social Cooperation Lab.) ○KANAI, Kan; ISHITANI, Haruro; KOBAYASHI, Shu**1H3-36\*** Numbering-up of Monolithic Microreactors and Its Application to Synthesis of a Key Intermediate of Valsartan (Grad. Sch. Eng., Kyoto Univ.) ○TONOMURA, Osamu; NAGAKI, Aiichiro; HIROSE, Katsuyuki; TANIGUCHI, Satoshi; TAGA, Toshiki; HASEBE, Shinji; ISHIZUKA, Norio; YOSHIDA, Jun-ichi**1H3-38** Suzuki-Miyaura Coupling Using Monolith Reactors Containing Palladium Catalyst (Grad. Sch. Eng., Kyoto Univ.) ○HIROSE, Katsuyuki; MORIWAKI, Yuya; ISHIZUKA, Norio; MITAMURA, Koji; MATSUKAWA, Kimihiro; NAGAKI, Aiichiro; YOSHIDA, Jun-ichi

Chair: MATSUBARA, Hiroshi (15 : 30~16 : 30)

\* 15:20-15:30: interval for laptop PC connection.(1H3-40, 1H3-41, 1H3-42, 1H3-43, 1H3-45)

**1H3-40\*** Synthesis of [10]Cycloparaphenylene Using Flow Microreactors (Grad. Sch. Eng., Kyoto Univ.) ○KIM, Heejin; LEE, Hyune-jea; KIM, Dong-pyo; YOSHIDA, Jun-ichi**1H3-41** Generations and Reactions of  $\alpha$ -alkylidene  $\beta$ -oxolithiums *via* Halogen-Lithium Exchange Using Flow System (Grad. Sch. Advanced Sci.

Eng., Waseda Univ.) OKUMURO, Katsuhiro; NAGAKI, Aiichiro; YOSHIDA, Jun-ichi; NAKADA, Masahisa

- 1H3-42** Efficient synthesis of methanofullerene derivative PCBM using flow microreactor (Osaka Municipal Technical Research Institute; Grad. Sch. Sci. Tech., Ryukoku Univ.) OINOUE, Yuta; ITO, Takatoshi; Iwai, Toshiyuki; IWASAWA, Tetsuo; MATSUMOTO, Fukashi; MORIWAKI, Kazuyuki; TAKAO, Yuko; MIZUNO, Takumi; OHNO, Toshinobu
- 1H3-43<sup>#</sup>** Development of Metal Nanoparticle Catalysts Immobilized in a Polymer with an NHC Moiety as a Cross-linker and a Ligand; Catalyst Design and Application to Reactions (Grad. Sch. Sci., The Univ. of Tokyo) OMIN, Hyemin; MIYAMURA, Hiroyuki; KOBAYASHI, Shu
- 1H3-45** Self-Assembled Nanocomposite Organic Polymers with Aluminum and Scandium as Heterogeneous Water-Compatible Lewis Acid Catalysts (Grad. Sch. Sci., The Univ. of Tokyo) OMIYAMURA, Hiroyuki; SONOYAMA, Arisa; HAYRAPETYAN, Davit; KOBAYASHI, Shu

Chair: MASE, Nobuyuki (16 : 40~17 : 40)

\* 16:30-16:40: interval for laptop PC connection.(1H3-47, 1H3-48, 1H3-49, 1H3-50, 1H3-52)

- 1H3-47** Construction of Asymmetric Quaternary Carbon Centers by Chiral Rhodium Nanoparticle-Catalyzed Asymmetric 1,4-Addition Reactions (Grad. Sch. Sci., The Univ. of Tokyo) OSAITO, Yuuki; YASUKAWA, Tomohiro; MIYAMURA, Hiroyuki; KOBAYASHI, Shu
- 1H3-48** Development of Chiral Rhodium Nanoparticle Catalysts for Asymmetric Arylation of Imines (Grad. Sch. Sci., The Univ. of Tokyo) YASUKAWA, Tomohiro; OKUREMOTO, Tatsuya; MIYAMURA, Hiroyuki; KOBAYASHI, Shu
- 1H3-49<sup>#</sup>** Rhodium Nanoparticle-Catalyzed Ketone Hydroacylation Reactions (Grad. Sch. Sci., The Univ. of Tokyo; The Univ. of Tokyo, GSC Social Cooperation Lab.) OYASUKAWA, Tomohiro; KOBAYASHI, Shu
- 1H3-50<sup>#</sup>** Microwave Specific Effect on Organic Synthesis (Fac. Sci. Tech., Keio Univ.) OYAMADA, Tohru; TASHIMA, Shigeki
- 1H3-52** Microwave irradiation effects for esterification reaction of ferrocene derivatives. (Grad. Sch. Life Sci., Ritsumeikan Univ.) OTACHI, Masashi; OKADA, Yutaka

## Friday, March 25, AM

Chair: YAMADA, Yoichi (9 : 00~9 : 50)

\* 8:50-9:00: interval for laptop PC connection.(2H3-01, 2H3-02, 2H3-03, 2H3-04, 2H3-05)

- 2H3-01** Flow Microreactor Synthesis of Functional Linear-Dendritic Hybrid Polymers (Grad. Sch. Eng., Kyoto Univ.) OTANI, Yosuke; TAKUMI, Masahiro; NAGAKI, Aiichiro; YOSHIDA, Jun-ichi
- 2H3-02** Generation and Control of Epimerization of Configurationally Unstable Oxiranylithiums Using Flow Microreactors (Sch. Eng., Kyoto Univ.) OMORONAGA, Satori; HIROSE, Katsuyuki; NAGAKI, Aiichiro; YOSHIDA, Jun-ichi
- 2H3-03** Reactions of Organolithiums with Acid Halides Using Flow Microreactors. (Grad. Sch. Eng., Kyoto Univ.) OISHIUCHI, Satoshi; NAGAKI, Aiichiro; YOSHIDA, Jun-ichi
- 2H3-04** Flow Microreactor Borylation of Trifluoromethylvinylithium and Its Synthetic Application (Div. of Chem., Fac. Pure Appl. Sci., Univ. of Tsukuba; Grad. Sch. Eng., Kyoto Univ.) OKONNO, Naruki; WATABE, Yota; ICHITSUKA, Tomohiro; FUJITA, Takeshi; NAGAKI, Aiichiro; YOSHIDA, Jun-ichi; ICHIKAWA, Junji
- 2H3-05** Continuous Flow Synthesis via Isothiocyanate-substituted Aryllithiums (Grad. Sch. Eng., Kyoto Univ.) OTORII, Daiki; KIM, Heejin; YOSHIDA, Jun-ichi

Chair: MIYAMURA, Hiroyuki (10 : 00~10 : 50)

\* 9:50-10:00: interval for laptop PC connection.(2H3-07, 2H3-08, 2H3-09, 2H3-10, 2H3-11)

- 2H3-07** Control of Anionic Fries Rearrangement and Its Synthetic Application Using Flow Microreactors (Grad. Sch. Eng., Kyoto Univ.) OINOUE, Keita; KIM, Heejin; MIN, Kyoung-ik; IM, Do Jin; KIM, Dong-pyo; YOSHIDA, Jun-ichi
- 2H3-08** Flowmicro Synthesis of C-Glycopyranosides (Grad. Sch. Sci., Kyushu Univ.) OJINTOKU, Mizuki; KISHIGAMI, Hayato; TORIKAI, Kohei; EBINE, Makoto; OISHI, Tohru
- 2H3-09** Highly Efficient Organic Photoreactions Using Flow Microreactors (Grad. Sch. Mat. Sci., NAIST) ONAKANO, Momoe; TERAOKA, Kimihiro; NISHIYAMA, Yasuhiro; KAKIUCHI, Kiyomi
- 2H3-10** Effect of Acid Catalysts on the Enhancement of Esterification by Microwave Heating (Waseda Univ.) OKOSHIMA, Hideko; ISHII, Saori; ASAH, Toru
- 2H3-11** Selective Deuterium Labeling of Amine and Alcohol by Ruthenium Catalyst (Grad. Sch. Eng., Kyoto Univ.) OKOBAYASHI, Taiyo; MATSUBARA, Seijiro

Chair: NAGAKI, Aiichiro (11 : 00~12 : 00)

\* 10:50-11:00: interval for laptop PC connection.(2H3-13, 2H3-14, 2H3-15, 2H3-16, 2H3-17)

- 2H3-13** Continuous Flow Esterification Using Sulfonic Acid Supported on Silica Gel (Grad. Sch. Sci., Osaka Pref. Univ.) OFURUTA, Akihiro;

FUKUYAMA, Takahide; RYU, Ilhyong

- 2H3-14** Flow Hydrogenation of Polyenes Using a Packed Bed Reactor (Grad. Sch. Sci., Osaka Pref. Univ.) OHIROBE, Yuki; FUKUYAMA, Takahide; RYU, Ilhyong
- 2H3-15** Development of trifluorometalating reaction using flow synthesis and applying to medicinal drug synthesis. (Grad. Sch. Eng., Nagoya Inst. of Tech.) OHIRANO, Kazuki; YASUDA, Yoshimasa; OOKUSU, Satoshi; TKUNAGA, Etsuko; SHIBATA, Norio
- 2H3-16** Construction of a small scale micro flow system and investigation of glycosylation via glycolsyl triflate utilizing this system (Sch. Sci., Osaka Univ.) OMASUI, Seiji; MANABE, Yoshiyuki; TOKUNAGA, Kento; FUKASE, Koichi
- 2H3-17\*** Total Synthesis of Feglymycin based on Microflow Amide Bond Formation (Chem. Res. Lab., Tokyo Tech; Grad. Sch. Sci., Eng., Tokyo Tech) OMIYAMURA, Hiroyuki; TANAKA, Hiroshi; NAKAMURA, Hiroyuki; FUSE, Shinichiro

## Friday, March 25, PM

Chair: FUSE, Shinichiro (13 : 10~14 : 10)

\* 13:00-13:10: interval for laptop PC connection.(2H3-26, 2H3-28, 2H3-29, 2H3-30, 2H3-31)

- 2H3-26<sup>#</sup>** Formal Hydrogen Transfer Reactions between Alkanes and Alkenes under Continuous Flow Conditions (Grad. Sch. Sci., The Univ. of Tokyo) OSUZUKI, Aya; MIYAMURA, Hiroyuki; TAMMINANA, Ramana; KOBAYASHI, Shu
- 2H3-28<sup>#</sup>** Dehydrogenation Reaction Using Polysilane-supported Platinum/Alumina Hybrid Catalysts (Grad. Sch. Sci., The Univ. of Tokyo) OLIU, Xiang; MIYAMURA, Hiroyuki; TAMMINANA, Ramana; KOBAYASHI, Shu
- 2H3-29** Development of Dehydrogenation of Alcohols with Polysilane Supported Pt/Fe Nanoparticles in Continuous Flow Conditions (Grad. Sch. Sci., The Univ. of Tokyo) OISSHIKI, Satoshi; MIYAMURA, Hiroyuki; MIN, Hyemin; KOBAYASHI, Shu
- 2H3-30** Organic synthesis involving TiCl<sub>4</sub> using the phase-vanishing method (Grad. Sch. Sci., Osaka Pref. Univ.) OADACHI, Yusuke; KUNIIYOSHI, Kenji; MATSUBARA, Hiroshi
- 2H3-31** Preparation of vinyl ethers using calcium carbide as an acetylene source (Grad. Sch. Sci., Osaka Pref. Univ.) MATAKE, Ryosuke; ADACHI, Yusuke; OMATSUBARA, Hiroshi

Chair: NAGAKI, Aiichiro (14 : 20~15 : 20)

\* 14:10-14:20: interval for laptop PC connection.(2H3-33, 2H3-34, 2H3-35, 2H3-36, 2H3-37, 2H3-38)

- 2H3-33** Continuous Flow Microwave Reactor for Organic Synthesis (Grad. Sch. Sci. Technol., Shizuoka Univ.) OMASUDA, Tsuguya; TAKEDA, Kazuhiro; SATO, Kohei; NARUMI, Tetsuo; WATANABE, Naoharu; MASE, Nobuyuki
- 2H3-34** Development of Environmentally-Friendly Multiphase Organic Reactions with Fine Bubbles (Grad. Sch. Sci. Technol., Shizuoka Univ.) ONISHINA, Yuki; SAKAI, Hidenori; SAITO, Takayuki; SATO, Kohei; NARUMI, Tetsuo; WATANABE, Naoharu; MASE, Nobuyuki
- 2H3-35** Highly efficient continuous synthesis of nitro-containing compounds by multi-step flow methods (Grad. Sch. Sci., The Univ. of Tokyo; The Univ. of Tokyo, GSC Social Cooperation Lab.) OISHITANI, Haruro; SAITO, Yuuki; KOBAYASHI, Shu
- 2H3-36** Highly efficient continuous synthesis of  $\beta$ -nitrostyrenes by a flow method (Grad. Sch. Sci., The Univ. of Tokyo; The Univ. of Tokyo, GSC Social Cooperation Lab.) OISHITANI, Haruro; SAITO, Yuuki; KOBAYASHI, Shu
- 2H3-37** Refined and Improved Multi-step Flow Total Synthesis of Optically Active Rolipram (Grad. Sch. Sci., The Univ. of Tokyo; The Univ. of Tokyo GSC Social Cooperation Laboratory) OFURIYA, Yuichi; ISHITANI, Haruro; KOBAYASHI, Shu
- 2H3-38** A New Methodology for One-pot Cascade Reaction utilizing M<sub>12</sub>L<sub>24</sub> Spherical Framework (Grad. Sch. Eng., The Univ. of Tokyo) OITO, Hiroaki; UEDA, Yoshihiro; FUJITA, Daishi; FUJITA, Makoto

Chair: NISHIYAMA, Yasuhiro (15 : 30~16 : 20)

\* 15:20-15:30: interval for laptop PC connection.(2H3-40, 2H3-41, 2H3-42, 2H3-43, 2H3-44)

- 2H3-40** C-N Bond Forming Cross-Coupling with a Self-Assembled Polymeric Imidazole Ni Catalyst (CSRS, Green Nanocatalysis Research Team, RIKEN) OISHII, Rikako; OHNO, Aya; YAMADA, Yoichi M. A.; UOZUMI, Yasuhiro
- 2H3-41** Direct Arylation of Thiophenes with Aryl Halides Using Self-Assembled Polymeric Pyridine-Palladium Catalysts (CSRS, Green Nanocatalysis Research Team, RIKEN) OHNO, Aya; SATO, Takuma; YAMADA, Yoichi M. A.; UOZUMI, Yasuhiro
- 2H3-42** A Palladium Nanoparticle Silicon Nanostructure Hybrid: Reductive Amination of Amines and Aldehydes Under the Atmospheric Pressure of Hydrogen and Its Application to a Flow Reaction (CSRS, Green Nanocatalysis Research Team, RIKEN) OSATO, Takuma; YAMADA, Yoichi M. A.; UOZUMI, Yasuhiro
- 2H3-43** Development of Ligand-Integrated Heterogeneous Chiral Metal

Nanoparticle-Catalyzed Asymmetric 1,4-Addition Reactions (Grad. Sch. Sci., The Univ. of Tokyo) ○NISHINO, Kohei; MIYAMURA, Hiroyuki; YASUKAWA, Tomohiro; KOBAYASHI, Shu

**2H3-44<sup>#</sup>** Combined Heterogeneous Catalysts (Au/Pd NP-chiral Bronsted Acid-polymer) for an Tandem Asymmetric Aerobic Oxidation- Aza Friedel-Crafts Process (Grad. Sch. Sci., The Univ. of Tokyo) ○MIGUELEZ, Javier; CHENG, Honggang; YOO, Woo-jin; MIYAMURA, Hiroyuki; KOBAYASHI, Shu

## Room H4

### Chishinkan3 Building 204

### Organic Chemistry -Reaction and Synthesis- Aromatic Compounds

Thursday, March 24, AM

Chair: NAGAHORA, Noriyoshi (9 : 30 ~10 : 30)

\* 9:20-9:30: interval for laptop PC connection.(1H4-04, 1H4-05, 1H4-06, 1H4-07, 1H4-08, 1H4-09)

**1H4-04** Regioselective synthesis of 7-formylated chlorophyll derivatives (Coll. Life Sci., Ritsumeikan Univ.) TAMIAKI, Hitoshi; ○KUSUNOKI, Makoto

**1H4-05** Physical properties of synthetic chlorophyll derivatives bearing a methyl viologen moiety (Coll. Life Sci., Ritsumeikan Univ.) TAMIAKI, Hitoshi; ○HIZUME, Shota; ECHIZEN, Shihoko; OGASAWARA, Shin

**1H4-06** Synthesis and physical properties of chlorophyll derivatives possessing a sulfanyl group at the C3 position (Graduate School of Life Sciences, Ritsumeikan University) ○KIM, Kifa; TAMIAKI, Hitoshi

**1H4-07** Sequential Diazotization and Polyaniline-induced Arylation of Anilines (Grad. Sch. Eng., Osaka Univ.) ○HATA, Dai; HIRAO, Toshikazu; AMAYA, Toru

**1H4-08** Synthesis and properties of thermally stable *ortho*quinodimethanes (Sch. Sci. Tech., Kwasei Gakuin Univ.) ○ADACHI, Kazuhiko; HIROSE, Shunsuke; HAMURA, Toshiyuki

**1H4-09** Syntheses of Novel Isobenzoheterols Based on One-pot Preparation Method of Isobenzofurans (Sch. Sci. Tech., Kwasei Gakuin Univ.) ○TOZAWA, Hitoshi; KATAOKA, Hiroki; HAMURA, Toshiyuki

Chair: AMAYA, Toru (10 : 40 ~11 : 40)

\* 10:30-10:40: interval for laptop PC connection.(1H4-11, 1H4-12, 1H4-13, 1H4-15, 1H4-16)

**1H4-11** *tert*-Butoxy Radical-Induced  $\alpha$ -Arylation of Amines with Sulfonyl-arenes (Sch. Sci. Tech., Kwasei Gakuin Univ.; Dep. Chem., Sch. Sci., Kyoto Univ.) ○IKEDA, Yuko; UENO, Ryota; SHIRAKAWA, Eiji

**1H4-12** Synthesis of novel  $\pi$ -conjugated compounds by direct arylation method for the application to n-type organic semiconductor (Fac. Eng. Nagoya Inst. of Tech.) ○YAMAMOTO, Shunya; TAKAGI, Koji

**1H4-13<sup>\*</sup>** Synthesis and Photophysical Properties of Fused Conjugated Imidazole Compounds (Grad. Sch. Eng., Nagoya Inst. of Tech.) ○TAKAGI, Koji; ITO, Kaede

**1H4-15** Synthesis of azulene-azaazulene dimer bearing a ethynyl group (Fac. Sci. Technol., Tokyo Univ. of Sci.) ○OHTSU, Keito; TSUKADA, Satoru; ABE, Noritaka; GUNJI, Takahiro

**1H4-16** Multicomponent coupling reaction involving arynes, amines, and aldehydes (Fac. Sci., Fukuoka Univ.) ○KINOSHITA, Hiroaki; NAGAHORA, Noriyoshi; SHIOJI, Kosei; OKUMA, Kentaro

Thursday, March 24, PM

Chair: KITAMURA, Kei (13 : 00 ~14 : 00)

\* 12:50-13:00: interval for laptop PC connection.(1H4-25, 1H4-26, 1H4-27, 1H4-28, 1H4-29, 1H4-30)

**1H4-25** Synthesis of azulene and azaazulene derivatives utilizing coupling reaction (Grad. Sch. Fac. Sci. Technol., Tokyo Univ. of Sci.) ○NAKAZAWA, Makoto; TUKADA, Satoru; GUNJI, Takahiro

**1H4-26** Synthesis of vinylazulene-POSS (Fac. Sci. Technol., Tokyo Univ. of Sci.) ○TOKUDA, Ken; TSUKADA, Satoru; ABE, Noritaka; GUNJI, Takahiro

**1H4-27<sup>#</sup>** Direct Evidence for the Photoproduct Derived from a Thiocalix[4]arene Crown-shaped Derivative Bearing an Anthracene Moiety (Grad. Sch. Sci. Eng., Saga Univ.) ○ZHAO, Jiang-lin; YAMATO, Takehiko

**1H4-28<sup>#</sup>** Synthesis and structures of syn-1,2-dimethyl[2.7]metacyclopentane-1-enes. (Grad. Sch. Sci. Eng., Saga Univ.) ○AKTHER, Thamina; YAMATO, Takehiko

**1H4-29** Sequential Substitution Reaction on Phosphorus Atom Using Thio Groups as Leaving Groups (IBB, Tokyo Med. and Dental Univ.) ○NISHIYAMA, Yoshitake; HAZAMA, Yuki; YOSHIDA, Suguru; HOSOYA, Takamitsu

**1H4-30** A Flexible Synthetic Method for Tetrasubstituted Pyrazines via Four Cross-Coupling Reactions (IBB, Tokyo Med. and Dental Univ.)

○AKIYAMA, Kei; NISHIYAMA, Yoshitake; YOSHIDA, Suguru; HOSOYA, Takamitsu

Chair: TSUKADA, Satoru (14 : 10 ~15 : 10)

\* 14:00-14:10: interval for laptop PC connection.(1H4-32, 1H4-33, 1H4-34, 1H4-35, 1H4-36)

**1H4-32** Synthesis of extended  $\pi$ -conjugated rubrene derivatives (Sch. Sci. Tech., Kwasei Gakuin Univ.) ○NAGAI, Yusaku; KITAMURA, Kei; ZHANG, Keshu; ASAHINA, Kenta; HAMURA, Toshiyuki

**1H4-33** Efficient Syntheses of 1,3-Dialkynylisobenzofurans (Sch. Sci. Tech., Kwasei Gakuin Univ.) ○KUDO, Ryoji; ASAHINA, Kenta; KITAMURA, Kei; HAMURA, Toshiyuki

**1H4-34** Synthetic study on novel  $\pi$ -conjugated molecules by using isobenzofurans (Sch. Sci. Tech., Kwasei Gakuin Univ.) ○KITAMURA, Kei; HAMURA, Toshiyuki

**1H4-35** Design and Synthesis of Open-Shell Singlet Thienophosphole Derivatives (Grad. Sch. Sci., Eng., Tokyo Tech) ○UETA, Yasuhiro; MIKAMI, Koichi; ITO, Shigekazu

**1H4-36<sup>\*</sup>** Syntheses and Photophysical Properties of Trisilatruxene and Its Analogues (Grad. Sch. Eng., Osaka Pref. Univ.; The Research Inst. for Molecular Electronic Devices, Osaka Pref. Univ.) ○OGAKI, Takuya; ODA, Yukiko; MATSUI, Yasunori; OHTA, Eisuke; IKEDA, Hiroshi

Chair: SUZUKI, Takeyuki (15 : 20 ~16 : 20)

\* 15:10-15:20: interval for laptop PC connection.(1H4-39, 1H4-40, 1H4-41, 1H4-42, 1H4-43, 1H4-44)

**1H4-39** Development of azobenzene-based stimuli-responsive acid-base combined catalysts (Grad. Sch. Chem. Sci. Technol., Tokyo Univ. of Sci.) ○MURATA, Daisuke; SHIRAIWA, Shuta; SUENAGA, Akari; KURIHARA, Seiji; IMAHORI, Tatsushi

**1H4-40** Regioselective synthesis of trisubstituted quinoxalines via NHC-catalyzed aryloxylation reaction (Grad. Sch. of Sci. Technol., Sophia Univ.) ○TAKEHARA, Ren; SUZUKI, Yumiko

**1H4-41** Establishment of simplified synthetic method of various benzylimides and its application (Sch. Sci. Tech., Kwasei Gakuin Univ.) ○MURASAWA, Kentaro; OHARA, Kenya; ARAI, Tomoki; IKEUCHI, Kazutada; YAMADA, Hidetoshi

**1H4-42** Oxidation of benzylamines by ClO<sub>2</sub> (Grad. Sch. Fac. Sci., Kanagawa Univ.) ○ITO, Daiki; KIHARA, Nobuhiro

**1H4-43** Convenient Synthesis and Synthetic Application of 1-(Trimethylsilyl)- and 1-(Trimethylstannyl)vinylphosphonates (Fac. Eng., Kinki Univ.) OKADA, Yoshiharu; ○NAKAMOTO, Masato; HATTORI, Takuya; NAKABO, Daisuke; NOMURA, Masato

**1H4-44<sup>#</sup>** Oxidative Aromatization of 9-([1,1'-Biphenyl]-2-ylmethylene)-9H-fluorenes for Construction of Dibenzo[g,p]chrysenes (WPI-AIMR, Tohoku Univ.) ○XU, Zhanqiang; XUAN, Zhang; ASAO, Naoki; YAMAMOTO, Yoshinori; JIN, Tienan

Chair: JIN, Tienan (16 : 30 ~17 : 30)

\* 16:20-16:30: interval for laptop PC connection.(1H4-46, 1H4-47, 1H4-48, 1H4-49, 1H4-50, 1H4-51)

**1H4-46** Solvent Effect in the Inverse Thermoresponse of An Ethynylhelicene Oligomer with Tri(Ethylene Glycol) Termini (Grad. Sch. Pharm. Sci., Tohoku Univ.) SAITO, Nozomi; ○KOBAYASHI, Higashi; YAMAGUCHI, Masahiko

**1H4-47** Formation of Lyotropic Liquid Crystals by Ethynylhelicene Oligomers and Their Thermoresponse (Tohoku Univ. FRIS; Grad. Sch. Pharm. Sci., Tohoku Univ.) ○SAITO, Nozomi; YAMAGUCHI, Masahiko

**1H4-48** Concise synthesis of binaphthol-derived chiral dicarboxylic acids (Univ. of Shizuoka) HAMASHIMA, Yoshitaka; ○SATO, Kentaro; EGAMI, Hiromichi; ASADA, Junshi; KAWATO, Yuji

**1H4-49** Kinetic resolution of [2.2]-paracyclopentane derivative by chiral phosphoric acid-catalyzed acylation (Fac. Sci., Gakushuin Univ.) ○KISHI, Hiroki; MORI, Keiji; SUGA, Takuya; AKIYAMA, Takahiko

**1H4-50<sup>#</sup>** Development of enantioselective reaction using abundant transition metals. (ISIR, Osaka Univ.) ○YONEYAMA, Shin; TAKENAKA, Kazuhiro; TAKIZAWA, Shinobu; SASAI, Hiroaki

**1H4-51<sup>#</sup>** Practical Synthesis of Chiral Binaphthalene Derivatives (API Corp.) ○SEKI, Masahiko

Friday, March 25, AM

Chair: TAKITA, Ryo (9 : 00 ~10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(2H4-01, 2H4-02, 2H4-03, 2H4-04, 2H4-05, 2H4-06)

**2H4-01** Synthesis of Various Fluorinated Compounds via Selective Transformation of C-F Bond (IBB, Tokyo Med. and Dental Univ.) ○SHIMOMORI, Ken; KIM, Youngchan; HOSOYA, Takamitsu; YOSHIDA, Suguru

**2H4-02** Catalytic Thiolation of C-F Bond Using Novel Reagents Capable of Generating Trityl Cation and Nucleophiles Simultaneously (IBB, Tokyo Med. and Dental Univ.) ○KIM, Youngchan; SHIMOMORI, Ken; HOSOYA, Takamitsu; YOSHIDA, Suguru

**2H4-03** Development of asymmetric difluoromethylthiolation reaction using difluoromethanesulfonyl iodonium ylides (Fac. Eng. Nagoya Inst. of Tech.)

- MATSUBARA, Okiya; TAKADA, Masahiro; TOKUNAGA, Etsuko; SUMII, Yuji; SHIBATA, Norio
- 2H4-04** Synthesis of decarboxylative allylic allylation of fluorine containing tri-substituted allyl indanone carboxylates (Fac. Eng. Nagoya Inst. of Tech.)  
○KONDO, Hiroya; MAENO, Mayaka; TOKUNAGA, Etsuko; SUMII, Yuuji; SHIBATA, Norio
- 2H4-05** Hydrodefluorination of Polyfluoroarenes with Hydrosilane and Fluoride Salt (Grad. Sch. Eng., Osaka Univ.) ○KIKUSHIMA, Kotaro; OHASHI, Masato; OGOSHI, Sensuke
- 2H4-06** Novel Fluorine-containing Organocatalyst for Oxidative Homocoupling Reaction of Grignard Reagent (Fac. Eng., Iwate Univ.) KORENAGA, Toshinobu; ○NITATORI, Kaoru; SHIMADA, Kazuaki; MURAOKA, Hiroki; OGAWA, Satoshi

Chair: SUMII, Yuji (10 : 10~11 : 00)

- \* 10:00-10:10: interval for laptop PC connection.(2H4-08, 2H4-09, 2H4-10, 2H4-11)
- 2H4-08** Oxidative Cyclization of Difluoroalkenes and Application to Substituted PAH Synthesis (Div. of Chem., Fac. Pure Appl. Sci., Univ. of Tsukuba) ○HAKOZAKI, Tomohiro; FUCHIBE, Kohei; ICHIKAWA, Junji
- 2H4-09** Aromatic Nucleophilic Substitution Reaction of Nonactivated Fluoroarenes and Development of Aromatic Ring Extension Cycle (Div. of Chem., Fac. Pure Appl. Sci., Univ. of Tsukuba) ○IMAOKA, Hisanori; FUCHIBE, Kohei; ICHIKAWA, Junji
- 2H4-10** Catalyst-Free Aminocarbonylation of Iodoarenes under Thermal Conditions (Grad. Sch. Sci., Osaka Pref. Univ.) ○SATO, Aoi; KAWAMOTO, Takuji; RYU, Ilhyong
- 2H4-11\*** Borylation and Perfluoroalkylation Reactions Based on Ate Complex Formation (Grad. Sch. Pharm., The Univ. of Tokyo) ○HIRANO, Keiichi; TAKITA, Ryo; UCHIYAMA, Masanobu

Chair: FUJITA, Takeshi (11 : 10~12 : 00)

- \* 11:00-11:10: interval for laptop PC connection.(2H4-14, 2H4-16, 2H4-17, 2H4-18)
- 2H4-14\*** Assembly of Functional Molecules Based on 'Multi-Click Chemistry' Using Multi-Azido Platform Molecules (IBB, Tokyo Med. and Dental Univ.) ○YOSHIDA, Suguru; MISAWA, Yoshihiro; KURIBARA, Tomoko; MORITA, Takamoto; KII, Isao; WATANABE, Yasuyoshi; HOSOYA, Takamitsu
- 2H4-16** Modular Synthesis of Diverse Triazoles Using an Alkenyl Azide (IBB, Tokyo Med. and Dental Univ.; JNC Petrochem. Co.) ○GOTO, Sayuri; KONDO, Masakazu; MATSUSHITA, Takeshi; YOSHIDA, Suguru; HOSOYA, Takamitsu
- 2H4-17** Diversity-Oriented Synthesis Using  $\alpha$ -Diazoacetophenones Bearing an Azido Group (IBB, Tokyo Med. and Dental Univ.) ○OYA, Kazuhiro; GOTO, Sayuri; MISAWA, Yoshihiro; YOSHIDA, Suguru; HOSOYA, Takamitsu
- 2H4-18** Construction of novel polycyclic skeletons by intramolecular cycloaddition with benzyne and phenol (Grad. Sch. Sci., Eng., Tokyo Tech) ○YAGISHITA, Hiroto; OHMORI, Ken; SUZUKI, Keisuke

## Friday, March 25, PM

Chair: OHMORI, Ken (14 : 50~15 : 50)

- \* 14:40-14:50: interval for laptop PC connection.(2H4-36, 2H4-37, 2H4-38, 2H4-39, 2H4-40)
- 2H4-36** Facile Synthesis of Phenothiazines via Direct Thioamination of Arynes Using Sulfilimines (IBB, Tokyo Med. and Dental Univ.) ○MATSUZAWA, Tsubasa; UCHIDA, Keisuke; YOSHIDA, Suguru; HOSOYA, Takamitsu
- 2H4-37** Facile Synthesis of *N*-Aryl Sulfoximines via Aryne Intermediates (IBB, Tokyo Med. and Dental Univ.) ○NAKAJIMA, Hana; UCHIDA, Keisuke; YANO, Takahisa; YOSHIDA, Suguru; HOSOYA, Takamitsu
- 2H4-38** Synthesis of Multisubstituted Benzofurans via Furanobenzyne Intermediates (IBB, Tokyo Med. and Dental Univ.) ○MORITA, Takamoto; YOSHIDA, Suguru; HOSOYA, Takamitsu
- 2H4-39** Synthesis of Substituted Acene Derivatives via Reductive Silylation Reactions (Grad. Sch. Sci. Tech., Gunma Univ.) ○KANNO, Ken-ichiro; KITA, Hikaru; TOMIOKA, Tomoyuki; KYUSHIN, Soichiro
- 2H4-40\*** Synthesis of Polycyclic Aromatic Hydrocarbons via C(sp<sup>2</sup>)-F Bond Activation under Acidic Conditions (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) ○SUZUKI, Naoto; FUJITA, Takeshi; ICHIKAWA, Junji

Chair: KURAHASHI, Takuya (16 : 00~17 : 00)

- \* 15:50-16:00: interval for laptop PC connection.(2H4-43, 2H4-44, 2H4-45, 2H4-46, 2H4-47, 2H4-48)
- 2H4-43** Stereoselective Synthesis of Ortho-Quinone Mono-Hemiaminals by Oxidative Dearomatization-Intramolecular Spirocyclization Cascade Reaction (Grad. Sch. Advanced Sci. Eng., Waseda Univ.) ○NAKAMURA, Akihiko; SAITO, Emi; MORIMOTO, Yoshihiro; NAKADA, Masahisa
- 2H4-44** Research on the Synthetic Approach to Tetracyclines via the Stereoselective Reaction of Para-Quinone Mono-Hemiaminals (Grad. Sch. Advanced Sci. Eng., Waseda Univ.) ○MORIMOTO, Yoshihiro; NAKAMURA, Akihiko; NAKADA, Masahisa

- 2H4-45** Sterically and Electronically Controlled Lewis Acidity of Group 13 Elements (Grad. Sch. Eng., Osaka Univ.) KONISHI, Akihito; ○NISHIMURA, Sota; YASUNAGA, Ryosuke; YASUDA, Makoto
- 2H4-46\*** Sterically Controlled Cage-shaped Phosphite: Synthesis, Characterization, and Applications to Palladium-catalyzed Coupling Reactions (Grad. Sch. Eng., Osaka Univ.) KONISHI, Akihito; ○IP, Yung Benny; YASUDA, Makoto
- 2H4-47** Lewis Acid-Catalyzed C4 Selective Trifluoromethylation of Aromatic Compounds (Grad. Sch. Pharm., The Univ. of Tokyo; ERTAO-JST) ○NISHI, Mitsumi; KUNINOBU, Yoichiro; KANAI, Motomu
- 2H4-48** Single Electron Transfer-Induced Coupling of Aryl Halides with Arylboron Compounds Using a Zinc Reagent as an Activator (Sch. Sci. Tech., Kwansai Gakuin Univ.; Dep. Chem., Sch. Sci., Kyoto Univ.) ○TERANISHI, Tsuyoshi; OKURA, Keisho; SHIRAKAWA, Eiji

Chair: OBORA, Yasushi (17 : 10~18 : 10)

- \* 17:00-17:10: interval for laptop PC connection.(2H4-50, 2H4-52, 2H4-53, 2H4-54, 2H4-55)
- 2H4-50\*\*** Visible Light-Mediated C-N Cross-Coupling Reactions Enabled by the Productive Merger of Copper and Photoredox Catalysis (Grad. Sch. Sci., The Univ. of Tokyo) ○YOO, Woo-jin; KOBAYASHI, Shu
- 2H4-52** Cationic Rhodium Porphyrin Catalyzed Cycloisomerization (Grad. Sch. Eng., Kyoto Univ.; ACT-C, JST) ○HASEGAWA, Makoto; KURAHASHI, Takuya; MATSUBARA, Seiji
- 2H4-53** Synthesis of substituted helicenes by Ir-catalyzed annulative coupling of biarylcarboxylic acid chlorides with alkynes (Grad. Sch. Sci., Osaka Pref. Univ.; Grad. Sch. Eng., Osaka Univ.) ○DEN, Hiroakira; NAGATA, Tomoya; KAMIKAWA, Ken; MIURA, Masahiro
- 2H4-54** Synthesis of Polysubstituted Naphthalenes via Hydrazone-Palladium Catalyzed Annulation of 1-Allyl-2-bromobenzene Derivatives with Internal Alkynes (Grad. Sch. Eng., Chiba Univ.) MINO, Takashi; ○HATTA, Chikako; WATANABE, Kohei; YOSHIDA, Yasushi; SAKAMOTO, Masami
- 2H4-55** Palladium-catalyzed *N*-Arylation of Electron-deficient Anilines (RIST, Kinki Univ.) ○NAKAZONO, Yohei; ISOMURA, Yuto; SUDO, Atsushi

## Saturday, March 26, AM

Chair: FUJIHARA, Tetsuaki (9 : 20 ~ 10 : 20)

- \* 9:10-9:20: interval for laptop PC connection.(3H4-03, 3H4-04, 3H4-05, 3H4-06, 3H4-08)
- 3H4-03** Selective Reduction of Aromatic Azido Group under Mild Conditions (IBB, Tokyo Med. and Dental Univ.) ○MEGURO, Tomohiro; YOSHIDA, Suguru; HOSOYA, Takamitsu
- 3H4-04** Cycloaddition between Oxadiazinones and Cycloalkynes for Molecular Conjugation (IBB, Tokyo Med. and Dental Univ.) ○CHEN, Shengnan; MEGURO, Tomohiro; YOSHIDA, Suguru; HOSOYA, Takamitsu
- 3H4-05** Facile Synthesis of Various Bistriazoles via Cycloaddition of Cycloalkynes with Diazide Compounds (IBB, Tokyo Med. and Dental Univ.) ○TAMURA, Yuya; KARAKI, Fumika; NISHIYAMA, Yoshitake; YOSHIDA, Suguru; HOSOYA, Takamitsu
- 3H4-06\*\*** Synthesis of Spirocyclic Tetraarylmethanes and Carbazoles through Twofold Nucleophilic Aromatic Substitution Reactions of Dibenzothiophene Dioxides (Dep. Chem., Sch. Sci., Kyoto Univ.) ○BHANUCHANDRA, M.; YORIMITSU, Hideki; OSUKA, Atsuhiko
- 3H4-08** Synthesis of Dibenzophospholes through Nucleophilic Aromatic Substitution Reactions of Dibenzothiophene Dioxides with Phenylphosphine (Dep. Chem., Sch. Sci., Kyoto Univ.) ○ONODA, Mitsuki; BHANUCHANDRA, M.; YORIMITSU, Hideki

Chair: UEDA, Mitsuhiro (10 : 30~11 : 20)

- \* 10:20-10:30: interval for laptop PC connection.(3H4-10, 3H4-11, 3H4-12, 3H4-13, 3H4-14)
- 3H4-10** Aromatic Metamorphosis from Dibenzofurans to Triphenylenes (Dep. Chem., Sch. Sci., Kyoto Univ.) ○KURATA, Yuto; OTSUKA, Shinya; FUKUI, Norihito; YORIMITSU, Hideki; OSUKA, Atsuhiko
- 3H4-11** Photoluminescence of 1,3,6,8-tetra(trimethylsilylethynyl)pyrene in the solid states (Fac. of Eng., Okayama Univ. of Sci.; Fac. Textile Sci. Technol., Shinshu Univ.) ORITA, Akihiro; ○NISHIDA, Takanori; XU, Feng; NAKAMURA, Hiromu; SUGIYAMA, Koki; OHTA, Kazuchika
- 3H4-12** Facile Synthesis of 3-Aminoaryne Precursors via Aminosilylation of 3-Triflyloxyarynes (IBB, Tokyo Med. and Dental Univ.) ○NAKAMURA, Yu; UCHIDA, Keisuke; HAZAMA, Yuki; YOSHIDA, Suguru; HOSOYA, Takamitsu
- 3H4-13** Generation of Arynes Triggered by Carbon-Carbon Bond Cleavage Reaction of Benzocyclobutenone (IBB, Tokyo Med. and Dental Univ.) ○UCHIDA, Keisuke; YOSHIDA, Suguru; HOSOYA, Takamitsu
- 3H4-14** Facile Synthesis of 3,6-Disubstituted Aryne Precursors Based on the Reactivity of a Sulfoxide Moiety (IBB, Tokyo Med. and Dental Univ.) ○NAGAI, Akira; UCHIDA, Keisuke; YOSHIDA, Suguru; HOSOYA, Takamitsu

Chair: YOSHIDA, Suguru (11 : 30~12 : 20)

- \* 11:20-11:30: interval for laptop PC connection.(3H4-16, 3H4-18, 3H4-19, 3H4-20)

- 3H4-16\*\*** Practical synthesis of resorcinol derivatives using Pd/C-ethylene system (Grad. Sch. Sci., Kobe Univ.) ○ELDEEB, Ibrahim; FUNAKOSHI, Tatsuya; DEN, Tian; MATSUBARA, Ryosuke; HAYASHI, Masahiko
- 3H4-18** [2+2] Cycloaddition of In-Situ Generated Allenol Esters with C60 (Fac. Sci., Osaka Pref. Univ.) ○MUNECHIKA, Aiko; UEDA, Mitsuhiro; YASUDA, Hiroshi; YOSHIDA, Shunsuke; RYU, Ilhyong
- 3H4-19** Synthesis of Double-concave Pyrrole-fused Azacoronenes (Fac. Sci., Ehime Univ.) ○SASAKI, Yoshiki; OKI, Kosuke; TAKASE, Masayoshi; MORI, Shigeki; OKUJIMA, Tetsuo; UNO, Hidemitsu
- 3H4-20** Synthesis of phosphorus octaphenyltetrabenzoporphyrin complexes (Grad. Sch. Sci., Eng., Ehime Univ.) ○MURAMATSU, Kohta; MIKAMI, Akihiro; MORI, Shigeki; TAKASE, Masayoshi; UNO, Hidemitsu; OKUJIMA, Tetsuo

## Room H5

### Chishinkan3 Building 205

### Organic Chemistry -Reaction and Synthesis- Organic Photochemistry

Friday, March 25, AM

Chair: OHTA, Eisuke (9 : 30 ~ 10 : 20)

- \* 9:20-9:30: interval for laptop PC connection.(2H5-04, 2H5-05, 2H5-06, 2H5-07, 2H5-08)
- 2H5-04** Mechanistic Studies on Diastereodifferentiating [4+2] Photocycloaddition of Electron Deficient Olefins Tethered with Anthracene through the Triplet Excited State (Sch. Eng., Osaka Univ.) ○ICHIKAWA, Makoto; MORI, Tadashi; FUKUHARA, Gaku; INOUE, Yoshihisa
- 2H5-05** Paternó-Büchi Reaction of Donor-Acceptor System. Evaluation of Products' Diastereoselectivities upon Structural Change of Excited State Olefin (Grad. Sch. Eng., Osaka Univ.) ○NAGASAKI, Keisuke; MORI, Tadashi; FUKUHARA, Gaku; INOUE, Yoshihisa
- 2H5-06** Dimerization of cinnamionitrile via photo-induced electron transfer (Grad. Sch. Sci., Eng., Tokyo Tech) ○MORISHITA, Naoya; MIZUNO, Kazuhiko; KONISHI, Gen-ichi
- 2H5-07** Reinvestigation of a redox-photosensitized reaction using LED light: Design of photosensitizer and its reaction (Grad. Sch. Sci., Eng., Tokyo Tech) ○KONISHI, Gen-ichi; KAMEI, Kohei; MIZUNO, Kazuhiko
- 2H5-08** Reactions of amino acid derivatives bearing aromatic group initiated by photoinduced electron transfer (Grad. Sch. Eng., Univ. of Fukui) ○YAMAWAKI, Mugen; YOSHIMI, Yasuharu

Chair: NISHIYAMA, Yasuhiro (10 : 30 ~ 11 : 30)

- \* 10:20-10:30: interval for laptop PC connection.(2H5-10, 2H5-11, 2H5-12, 2H5-13, 2H5-14, 2H5-15)
- 2H5-10** Comparison of Emission-Controlling Ring-Opening Reactivities of 1- and 2-Naphthyl-Substituted Methylene-cyclopropanes (Grad. Sch. Eng., Osaka Pref. Univ.; The Research Inst. for Molecular Electronic Devices, Osaka Pref. Univ.) ○SHIMONO, Kazuki; TAKAE, Kosuke; MATSUI, Yasunori; OHTA, Eisuke; IKEDA, Hiroshi
- 2H5-11** Pinacol-coupling Reaction Using Perylene-derivatives as Photoredox Catalysts (Fac. Sci. Eng., Kinki Univ.) ○TSUJIOKA, Hiroki; KOJIYAMA, Keita; OKAMOTO, Shusuke; SUDO, Atsushi
- 2H5-12** Generation and Reaction of Imidoyl Radicals from Imidoylsilanes by means of Photo-Induced Single Electron Transfer Reaction (Grad. Sch. Sci., Eng., Tokyo Tech; Fac. Sci., Gakushuin Univ.) ○OHYAMA, Tomoya; ISHIDA, Kento; IWASAWA, Nobuharu; KUSAMA, Hiroyuki
- 2H5-13** Photoinduced decarboxylative radical reactions using N-acryloyl amino acid esters as radical acceptor (Grad. Sch. Eng., Univ. of Fukui) ○OSAKA, Kazuyuki; YOSHIMI, Yasuharu
- 2H5-14** Intramolecular photoredox reaction of 1,2-naphthoquinone derivatives (Grad. Sch. Sci., Eng., Tokyo Tech) ○WAKITA, Fumihiko; ANDO, Yoshio; OHMORI, Ken; SUZUKI, Keisuke
- 2H5-15** Organocatalytic Photooxidative Keto-Trifluoromethylation of Styrenes (Gifu Pharm. Univ.) ○ISHIHARA, Jun; KAMITO, Yuuji; YAMAGUCHI, Eiji; ITOU, Akichika

Chair: MAEDA, Hiromitsu (11 : 40 ~ 12 : 30)

- \* 11:30-11:40: interval for laptop PC connection.(2H5-17, 2H5-18, 2H5-19, 2H5-20)
- 2H5-17** Addition of alkyl radical generated by photoinduced decarboxylation to formaldehyde (Grad. Sch. Eng., Univ. of Fukui) ○HARADA, Shingo; YOSHIMI, Yasuharu
- 2H5-18** Photocycloaddition Reaction of Indenone Derivatives Leading to C<sub>2</sub> Symmetry Materials (Grad. Sch. Eng., Chiba Univ.) ○TAMURA, Naoki; YOSHIDA, Yasushi; MINO, Takashi; SAKAMOTO, Masami
- 2H5-19** Enantiodifferentiating [2+2] Photocycloaddition Using Menthol Derivatives as a Chiral Template (Grad. Sch. Mat. Sci., NAIST) ○SUZUKI, Yasumasa; YANAGISAWA, Yuuki; NISHIYAMA, Yasuhiro;

- KAKIUCHI, Kiyomi
- 2H5-20\*\*** Synthesis, Crystal Structure and Emission Properties of Bipyroles Having Extended Conjugation Systems (Kitakyushu Nat. Coll. of Tech.) ○OKAWARA, Toru; ISHIHAMA, Kohei; KAWANO, Reo; KATO, Tamami; FUKUDA, Ryu; TAKEHARA, Kenji

Friday, March 25, PM

Chair: MATSUBARA, Ryosuke (14 : 00 ~ 14 : 40)

- \* 13:50-14:00: interval for laptop PC connection.(2H5-31, 2H5-32, 2H5-33, 2H5-34)
- 2H5-31** Synthesis and Photophysical Properties of Bipyroles Bearing Electron-Deficient Double Bonds (Kitakyushu Nat. Coll. of Tech.) ○KAWANO, Reo; KATO, Tamami; FUKUDA, Ryu; TAKEHARA, Kenji; OKAWARA, Toru
- 2H5-32** Photochemical Reactions of [3.3](1,4)Naphthalenophanes Possessing Nitrogen-Containing Side Chains and Structures of the Photoproducts (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○OKAMOTO, Hideki; YAMAMOTO, Masanori
- 2H5-33** Generation of Nitrogen-Bridged Tetramethylenethane Biradical by Photoinduced Electron-Transfer Reaction (Grad. Sch. Eng., Osaka Pref. Univ.; The Research Inst. for Molecular Electronic Devices, Osaka Pref. Univ.) ○AIZAWA, Kensuke; HORI, Tomohiro; SAKAKI, Shotaro; MATSUI, Yasunori; OHTA, Eisuke; IKEDA, Hiroshi
- 2H5-34** Intermolecular cyclopropanation of styrenes using iodine and visible light via carbon-iodine bond cleavage (Gifu Pharm. Univ.) ○USAMI, Kaoru; YAMAGUCHI, Eiji; ITOH, Akichika

Chair: MORI, Tadashi (14 : 50 ~ 15 : 30)

- \* 14:40-14:50: interval for laptop PC connection.(2H5-36, 2H5-37, 2H5-38, 2H5-39)
- 2H5-36** Development of photolabile protective group of the cyano group (Grad. Sch. Sci., Kobe Univ.) ○MA, Huiying; MATSUBARA, Ryosuke; HAYASHI, Masahiko
- 2H5-37** Meta-photocycloadditions of 2-Naphthoic Acid Derivatives with Styrene: Effect of Structure of Acid Derivatives (Grad. Sch. Fac. Sci. Eng., Shimane Univ.) ○WATABE, Hajime; NAKANISHI, Takuto; SHIRATORI, Hideo; KUBO, Yasuo
- 2H5-38** Photo-Fries and Photo-Claisen Rearrangement of Pyrene Derivatives (Grad. Sch. Nat. Sci. Technol., Kanazawa Univ.) ○NAKAMURA, Saki; MAEDA, Hajime; AKAI, Tomomi; FURUYAMA, Taniyuki; SEGI, Masahito
- 2H5-39** Visible-Light-Induced Oxygenation sensitized by Porphyrin-Semiconductor (Grad. Sch. Urban Environmental Sci., TMU) ○ONUKI, Satomi; MATHEW, Siby; KUTTASSERY, Fazalurahman; YAMAMOTO, Daisuke; NABETANI, Yu; TACHIBANA, Hiroshi; INOUE, Haruo

Chair: NISHIMURA, Yoshinobu (15 : 40 ~ 16 : 20)

- \* 15:30-15:40: interval for laptop PC connection.(2H5-41, 2H5-43)
- 2H5-41\*\*** NOVEL SYNTHETIC METHODOLOGY OF WATER SOLUBLE CATIONIC TIN PORPHYRINS IN WATER AT AMBIENT TEMPERATURE TOWARDS ARTIFICIAL PHOTOSYNTHESIS (Grad. Sch. Urban Environmental Sci., TMU) ○THOMAS, Arun; YAMAMOTO, Daisuke; NABETANI, Yu; ONUKI, Satomi; TACHIBANA, Hiroshi; INOUE, Haruo
- 2H5-43\*\*** Supramolecular Environment with Protective Effect on Water Oxidation Catalyst for Artificial Photosynthesis (Cent. Artificial Photosynthesis, TMU) ○MATHEW, Siby; KUTTASSERY, Fazalurahman; YAMAMOTO, Daisuke; ONUKI, Satomi; NABETANI, Yu; TACHIBANA, Hiroshi; INOUE, Haruo

Saturday, March 26, AM

Chair: YAGISHITA, Fumitoshi (9 : 30 ~ 10 : 20)

- \* 9:20-9:30: interval for laptop PC connection.(3H5-04, 3H5-05, 3H5-06, 3H5-07, 3H5-08)
- 3H5-04** Photochemical oxygenation reaction using metalloporphyrin derivatives on the clay surface as reaction field (Urban Environmental Sci., TMU) ○SUZUKI, Shunpei; TSUKAMOTO, Takamasa; TATSUMI, Daichi; SIMADA, Tetsuya; TAKAGI, Shinsuke
- 3H5-05** The Monitoring of the Photodeprotection of Novel Caged Resveratrols with Thiochromone-type Photolabile Protecting Group by Fluorescence Measurement (Grad. Sch. Mat. Sci., NAIST) ○HIKAGE, Shin; SASAKI, Yasuo; NISHIYAMA, Yasuhiro; KAKIUCHI, Kiyomi
- 3H5-06** Solvent effect on fluorescence properties of formylated amino coumarin (Sch. Sci. Eng., Univ. of Tsukuba) ○SATOU, Yuuma; MOMOTAKE, Atsuya; ARAI, Tatsuo
- 3H5-07** Photochemical behavior of N-phenyl-N'-(4-phenylethynyl benzene) urea (PEU) (Sch. Sci. Eng., Univ. of Tsukuba) ○TOUGASAKI, Kei; NISHIMURA, Yoshinobu; ARAI, Tatsuo
- 3H5-08** Development of the Organocatalyst for Efficient Generation of Carbon-Centered Radical (Sch. Sci., Kobe Univ.) ○YABUTA, Tatsushi; MATSUBARA, Ryosuke; SHIMADA, Toshiyuki; HAYASHI, Masahiko; KOBORI, Yasuhiro

Chair: TAKAHASHI, Masaki (10 : 30~11 : 20)

\* 10:20-10:30: interval for laptop PC connection.(3H5-10, 3H5-11, 3H5-12, 3H5-13, 3H5-14)

**3H5-10** Photochemical behavior and substituent effect of olefins having pyridine and pyrrole ring at both ends of olefin carbon (Sch. Sci. Eng., Univ. of Tsukuba) ○MIYAZAKI, Masato; ARAI, Tatsuo**3H5-11** Effect of substituent on photochemical and fluorescence properties of 2-[2-(2-pyrrolyl)ethenyl]pyridine derivatives (Sch. Sci. Eng., Univ. of Tsukuba) ○TAKAYAMA, Kai; ARAI, Tatsuo**3H5-12** Photochemical properties of 2-hydroxy-6-(2-phenylvinyl)pyridine (Sch. Sci. Eng., Univ. of Tsukuba) ○SHIMIZU, Keika; ARAI, Tatsuo**3H5-13** Creation of external stimuli responsible artificial nucleic acids: synthesis and photo reactivity of 6-bromouridine (IMRAM, Tohoku Univ.) ○NISHIGAI, Yuki; UEMATSU, Ryohei; INAGAKI, Masahito; ARAKI, Yasuyuki; SAKAMOTO, Seiji; WADA, Takehiko**3H5-14** Photochemical behavior of stilbene derivatives in bovine serum albumin (BSA) (Sch. Sci. Eng., Univ. of Tsukuba) ○ISHIDA, Yuka; ARAI, Tatsuo

## Room H6

Chishinkan3 Building 206

### Organic Chemistry -Reaction and Synthesis- Organic Electron Transfer Chemistry

Thursday, March 24, PM

Chair: NOKAMI, Toshiaki (14 : 20~15 : 10)

\* 14:10-14:20: interval for laptop PC connection.(1H6-33, 1H6-34, 1H6-35, 1H6-37)

**1H6-33** Mg-promoted Reductive Silylation of Ethyl Cinnamates with a Good Leaving Group (Grad. Sch. Eng., Nagaoka Univ. of Tech.) NODA, Katsuki; ○MAEKAWA, Hirohumi**1H6-34** Electron transfer reaction of salicylic acid derivatives with a modified hydroxyl group as the leaving group (Grad. Sch. Eng., Nagaoka Univ. of Tech.) ○KANAZAWA, Shinnosuke; MAEKAWA, Hirofumi**1H6-35\*** Reductive Trifluoroacetylation of Aromatic Ynones by Electron Transfer from Magnesium (Nagaoka Univ. of Tech.) ○ZHANG, Tianyuan; MAEKAWA, Hirofumi**1H6-37** Synthesis of HF-Base Complexes Based on Cation Exchange Reaction between KF and Solid-Supported Acids and Their Application to Anodic Fluorination (Grad. Sch. Eng. Sci., Shibaura Inst. of Tech.) ○YAMADA, Masahide; FUKUDA, Toshihiro; TAJIMA, Toshiaki

Chair: MAEKAWA, Hirofumi (15 : 20~16 : 10)

\* 15:10-15:20: interval for laptop PC connection.(1H6-39, 1H6-41, 1H6-43)

**1H6-39\*** Electro-reductive Esterification of Carboxylic Acids and its Application to Paired Electro-synthesis (Kinki Univ.) ○MATSUMOTO, Kouichi; MIYAMOTO, Yu; ITAMI, Sayo; YAMADA, Yuki; SHIMAZAKI, Hayato; SHIMADA, Kazuaki; NOKAMI, Toshiaki; NISHIWAKI, Keiji; KASHIMURA, Shigenori**1H6-41\*** Electric field-induced Propagation of Conducting Polymer Microfibers from Wireless Electrodes (Interdisciplinary Grad. Sch. Sci. and Eng., Tokyo Tech) ○KOIZUMI, Yuki; NISHIYAMA, Hiroki; TOMITA, Ikuyoshi; INAGI, Shinsuke**1H6-43** Synthesis of linear PEDOT fibers by bipolar electropolymerization (Interdisciplinary Grad. Sch. Sci. and Eng., Tokyo Tech) ○OHIRA, Masato; KOIZUMI, Yuki; NISHIYAMA, Hiroki; TOMITA, Ikuyoshi; INAGI, Shinsuke

Chair: ISHIFUNE, Manabu (16 : 20~17 : 10)

\* 16:10-16:20: interval for laptop PC connection.(1H6-45, 1H6-46, 1H6-47, 1H6-48, 1H6-49)

**1H6-45** Reductive Deprotection of Benzyl Substituted Amines Using Electrochemically Generated Solvated Electrons in Cyclic Amide Solvents (Grad. Sch. Eng. Sci., Shibaura Inst. of Tech.) ○NAKAGOME, Sho; TAJIMA, Toshiaki**1H6-46** Selective Reductive Deallylation Reaction with Pd/Viologen System (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) KOJIMA, Atsuki; ○KUROBOSHI, Manabu**1H6-47** Preparation and electrochemical analysis of ionic liquids consisting of croconate anions and ammonium cations. (Grad. Sch. Eng., Tottori Univ.) ○HANDA, Naoyuki; NOKAMI, Toshiaki; ITOH, Toshiyuki**1H6-48** Facile Synthesis of Ethene-Bridged Terthiophenes and Their Electrochemical Behavior (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○MITSUDO, Koichi; KAMIMOTO, Natsuyo; YAMASAKI, Arata; SATO, Hidehiko; SUGA, Seiji**1H6-49** Synthesis of  $\pi$ -Extended Thienofurans via Zeolite-Promoted Dehydrative Cyclization and Their Electrochemical Properties (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○INADA, Tomohiro; SHIOTSU, Tatsuma; NAKAMURA, Nariaki; MITSUDO, Koichi; SUGA, Seiji

Chair: INAGI, Shinsuke (17 : 20~18 : 10)

\* 17:10-17:20: interval for laptop PC connection.(1H6-51, 1H6-52, 1H6-53, 1H6-54, 1H6-55)

**1H6-51\*** Oxidative Coupling of Aromatic Compounds using Bacteriogenic Amorphous Iron Oxide (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○MANDAI, Kyoko; MATSUMOTO, Shuji; TAKADA, Jun; SUGA, Seiji**1H6-52** Electroreductive synthesis of block type polysilanes consisting of hydrophilic and hydrophobic silylene chains (Kinki Univ.) ○UEMINAMI, Ryota; ISHIFUNE, Manabu**1H6-53** Preparation of thermoresponsive polymer-grafted electrodes bearing nitrogen-containing ligands and their complexation with metalloporphyrins (Fac. Sci. Eng., Kinki Univ.) ○MIYANO, Yuuki; ISHIFUNE, Manabu**1H6-54** Stereoselective glycosylation using the 2-deoxy-2-azido carbohydrate building block for automated electrochemical assembly (Fac. Eng., Tottori Univ.) ○KITAMURA, Kei; ISODA, Yuta; SASAKI, Norihiko; NOKAMI, Toshiaki; ITOH, Toshiyuki**1H6-55** Total synthesis of TMG-chitotriomycine based on automated electrochemical assembly (Grad. Sch. Eng., Tottori Univ.) ○ISODA, Yuta; KITAMURA, Kei; SASAKI, Norihiko; NOKAMI, Toshiaki; ITOH, Toshiyuki

Friday, March 25, AM

Chair: TAJIMA, Toshiaki (9 : 30 ~ 10 : 10)

\* 9:20-9:30: interval for laptop PC connection.(2H6-04, 2H6-05, 2H6-07)

**2H6-04** Fixation of Carbon Dioxide by the Use of Hydrogen Abstraction of Aryl Radicals Generated by Electrochemical Reduction (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.; Grad. Sch. Eng., Hokkaido Univ.) ○OSHIKIRI, Kyohei; KATAYAMA, Asahi; SENBOKU, Hisanori; HARA, Shoji**2H6-05\*** Electrochemical Transformation of Benzylic C-H bonds via Aminofenonium Ions (Graduate School of Engineering, Kyoto University) ○HAYASHI, Ryutarō; SHIMIZU, Akihiro; YOSHIDA, Junichi**2H6-07** Reactivity of thiurene ions generated by the cation pool method (Grad. Sch. Eng., Kyoto Univ.; Kinki Univ.) ○HORIUCHI, Shun; HAYASHI, Ryutarō; SHIMIZU, Akihiro; MATSUMOTO, Kouichi; MIYAMOTO, Yu; MORISAWA, Yusuke; WAKABAYASHI, Tomonari; YOSHIDA, Jun-ichi

Chair: SHIMIZU, Akihiro (10 : 20~11 : 00)

\* 10:10-10:20: interval for laptop PC connection.(2H6-09, 2H6-10, 2H6-11, 2H6-12)

**2H6-09** Synthesis of Tetrathienonaphthalenes by Photoinduced Electron-Transfer Cyclization-Dehydrogenation Reactions and Their Basic Properties (Grad. Sch. Eng., Osaka Pref. Univ.; Grad. Sch. Sci., Osaka Pref. Univ.; The Research Inst. for Molecular Electronic Devices, Osaka Pref. Univ.; Rigaku Corp.) ○NAGAE, Kunihiko; YAMAMOTO, Atsushi; ASADA, Toshiro; SATO, Hiroyasu; MATSUI, Yasunori; OHTA, Eisuke; KOSEKI, Shiro; IKEDA, Hiroshi**2H6-10** Development of D- $\pi$ -A Pyrazinium Dyes Bearing Different Counter Anion and Their Singlet Oxygen Generation Characteristics (Grad. Sch. Eng., Hiroshima Univ.) ○ENOKI, Toshiaki; OYAMA, Yousuke; OHSHITA, Joji**2H6-11** Synthesis and optoelectronic properties of bis(perfluoroaryl)carborane compounds (Interdisciplinary Grad. Sch. Sci. and Eng., Tokyo Tech) ○OWAKI, Satoshi; NISHIYAMA, Hiroki; TOMITA, Ikuyoshi; INAGI, Shinsuke**2H6-12** Synthesis of ring-fused  $\pi$ -electron systems by nucleophilic aromatic substitution reaction of perfluoroarenes and their electrochemical properties (Interdisciplinary Grad. Sch. Sci. and Eng., Tokyo Tech) ○ASANUMA, Yuki; NISHIYAMA, Hiroki; TOMITA, Ikuyoshi; INAGI, Shinsuke

Chair: SENBOKU, Hisanori (11 : 10~11 : 50)

\* 11:00-11:10: interval for laptop PC connection.(2H6-14, 2H6-15, 2H6-16, 2H6-17)

**2H6-14** Synthesis and Electrochemical Properties of Thienyl-Substituted Pyrenetetraone (Sch. Eng., Kyoto Univ.) ○TANIZAWA, Hideya; SHIMIZU, Akihiro; YOSHIDA, Jun-ichi**2H6-15** Development of Liquid Organic Active Materials and Application to Redox-Flow Batteries (Grad. Sch. Eng., Kyoto Univ.) ○TAKENAKA, Keisuke; TAKENAKA, Keisuke; YOSHIDA, Jun-ichi**2H6-16** Monoalkylations of methyl phenylacetate using in situ electrogeneration of 2-pyrrolidone anion in an electrochemical flow-microreactor (Grad. Sch. Fac. Env. and Info. Sci., Yokohama Natl. Univ.) ○MATSUMURA, Yoshimasa; KAKIZAKI, Yoshinobu; TATENNO, Hiroyuki; ATOBE, Mahito**2H6-17** The Effect of Metal-supported Catalysts on Electrochemical Hydrogenation of Toluene Using a PEM Reactor (Sch. Eng., Yokohama Natl. Univ.) ○FUKAZAWA, Atsushi; TAKANO, Ken; MATSUMURA, Yoshimasa; MITSUSHIMA, Shigenori; ATOBE, Mahito

# Room H7

## Chishinkan3 Building 207

### Organic Chemistry -Reaction and Synthesis- Organometallic Compounds

Thursday, March 24, AM

Ir

Chair: NISHIMURA, Takahiro (9 : 20 ~ 10 : 10)

\* 9:10-9:20: interval for laptop PC connection.(1H7-03, 1H7-04, 1H7-05, 1H7-07)

**1H7-03** Ir-Catalyzed Borylation of Aromatic C-H Bonds Using an Amino-borane Reagent (Grad. Sch. Eng., Osaka Univ.) TOBISU, Mamoru; OIGARASHI, Takuya; CHATANI, Naoto

**1H7-04**<sup>#</sup> Effect of Additives on the Iridium-Catalyzed Selective Silylation of 4-Alkylpyridines at the Benzylic Position with Hydrosilanes. (Grad. Sch. Eng., Osaka Univ.) FUKUMOTO, Yoshiya; OHIRANO, Masaya; CHATANI, Naoto

**1H7-05**<sup>#</sup> Asymmetric Hydrogenation of 2,3-Disubstituted Pyridinium Salts Catalyzed by Dinuclear Iridium Complexes Bearing Chiral Diphosphine Ligands (Sch. Eng. Sci., Osaka Univ.) OIIMURO, Atsuhiko; HIGASHIDA, Kosuke; KITA, Yusuke; MASHIMA, Kazushi

**1H7-07** E-selective semi-hydrogenation of alkynes by dinuclear iridium (III) complexes (Grad. Sch. Eng. Sci., Osaka Univ.; Grad. Sch. Eng. Sci., Osaka Univ.) OHIGASHIDA, Kosuke; KITA, Yusuke; MASHIMA, Kazushi

Chair: KITA, Yusuke (10 : 20 ~ 11 : 20)

\* 10:10-10:20: interval for laptop PC connection.(1H7-09, 1H7-10, 1H7-11, 1H7-12, 1H7-13, 1H7-14)

**1H7-09** Dehydrogenation of Nitrogen Heterocycles Catalyzed by Iridium Complexes Bearing a Functional Bipyridonate Ligand (Grad. Sch. Human and Environ. Stud., Kyoto Univ.) OWADA, Tomokatsu; FUJITA, Ken-ichi

**1H7-10** Efficient *N*-Methylation of Amines Using Methanol Catalyzed by *N*-Heterocyclic Carbene Complexes of Iridium (Grad. Sch. Human and Environ. Stud., Kyoto Univ.) OTSUI, Akiko; FUJITA, Ken-ichi

**1H7-11** Ir-catalyzed C-H borylation of *peri*-xanthenoxanthenes (Dept. of Chem. Eng., NNCT) KAMEI, Toshiyuki; OURYU, Mizuho; SHIMADA, Toyoshi

**1H7-12**<sup>#</sup> Iridium-catalyzed asymmetric cyclization of *N*-sulfonyl alkenyl amides (Dep. Chem., Sch. Sci., Kyoto Univ.) ONAGAMOTO, Midori; YANAGI, Tomoyuki; NISHIMURA, Takahiro; YORIMITSU, Hideki

**1H7-13** Iridium-Catalyzed Reductive Cleavage of C-O Bonds of Aryl Ethers Using 2-Propanol as a Reducing Agent (Dep. Chem., Sch. Sci., Kyoto Univ.) OHIBE, Yuta; EBE, Yusuke; NISHIMURA, Takahiro; YORIMITSU, Hideki

**1H7-14**<sup>#</sup> Iridium-Catalyzed Asymmetric Hydroarylation of Allylic Ethers: Isomerization of Allylic Ethers into Vinylic Ethers and Their Regioselective Hydroarylation (Dep. Chem., Sch. Sci., Kyoto Univ.; Dep. Chem., Sch. Sci., Kyoto Univ.) OEBE, Yusuke; ONODA, Mitsuki; NISHIMURA, Takahiro; YORIMITSU, Hideki

Chair: TSURUGI, Hayato (11 : 30 ~ 12 : 20)

\* 11:20-11:30: interval for laptop PC connection.(1H7-16, 1H7-18, 1H7-20)

**1H7-16**<sup>#</sup> ortho-Selective C-H Borylation of Aromatic Compounds Controlled by Lewis Acid-Base Interaction (Grad. Sch. Pharm., The Univ. of Tokyo) OLI, Hongliang; KUNINOBU, Yoichiro; KANAI, Motomu

**1H7-18**<sup>\*</sup> Catalytic Asymmetric Hydrogenation of Isoxazolium salts: Study on its Regioselectivity and Reaction Pathway (Grad. Sch. Sci., Kyushu Univ.) OIKEDA, Ryuhei; KUWANO, Ryoichi

**1H7-20** Iridium catalyzed  $\beta$ -alkylation of ethanol with benzyl alcohols (Grad. Sch. Sci. and Eng., Kansai Univ.) OITOH, Satoshi; OBORA, Yasushi

Thursday, March 24, PM

Sc,Hf,Y

Chair: KUWANO, Ryoichi (13 : 30 ~ 14 : 20)

\* 13:20-13:30: interval for laptop PC connection.(1H7-28, 1H7-29, 1H7-30, 1H7-31, 1H7-32)

**1H7-28** Rare-Earth-Catalyzed Syndiotactic Polymerization of Styrene Using Pyridines as Chain Transfer Agents (RIKEN) OYAMAMOTO, Atsushi; NISHIURA, Masayoshi; HOU, Zhaomin

**1H7-29**<sup>#</sup> Regioselective Step-Growth Polymerization of Anisyl-Substituted Alkenes via Rare-Earth-Catalyzed C-H Alkylation (RIKEN CSRS) OWANG, Haoqing; NISHIURA, Masayoshi; HOU, Zhaomin

**1H7-30** Haloalkoxylation of  $\alpha, \beta$ -Unsaturated Carbonyl Compounds Catalyzed by Scandium Triflate (Grad. Sch. Eng. Sci., Osaka Univ.) OONOUE, Akihiro; KITA, Yusuke; MASHIMA, Kazushi

**1H7-31** Haloalkoxylation of  $\alpha, \beta$ -Unsaturated Carbonyl Compounds Catalyzed by Scandium Triflate (Grad. Sch. Eng. Sci., Osaka Univ.) OONOUE, Akihiro; OKITA, Yusuke; MASHIMA, Kazushi

**1H7-32** Catalytic C(sp<sup>3</sup>)-H Bond Alkenylation of 2-Methylpyridine by Amidoyttrium Complexes and Their Mechanistic Study (Grad. Sch. Eng. Sci., Osaka Univ.) ONAKAMOTO, Masami; NAGAE, Haruki; KUNDU, Abhinanda; TSURUGI, Hayato; MASHIMA, Kazushi

Chair: ASAKO, Sobi (14 : 30 ~ 15 : 30)

\* 14:20-14:30: interval for laptop PC connection.(1H7-34, 1H7-36, 1H7-37, 1H7-38, 1H7-39)

**1H7-34**<sup>#</sup> Asymmetric aminoalkylation reaction of *N*-heteroaromatic compounds catalyzed by yttrium complexes with chiral multidentate ligand (Grad. Sch. Eng. Sci., Osaka Univ.) OKUNDU, Abhinanda; NAGAE, Haruki; TSURUGI, Hayato; MASHIMA, Kazushi

**1H7-36**<sup>#</sup> Enantioselective sp<sup>3</sup> C-H Bond Addition of 2-Methyl Pyridines to Alkenes Catalyzed by Chiral Half-Sandwich Rare-Earth Complexes (RIKEN CSRS) OLUO, Yong; HOU, Zhaomin

Ce, Sm,Gd

**1H7-37** Preparation of cerium complexes with Schiff-base ligands and their catalytic aerobic oxidation of alcohols (Grad. Sch. Eng. Sci., Osaka Univ.) OSHIRASE, Satoru; MITALI, Paul; TSURUGI, Hayato; MASHIMA, Kazushi

**1H7-38**<sup>#</sup> Intermolecular Enantioselective Hydroamination of 3,3-Disubstituted Cyclopropenes Catalyzed by Chiral Half-sandwich Samarium Alkyl Complexes (RIKEN CSRS) OTENG, Huailong; HOU, Zhaomin

**1H7-39**<sup>#</sup> Rare-Earth-Catalyzed Polymerization of Methoxyl Substituted Styrene: Step-Growth vs. Chain-Growth polymerization (RIKEN CSRS) OSHI, Xiaochao; NISHIURA, Masayoshi; HOU, Zhaomin

Re

Chair: KUNINOBU, Yoichiro (15 : 40 ~ 16 : 30)

\* 15:30-15:40: interval for laptop PC connection.(1H7-41, 1H7-42, 1H7-43, 1H7-44, 1H7-45)

**1H7-41** Rhenium-Catalyzed anti-Markovnikov Addition of 1,3-Ketoesters to Terminal Alkynes (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) OUEMURA, Erika; HORI, Shunsuke; MURAI, Masahito; TAKAI, Kazuhiko

**1H7-42** Rhenium-Catalyzed Disproportionation of Allylic Alcohols (Fac. Chem. Materials and Bioeng., Kansai Univ.) OYAMAMOTO, Takaaki; ITAMIGAWA, Kouhei; UMEMA, Rui; NISHIYAMA, Yutaka

**1H7-43** Rhenium-Catalyzed Synthesis of Dihydroisoquinolines (Fac. Chem. Materials and Bioeng., Kansai Univ.) ONAKAGAWA, Yota; UMEMA, Rui; NISHIYAMA, Yutaka

**1H7-44** Rhenium-Catalyzed Reaction of Terminal Alkynes with *N*-Arylimines Leading to 3-Substituted Quinolines (Grad. Sch. Eng., Osaka Univ.) FUKUMOTO, Yoshiya; OYAMADA, Sodai; CHATANI, Naoto

**1H7-45** Rhenium-Catalyzed Isomerization of *N*-Alkylpropargylamines to *N*-Alkylideneallyl amines (Grad. Sch. Eng., Osaka Univ.) FUKUMOTO, Yoshiya; OKAZAKI, Natsuki; CHATANI, Naoto

Rh

Chair: MIURA, Tomoya (16 : 40 ~ 17 : 40)

\* 16:30-16:40: interval for laptop PC connection.(1H7-47, 1H7-48, 1H7-49, 1H7-50, 1H7-51, 1H7-52)

**1H7-47** Synthesis of a Functionalized Cycloparaphenylene via Rhodium-Catalyzed Cyclotrimerization of Alkynes and Reductive Aromatization (Grad. Sch. Sci., Eng., Tokyo Tech) ONISHIGAKI, Shuhei; MIYAUCHI, Yuta; FUKUI, Miho; SHIBATA, Yu; TANAKA, Ken

**1H7-48** Synthesis of Functionalized Benzobarrelenes by Rhodium-Catalyzed [2+2+2] Cycloaddition (Grad. Sch. Sci., Eng., Tokyo Tech) OMIYAUCHI, Yuta; SHIBATA, Yu; TANAKA, Ken

**1H7-49** Enantioselective Synthesis of [9]Helicene-like Molecules by Rhodium-Catalyzed [2+2+2] Cycloaddition (Grad. Sch. Sci., Eng., Tokyo Tech) OYAMANO, Ryota; HARA, Jun; MURAYAMA, Koichi; TERAOKA, Kota; UEKUSA, Hidehiro; SHIBATA, Yu; TANAKA, Ken

**1H7-50** Rhodium-Catalyzed Directed Cross-Coupling Reaction of Arenes with Aryl Esters via the Cleavage of Carbon-Hydrogen and Carbon-Oxygen Bonds (Grad. Sch. Eng., Osaka Univ.) TOBISU, Mamoru; OYASUI, Kosuke; AIHARA, Yoshinori; CHATANI, Naoto

**1H7-51** Rhodium-Catalyzed Reaction of Terminal Alkynes with Hydrazines Leading to Nitriles (Sch. Eng., Osaka Univ.) FUKUMOTO, Yoshiya; OTAMURA, Yuto; CHATANI, Naoto

**1H7-52** Rhodium-Catalyzed Reaction of Aromatic Amides with Styrenes Using a Bidentate Directing Group (Grad. Sch. Eng., Osaka Univ.) OYAMAGUCHI, Takuma; SHIBATA, Kaname; CHATANI, Naoto

Chair: MINAMI, Yasunori (17 : 50 ~ 18 : 50)

\* 17:40-17:50: interval for laptop PC connection.(1H7-54, 1H7-55, 1H7-56, 1H7-57, 1H7-58, 1H7-59)

**1H7-54** Asymmetric hydroarylation of aliphatic aldimine using cationic



rhodium/*N*-Me-BIPAM catalyst (Grad. Sch. Eng., Hokkaido Univ.)  
 ○KATO, Naoya; YAMAMOTO, Yasunori

- 1H7-55** Cascade Transformation Reaction to Azabicyclo Compound from *N*-alkynyl Nitro by the Rhodium Catalyst (Grad. Sch. Sci., Tohoku Univ.)  
 ○TAKEDA, Keisuke; SATO, Yoshinori; NAKAMURA, Itaru; TERADA, Masahiro
- 1H7-56\*** Chelating bis(*tz*NHC)-Rhodium Complexes: Versatile Catalyst for Hydrosilylation Reactions (Grad. Sch. Sci., The Univ. of Tokyo)  
 ○NGUYEN, Thanh V. Q.; YOO, Woo-jin; KOBAYASHI, Shu
- 1H7-57** Stereoselective Synthesis of Cyclopropylmethylamines by Rhodium (II)-Catalyzed Cyclopropanation of Allyl Pinacol Boronate with Triazoles (Grad. Sch. Eng., Kyoto Univ.) ○NAKAMURO, Takayuki; NIKISHIMA, Hiroki; MIURA, Tomoya; MURAKAMI, Masahiro
- 1H7-58\*** Regioselective C-H Bond Functionalization of Indoles by  $\alpha$ -Imino Rhodium Carbene Complexes (Grad. Sch. Eng., Kyoto Univ.) ○ZHAO, Qiang; FUNAKOSHI, Yuuta; MIURA, Tomoya; MURAKAMI, Masahiro
- 1H7-59** Rhodium-Catalyzed Denitrogenative Reaction of *N*-Sulfonyl-1,2,3-triazoles with 2-Siloxyfurans (Grad. Sch. Eng., Kyoto Univ.)  
 ○FUNAKOSHI, Yuuta; MIURA, Tomoya; MURAKAMI, Masahiro

## Friday, March 25, AM

## Ir

Chair: MURAKAMI, Kei (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(2H7-01, 2H7-02, 2H7-03, 2H7-05, 2H7-06)
- 2H7-01** Enantioselective C(sp<sup>3</sup>)-H Alkylation of 2-(Alkylamino)pyridines Catalyzed by Iridium/Chiral Diene Complexes (Dep. Chem., Sch. Sci., Kyoto Univ.) ○NAGAI, Masaki; NAGAMOTO, Midori; NISHIMURA, Takahiro; YORIMITSU, Hideki
- 2H7-02** Azoles as Effective Directing Groups for the Asymmetric Hydroarylation of Vinyl Ethers Catalyzed by Hydroxo-iridium complexes (Dep. Chem., Sch. Sci., Kyoto Univ.) ○YAMAUCHI, Daisuke; NISHIMURA, Takahiro; YORIMITSU, Hideki
- 2H7-03\*\*** Catalyst-Controlled Regioselective C-H Borylation of Benzamides by Cooperative Iridium/Aluminum Catalysis (Grad. Sch. Eng., Kyoto Univ.)  
 ○YANG, Lichen; SAITO, Teruhiko; SEMBA, Kazuhiko; NAKAO, Yoshiaki
- 2H7-05** An Iridium-Catalyzed Reductive Approach to Nitrones from *N*-Hydroxyamides (Fac. Sci. Tech., Keio Univ.) ○KATAHARA, Seiya; KOBAYASHI, Shoichiro; FUJITA, Kanami; SATO, Takaaki; CHIDA, Noritaka
- 2H7-06** An Iridium-catalyzed reductive nucleophilic addition (Grad. Sch. Sci. Tech., Keio Univ.) ○TAKAHASHI, Yoshito; YORITATE, Makoto; NAKAJIMA, Minami; SATO, Takaaki; CHIDA, Noritaka

Chair: SEMBA, Kazuhiko (10 : 10 ~ 11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(2H7-08, 2H7-09, 2H7-10, 2H7-12, 2H7-13)
- 2H7-08** Hydrogenolysis of Alkanes Using H<sub>2</sub>IrCl<sub>6</sub> Catalyst (Grad. Sch. Sci., Osaka Pref. Univ.) FUKUYAMA, Takahide; ○KANEKO, Masaya; RYU, Ilhyong
- 2H7-09** Hydrodechlorination of Alkyl Chlorides Using Iridium Catalysts (Grad. Sch. Sci., Osaka Pref. Univ.) FUKUYAMA, Takahide; ○HAMADA, Yuki; RYU, Ilhyong
- 2H7-10\*\*** Ir-catalyzed Hydroboration of Cyclopropanes (Grad. Sch. Sci., Nagoya Univ.; WPI-ITbM, Nagoya Univ.) ○KONDO, Hiroki; KOBAYASHI, Chisa; MIYAMURA, Shin; ITAMI, Kenichiro; YAMAGUCHI, Junichiro
- 2H7-12** The Retro-Hydroformylation Reaction (Grad. Sch. Eng., The Univ. of Tokyo) ○TATSUKI, Toshiumi; KUSUMOTO, Syuhei; NOZAKI, Kyoto
- 2H7-13** Ligand effects on catalytic dehydrogenation reaction catalyzed by hydroxycyclopentadienyl iridium complexes (Grad. Sch. Eng., The Univ. of Tokyo; Grad. Sch. Eng., The Univ. of Tokyo) ○ANDO, Hideaki; KOBAYASHI, Hiroko; KUSUMOTO, Shuhei; NOZAKI, Kyoto

Chair: FUKUYAMA, Takahide (11 : 20 ~ 12 : 20)

- \* 11:10-11:20: interval for laptop PC connection.(2H7-15, 2H7-16, 2H7-18, 2H7-19, 2H7-20)
- 2H7-15** Iridium-Catalyzed Multiple C (sp<sup>3</sup>)-H Borylation of Siloxane Compounds (Grad. Sch. Eng., Kyoto Univ.) OHMURA, Toshimichi; ○EMURA, Kazuki; TORIGOE, Takeru; SUGINOME, Michinori
- 2H7-16\*\*** Iridium-Catalyzed Intramolecular Addition of C(sp<sup>3</sup>)-H Bond to Carbon-Carbon Triple Bond (Grad. Sch. Eng., Kyoto Univ.) ○TORIGOE, Takeru; OHMURA, Toshimichi; SUGINOME, Michinori
- 2H7-18** Synthesis of 9,9-Disubstituted Fluorene Derivatives by Iridium Catalyst via C-C Bond Activation of Biphenylenes (Sch. Advanced Sci. Eng., Waseda Univ.) ○TAKANO, Hideaki; SUGIMURA, Natsuhiko; KANYIVA, Kyalo-Stephen; SHIBATA, Takanori
- 2H7-19** Development of Byproduct-Free Siloxane Bond Formation (IRC3, AIST) ○MATSUMOTO, Kazuhiro; KAPPAM VEETIL, Sajna; SATO, Kazuhiko; SHIMADA, Shigeru
- 2H7-20** Synthesis of Polycyclic Heteroaromatic Compounds by Iridium-Catalyzed [2+2+2] Cycloaddition (Grad. Sch. Sci., Eng., Aoyama Gakuin Univ.) HASHIMOTO, Toru; HARA, Tomohiro; FUJISAWA, Shunsuke;

○YOSHIDA, Yuzo; TAKEUCHI, Ryo

## Friday, March 25, PM

## Rh

Chair: UEDA, Mitsuhiro (13 : 30 ~ 14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(2H7-28, 2H7-30, 2H7-31, 2H7-32, 2H7-33)
- 2H7-28\*** Asymmetric [2+2+2] Cycloaddition of 1,6-Enynes with Alkenes Catalyzed by a Cationic Rhodium Catalyst (Grad. Sch. Sci., Eng., Tokyo Tech) ○MASUTOMI, Koji; SHIBATA, Yu; TANAKA, Ken
- 2H7-30** Rhodium-Catalyzed Asymmetric [2+2+2] Cycloaddition of 1,6-Diynes with Cyclic Alkenes (Grad. Sch. Sci., Eng., Tokyo Tech) ○AIDA, Yukimasa; SHIBATA, Yu; TANAKA, Ken
- 2H7-31** Synthesis of Novel Quinoidal Fused Oligosiloles by Rhodium-Catalyzed Stitching Reaction (School of Engineering, The University of Tokyo) ○IINO, Ryo; SHINTANI, Ryo; NOZAKI, Kyoto
- 2H7-32\*** Rh-Catalyzed Stitching Reaction Leading to Unsymmetric Pentalene Derivatives (Grad. Sch. Eng., The Univ. of Tokyo) ○TAKAHASHI, Keisuke; ITO, Shingo; SHINTANI, Ryo; NOZAKI, Kyoto
- 2H7-33** Asymmetric Hydrogenation of Indole Derivatives Catalyzed by Dinuclear Rhodium Complexes Bearing Chiral Diphosphine Ligands (Grad. Sch. Eng. Sci., Osaka Univ.) ○HIGASHIHARA, Kenya; HIDA, Shoji; SEKHAR JENA, Himanshu; KITA, Yusuke; MASHIMA, Kazushi

Chair: TANAKA, Ken (14 : 40 ~ 15 : 30)

- \* 14:30-14:40: interval for laptop PC connection.(2H7-35, 2H7-36, 2H7-37, 2H7-39)
- 2H7-35** Rhodium-Catalyzed Odorless Deborythiolation of Organoborons Using Thiosulfonates (IBB, Tokyo Med. and Dental Univ.) ○KANEMOTO, Kazuya; SUGIMURA, Yasuyuki; YOSHIDA, Suguru; HOSOYA, Takamitsu
- 2H7-36** Rh-Catalyzed *ipso*-Borylation of Arylsulfides via C-S Bond Cleavage (RIKEN CLST; IBB, Tokyo Med. and Dental Univ.) ○UETAKE, Yuta; NIWA, Takashi; HOSOYA, Takamitsu
- 2H7-37\*** Rhodium-Catalyzed Formal Decarboxylative Borylation of Carboxylic Acids (RIKEN CLST) ○OCHIAI, Hidenori; UETAKE, Yuta; NIWA, Takashi; HOSOYA, Takamitsu
- 2H7-39** Rh-catalyzed C-H/O-H insertion reaction of 3-alkoxycarbonyl-1,2-diazonaphthoquinone (Grad. Sch. Eng., KIT) ○OTSUKA, Kota; TAKAHASHI, Syuhei; OKAUCHI, Tatsuo; KITAMURA, Mitsuru

Chair: HIRANO, Koji (15 : 40 ~ 16 : 30)

- \* 15:30-15:40: interval for laptop PC connection.(2H7-41, 2H7-42, 2H7-43, 2H7-44, 2H7-45)
- 2H7-41** Oxidative Annulation of Aryl Carboxylic Acids with Internal Alkynes Catalyzed by an Electron-Deficient Rhodium(III) (Grad. Sch. Sci., Eng., Tokyo Tech) ○KUDO, Eiji; SHIBATA, Yu; YAMAZAKI, Mustumi; MASUTOMI, Koji; MIYAUCHI, Yuta; FUKUI, Miho; SATOH, Tetsuya; MIURA, Masahiro; SUHIYAMA, Haruki; UEKUSA, Hidehiro; TANAKA, Ken
- 2H7-42** Synthesis of Unsymmetrical Rhodocenes by Annulation of an Electron-Deficient Rhodium(III) Complex, Aliphatic Alkenes, and Alkynes (Grad. Sch. Sci., Eng., Tokyo Tech) ○SHIBATA, Yu; KUDO, Eiji; SUGIYAMA, Haruki; UEKUSA, Hidehiro; TANAKA, Ken
- 2H7-43** Catalytic Enantioselective Synthesis of 5,6,7,8-Tetrasubstituted Tribenzothiepins by the Intermolecular Cycloaddition (Sch. Advanced Sci. Eng., Waseda Univ.) ○MATSUBARA, Riku; MITAKE, Akihito; TAHARA, Yuki; KANYIVA, Kyalo-Stephen; SHIBATA, Takanori
- 2H7-44** Catalytic Enantioselective Synthesis of the 1,2,3,4-Tetrasubstituted Tribenzothiepins by the Intermolecular Cycloaddition (Sch. Advanced Sci. Eng., Waseda Univ.) ○MITAKE, Akihito; MATSUBARA, Riku; TAHARA, Yu-ki; KANYIVA, Kyalo-Stephen; SHIBATA, Takanori
- 2H7-45** Rhodium-Catalyzed Intramolecular Alkynylsilylation of Alkynes (Grad. Sch. Eng., The Univ. of Tokyo) ○KURATA, Hiroki; SHINTANI, Ryo; NOZAKI, Kyoto

Chair: SHINTANI, Ryo (16 : 40 ~ 17 : 30)

- \* 16:30-16:40: interval for laptop PC connection.(2H7-47, 2H7-48, 2H7-49, 2H7-50)
- 2H7-47** Highly Selective 1,1-Addition of Diboron to Terminal Alkynes catalyzed by Rhodium complex (Grad. Sch. Eng., Kyoto Univ.) ○ABE, Kenichi; SAWASE, Kanai; KIMURA, Yu; KONDO, Teruyuki
- 2H7-48** Rhodium-Catalyzed C6-Selective C-H Borylation of 2-Pyridones (Graduate School of Engineering, Osaka University) ○MIURA, Wataru; HIRANO, Koji; MIURA, Masahiro
- 2H7-49\*** Synthesis of Benzo[*c*]thiophenes by rhodium-catalyzed Dehydrogenative Annulation (Grad. Sch. Eng., Osaka Univ.) ○FUKUZUMI, Keita; UNOH, Yuto; NISHII, Yuji; SATOH, Tetsuya; MIURA, Masahiro
- 2H7-50\*\*** Rh(III)-catalyzed direct coupling reaction of arylphosphine derivatives with heterobicyclic alkenes (Grad. Sch. Eng., Osaka Univ.) ○UNOH, Yuto; SATOH, Tetsuya; HIRANO, Koji; MIURA, Masahiro

## Co

Chair: YORIMITSU, Hideki (17 : 40~18 : 40)

- \* 17:30-17:40: interval for laptop PC connection.(2H7-53, 2H7-54, 2H7-55, 2H7-56, 2H7-57, 2H7-58)
- 2H7-53** Quantum chemical study of Cp\*Co(III)-catalyzed C-H alkenylation/annulation reaction (Hoshi Univ.; Grad. Sch. Pharm., Hokkaido Univ.)  
○SAKATA, Ken; EDA, Masami; KITAOKA, Yuri; YOSHINO, Tatsuhiko; MATSUNAGA, Shigeki
- 2H7-54** Electrophilic borylation of aryl halides using Co/Cr catalyst system (Grad. Sch. Eng., Hiroshima Univ.) KOMEYAMA, Kimihiro;  
○KIGUCHI, Shinosuke; TAKAKI, Ken
- 2H7-55** Cobalt-Catalyzed Annulation of Silyl Alkynes with *o*-Methoxycarbonylphenylboronic Acid (Grad. Sch. Sci., Osaka Pref. Univ.) ○UENO, Tamami; UEDA, Mitsuhiko; RYU, Ilhyong
- 2H7-56** Cobalt-Catalyzed [3,3]-Rearrangement of Alkoxy-carbonyloxy Group; Efficient Synthesis of 2-Aminophenol Derivatives (Sch. Sci., Tohoku Univ.)  
○OWADA, Mao; JOU, Takeru; NAKAMURA, Itaru; TERADA, Masahiro
- 2H7-57<sup>#</sup>** Carboxyzincation of alkynes employing carbon dioxide and Zn powder under cobalt catalysis (Grad. Sch. Eng., Kyoto Univ.) ○NOGI, Keisuke; FUJIHARA, Tetsuaki; TERAU, Jun; TSUJI, Yasushi
- 2H7-58** Cobalt-catalyzed carboxylative coupling reaction of alkynes and acrylates employing CO<sub>2</sub> (Grad. Sch. Eng., Kyoto Univ.) ○KUKITA, Susumu; NOGI, Keisuke; FUJIHARA, Tetsuaki; TERAU, Jun; TSUJI, Yasushi

## Saturday, March 26, AM

## Rh

Chair: MITSUDO, Koichi (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(3H7-01, 3H7-02, 3H7-03, 3H7-04, 3H7-05, 3H7-06)
- 3H7-01** Synthesis of Multi-Substituted Dibenzophosphole Oxide Derivatives by Rhodium-Catalyzed Intermolecular [2+2+2] Cycloaddition (Sch. Advanced Sci. Eng., Waseda Univ.) ○SATO, Tatsuki; TAHARA, Yu-ki; KANYIVA, Kyalo-Stephen; SHIBATA, Takanori
- 3H7-02** Enantioselective Synthesis of Aminoindan Carboxylic Acid Derivatives by the Intramolecular [2+2+2] Cycloaddition of Amino Acid-Tethered Triynes (Sch. Advanced Sci. Eng., Waseda Univ.) ○OBINATA, Shuhei; TAHARA, Yu-ki; KANYIVA, Kyalo-Stephen; SHIBATA, Takanori
- 3H7-03** Synthesis of bezoxasilole derivatives by rhodium-catalyzed cycloisomerization involving alkyne and silicon migration (Grad. Sch. Sci., Eng., Tokyo Tech) ○NAMBA, Tomoya; KANNO, Hiroshi; SUGIYAMA, Haruki; TERAOKA, Kota; UEKUSA, Hidehiro; SHIBATA, Yu; TANAKA, Ken
- 3H7-04** Synthesis of Multi-Substituted Fulvenes by Rhodium-Catalyzed [2+2+1] Cycloaddition of Dienes with Cyclopropylideneacetamides (Grad. Sch. Sci., Eng., Tokyo Tech) ○YOSHIZAKI, Soichi; SHIBATA, Yu; NAKAMURA, Yu; MASUTOMI, Koji; YOSHIDA, Tomoka; TANAKA, Ken
- 3H7-05<sup>#</sup>** Development of Highly Efficient Planar-Chiral Phosphine-Olefin Ligands Based on Transition Metal Complexes and Their Application to Asymmetric Reactions (Grad. Sch. Sci., Osaka Pref. Univ.; CRC, Hokkaido Univ.) ○TSENG, Ya-yi; KAMIKAWA, Ken; TAKAHASHI, Tamotsu; OGASAWARA, Masamichi
- 3H7-06** Mechanistic insights into the construction of tetraorganosilicon stereocenters via the rhodium-catalyzed dehydrogenative silylation of C(sp<sup>2</sup>)-H bonds (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○TAKEUCHI, Yutaro; MURAI, Masahito; TAKAI, Kazuhiko

Chair: KONDOH, Azusa (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(3H7-08, 3H7-09, 3H7-11, 3H7-13)
- 3H7-08** Synthesis of Benzosilolothiophene Derivatives by Dehydrogenative Silylation (Grad. Sch. Nat. Sci. Technol., Okayama Univ.; Fac. Eng., Iwate Univ.) ○TANAKA, Seiichi; ISOBUCHI, Ryota; MITSUDO, Koichi; KORENAGA, Toshinobu; SUGA, Seiji
- 3H7-09<sup>#</sup>** Rhodium-Catalyzed C-H Alkenylation of Arylboronic Acids with a Removable *ortho*-Directing Group (Grad. Sch. Eng., Kyoto Univ.)  
○ISHIBASHI, Aoi; YAMAMOTO, Takeshi; SUGINOME, Michinori
- 3H7-11<sup>#</sup>** Coupling Reactions of Anilides with Two Alkynoates Catalyzed by Electron-Deficient Rhodium(III) (Grad. Sch. Sci., Eng., Tokyo Tech; Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) FUKUI, Miho;  
○SHIBATA, Yu; HOSHINO, Yuki; SUGIYAMA, Haruki; TERAOKA, Kota; UEKUSA, Hidehiro; TANAKA, Ken
- 3H7-13** Substituent effect of Phebox-Rh in asymmetric catalytic reactions (Grad. Sch. Eng., Nagoya Univ.) ○ASAOKU, Kana; TAMARU, Masatomo; ITOH, Jun-ichi; NISHIYAMA, Hisao

## Mn, V

Chair: MIYOSHI, Norikazu (11 : 20~12 : 20)

- \* 11:10-11:20: interval for laptop PC connection.(3H7-15, 3H7-16, 3H7-17,

3H7-18, 3H7-19, 3H7-20)

- 3H7-15** Manganese- and Borane-Catalyzed Synthesis of Isobenzofuranones via C-H Bond Activation (Grad. Sch. Pharm., The Univ. of Tokyo; CREST-JST) ○SUEKI, Shunsuke; WANG, Zijia; KUNINOBU, Yoichiro
- 3H7-16** Manganese-Catalyzed Directed Methylation of sp<sup>2</sup> C-H Bond (Grad. Sch. Sci., The Univ. of Tokyo) ○SATO, Takenari; YOSHIDA, Takumi; AL MAMARI, Hamad; ILIES, Laurean; NAKAMURA, Eiichi
- 3H7-17** Catalytic Oxidation of Alcohols with Molecular Oxygen by an Oxovanadium Complex Having Perrhenate Ions. (Grad. Sch. Sci. Eng., Chuo Univ.) ○KOBAYASHI, Daiki; KODAMA, Shintaro; ISHII, Youichi
- 3H7-18** Oxidative Cross-Coupling between Enolates Induced by High-Valent Oxovanadium Catalyst (Grad. Sch. Eng., Osaka Univ.) AMAYA, Toru; ○OSAFUNE, Yuma; HIRAO, Toshikazu
- 3H7-19<sup>#</sup>** Enantioselective and Aerobic Oxidative Coupling of 2-Naphthols Derivatives Using Chiral Dinuclear Vanadium(V) Complex in Water (ISIR, Osaka Univ.) ○SAKO, Makoto; TAKIZAWA, Shinobu; YOSHIDA, Yasushi; SASAI, Hiroaki
- 3H7-20<sup>#</sup>** The development of enantioselective oxidative coupling reactions of 1-naphthol derivatives catalyzed by vanadium(V) complex (ISIR, Osaka Univ.) ○SAKAI, Tomohiro; KODERA, Junpei; TAKIZAWA, Shinobu; SASAI, Hiroaki

## Saturday, March 26, PM

## Sr, Nb

Chair: KIYOKAWA, Kensuke (13 : 40~14 : 30)

- \* 13:30-13:40: interval for laptop PC connection.(3H7-29, 3H7-30, 3H7-31, 3H7-33)
- 3H7-29** Convenient Synthesis of Esters Having Two Different Acetylene Groups Using Acetylene Carboxylic Acid and Metallic Strontium (Fac. Integrated Arts and Sci., Tokushima Univ. Grad. Sch.) ○TAKAHASHI, Haruka; OHMURA, Satoshi; UENO, Masaharu; MIYOSHI, Norikazu
- 3H7-30** Development of Sr-mediated Hydrogenation of Aromatic Hydrocarbons (Fac. Integrated Arts and Sci., Tokushima Univ.) ○OHMURA, Satoshi; UENO, Masaharu; MIYOSHI, Norikazu
- 3H7-31\*** Radical Addition and Hydrodehalogenation Reactions Catalyzed by Niobium Complexes bearing  $\alpha$ -Diimine Ligand (Sch. Eng. Sci., Osaka Univ.) ○NISHIYAMA, Haruka; TSURUGI, Hayato; MASHIMA, Kazushi
- 3H7-33** NbCl<sub>5</sub>-mediated synthesis of pyrimidine derivatives from nitriles and alkynes (Fac. Chem. Materials and Bioeng., Kansai Univ.) ○FUJII, Maito; OBORA, Yasushi

## Room J1

Chishinkan3 Building 210

Organic Chemistry -Reaction and Synthesis-  
Organometallic Compounds

## Thursday, March 24, AM

## Cu

Chair: UMEDA, Rui (9 : 10 ~ 10 : 10)

- \* 9:00-9:10: interval for laptop PC connection.(1J1-02, 1J1-03, 1J1-04, 1J1-06)
- 1J1-02** Copper-catalyzed Intermolecular Hydroamination of Trifluoromethyl Group Substituted Internal Alkynes (Grad. Sch. Integrated Basic Sci., Nihon Univ.; Coll. Hum. Sci., Nihon Univ.) ○SONEHARA, Taro; MINAKAWA, Maki; KAWATSURA, Motoi
- 1J1-03** Copper-Catalyzed [1,3]-Alkoxy Rearrangement for Efficient Synthesis of *ortho*-Alkoxyanilines (Grad. Sch. Sci., Tohoku Univ.) ○JO, Takeru; NAKAMURA, Itaru; TERADA, Masahiro
- 1J1-04<sup>#</sup>** Copper-Catalyzed Highly Regioselective Carboxylation of Ynamides and Allenamides with Functionalized Alkylzinc Halide Reagents and Carbon Dioxide (Grad. Sch. Sci., Eng., Saitama Univ.; RIKEN CSRS) ○GHOLAP, Sandeep Suryabhan; TAKIMOTO, Masanori; HOU, Zhaomin
- 1J1-06\*** Cu(I)-catalyzed Defluorosilylation of Fluoroalkenes with Silylborane (Grad. Sch. Eng., Osaka Univ.) ○SAKAGUCHI, Hironobu; KIKUSHIMA, Kotaro; OHASHI, Masato; OGOSHI, Sensuke
- Chair: NAKAMURA, Itaru (10 : 20~11 : 10)
- \* 10:10-10:20: interval for laptop PC connection.(1J1-09, 1J1-10, 1J1-11, 1J1-12, 1J1-13)
- 1J1-09** DMF-protected Cu nanoparticles catalyzed synthesis of amide compounds from amines and terminal alkynes (Grad. Sch. Sci. and Eng., Kansai Univ.) ○KITAI, Katsuya; OBORA, Yasushi
- 1J1-10** Copper-catalyzed fluorination using acid fluoride as a fluorine source (Grad. Sch. Eng., Osaka Univ.) ○SHIOZAKI, Daigo; KUNIYASU, Hitoshi; NAKAZAKI, Masato; IWASAKI, Takanori; KAMBE, Nobuaki
- 1J1-11** Cu-catalyzed Hydro- and Alkylperfluoroarylation of Conjugated

- Dienes (Grad. Sch. Eng., Osaka Univ.) ○OKAMOTO, Kanako; IWASAKI, Takanori; KUNIYASU, Hitoshi; KAMBE, Nobuaki  
**1J1-12** Synthesis of  $\alpha$ -Aminoboronic Acid Derivatives by Copper-Catalyzed Electrophilic Amination (Grad. Sch. Eng., Osaka Univ.) ○NISHIKAWA, Daiki; HIRANO, Koji; MIURA, Masahiro  
**1J1-13** Copper-Catalyzed Formal [4+1] Cycloaddition of Benzamides and Isonitriles via C-H Cleavage (Grad. Sch. Eng., Osaka Univ.) ○TAKAMATSU, Kazutaka; HIRANO, Koji; MIURA, Masahiro

Chair: IWASAKI, Takanori (11 : 20~12 : 10)

- \* 11:10-11:20: interval for laptop PC connection.(1J1-15, 1J1-16, 1J1-17, 1J1-19)  
**1J1-15** Copper-Catalyzed Stereoselective Hydroalkylations of Terminal Alkynes (Grad. Sch. Sci. Eng., Yamaguchi Univ.) ○NAKAMURA, Kimiaki; NISHIKATA, Takashi; YAMAGUCHI, Norihiro  
**1J1-16** Copper-Catalyzed Arylstannylation of Arynes (Grad. Sch. Eng., Hiroshima Univ.; ACT-C, JST) YOSHIDA, Hiroto; ○KURIKI, Hitoshi; KUBO, Teruhiko; TAKAKI, Ken  
**1J1-17\*** Photo-Induced Carboxylation of Allylic C-H Bonds of Alkenes with CO<sub>2</sub> Catalyzed by Ketone and Copper (Grad. Sch. Eng., Kyoto Univ.) ○MASUDA, Yusuke; ISHIDA, Naoki; UEMOTO, Sho; MURAKAMI, Masahiro  
**1J1-19** Regioselective Synthesis of Multiple Substituted Naphthalenes Using Benzannulation Reaction (Fac. Chem. Materials and Bioeng., Kansai Univ.) ○UEDA, Ryo; HAYASHI, Akitsugu; TANAKA, Taiki; UMEDA, Rui; NISHIYAMA, Yutaka

### Thursday, March 24, PM

Chair: ITO, Hajime (13 : 20~14 : 20)

- \* 13:10-13:20: interval for laptop PC connection.(1J1-27, 1J1-30)  
**1J1-27** Young Scholar Lectures of CSJ A new aspect of Cu-catalyzed alkylation reaction in the presence of an amine. (Grad. Sch. Sci. Eng., Yamaguchi Univ.) ○NISHIKATA, Takashi  
**1J1-30\*** CSJ Award for Young Chemists Development of New Catalytic C-N Bond Formations Based on Electrophilic Amination (Grad. Sch. Eng., Osaka Univ.) ○HIRANO, Koji

### Ni

Chair: KENTARO, Okano (14 : 30~15 : 30)

- \* 14:20-14:30: interval for laptop PC connection.(1J1-34, 1J1-35, 1J1-36, 1J1-37, 1J1-38, 1J1-39)  
**1J1-34** Arylboration of Alkenes by Cooperative Nickel/Copper Catalysis (Grad. Sch. Eng., Kyoto Univ.) ○OHTAGAKI, Yasuhiro; SEMBA, Kazuhiko; NAKAO, Yoshiaki  
**1J1-35** para-Selective Alkylation of Aromatic Carbonyl and Sulfonyl Compounds with Alkenes by Cooperative Nickel/Aluminum Catalysis (Grad. Sch. Eng., Kyoto Univ.) ○OKUMURA, Shogo; TANG, Shuwei; SAITO, Teruhiko; SEMBA, Kazuhiko; SAKAKI, Shigeyoshi; NAKAO, Yoshiaki  
**1J1-36** C-3 Selective Alkenylation of N-Acylindoles by Cooperative Nickel/Aluminum Catalysis (Grad. Sch. Eng., Kyoto Univ.) ○INOUE, Fumiyoshi; SAITO, Teruhiko; SEMBA, Kazuhiko; NAKAO, Yoshiaki  
**1J1-37** Nickel-Catalyzed Iodination of C-H Bonds in Aromatic Amides and Formation of  $\beta$ -Lactams via a Cleavage of C(sp<sup>3</sup>)-H Bond (Grad. Sch. Eng., Osaka Univ.) ○AIHARA, Yoshinori; CHATANI, Naoto  
**1J1-38** Nickel-Catalyzed Methylation of Carbon-Hydrogen Bonds in Aromatic Amides by Using Phenyltrimethylammonium Iodide (Grad. Sch. Eng., Osaka Univ.) ○YAMAGUCHI, Mao; UEMURA, Takeshi; CHATANI, Naoto  
**1J1-39** Nickel-Catalyzed Methylation of Carbon-Hydrogen Bonds in Aromatic Amides by Using Peroxide. (Grad. Sch. Eng., Osaka Univ.) ○KUBO, Teruhiko; CHATANI, Naoto

Chair: SEMBA, Kazuhiko (15 : 40~16 : 40)

- \* 15:30-15:40: interval for laptop PC connection.(1J1-41, 1J1-42, 1J1-43, 1J1-44, 1J1-45, 1J1-46)  
**1J1-41** Thiophene-thiophene bond formation with the coupling reaction at the C-H bond of chlorothiophene (Grad. Sch. Eng., Kobe Univ.) ○FUJITA, Keisuke; NAKAGAWA, Naoki; SUNAHARA, Kazuhiro; OKANO, Kentarou; MORI, Atsunori  
**1J1-42** Studies on the monomer structure in the C-H coupling reactions of thiophene derivatives (Grad. Sch. Eng., Kobe Univ.) ○NAKAGAWA, Naoki; OGURA, Tadayuki; FUJITA, Keisuke; SUMINO, Yugo; FUKUI, Yuta; TANAKA, Shota; OKANO, Kentarou; MORI, Atsunori  
**1J1-43** Studies on the ligand effect in the C-H coupling polymerization of thiophene derivatives (Fac. Eng., Kobe Univ.) ○OGURA, Tadayuki; NAKAGAWA, Naoki; FUJIO, Makoto; HASHIMOTO, Takayoshi; OKANO, Kentaro; MORI, Atsunori  
**1J1-44** Nickel-Catalyzed Homocoupling Reaction of Methoxyarenes via the Carbon-Oxygen Bond Cleavage (Faculty of Engineering, Osaka University) ○NAKAMURA, Keisuke; TOBISU, Mamoru; CHATANI, Naoto  
**1J1-45** Nickel-Catalyzed Methylation of Anisole Derivatives with Trimethylaluminum through the Cleavage of Carbon-Oxygen Bonds (Grad. Sch. Eng., Osaka Univ.) TOBISU, Mamoru; ○MORIOKA, Toshifumi;

NISHIZAWA, Akihiro; CHATANI, Naoto

- 1J1-46** Nickel-Catalyzed Alkylation of Anisoles Using Alkyl Grignard Reagents via Carbon-Oxygen Bond Cleavage (Grad. Sch. Eng., Osaka Univ.) TOBISU, Mamoru; ○TAKAHIRA, Tsuyoshi; CHATANI, Naoto

Chair: KITA, Yusuke (16 : 50~17 : 40)

- \* 16:40-16:50: interval for laptop PC connection.(1J1-48, 1J1-49, 1J1-50, 1J1-51, 1J1-52)  
**1J1-48\*** Hydrogenolysis of Arenols with Hydrosilanes by Nickel Catalysis (Grad. Sch. Eng., Kyoto Univ.) ○OHGI, Akito; NAKAO, Yoshiaki  
**1J1-49** Ni-Catalyzed Amination of Chloroarenes with Primary Amines: Effects of Bisphosphine-Branched Polystyrenes (Fac. Sci., Hokkaido Univ.) ○SHIMADA, Hajime; HARADA, Tomoya; IWAI, Tomohiro; SAWAMURA, Masaya  
**1J1-50** Nickel-Catalyzed Suzuki-Miyaura Cross-Coupling Reaction of Vinyl Ethers with Organoboron Compounds through the Cleavage of Carbon-Oxygen Bonds: Effect of the Ligand (Grad. Sch. Eng., Osaka Univ.) ○OHTSUKI, Akimichi; TOBISU, Mamoru; CHATANI, Naoto  
**1J1-51** Suzuki-Miyaura Type Cross-Coupling Reaction of Aryl Pivalates Using a Nickel/N-Heterocyclic Carbene (NHC) Catalyst (Grad. Sch. Eng., Osaka Univ.) TOBISU, Mamoru; ○YANAGISAWA, Kosuke; OHTSUKI, Akimichi; CHATANI, Naoto  
**1J1-52\*** Nickel-Catalyzed Borylation of Benzyl 2-Pyridyl Ethers through the Cleavage of a Carbon-Oxygen Bond (Grad. Sch. Eng., Osaka Univ.) TOBISU, Mamoru; ○ZHAO, Jiangning; CHATANI, Naoto

Chair: IWAI, Tomohiro (17 : 50~18 : 40)

- \* 17:40-17:50: interval for laptop PC connection.(1J1-54, 1J1-55, 1J1-56, 1J1-57, 1J1-58)  
**1J1-54** Nickel-Catalyzed Direct Selenation of Benzamides with Elemental Selenium (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○MIKI, Natsumi; TSUCHIYA, Yuta; IWASAKI, Masayuki; NISHIHARA, Yasushi  
**1J1-55** Ni-Catalyzed Allylic Alkylation of  $\beta$ -Ketoesters Using Allylamine (Grad. Sch. Eng. Sci., Osaka Univ.) ○SHOJI, Koya; ODA, Hiroaki; KITA, Yusuke; MASHIMA, Kazushi  
**1J1-56** Characterization of Active Species in Catalytic Ullmann Coupling Reaction Mediated by Amorphous Nickel Nanoparticles (Grad. Sch. Eng. Sci., Osaka Univ.; IRC3, AIST; NRI, AIST) ○UEDA, Yohei; YURINO, Taiga; SHIMIZU, Yoshiki; TANAKA, Shinji; TSURUGI, Hayato; SATO, Kazuhiko; MASHIMA, Kazushi  
**1J1-57** Copolymerization of Ethylene and Polar Monomers Using Ni/IZOQO Catalyst (Grad. Sch. Eng., The Univ. of Tokyo) ○NAKANO, Ryo; TAO, Wen-jie; ITO, Shingo; NOZAKI, Kyoko  
**1J1-58** Asymmetric Synthesis of Helicenes via Nickel-Catalyzed Cycloisomerization of Triynes Using Helically Chiral Polymer Ligand (Grad. Sch. Eng., Kyoto Univ.) YAMAMOTO, Takeshi; ○OKITSUKA, Masumi; ADACHI, Takumi; JANCARIK, Andrej; STARÝ, Ivo; STARÁ, Irena G.; SUGINOME, Michinori

### Friday, March 25, AM

Chair: ISHIDA, Naoki (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(2J1-01, 2J1-02, 2J1-03, 2J1-04, 2J1-05)  
**2J1-01** Nickel-catalyzed Boron Insertion into the C2-O Bond of Benzofurans (Dep. Chem., Sch. Sci., Kyoto Univ.) ○SAITO, Hayate; OTSUKA, Shinya; YORIMITSU, Hideki  
**2J1-02\*** Ni-Catalyzed Cyanation of Phenol Derivatives with Aminoacetonitriles (Grad. Sch. Sci., Nagoya Univ.) ○TAKISE, Ryosuke; YAMAGUCHI, Junichiro; ITAMI, Kenichiro  
**2J1-03** Nickel-catalyzed Multi-component coupling reaction of perfluoroarenes with 1,3-butadiene and aryl Grignard reagents (Graduate School of Engineering, Osaka University) ○MIN, Xin; FUKUOKA, Asuka; IWASAKI, Takanori; KUNIYASU, Hitoshi; KAMBE, Nobuaki  
**2J1-04** Synthesis of  $\beta$ -Keto Acid via Decarboxylation of Cyclic Carbonate and Reinsertion of Carbon Dioxide by Using Nickel Catalyst (Grad. Sch. Eng., Nagasaki Univ.) ○NINOKATA, Ryo; ONODERA, Gen; KIMURA, Masanari  
**2J1-05\*** Nickel-catalyzed stannylation of aryl halides and allyl acetates (Grad. Sch. Eng., Hiroshima Univ.) ○KOMEYAMA, Kimihiro; ASAKURA, Ryota; ITAI, Yuuhei; TAKAKI, Ken

Chair: KOMEYAMA, Kimihiro (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(2J1-08, 2J1-09, 2J1-10, 2J1-12)  
**2J1-08** Site-Selective Insertion of CO<sub>2</sub> into the C-Si Bond of Silacyclobutenes (Grad. Sch. Eng., Kyoto Univ.) ○OKUMURA, Shintaro; ISHIDA, Naoki; MURAKAMI, Masahiro  
**2J1-09** Synthesis of Acrylic Acid via Nickelalactone Formed from Ethylene and Carbon Dioxide (Grad. Sch. Pharm., Hokkaido Univ.) ○AWAJI, Naoya; TANIGUCHI, Takahisa; SAITO, Nozomi; SATO, Yoshihiro  
**2J1-10\*** Development of Sulfur-Modified Au-Supported Nickel Catalyst (SANi) and Its Application to Catalytic Carboxylation of Multiple Bonds (Grad. Sch. Pharm., Hokkaido Univ.; Sch. Pharm., Osaka Univ.) ○TANIGUCHI, Takahisa; SAITO, Nozomi; HOSHIYA, Naoyuki;

FUJIKI, Katsumasa; SHUTO, Satoshi; FUJIOKA, Hiromichi; ARISAWA, Mitsuhiro; SATO, Yoshihiro

**2J1-12\*** Synthesis of diverse aromatic compounds via aryl-nickel complexes (RIKEN CLST) ○SUMIDA, Yuto; SUMIDA, Tomoe; HOSOYA, Takamitsu

Chair: SUMIDA, Yuto (11 : 20~12 : 10)

\* 11:10-11:20: interval for laptop PC connection.(2J1-15, 2J1-16, 2J1-17, 2J1-18, 2J1-19)

**2J1-15** Nickel-Catalyzed Reductive Coupling of Difluoropropenes with Iodoarenes via C-F Bond Activation (Div. of Chem., Fac. Pure Appl. Sci., Univ. of Tsukuba) ○KOBAYASHI, Yutaro; ICHITSUKA, Tomohiro; FUJITA, Takeshi; ICHIKAWA, Junji

**2J1-16** Nickel-Catalyzed Redox-Economical Coupling of Alcohols and Alkynes (Grad. Sch. Eng., Kyoto Univ.; ACT-C, JST) ○TAKAHASHI, Toshifumi; MAEDA, Kazuki; KURAHASHI, Takuya; MATSUBARA, Seiji

**2J1-17<sup>#</sup>** Convertible Three-component Domino Reactions of Bis(iodozinc) methane, Alkyne, and Aryl Iodide Controlled by Transition Metal Catalyst (Grad. Sch. Eng., Kyoto Univ.) ○SHIMIDA, Yukako; MATSUBARA, Seiji

## Zn

**2J1-18** Carbozincation of Ynol Ethers Using Zinc Salts and Silyl Ketene Acetals. (Grad. Sch. Eng., Osaka Univ.) NISHIMOTO, Yoshihiro; ○KANG, Kyoungmin; YASUDA, Makoto

**2J1-19** Zinc catalysts assisted transformations of ethanolamides via acyl rearrangement (Grad. Sch. Eng. Sci., Osaka Univ.) ○HIRAI, Takahiro; NISHII, Yuji; KITA, Yusuke; MASHIMA, Kazushi

## Friday, March 25, PM

### Co

Chair: SATOH, Tetsuya (13 : 20~14 : 20)

\* 13:10-13:20: interval for laptop PC connection.(2J1-27, 2J1-30)

**2J1-27<sup>#</sup>** Young Scholar Lectures of CSJ Anionic complexes of group 9 metals: reactivities and catalytic activities (Grad. Sch. Eng., Osaka Univ.) ○IWASAKI, Takanori

### Bi

**2J1-30** Young Scholar Lectures of CSJ Transition-metal Catalyzed Efficient Synthesis and Properties of Functionalized Polycyclic Aromatic Hydrocarbons (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○MURAI, Masahito

### Pt

Chair: TOBISU, Mamoru (14 : 30~15 : 30)

\* 14:20-14:30: interval for laptop PC connection.(2J1-34, 2J1-36, 2J1-37, 2J1-38, 2J1-39)

**2J1-34<sup>#</sup>** Carbon-Carbon Bond-Forming Catalytic Properties of Zwitterionic Platinum Complexes Prepared from Alkyne-Based Bisphosphine Ligand Precursors (Grad. Sch. Eng., Kyoto Univ.) ○OKAMOTO, Kazuhiro; FUNASAKA, Satoshi; OHE, Kouichi

**2J1-36** Pt<sup>II</sup>-Pincer Complex Catalyzed C-H Borylation of Arenes and Alkenes (Grad. Sch. Sci., Eng., Tokyo Tech) ○ITO, Shisei; TAKAYA, Jun; IWASAWA, Nobuharu

**2J1-37** Chiral Platinum-Catalyzed Enantioselective Cycloisomerization for the Synthesis of Planar-Chiral Ferrocene Derivatives (Sch. Advanced Sci. Eng., Waseda Univ.) ○UNO, Ninna; SASAKI, Tomoya; KANYIVA, Kyalo-Stephen; SHIBATA, Takanori

### Pd

**2J1-38<sup>#</sup>** Salicylimine as a Directing Group for  $\gamma$ -C(sp<sup>3</sup>)-H Arylation of Amino Groups (Grad. Sch. Eng., Kyoto Univ.; Grad. Sch. Eng., Kyoto Univ.) ○LIAO, Wenqing; ISHIHARA, Yumi; SATO, Yuta; YADA, Akira; MURAKAMI, Masahiro

**2J1-39** Salicylimine as a Directing Group for  $\gamma$ -C(sp<sup>2</sup>)-H Arylation and Alkylation of Amino Groups (Grad. Sch. Eng., Kyoto Univ.) ○ISHIHARA, Yumi; LIAO, Wenqing; SATO, Yuta; YADA, Akira; MURAKAMI, Masahiro

Chair: TAKAYA, Jun (15 : 40~16 : 40)

\* 15:30-15:40: interval for laptop PC connection.(2J1-41, 2J1-42, 2J1-44, 2J1-45)

**2J1-41** Palladium-Catalyzed Synthesis of Benzothiophenes via the Carbon-Sulfur Bond Cleavage (Grad. Sch. Eng., Osaka Univ.) TOBISU, Mamoru; ○MASUYA, Yoshihiro; CHATANI, Naoto

**2J1-42<sup>#</sup>** Platinum-Catalyzed Borylation of Carbon-Hydrogen Bonds in Arenes (Grad. Sch. Eng., Osaka Univ.) TOBISU, Mamoru; ○FURUKAWA, Takayuki; CHATANI, Naoto

**2J1-44** A Pd-catalyzed direct arylation of diarylfurans at bulky C-H bond (Grad. Sch. Sci. Eng., Yamaguchi Univ.) ○YAMANE, Yu; YAMAGUCHI, Yosui; ISHIKAWA, Shingo; NISHIKATA, Takashi

**2J1-45<sup>#</sup>** Palladium-Catalyzed C(sp<sup>2</sup>)-H Fluorination (Harvard Univ.; Max-Planck-Institut für Kohlenforschung) ○YAMAMOTO, Kumiko; GARBER, Jeffrey A. O.; ROLFES, Julian D.; BORGES, Jannik; BOURSALIAN, Gregory B.; RITTER, Tobias

Chair: YADA, Akira (16 : 50~17 : 40)

\* 16:40-16:50: interval for laptop PC connection.(2J1-48, 2J1-49, 2J1-50, 2J1-51, 2J1-52)

**2J1-48** Synthesis of Fused Furan Compounds via Palladium(II)-Catalyzed Intramolecular Dehydrocyclization (Grad. Sch. Eng., Osaka Univ.) ○KAIDA, Hiroyuki; HIRANO, Koji; SATOH, Tetsuya; MIURA, Masahiro

**2J1-49** Palladium(II)-Catalyzed Direct C-H Alkenylation of Fused Heteroarenes (Grad. Sch. Eng., Osaka Univ.) ○MORITA, Tomohiro; SATOH, Tetsuya; MIURA, Masahiro

**2J1-50** Synthesis of multi-functionalized imidazoles via C-H selective arylation (Fac. Eng., Gifu Univ.) ○HAYANO, Tepei; YAMAUCHI, Takayuki; SHIBAHARA, Fumitoshi; MURAI, Toshiaki

**2J1-51** Palladium-Catalyzed Ring-Reconstruction of Alkene-Tethered Isoxazoles into Pyrroles (Sch. Eng., Kyoto Univ.) OKAMOTO, Kazuhiro; ○SASAKI, Masumi; NANYA, Atsushi; OHE, Kouichi

**2J1-52** Palladium-Catalyzed Synthesis of Ketones from Aldehydes and Aryl Halides (Grad. Sch. Pharm., The Univ. of Tokyo) ○WAKAKI, Takayuki; KUNINOBU, Yoichiro; KANAI, Motomu

Chair: KUNINOBU, Yoichiro (17 : 50~18 : 40)

\* 17:40-17:50: interval for laptop PC connection.(2J1-54, 2J1-55, 2J1-57)

**2J1-54** Palladium-Catalyzed Three-Component Reaction of 3-(Pinacolatoboryl)allyl Acetates, Aldehydes, and Organostannanes (Grad. Sch. Sci. Eng. For Edu., Univ. of Toyama) HORINO, Yoshikazu; ○SUGATA, Miki; ABE, Hitoshi

**2J1-55<sup>#</sup>** Pd-catalyzed sequential arylation of methyl sulfone derivatives toward straightforward synthesis of multiply-arylated methanes (WPI-ITbM, Nagoya Univ.) ○NAMBO, Masakazu; YIM, Jacky C.-H.; CRUDDEN, Cathleen M.

**2J1-57<sup>#</sup>** Pd-catalyzed Desulfonative Cross-Coupling of Diarylmethyl Sulfones with Oxazoles (WPI-ITbM, Nagoya Univ.) ○YIM, Jacky C.-H.; NAMBO, Masakazu; CRUDDEN, Cathleen M.

## Saturday, March 26, AM

Chair: ONODERA, Gen (9 : 00 ~10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(3J1-01, 3J1-02, 3J1-03, 3J1-04, 3J1-05, 3J1-06)

**3J1-01** Development of the enantioselective remote [3+2] cycloaddition of  $\alpha$ ,  $\beta$ - $\gamma$ ,  $\delta$ -unsaturated carbonyl compounds with chiral Pd Lewis acid catalyst (Grad. Sch. Sci., Eng., Tokyo Tech) ○HONDA, Kazuya; AIKAWA, Kohsuke; KOICHI, Mikami

**3J1-02** Development of Enantioselective Hydrocarboxylation Catalyzed by Si-chiral P<sup>III</sup>-pincer Palladium Complexes (Grad. Sch. Sci., Eng., Tokyo Tech) ○YAMADA, Ryosuke; ITO, Tatsuyoshi; TAKAYA, Jun; IWASAWA, Nobuharu

**3J1-03** Development of asymmetric nucleophilic addition of dichloroacetonitrile with imines using chiral bis(imidazoline)-palladium catalyst (Grad. Sch. Eng., Nagoya Inst. of Tech.) ○SUGIMOTO, Mami; NAKAMURA, Shuichi

**3J1-04** Palladium-Catalyzed Oxidative Dehydroboration of Boron Enolates (ISIR, Osaka Univ.) ○SAKAMOTO, Yuki; AMAYA, Toru; SUZUKI, Takeyuki; HIRAO, Toshikazu

**3J1-05** Palladium/Light Combined System for Cross-coupling Reaction of Alkyl Iodides with Vinyl and Allyl Sulfones (Grad. Sch. Sci., Osaka Pref. Univ.) ○SUMINO, Shuhei; FUKUYAMA, Takahide; RYU, Ilhyong

**3J1-06** Chain-Walking Cycloisomerization of 1,n-Dienes Catalyzed by Pyridine-Oxazoline Palladium Complexes (Fac. Sci. Tech., Keio Univ.) ○HAMASAKI, Taro; KAKIUCHI, Fumitoshi; KOCHI, Takuya

Chair: KOCHI, Takuya (10 : 10~11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(3J1-08, 3J1-09, 3J1-10, 3J1-11, 3J1-12, 3J1-13)

**3J1-08** Catalytic Decarbonylative Alkynylation of Aromatic Esters (Grad. Sch. Sci., Nagoya Univ.) ○KUMAZAWA, Kazushi; TAKISE, Ryosuke; YAMAGUCHI, Junichiro; ITAMI, Kenichiro

**3J1-09** Catalytic Decarbonylative Etherification of Aromatic Esters (Grad. Sch. Sci., Nagoya Univ.) ○TAKISE, Ryosuke; YAMAGUCHI, Junichiro; ITAMI, Kenichiro

**3J1-10<sup>#</sup>** Palladium-Catalyzed Regio- and Stereoselective Carbothiolation of Terminal Alkynes with Benzothiazolyl Sulfides (Grad. Sch. Nat. Sci. Technol., Okayama Univ.; Department of Chemistry, Aichi University of Education) ○IWASAKI, Masayuki; TOPOLOVCAN, Nikola; HU, Hao; NISHIMURA, Yugo; GAGNOT, Glwadys; YUVACHARASKUL, Ramida; NAKAJIMA, Kiyohiko; NISHIHARA, Yasushi

**3J1-11** Synthesis of Phenanthrenes by Palladium-Catalyzed Three-Component Coupling of Aryl Bromides, Internal Alkynes, and *o*-Bromobenzyl Alcohols (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○ARAKI, Yasuhiro; IWASAKI, Masayuki; NISHIHARA, Yasushi

- 3J1-12** Palladium-Catalyzed Allylic Alkylation by Using Phosphine-Borane Ligand (Grad. Sch. Eng., Nagasaki Univ.) ○SHIMIZU, Aika; HIRATA, Goki; ONODERA, Gen; KIMURA, Masanari
- 3J1-13** Palladium-catalyzed reaction of alkynyltin from diazonaphthoquinone (Grad. Sch. Eng., KIT; Grad. Sch. Eng., KIT) ○TAKAHASHI, Shuhei; OKAUCHI, Tatsuo; KITAMURA, Mitsuru

Chair: NISHIHARA, Yasushi (11 : 20~12 : 20)

\* 11:10-11:20: interval for laptop PC connection.(3J1-15, 3J1-17, 3J1-18)

- 3J1-15<sup>#</sup>** Palladium-Catalyzed Arylation of Alkylamines or Ketimines with Aryl Sulfides (Dep. Chem., Sch. Sci., Kyoto Univ.) ○GAO, Ke; YORIMITSU, Hideki; OSUKA, Atsushi
- 3J1-17** Base-Free Palladium-Catalyzed Reduction of Aryl Chlorides with Pinacolborane (Dep. Chem., Sch. Sci., Kyoto Univ.) ○YAMAMOTO, Yutaro; YORIMITSU, Hideki; OSUKA, Atsushi
- 3J1-18<sup>#</sup>** Young Scholar Lectures of CSJ Development of Transition-Metal Complexes Directed toward Transformation of Perfluoro Compounds into Valuable Organofluorine Compounds (Grad. Sch. Eng., Osaka Univ.) ○OHASHI, Masato

### Saturday, March 26, PM

Chair: OHASHI, Masato (13 : 40~14 : 40)

\* 13:30-13:40: interval for laptop PC connection.(3J1-29, 3J1-31, 3J1-32, 3J1-33)

- 3J1-29<sup>#</sup>** Palladium-Catalyzed APEX Reaction for Synthesis of  $\pi$ -Extended Aromatics (Grad. Sch. Sci., Nagoya Univ.; WPI-ITbM, Nagoya Univ.; ERATO, JST) ○ITO, Hideto; OZAKI, Kyohei; SHIBATA, Mari; YANO, Yuuta; KAWASUMI, Katsuaki; ITAMI, Kenichiro
- 3J1-31** Bottom-up Synthesis of Graphene Nanoribbons by APEX Polymerization (Grad. Sch. Sci., Nagoya Univ.; WPI-ITbM, Nagoya Univ.; ERATO, JST) ○YANO, Yuuta; ITO, Hideto; ITAMI, Kenichiro
- 3J1-32** Reductive Cross-Coupling of Alkynes and Aryl Iodides with Hydrogen by Cooperative Palladium/Copper Catalysis (Grad. Sch. Eng., Kyoto Univ.) ○KAMEYAMA, Ryohei; SEMBA, Kazuhiko; NAKAO, Yoshiaki
- 3J1-33<sup>#</sup>** Mechanistic Studies on Hydroarylation of Alkenes by Cooperative Palladium/Copper Catalysis (Grad. Sch. Eng., Kyoto Univ.) ○SEMBA, Kazuhiko; ZHENG, Hong; KAMEYAMA, Ryohei; SAKAKI, Shigeyoshi; NAKAO, Yoshiaki

## Room J2

Chishinkan3 Building 213

### Organic Chemistry -Reaction and Synthesis- Organometallic Compounds

Thursday, March 24, AM

#### Ru

Chair: TAKENAKA, Kazuhiro (9 : 40 ~10 : 40)

\* 9:30-9:40: interval for laptop PC connection.(1J2-05, 1J2-06, 1J2-07, 1J2-08, 1J2-09, 1J2-10)

- 1J2-05** Ruthenium-Catalyzed Regioselective Acetoxylation of Aromatic C-H Bond (Grad. Sch. Eng., Osaka Univ.) ○OKADA, Takeshi; SATOH, Tetsuya; MIURA, Masahiro
- 1J2-06<sup>#</sup>** Highly Stereoselective Cyclopropanation of Functionalized diazoketones Catalyzed by Chiral Ru(II)-Pheox Complexes (Dept. Env. Life Sci., Toyohashi Univ. of Tech.) ○SUHARTO, Agus; CHANTHAMATH, Soda; SHIBATOMI, Kazutaka; IWASA, Seiji
- 1J2-07** Kinetic Resolution of Branched Monosubstituted Allylic Acetates by Ruthenium-catalyzed Asymmetric Allylic Etherification (Grad. Sch. Integrated Basic Sci., Nihon Univ.) ○SHINOZAWA, Toru; TERASAKI, Shou; MINAKAWA, Maki; KAWATSURA, Motoi
- 1J2-08** Ru(0)-Catalyzed C3 Selective Coupling of Dihydrofuran and Dihydropyrrole with Conjugated Dienes (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○MURAKAMI, Tasuku; KOMINE, Nobuyuki; HIRANO, Masafumi
- 1J2-09** Double Asymmetric Hydrogenation of  $\beta, \beta$ -Disubstituted  $\alpha, \beta$ -Unsaturated Ketones Catalyzed by Ruthenium(I) Complex (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) ○KOMATSU, Ryo; SATOH, Hironori; ARAI, Noriyoshi; OHKUMA, Takeshi
- 1J2-10** Ruthenium-Catalyzed Unprecedented Cycloisomerization Reaction of 1,6-Diynes with Styryl Terminal (Grad. Sch. Pharm. Sci., Nagoya Univ.) ○NISHIMURA, Keiichi; YAMAMOTO, Yoshihiko; SHIBUYA, Masatoshi

Chair: NISHIMOTO, Yoshihiro (10 : 50~11 : 50)

\* 10:40-10:50: interval for laptop PC connection.(1J2-12, 1J2-13, 1J2-14, 1J2-15, 1J2-16, 1J2-17)

- 1J2-12** Mechanistic Study for Oxidation of Methoxybenzenes Catalyzed by

Ruthenium Complex-Bound Norvaline (ICR, Kyoto Univ.; Sch. Eng., Kyoto Univ.) ○YOSHIDA, Ryota; ISOZAKI, Katsuhiro; YOKOI, Tomoya; TAKAYA, Hikaru; NAKAMURA, Masaharu

- 1J2-13** Oxidative Degradation of Lignin Catalyzed by Ruthenium Complex-Bound Norvaline (ICR, Kyoto Univ.; Sch. Eng., Kyoto Univ.) ○YOSHIDA, Ryota; ISOZAKI, Katsuhiro; YOKOI, Tomoya; WATANABE, Takashi; NISHIMURA, Hiroshi; KATAHIRA, Masato; TAKAYA, Hikaru; NAKAMURA, Masaharu

#### Pd

- 1J2-14** Development of an efficient synthetic method for multiply arylated thiophenes utilizing the halogen dance reaction (Grad. Sch. Eng., Kobe Univ.) ○SUNAHARA, Kazuhiro; YAMANE, Yoshiki; OKANO, Kentaro; MORI, Atsunori
- 1J2-15** Halogen dance reaction of bromothiophenes using magnesium bisamide (Fac. Eng., Kobe Univ.) ○YAMANE, Yoshiki; SUNAHARA, Kazuhiro; OKANO, Kentaro; MORI, Atsunori
- 1J2-16** Development of deprotonative generation of cycloalkynes from enol triflates using magnesium bisamide (Fac. Eng., Kobe Univ.) ○HIOKI, Yuto; OKANO, Kentaro; MORI, Atsunori
- 1J2-17** Aminosilylation of 1,3-dienes catalyzed by palladium (Fac. Chem. Materials and Bioeng., Kansai Univ.) ○KAWAKUBO, Atsushi; LIN, Xianjin; OBORA, Yasushi

### Thursday, March 24, PM

Chair: OBORA, Yasushi (13 : 00~14 : 00)

\* 12:50-13:00: interval for laptop PC connection.(1J2-25, 1J2-27, 1J2-28, 1J2-29, 1J2-30)

- 1J2-25<sup>#</sup>** Palladium Enolate Umpolung: Cyclative Haloacetoxylation of Alkynyl Cyclohexadienones (ISIR, Osaka Univ.) ○TAKENAKA, Kazuhiro; MOHANTA, Suman Chandra; SASAI, Hiroaki
- 1J2-27<sup>#</sup>** Palladium Enolate Umpolung: Cyclative Hydroacyloxylation of Alkynyl Cyclohexadienones (ISIR, Osaka Univ.) ○SAWADA, Kazuya; MOHANTA, Suman Chandra; TAKENAKA, Kazuhiro; SASAI, Hiroaki
- 1J2-28** Palladium-catalyzed regioselective double substitution of 2-fluoroallyl esters with phenols and imides (Grad. Sch. Integrated Basic Sci., Nihon Univ.) ○KOGAWA, Masaki; YAMAMOTO, Mitsuaki; WATANABE, Hirotaka; MINAKAWA, Maki; KAWATSURA, Motoi
- 1J2-29** Palladium-catalyzed alkylation of fluorine-containing allylic ester includes the construction of trifluoromethyl group (Grad. Sch. Integrated Basic Sci., Nihon Univ.) ○HANAKAWA, Taisyun; MINAKAWA, Maki; KAWATSURA, Motoi
- 1J2-30** The Heck Reaction with a Highly Active Palladium NNC-Pincer Complex (Sch. Physical Sci., SOKENDAI; Devision of Complex Catalysis, IMS; JST-ACCEL) ○ICHIH, Shun; HAMASAKA, Go; UOZUMI, Yasuhiro

Chair: MURAKAMI, Kei (14 : 10~15 : 10)

\* 14:00-14:10: interval for laptop PC connection.(1J2-32, 1J2-33, 1J2-34, 1J2-35, 1J2-36, 1J2-37)

- 1J2-32<sup>#</sup>** Efficient Synthesis of Spiro-type Chiral Ligands Based on Direct C5 Arylation of Isoxazoles (ISIR, Osaka Univ.) ○SHIGENOBU, Masashi; TAKENAKA, Kazuhiro; SASAI, Hiroaki
- 1J2-33<sup>#</sup>** Effect of the Chain Length on Palladium-Catalyzed Coupling Reactions with *N*-Heterocyclic Carbene Ligands Bearing Poly(ethylene glycol) Chains (Grad. Sch. Eng., Kyoto Univ.) ○SATOU, Motoi; YOSHIKAWA, Takahiro; FUJIHARA, Tetsuaki; TERAU, Jun; TSUJI, Yasushi
- 1J2-34** Synthesis of Novel Single-Nano-Sized Pd Particles and Their use in Catalysis (Fac. Chem. Materials and Bioeng., Kansai Univ.) ○ISHIDA, Junya; OBORA, Yasushi
- 1J2-35** Ti-Pd alloys catalyzed Suzuki-Miyaura cross coupling reaction (Fac. Chem. Materials and Bioeng., Kansai Univ.) ○AZUMA, Ryusei; NAKAMICHI, Seiya; KONDO, Ryota; OBORA, Yasushi
- 1J2-36<sup>#</sup>** The Suzuki-Miyaura cross-coupling with a palladium catalyst at parts per million levels (LCCMS, IMS) ○ROY, David; HAMASAKA, Go; UOZUMI, Yasuhiro
- 1J2-37** Synthesis of  $\gamma$ -Amino- $\alpha, \beta$ -unsaturated Esters Utilizing Pd-catalyzed Rearrangement of Allylic Carbamates (Grad. Sch. Sci., Tohoku Univ.) ○KAMATA, Yuji; KONDOH, Azusa; TERADA, Masahiro

Chair: YOSHIDA, Suguru (15 : 20~16 : 20)

\* 15:10-15:20: interval for laptop PC connection.(1J2-39, 1J2-40, 1J2-41, 1J2-42, 1J2-43, 1J2-44)

- 1J2-39** Pd nanoclusters catalyzed allylic silylation with disilane (Fac. Chem. Materials and Bioeng., Kansai Univ.) ○ONISHI, Kaito; LIN, Xianjin; OBORA, Yasushi
- 1J2-40** Single-nano-sized Pd Nanoclusters Catalyzed Cross-Coupling Reaction of Aryl Halides with Silanes (Fac. Chem. Materials and Bioeng., Kansai Univ.) ○ISHIMOTO, Shinya; LIN, Xianjin; NAKAMICHI, Seiya; OKA, Hideo; OBORA, Yasushi
- 1J2-41** Palladium-Catalyzed Cross-Coupling of Acyl Chlorides or Fluorides with Organosilicon Compounds for Construction of Benzophenone Derivatives (Fac. Sci. Technol., Tokyo Univ. of Sci.) ○SAKINO, Daisuke; OGIWARA, Yohei; SAKAI, Norio

**1J2-42<sup>#</sup>** Allylarylation of Alkenes by Cooperative Palladium/Copper Catalysis (Grad. Sch. Eng., Kyoto Univ.) ○OHTA, Naoki; SEMBA, Kazuhiko; SAITO, Teruhiko; NAKAO, Yoshiaki

## Cu

**1J2-43** Cu-catalyzed allylic alkylation reaction via C-C bond cleavage (Grad. Sch. Sci. Eng., Yamaguchi Univ.) ○YUSHI, Noda; WADA, Masaru; NISHIKATA, Takashi

**1J2-44** Mechanism-based rational ligand design for Cu-catalyzed aromatic C-H imidation (Grad. Sch. Sci., Nagoya Univ.) ○KAWAKAMI, Takahiro; HAINES, Brandon; MURAKAMI, Kei; MUSAEV, Djmaladdin; ITAMI, Kenichiro

Chair: NISHIMOTO, Yoshihiro (16 : 30~17 : 30)

\* 16:20-16:30: interval for laptop PC connection.(1J2-46, 1J2-47, 1J2-48, 1J2-49, 1J2-50, 1J2-51)

**1J2-46** Copper-Catalyzed Synthesis of Sulfinamides via Coupling of Thiols with Amines (Sch. of Med., Fukushima Med. Univ.) ○TANIGUCHI, Nobukazu

**1J2-47** Cu-Catalyzed Defluoroborylation of Fluoroarenes (RIKEN CLST) ○NIWA, Takashi; OCHIAI, Hidenori; HOSOYA, Takamitsu

**1J2-48** Development of Cycloalkyne-Copper Complexes Purifiable by Silica-Gel Column Chromatography (IBB, Tokyo Med. and Dental Univ.; IMCE, Kyushu Univ.) ○MAKIO, Naoki; HATAKEYAMA, Yasutomo; KARAKI, Fumika; IGAWA, Kazunobu; TOMOOKA, Katsuhiko; YOSHIDA, Suguru; HOSOYA, Takamitsu

**1J2-49** Facile Synthesis of Thioxanthone Derivatives via Copper-Catalyzed Odorless Thiolation (IBB, Tokyo Med. and Dental Univ.) ○MUTSUURA, Kotaro; UCHIDA, Keisuke; YOSHIDA, Suguru; HOSOYA, Takamitsu

**1J2-50** Double cross-coupling of Bis(triorganosilyl)arenes using a Copper catalyst (Grad. Sch. Sci. Eng., Chuo Univ.) ○KOMIYAMA, Takeshi; MINAMI, Yasunori; HIYAMA, Tamejiro

## B, Al, Ga, In

**1J2-51<sup>#</sup>** Mesoionic Carbene-Stabilized Borenum Catalyzed Hydrosilylation of C=N Double Bond (Queen's University) ○KOJIMA, Ryoto; BESTVATER, Brian; EISENBERGER, Patrick; CRUDDEN, Cathleen M.

Chair: NIWA, Takashi (17 : 40~18 : 40)

\* 17:30-17:40: interval for laptop PC connection.(1J2-53, 1J2-55, 1J2-56, 1J2-57, 1J2-58)

**1J2-53<sup>\*</sup>** A strategy to control the revival of frustrated Lewis pairs from shelf-stable carbene-borane complexes (Grad. Sch. Eng., Osaka Univ.) ○HOSHIMOTO, Yoichi; KINOSHITA, Takuya; OHASHI, Masato; OGOSHI, Sensuke

**1J2-55** Tris(pentafluorophenyl)borane-catalyzed dehydrogenation of alcohols with hydrosilanes controlled by Lewis bases (Dept. of Chem. Eng., NNCT) ○IWAIDA, Kohji; ICHII, Shun; KUROSAKI, Ryo; KAMEI, Toshiyuki; SHIMADA, Toyoshi

**1J2-56** Diisobutylaluminum Hydride-Promoted Cyclization of 1,4-Disilyl-1,3-enynes to Polysubstituted Siloles (Applied Chemistry, Saitama University) ○UEDA, Akihiro; KINOSHITA, Hidenori; MIURA, Katsukiyo

**1J2-57<sup>#</sup>** Development and Mechanistic Investigation of GaBr<sub>3</sub> Catalyzed Coupling Reaction Using Enol Derivatives Based on Theoretical Calculation (Grad. Sch. Eng., Osaka Univ.) NISHIMOTO, Yoshihiro; ○KITA, Yuji; YASUDA, Makoto

**1J2-58** Effect of Additives on Reactions of Allylic Indium Reagents in Ionic Liquids (Grad Sch. Eng., Nagoya Inst. of Tech.) ○NODA, Takayuki; HIRASHITA, Tsunehisa; ARAKI, Shuki

## Friday, March 25, AM

## Cu

Chair: YOSHIDA, Hiroto (9 : 00 ~ 10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(2J2-01, 2J2-02, 2J2-03, 2J2-05, 2J2-06)

**2J2-01** Copper-Catalyzed Silaformylation of Allenes Using Silyboranes and Formates (Grad. Sch. Eng., Kyoto Univ.) ○YAMAGUCHI, Tatsuya; TANI, Yosuke; FUJIHARA, Tetsuaki; TERAU, Jun; TSUJI, Yasushi

**2J2-02** Copper-Catalyzed Boraformylation of Allenes Using Diboranes and Formates (Grad. Sch. Eng., Kyoto Univ.) ○SAWADA, Ayumi; YAMAGUCHI, Tatsuya; FUJIHARA, Tetsuaki; TERAU, Jun; TSUJI, Yasushi

**2J2-03<sup>#\*</sup>** Asymmetric Synthesis of  $\alpha$ -Chiral  $\gamma$ -Functionalized Allylboronates via Copper(I)-Catalyzed  $\gamma$ -Boryl Substitution Reaction of Allylic Amines and Acylals (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) ○TAKENOUCHE, Yuta; KOJIMA, Ryoto; ITO, Hajime

**2J2-05** Copper-Catalyzed Enantioselective Allyl-Allyl Coupling between Allylboronates and Primary Allylic Phosphates (Fac. Sci., Hokkaido Univ.) ○YASUDA, Yuto; OHMIYA, Hirohisa; SAWAMURA, Masaya

**2J2-06** Construction of Quaternary Stereogenic Carbon Centers through Copper-Catalyzed Enantioselective Allylic Alkylation of Terminal Alkyne

Pronucleophiles (Fac. Sci., Hokkaido Univ.) ○SHIBATA, Saori; HARADA, Ayumi; OHMIYA, Hirohisa; SAWAMURA, Masaya

Chair: FUJIHARA, Tetsuaki (10 : 10~11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(2J2-08, 2J2-09, 2J2-10, 2J2-11, 2J2-12, 2J2-13)

**2J2-08** Copper-Catalyzed Borylstannylation with a Stannyl Fluoride (Grad. Sch. Eng., Hiroshima Univ.) YOSHIDA, Hiroto; ○KIMURA, Miki; TAKAKI, Ken

**2J2-09<sup>#</sup>** Copper-Catalyzed Three-component Carboboration of Alkenes with a Masked Diboron (Grad. Sch. Eng., Hiroshima Univ.) YOSHIDA, Hiroto; ○KAGEYUKI, Ikuo; TAKAKI, Ken

**2J2-10<sup>#</sup>** Copper-Catalyzed Reaction of a Masked Diboron with Organic Halides (Grad. Sch. Eng., Hiroshima Univ.) ○YOSHIDA, Hiroto; TAKEMOTO, Yuki; TAKAKI, Ken

**2J2-11** Copper-Catalyzed Enantioselective Intramolecular Allylic Substitution with Alkylboranes (Fac. Sci., Hokkaido Univ.) ○HOJOH, Kentaro; OHMIYA, Hirohisa; SAWAMURA, Masaya

**2J2-12** Helically Chiral Poly(quinioxaline-2,3-diyl)s Bearing Bipyridyl Pendants: Synthesis and Application for Copper Catalyzed Asymmetric Reactions (Grad. Sch. Eng., Kyoto Univ.) ○YOSHINAGA, Yukako; YAMAMOTO, Takeshi; SUGINOME, Michinori

**2J2-13** Chiral copper or silver complexes catalyzed asymmetric Michael addition of oxazoline esters and thiazoline esters to nitroalkenes (Grad. Sch. Sci. Eng., Chuo Univ.) ○KOIZUMI, Akihiro; MATSUDA, Yukiko; TOKORO, Yuichiro; FUKUZAWA, Shin-ichi

Chair: TOKORO, Yuichiro (11 : 20~12 : 20)

\* 11:10-11:20: interval for laptop PC connection.(2J2-15, 2J2-16, 2J2-17, 2J2-19, 2J2-20)

**2J2-15** Copper(I)-Catalyzed Regio- and Stereoselective Dearomative Carboborylation of Indoles (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) ○HAYAMA, Keiichi; KUBOTA, Koji; IWAMOTO, Hiroaki; ITO, Hajime

**2J2-16** Copper(I)-Catalyzed Markovnikov Hydroboration of Alkyl Group-Substituted Terminal Alkenes (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) ○IWAMOTO, Hiroaki; IWAMOTO, Hiroaki; ITO, Hajime

**2J2-17<sup>\*</sup>** Highly Regioselective Synthesis of (2-Aryloxy)-2- and 3-Butenoic Acids from Aryl Allyl Ethers by a Cu-Catalyzed Formal C-H Carboxylation (RIKEN) ○TAKIMOTO, Masanori; UENO, Astushi; HOU, Zhaomin

**2J2-19<sup>#</sup>** Copper-catalyzed regio- and stereo selective hydroallylation of allenes using hydrosilanes and allyl chlorides (Grad. Sch. Eng., Kyoto Univ.) ○YOKOTA, Ken; FUJIHARA, Tetsuaki; TERAU, Jun; TSUJI, Yasushi

**2J2-20** Cu-Catalyzed Regio- and Stereoselective Three-Component Coupling Reaction of Organoboranes, Terminal Alkynes and Carbon Dioxide (Grad. Sch. Eng., Nagasaki Univ.) ○KUGE, Kenta; MORI, Yasuyuki; ONODERA, Gen; KIMURA, Masanari

## Friday, March 25, PM

Chair: FUKUYAMA, Takahide (13 : 30~14 : 30)

\* 13:20-13:30: interval for laptop PC connection.(2J2-28, 2J2-30, 2J2-31, 2J2-32, 2J2-33)

**2J2-28<sup>\*</sup>** Copper(I)-Catalyzed Regio- and Enantioselective Borylation of 1,2-Dihydropyridines (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) ○KUBOTA, Koji; WATANABE, Yuta; HAYAMA, Keiichi; ITO, Hajime

**2J2-30** Asymmetric Synthesis of Optically Active Boryl-tetrahydroquinolines with Copper(I)-Catalyzed System (Sch. Eng., Hokkaido Univ.) ○WATANABE, Yuta; KUBOTA, Koji; ITO, Hajime

**2J2-31** Copper(I)-Catalyzed Enantioselective Borylation of Aliphatic Ketones (Sch. Eng., Hokkaido Univ.) ○OSAKI, Shun; KUBOTA, Koji; ITO, Hajime

## Ru

**2J2-32** Highly Stereoselective Cyclopropanation of Diazosulfones with Alkenes Catalyzed by Chiral Ru(II)-Pheox Complexes (Dept. Env. Life Sci., Toyohashi Univ. of Tech.) ○KOTOZAKI, Manato; CHANTHAMATH, Soda; SHIBATOMI, Kazutaka; IWASA, Seiji

**2J2-33** Asymmetric Hydrogenation of N-Benzylimines Catalyzed by Skew-phos-diamine/Ru(II) Complexes (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) ○YAMADA, Rina; ARAI, Noriyoshi; MATSUMOTO, Yuki; UTSUMI, Noriyuki; TSUTSUMI, Kunihiko; OHKUMA, Takeshi

Chair: KOCHI, Takuya (14 : 40~15 : 40)

\* 14:30-14:40: interval for laptop PC connection.(2J2-35, 2J2-36, 2J2-37, 2J2-38, 2J2-39)

**2J2-35** Ruthenium hydride-catalyzed selective olefins isomerization of siloxydienes (Grad. Sch. Sci., Osaka Pref. Univ.) ○YAMAMOTO, Yuki; KUWAHARA, Tadashi; FUKUYAMA, Takahide; RYU, Ilhyong

**2J2-36** Mechanistic study on the RuHCl(CO)(PPh<sub>3</sub>)<sub>3</sub>-catalyzed cross-coupling of enone and aldehydes (Grad. Sch. Sci., Osaka Pref. Univ.) ○KUWAHARA, Takashi; FUKUYAMA, Takahide; RYU, Ilhyong

**2J2-37** Asymmetric hydrogenation of keto esters catalyzed by chiral ruthenium complexes (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) ○NAMBA, Takanori; ARAI, Noriyoshi; MATSUMOTO, Yuki;

OHKUMA, Takeshi

- 2J2-38<sup>#</sup>** Ruthenium-Catalyzed Reductive Coupling of Allenes and Imines: Hydroaminomethylation via Transfer Hydrogenation (University of Texas at Austin) ○ODA, Susumu; KRISCHE, Michael
- 2J2-39<sup>\*</sup>** Additive Effects of Zinc Compounds for Dehydrogenative Coupling of Alcohols and Amines Catalyzed by Ruthenium Complex bearing PN Ligand (Sch. Eng. Sci., Osaka Univ.) ○HIGUCHI, Takafumi; TAGAWA, Risa; AKIYAMA, Shoko; KITA, Yusuke; MASHIMA, Kazushi

Chair: FUKUYAMA, Takahide (15 : 50~16 : 50)

\* 15:40-15:50: interval for laptop PC connection.(2J2-42, 2J2-43, 2J2-44, 2J2-45, 2J2-46, 2J2-47)

- 2J2-42** Ruthenium-Catalyzed Selective Monoarylation of Aromatic Ketones via Cleavage of Carbon-Oxygen Bonds (Fac. Sci. Tech., Keio Univ.) ○KONDO, Hikaru; KOCHI, Takuya; KAKIUCHI, Fumitoshi
- 2J2-43** Ru-catalyzed [4+1] cycloaddition of aromatic amides with internal alkynes (Urban Environmental Sci., TMU; ESICB Kyoto Univ.) ○TERAJIMA, Sachie; MIURA, Hiroki; SHISHIDO, Tetsuya
- 2J2-44<sup>#</sup>** Synthesis of Substituted Pyridines by Ruthenium-Catalyzed Decarboxylative Transformation of Alkene-Tethered Isoxazol-5(4*H*)-ones (Grad. Sch. Eng., Kyoto Univ.) OKAMOTO, Kazuhiro; ○SASAKURA, Kohei; NANYA, Atsushi; SHIMBAYASHI, Takuya; OHE, Kouichi
- 2J2-45<sup>#</sup>** Mechanistic Studies on Ruthenium(II)-mediated Transformation of Oxime Esters via N-O Bond Cleavage (Grad. Sch. Eng., Kyoto Univ.) ○SHIMBAYASHI, Takuya; OKAMOTO, Kazuhiro; OHE, Kouichi

## Si, Ge, Sn

- 2J2-46** Conversion of Alkoxydisilanes into Alkoxydisilanes via Transition-Metal-Free Silylene Insertion Using (Aminosilyl)boronic Esters (Grad. Sch. Eng., Kyoto Univ.) OHMURA, Toshimichi; ○SASAKI, Ikuo; SUGINOME, Michinori
- 2J2-47** Structure and Reactivity of Germanium Enolates (Grad. Sch. Eng., Osaka Univ.) KONISHI, Akihito; ○MINAMI, Youhei; YASUDA, Makoto

Chair: UMEDA, Rui (17 : 00~18 : 00)

\* 16:50-17:00: interval for laptop PC connection.(2J2-49, 2J2-50, 2J2-51, 2J2-52, 2J2-54)

- 2J2-49** Multi-Component Reaction of 3-(Tributylstannyl)propargyl Acetates, Aldehydes, and Triorganoboranes (Grad. Sch. Sci. Eng. For Edu., Univ. of Toyama) HORINO, Yoshikazu; ○AIMONO, Ataru; ABE, Hitoshi
- 2J2-50** Tin-catalyzed Addition-annulation Reaction between alpha-Mercapto ketones with 1,1-Dicyanoalkenes (Research Center for Environmental Preservation) ○SEO, Yuta; SHIBATA, Ikuya

## Mo

- 2J2-51** Dinuclear Molybdenum Complexes as Catalysts for Silyl Enol Ether Formation from  $\alpha$ -Halocarbonyl Compounds (Grad. Sch. Eng. Sci., Osaka Univ.) ○KANDO, Shun; TSURUGI, Hayato; MASHIMA, Kazushi
- 2J2-52<sup>#</sup>** Mixed-ligated Paddle-wheel Mo<sub>2</sub> Complexes as Catalysts for Radical Addition Reaction. (Grad. Sch. Eng. Sci., Osaka Univ.) ○REJ, Supriya; TSURUGI, Hayato; MASHIMA, Kazushi
- 2J2-54** Molybdenum-Catalyzed Methylenation of Aldehydes and Ketones (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○HAYASHI, Miyuki; ASAKO, Sobi; TAKAI, Kazuhiko

## Fe

Chair: KONISHI, Akihito (18 : 10~18 : 40)

\* 18:00-18:10: interval for laptop PC connection.(2J2-56, 2J2-58)

- 2J2-56<sup>#</sup>** A Tridentate Phosphine Ligand Enables Iron-Catalyzed ortho-C-H Methylation of Carboxylic Acids with Trimethylaluminum (Grad. Sch. Sci., The Univ. of Tokyo) ○SHANG, Rui; ZHOU, Yi; ILIES, Laurean; NAKAMURA, Eiichi
- 2J2-58** Iron Fluoride/NHC-Catalyzed Cross Coupling between Aryl Chlorides and Alkyl Grignard Reagents and XAFS Study on the Reaction Mechanism (ICR, Kyoto Univ.) ○AGATA, Ryosuke; IWAMOTO, Takahiro; TAKAYA, Hikaru; NAKAMURA, Masaharu

## Saturday, March 26, AM

Chair: MINAMI, Yasunori (9 : 00~10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(3J2-01, 3J2-02, 3J2-03, 3J2-04, 3J2-06)

- 3J2-01** Selective Direct N-Alkylation of Amines with Alcohols using Iron Phthalocyanine Chloride (Grad. Sch. Integrated Basic Sci., Nihon Univ.; Coll. Hum. Sci., Nihon Univ.) MINAKAWA, Maki; ○OKUBO, Masataka; KAWATSURA, Motoi
- 3J2-02** Development of a novel reaction using different Cl-substituted diene-iron complex. (Grad. Sch. Eng., KIT) ○BANDO, Kotaro; KITAMURA, Mitsuru; OKAUCHI, Tatsuo
- 3J2-03<sup>#</sup>** Iron-Catalyzed Directed Alkylation of Carboxamides with Olefins via Carbometalation Pathway (Grad. Sch. Sci., The Univ. of Tokyo) ○ZHOU, Yi; MATSUBARA, Tatsuki; ILIES, Laurean; NAKAMURA, Eiichi

- 3J2-04<sup>\*</sup>** Iron-Catalyzed C-H Amination of Aniline Derivatives (ICR, Kyoto Univ.; Grad. Sch. Eng., Kyoto Univ.) ○AOKI, Yuma; IMAYOSHI, Ryuji; HATAKEYAMA, Takuji; TAKAYA, Hikaru; NAKAMURA, Masaharu
- 3J2-06** Metalloporphyrin-Fullerene Dyad: Photoresponsive Lewis Acid Catalyst (Grad. Sch. Eng., Kyoto Univ.; ACT-C, JST) ○MAEDA, Kazuki; KURODA, Daiki; KURAHASHI, Takuya; MATSUBARA, Seijiro

Chair: ILIES, Laurean (10 : 10~11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(3J2-08, 3J2-09, 3J2-11, 3J2-12, 3J2-13)

- 3J2-08<sup>#</sup>** Synthesis of 2-Phosphaphenol Derivatives Based on Iron-Catalyzed [2+2] Cycloaddition Reactions (Grad. Sch. Eng., The Univ. of Tokyo) ○LIANG, Wenbin; NAKAJIMA, Kazunari; NISHIBAYASHI, Yoshiaki
- 3J2-09<sup>\*</sup>** Mechanistic Study of Iron-Catalyzed Cross-Coupling Reaction Based on Solution-Phase Structural Analysis of Phenyl-Iron Intermediate (ICR, Kyoto Univ.; JASRI) ○NAKAJIMA, Sho; TAKAYA, Hikaru; ISOZAKI, Katsuhiro; IWAMOTO, Takahiro; NAKAGAWA, Naohisa; GOWER, N. J.; IMAYOSHI, Ryuji; HONMA, Tetsuo; TAKAGAKI, Masafumi; SUNADA, Yusuke; NAGASHIMA, Hideo; HATAKEYAMA, Takuji; NAKAMURA, Masaharu
- 3J2-11** Iron-Catalyzed Enantioselective Cross-Coupling Reaction of  $\alpha$ -haloester with Aryl Boron Reagents (ICR, Kyoto Univ.) ○OKUZONO, Chiemi; IWAMOTO, Takahiro; ADAK, Laksmikanta; JIN, Masayoshi; TAKAYA, Hikaru; NAKAMURA, Masaharu
- 3J2-12** Synthesis of optically active amines possessing 7-azabicyclo[2.2.1] heptane skeleton using iron-catalyzed asymmetric carbometalation. (ICR, Kyoto Univ.; Grad. Sch. Eng., Kyoto Univ.) ○SAITO, Shota; ISOZAKI, Katsuhiro; ADAK, Laksmikanta; GOWER, Nicholas John; KAWABATA, Tatsuya; JIN, Masayoshi; ITOH, Takuma; ITO, Shingo; NAKAMURA, Masaharu
- 3J2-13** Palladium-Catalyzed Annulation of Alkynyl Ferrocenyl Ethers with Isocyanates (Grad. Sch. Sci. Eng., Chuo Univ.) ○SUGITA, Kengo; TOKORO, Yuichiro; FUKUZAWA, Shin-ichi; MINAMI, Yasunori; HIYAMA, Tamejiro

Chair: ISOZAKI, Katsuhiro (11 : 20~12 : 20)

\* 11:10-11:20: interval for laptop PC connection.(3J2-15, 3J2-16, 3J2-17, 3J2-18, 3J2-19, 3J2-20)

- 3J2-15<sup>#</sup>** Copper catalyzed Regioselective C-H Amination of Ferrocenes with Bidentate Directing Group (Fac. Sci. Eng., Chuo Univ.) ○TOKORO, Yuichiro; HOSHINO, Shun; FUKUZAWA, Shin-ichi

## Au

- 3J2-16** Au-Catalyzed Reaction of Silanols with Hydrosilanes Leading to Unsymmetrical Siloxanes (IRC3, AIST) ○SATO, Yasushi; SATO, Kazuhiko; SHIMADA, Shigeru
- 3J2-17** Construction of Eight-Membered Rings through Cycloisomerization of 1,9-Enynes with Semihollow-Shaped Phosphine-Gold Catalysts (Fac. Sci., Hokkaido Univ.) ○UENO, Masahiro; OKOCHI, Hiiori; IWAI, Tomohiro; SAWAMURA, Masaya
- 3J2-18** Enantioselective Synthesis of Biaryls by Gold-Catalyzed Intramolecular Hydroarylation (Grad. Sch. Sci., Eng., Tokyo Tech) ○SATO, Masakazu; SHIBATA, Yu; KIMURA, Yuki; TANAKA, Ken

## Ag

- 3J2-19** Oxidative cleavage of carbon-carbon double bonds catalyzed by silver salts (Dept. Chem., Tokyo Med. Univ.) ○ISHIKAWA, Shingo; FUGAMI, Keigo
- 3J2-20<sup>#</sup>** Silver-Catalyzed 2-Fluoroindole Synthesis via 5-endo-trig Cyclization of  $\beta$ ,  $\beta$ -Di fluorostyrenes (Div. of Chem., Fac. Pure Appl. Sci., Univ. of Tsukuba) ○WATABE, Yota; YAMASHITA, Shigeyuki; NOJIMA, Tomoya; FUJITA, Takeshi; ICHIKAWA, Junji

## Saturday, March 26, PM

## Pd

Chair: SHIBATA, Yu (13 : 30~14 : 30)

\* 13:20-13:30: interval for laptop PC connection.(3J2-28, 3J2-29, 3J2-30, 3J2-31, 3J2-32, 3J2-33)

- 3J2-28** Palladium-Catalyzed Addition of Methyl Ketones to Alkynyl Aryl Ethers (Chuo Univ.) ○YAMADA, Mayu; MINAMI, Yasunori; TSURUOKA, Chisato
- 3J2-29** Synthesis of Arylcarbazoles by the Palladium Catalyzed C-H Arylation (Grad. Sch. Sci., Osaka Pref. Univ.) ○UWA, Koji; TSENG, Ya-yi; KAMIKAWA, Ken
- 3J2-30** Synthesis of Azahelicenes by Palladium-Catalyzed Dehydrogenative C-H Coupling Reaction (Grad. Sch. Sci., Osaka Pref. Univ.) ○KONO, Choji; KAMIKAWA, Ken
- 3J2-31** Palladium-Catalyzed Intramolecular hydroarylation of 2-Aryloxybut-1-en-3-yne via ortho-C-H Bond Activation (Grad. Sch. Sci. Eng., Chuo Univ.) ○SAKAI, Megumi; MINAMI, Yasunori; HIYAMA, Tamejiro
- 3J2-32** Palladium-catalyzed intramolecular hydroalkylation of alkynyl aryl

ethers via  $sp^3$  C-H activation (Fac. Sci. Eng., Chuo Univ.) ○NOGUCHI, Yuta; MINAMI, Yasunori; YAMADA, Kotomi; HIYAMA, Tamejiro

## Ni

- 3J2-33** Development of Cross-Coupling Reactions of Aryl Halides with 4-Alkyl-1,4-dihydropyridines Using Transition Metal-Photoredox Synergistic Catalysts (Inst. Eng. Innovation, Sch. of Eng., Univ. of Tokyo) ○NOJIMA, Sunao; NAKAJIMA, Kazunari; NISHIBAYASHI, Yoshiaki

## Room P

## Davis Memorial Auditorium

Thursday, March 24, AM

(12 : 30~14 : 00)

## Education and History of Chemistry

- 1PB-001** The synthesis of salicylic acid from phenol (Grad. Sch. Mathematics Sci. Edu., Tokyo Univ. of Sci.) ○SATO, Kazunori; INOUE, Masayuki
- 1PB-002** Development of experiments using natural dyes in order to enable students to understand color from combine the humanities and sciences perspectives. (Fac. Sci., Toho Univ.) ○IMAI, Izumi; SHIMAZU, Yoshiko
- 1PB-003** Synthesis of triarylmethane dye molecules utilizing "boric silica gel" (Grad. Sch. Mathematics Sci. Edu., Tokyo Univ. of Sci.) ○MATSUOKA, Masatada; INOUE, Masayuki
- 1PB-004** Aerobic oxidation of aldehydes utilizing gold catalyst supported on chitin (Grad. Sch. Mathematics Sci. Edu., Tokyo Univ. of Sci.) ○SHIMAMURA, Wataru; INOUE, Masayuki
- 1PB-005** Remarks on Chemical experiments of High School (Fac. Edu., Ehime Univ.) KUMAGAI, Takashi; ○MIURA, Takashi
- 1PB-006** Development of the extension course using tablet devices with the aim of applying the method to junior high school science and primary school living environment studies classes (Kobe City Coll. Technol.) ○SATO, Hiroto; FUKUMOTO, Kozo; OSHIO, Aiko; HATTORI, Yuichi; KATAYAMA, Osamu
- 1PB-007** Development of chemical education teaching materials using the brewing (Fac. Edu., Ehime Univ.) ○GOTO, Shiho; OHASHI, Atsushi; AZUMA, Mao
- 1PB-008** Chemical Education using computer chemistry (Fac. Edu., Ehime Univ.) ○NITTA, Sae; OHASHI, Atsushi
- 1PB-009** Development and practice of experiment teaching materials for young people (Fac. Eng., Univ. of Miyazaki) ○SUGAMOTO, Kazuhiro; TANOUÉ, Jirou; TOYAMA, Takako; NISHIOKA, Yusuke
- 1PB-010** Educational material for measurement of altitude dependence of atmospheric pressure with using glass syringe, force sensor, and smartphone. (Hokkaido Univ. of Educ. Sapporo) ○TAGUCHI, Satoshi; FUCHIGAMI, Satoru; CHUBACHI, Daichi
- 1PB-011** Improvements of Lectures in University Experimental Lessons (The Univ. of Electro-Communications) ○OHASHI, Kazutaka
- 1PB-012<sup>#</sup>** "Hybrid" of Naked-Eye Chemistry and Circular Dichroism Spectroscopy Experiments in Lab Class (LESC, The Univ. of Electro-Communications) ○SUGA, Torao
- 1PB-013<sup>#</sup>** Comparing investigation of the educational visualization method for intermolecular interactions (Coll. Liberal Arts Sci., Kitasato Univ.) ○DAIGOKU, Kota
- 1PB-014<sup>#</sup>** Chemistry education and research using desktop NMR Spectrometer "picoSpin 80" 2 (TNCT) ○HIROKI, Kazuaki; SAWADA, Hiromi; YAMASHITA, Naoya
- 1PB-015<sup>#</sup>** Development of Electronic Textbook for College Chemistry-experiment - Walden's Inversion - (Fac. of Edu., Tokyo Gakugei Univ.) ○IKUO, Akira; NIEDA, Hayato; NISHITANI, Nozomi; YOSHINAGA, Yusuke; OGAWA, Haruo
- 1PB-016** Chemistry education of the Shizuoka University in cooperation with a Super Science High School in Shizuoka city (Fac. Sci., Shizuoka Univ.; Shizuoka Municipal High School) ○URITANI, Masahiro; KONDO, Mitsuru; OYOSHI, Takanori; MORIYA, Makoto; MORISHITA, Naoto; TOTSUKA, Shigeko
- 1PB-017** A Study of the Effects of Component Ions in Hot Spring Water and LED Light Sources on Hydroponics (Salesian Polytechnic) ○IIJIMA, Takuya; NAGAO, Akemi; YONEMORI, Hironobu
- 1PB-018** Construction and practice of the system for the continuous execution of the mobile experimental classroom for the encounter with the chemistry. (Fac. Bio. Eng., Toin Univ. of Yokohama) SAITO, Kiyoshi; ○ASAHINA, Kenta; YOTA, Taichi; KASHIMA, Hiroo; KOISHI, Akihiro

## Physical Organic Chemistry Reaction Mechanism

- 1PB-021** Ab Initio Study on Reaction Mechanisms of PCB Formation from

o-Dichlorophenyl Radicals (Grad. Sch. Human Sci., Nara Women's Univ.; RCEP, Osaka Univ.; Fac. Sci., Nara Women's Univ.) ○TAKEUCHI, Michika; NAKANO, Takeshi; TAKEUCHI, Takae

- 1PB-022** Theoretical Analysis of Facial Selectivity and Reaction Mechanism of Hydroboration of Alkenes. (Grad. Sch. Integrated Arts Sci., Kochi Univ.) ○TAKAOKA, Kaname; KANENO, Daisuke
- 1PB-023<sup>#</sup>** Development of multicomponent molecular orbital-climbing image-nudged elastic band method to analyze H/D isotope effect in chemical reactions including nuclear quantum effect (Fac. Eng., Gifu Univ.) ○UDAGAWA, Taro; SUZUKI, Kimichi; TACHIKAWA, Masanori

## Organic Chemistry -Reaction and Synthesis-Organic Electron Transfer Chemistry

- 1PB-025<sup>#</sup>** Electric Molecular Building on Surface using Dual Alkyne Reactions Catalyzed by Copper(II)/(I) (Grad. Sch. Sci., Hiroshima Univ.) ○KAMAMOTO, Yu; NITTA, Yuya; KUME, Shoko; MIZUTA, Tsutomu

## Organic Chemistry -Reaction and Synthesis-High-Throughput Synthesis

- 1PB-027** Study on the Nucleophilic Aromatic Substitution by Biphasic Microreactor Technology (WINTeC) ○MORI, Hajime; TSUCHITANI, Akane; MORI, Megumi

## Analytical Chemistry

## Sensor

- 1PB-029** Electronic States of Tartaric Acid and Its Alkali Metal Salts (Part 3) (Fac. Sci. Tech., Ryukoku Univ.) NAKAMURA, Ryota; ○FUJIWARA, Manabu; HARADA, Tadao; OSAWA, Tsutomu
- 1PB-030<sup>#</sup>** Highly Sensitive Glucose Sensors Created by Combining Boronic Acid-Containing Thin Films and Enzymes (Fac. Eng., Kitami Inst. of Tech.) ○NAKAHASHI, Hitoshi; KANEKIYO, Yasumasa
- 1PB-031<sup>#</sup>** A rapid detection of protein by electrochemical method using an immunoliposome encapsulating potassium ferrocyanide (Pref. Univ. of Hiroshima) ○NAKANISHI, Riko; INAGE, Sayaka; MITOMA, Yoshiharu; EGASHIRA, Naoyoshi
- 1PB-032** Design and Complexing Reaction of Fluorescence Ion Sensor Based on Disalicylidene (Osaka Kyoiku Univ.) ○KUBONO, Koji; ISHIHARA, Marina; TANI, Keita; YOKOI, Kunihiko
- 1PB-033** Development of Fluorescent Metal Ion Sensor Based on Quinolinol Bearing Dipicolylamine (Osaka Kyoiku Univ.; Osaka Municipal Technical Research Institute) ○KADO, Kimiko; KUBONO, Koji; KASHIWAGI, Yukiyasu; YOKOI, Kunihiko
- 1PB-034** Quartz crystal microbalance sensing of (+)-catechin (KAIT) ○KOBAYASHI, Yumi; SAITO, Takashi

## Mass Spectrometry

- 1PB-035** Effective measurement of CsI cluster ions with iodine by LDI-MS (Sch. Eng., Tohoku Univ.) ○MOCHIZUKI, Shunsuke
- 1PB-036** A Process Analytical Technology (PAT) Approach Using Online Mass Spectrometry to Evaluate Drying Process and Control Oxygen Generation (Sumitomo Dainippon Pharma Co., Ltd.) ○WATANABE, Shoji; UENO, Atsushi; MIYAKE, Takayuki

## Chromatography

- 1PB-037** Determination of 7 kinds of Sulfa Drugs in Pork with HPLC by QuEChERS method (Sch. Sci., Tokai Univ.) ○SUGITA, Hiroataka; ISHIHARA, Yoshimi; TAKANO, Jiro; KITAMI, Hideaki
- 1PB-038** Immobilization of polymer monolith by metal framework (Department of Chemistry, Toyama Institute of Health) ○YAMASHITA, Tomohisa; YASUKAWA, Kazuyuki; KEMMEI, Tomoko; HORII, Yuuko; NAKAYAMA, Eriko; MURAMOTO, Tatsuya; TAKADA, Hiroshi
- 1PB-039** Preparation and Evaluation of a Monodisperse Molecularly Imprinted Polymer for Separation of Sialic Acid (Graduate School of Science and Technology, Nihon University; Department of Chemistry, Tokyo Medical University) ○MIURA, Takuya; AOYAGI, Takao; HAGIWARA, Toshiki; KITAHARA, Keiichi; NISHIMURA, Yukihiko; ISHIKAWA, Shingo; FUGAMI, Keigo
- 1PB-040** Determination of saccarides by the detection of fluorescence of Ce (III) (Sch. Sci., Tokai Univ.) ○MIKAMI, Ikko; KABURAKI, Yasumasa
- 1PB-041<sup>#</sup>** Development of evaluation device for physical stimulation to cell based on dielectrophoresis (Grad. Sch. Arts and Sci., The Univ. of Tokyo) ○YOSHIOKA, Junya; YASUKAWA, Tomoyuki; YOSHIMOTO, Keitaro

## Micro/nanoanalysis

- 1PB-042** A cell-free microfluidic model of a tumor blood vessel surrounded by interstitial tissues (Fac. Sci. Eng., Toyo Univ.) ○USUI, Yuya; WATANABE, Satoshi; SASAKI, Naoki
- 1PB-043** A membrane-integrated microfluidic device for permeability assays



of nanoparticle (Fac. Sci. Eng., Toyo Univ.) OTSUCHIYA, Kimiaki; SASAKI, Naoki

- 1PB-044** Microfluidic Preparation of Monodisperse Emulsion Droplets Based on Compressed Gas-Driven Liquid Delivering and Use of the Created Droplets for Droplet Digital PCR (Fac. Sci. Eng., Doshisha Univ.)  
○KOSHIROGANE, Toshihiro; OKURA, Naoaki; TSUKAGOSHI, Kazuhiko; HASHIMOTO, Masahiko
- 1PB-045** Glass membrane device with open microholes for rare tumor cells analysis (Sch. Eng., Nagoya Univ.) ○KUBOYAMA, Daiki; ONOSHIMA, Daisuke; YUKAWA, Hiroshi; TANAKA, Hiromasa; ISHIKAWA, Kenji; HORI, Masaru; BABA, Yoshinobu
- 1PB-046** Removable micropore film for arraying and collecting single cells (Sch. Eng., Nagoya Univ.) ○NAKAMURA, Yosuke; ONOSHIMA, Daisuke; YUKAWA, Hiroshi; BABA, Yoshinobu
- 1PB-047** Development of exosome extraction method by minute layer glass device (Sch. Eng., Nagoya Univ.) ○NAKAMURA, Yuta; YUKAWA, Hiroshi; ONOSHIMA, Daisuke; BABA, Yoshinobu
- 1PB-048<sup>#</sup>** Development of microfluidic devices for detecting mutated epidermal growth factor receptors in lysates of sediment in the pleural effusion (Grad. Sch. Eng., Nagoya Univ.) ○ISHIKAWA, Koya; KASAMA, Toshihiro; YOGO, Naoyuki; HASE, Tetsunari; KONDO, Masashi; KAJI, Noritada; HASEGAWA, Yoshinori; BABA, Yoshinobu

### Bioanalysis

- 1PB-049** Detection of Single-Point Mutations Based on the Ligase Detection Reaction: Use of Gold Nanoparticle-Oligonucleotide Conjugates as Sensing Probes (Fac. Sci. Eng., Doshisha Univ.) ○TANAKA, Yugo; MURAO, Kennichi; TSUKAGOSHI, Kazuhiko; HASHIMOTO, Masahiko
- 1PB-050<sup>#</sup>** Separation of the Complex of a Small Molecule and Its Specific DNA Aptamer from Free Aptamers by Capillary Electrophoresis with a Suppressed Electroosmotic Flow (Advanced Research Div., Panasonic Corp.)  
○ONODERA, Mari; YAKU, Hidenobu; SUEYOSHI, Kenji; TANAKA, Shinji; SHIMONO, Ken
- 1PB-051** Clarification of infection mechanism of HBV and development of efficient detecting device by the visualization of pseudo virus with fluorescence probe (IMPACT Res. Cen. Adv. Nanobiodevices, Nagoya Univ.)  
○HIRAKAWA, Masashi; YUKAWA, Hiroshi; ONOSHIMA, Daisuke; ISHIKAWA, Tetsuta; BABA, Yoshinobu
- 1PB-052** Thermodynamic analysis of triplex formation between chiral peptide nucleic acid and double-stranded RNA (Grad. Sch. Sci., Tohoku Univ.)  
○SHIMIZU, Kazuya; SATO, Takaya; SATO, Yusuke; NISHIZAWA, Seiichi
- 1PB-053** Development of red fluorescent dye-modified peptide nucleic acids for selective binding to double-stranded RNA (Grad. Sch. Sci., Tohoku Univ.) ○CHIBA, Toshiaki; SATO, Takaya; SATO, Yusuke; NISHIZAWA, Seiichi
- 1PB-054** Quantum-Magnetic Nanohybrid Material for Stem Cell Imaging and Hyperthermia Effect (Sch. Eng., Nagoya Univ.) ○KOBAYASHI, Kaori; YUKAWA, Hiroshi; ONOSHIMA, Daisuke; ISHIKAWA, Tetsuya; BABA, Yoshinobu
- 1PB-055<sup>#</sup>** Development of in vitro selection method for DNA aptamers based on the combined use of CE-SELEX and magnetic beads (Grad. Sch. Arts and Sci., The Univ. of Tokyo) ○WAKUI, Koji; FURUSHO, Hitoshi; YOSHIMOTO, Keitaro
- 1PB-056<sup>#</sup>** Highly Sensitive Biosensor Based on Graphene Oxide (Grad. Sch. Sci. & Tech., Kumamoto Univ.; CREST, JST) ○MIYAHATA, Tataka; MATSUO, Tomoya; KITAMURA, Yusuke; IHARA, Toshihiro

### Separation and Detection

- 1PB-057** Comprehensive extraction study of metal ions using a novel phosphoric acid-type ligand (NSED, JAEA) ○SUGITA, Tsuyoshi; SHIMOJO, Kojiro; OKAMURA, Hiroyuki; NAGANAWA, Hirochika
- 1PB-058<sup>#</sup>** Molecular Recognition by Fluorescent Boronic Acid Polymers (Fac. Eng., Kitami Inst. of Tech.) ○TAKESHIMA, Kan; KANEKIYO, Yasumasa
- 1PB-059** Determination of pyruvate and glucose in sake moromi using self-driven coulometry (Dept. of Chem. Eng., NNCT) MIKI, Kojiro; ○OGATA, Nanami; KAWASHIMA, Kohei; ISHIMARU, Hirohito; KITAMURA, Makoto
- 1PB-060** The reaction distribution analysis of Li-ion batteries using glow discharge emission spectrometry (KOBELCO RESEARCH INSTITUTE, INC.) ○OKI, Kaho; TSUNEISHI, Hidemasa; HAYASHI, Yoshiki; TAGUCHI, Hideyuki; NISHIUCHI, Masato; IKEDA, Takashi; TSUBOTA, Takayuki
- 1PB-061** Investigation of additive-added phase separation multi-phase and application to separation technology (Grad. Sch. Eng., Doshisha Univ.) ○KAN, Hyou; KAWAKAMI, Takuya; HASHIMOTO, Masahiko; TSUKAGOSHI, Kazuhiko
- 1PB-062** Development of an absorbent to eliminate interfering elements in elemental analysis (Grad. Sch. Eng., Osaka Univ.) ○KAMON, Kunihiro; OHI, Hiromi

Friday, March 25, AM

(10 : 00~11 : 30)

### Physical Chemistry -Structure-

- 2PA-001** Effects of Cation Structure in Ionic Liquids and Molecular Structure in Molecular Liquids on the Low-Frequency Spectra (Fac. Sci., Chiba Univ.) ○TAKAHASHI, Kotaro; SHIROTA, Hideaki
- 2PA-002<sup>#</sup>** Chromophore conformation in active site of orange carotenoid protein studied by Raman optical activity spectroscopy (Grad. Sch. Sci. Eng., Saga Univ.) ○FUJISAWA, Tomotsumi; LEVERENZ, Ryan; KERFELD, Cheryl; UNNO, Masashi
- 2PA-003<sup>#</sup>** Temperature and excitation wavelength dependencies of photo-induced cycloreversion and cyclization of diarylethene derivatives (Grad. Sch. Eng. Sci., Osaka Univ.) ○UNE, Kanako; NAGASAKA, Tatsuhiro; SOTOME, Hikaru; MIYASAKA, Hiroshi; KITAGAWA, Daichi; KOBATAKE, Seiya; IRIE, Masahiro
- 2PA-004<sup>#</sup>** Luminescence and photochemical reaction of the cyclodextrin-naphthalene inclusion complexes (Fac. Eng., Iwate Univ.) ○SUZUKI, Eiichi; IWAJUKI, Yumi; IKEDA, Saki; OGASAWARA, Kazuki; YASHIRO, Hitoshi
- 2PA-005** DNP-NMR measurement for elucidate rheology of water surrounding azobenzene containing vesicular membrane (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.; Fac. Sci., Hokkaido Univ.) ○KONDO, Ryota; KAGEYAMA, Yoshiyuki; TAKEDA, Sadamu
- 2PA-006<sup>#</sup>** Inorganic salt effect on dissipation process of oxygen nanobubble (Div. of Chem., Fac. Pure Appl. Sci., Univ. of Tsukuba) ○NISHIMURA, Yoshinobu; ARAI, Tatsuo
- 2PA-007** Aggregation States of a Hybrid Film of an Organic Dye and a Clay Compound Studied by Near-field Fluorescence Spectroscopy (Hyogo Prefectural Institute of Technology) ○ISHIHARA, Mari
- 2PA-008** The gas dynamics of water vapor deriving from adsorption (Fac. Sci., Kyoto Univ.) ○MARUOKA, Mitsuaki; SUGIMOTO, Toshiaki; WATANABE, Kazuya; MATSUMOTO, Yoshiyasu
- 2PA-009** Adsorption of ethylene gas into flexible [Cu<sub>2</sub>(bza)<sub>4</sub>(pyz)]<sub>n</sub> and Host-Guest interaction. (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.; Fac. Sci., Hokkaido Univ.) ○SANADA, Kosuke; MARUTA, Goro; KAGEYAMA, Yoshiyuki; TAKEDA, Sadamu

### Physical Chemistry -Properties-

#### Physical Chemistry - Properties

- 2PA-011<sup>#</sup>** Evaluation of the equilibrium content of acyclic form of ketohexoses and their molar absorption coefficient of carbonyl group in aqueous solution (Fac. Agr., Kagawa Univ.) ○FUKADA, Kazuhiro; YOSHIIHARA, Akihiko; SATO, Masashi
- 2PA-012** Physical properties of deep eutectics of lithium salt-amide systems: Substitution effects of amide derivatives (Fac. Sci., Chiba Univ.) ○TAGO, Akito; SHIROTA, Hideaki
- 2PA-013** Stability in the Structure and Enzymatic Activity of Lysozyme in Ionic Liquid-Water Mixtures (Dept. Appl. Chem., Nat. Def. Acad.)  
○YOSHIMURA, Yukihiro; TAKEKIYO, Takahiro; HATTORI, Shyuji; SASAKI, Toru; ABE, Hiroshi
- 2PA-014** Solubilization of insoluble protein aggregates by the use of ionic liquids (Dept. Appl. Chem., Nat. Def. Acad.) ○TAKEKIYO, Takahiro; TANAKA, Shouta; YAMAGUCHI, Erika; YOSHIMURA, Yukihiro
- 2PA-015<sup>#</sup>** Preparation and Properties of Photoreponsive Ionic Liquids Containing Cationic Spiropyran (Fac. Eng., Tokyo Univ. of Sci., Yamaguchi) ○OKADA, Hirochika; FUNASAKO, Yusuke; INOKUCHI, Makoto
- 2PA-016** Induction of the nucleation and the growth of the ordered phase by annealing in ionic liquid (C<sub>8</sub>mim)BF<sub>4</sub> (Fac. Sci., Fukuoka Univ.) ○TAKAMATSU, Takuya; WATANABE, Keisuke; NEGITA, Keishi
- 2PA-017** Correlation between ordering and intermolecular interaction of the ionic liquid (C<sub>4</sub>mim)PF<sub>6</sub> (Fac. Sci., Fukuoka Univ.) ○KOJIMA, Akira; WATANABE, Keisuke; NEGITA, Keishi; KATSUMOTO, Yukiteru
- 2PA-018<sup>#</sup>** Molecular orientation of hydrogen-bonded liquid crystals(6BA)<sub>2</sub>-(BP)<sub>2</sub> (Grad. Sch. Nat. Sci. Technol., Kanazawa Univ.) ○MIZUNO, Motohiro; TABOTA, Kazuma
- 2PA-019<sup>#</sup>** Phase Transition of Amorphous Ice with Warming (Dept. of Sci. Tech., Meiji Univ.) ○KUMAGAI, Yu; FUKAZAWA, Tomoko
- 2PA-020** Crystallization of isotope mixed amorphous solid water thin films (Fac. Sci., Kyoto Univ.) ○TAKAKUWA, Hiroaki; MATSUMOTO, Yoshiyasu; WATANABE, Kazuya; SUGIMOTO, Toshiaki; KATOU, Fumiaki; HARADA, Kuniaki
- 2PA-021<sup>#</sup>** Structure of Ice in Poly-N,N-dimethylacrylamide Hydrogel (Dept. of Sci. Tech., Meiji Univ.) ○TAKEUCHI, Yuki; FUKAZAWA, Tomoko
- 2PA-022** Study of sol-gel transition of carrageenan in terms of rotational relaxation of green fluorescent protein (Grad. Sch. Eng., Osaka City Univ.) ○YAMASAKI, Mayo; KOMETANI, Norisugu
- 2PA-023** The study of synthesis and functionality of λ-Ti<sub>3</sub>O<sub>5</sub> (Grad. Sch. Sci., The Univ. of Tokyo) ○MAENO, Yuta; NASU, Tomomichi;

- YOSHIKIYO, Marie; NAMAI, Asuka; TOKORO, Hiroko; OHKOSHI, Shin-ichi
- 2PA-024** Depth-dependent properties of polymer solids as investigated with three-dimensional single-molecule tracking of guest dyes (Grad. Sch. Eng. Sci., Osaka Univ.) ○HIRATSUKA, Kengo; TAGA, Yuhei; TAKEI, Satoshi; KITAGAWA, Daichi; KOBATAKE, Seiya; ITO, Syoji; MIYASAKA, Hiroshi
- 2PA-025<sup>#</sup>** Chemical functionalization of graphene nano-ribbons (Grad. Sch. Sci., Osaka Univ.) ○ISHIMURA, Fumito; FUKUMORI, Minoru; TANAKA, Hirofumi; OGAWA, Takuji
- 2PA-026** Structure and electronic state of a 1,3,5-trithia-2,4,6-triazapentalenyl thin film (Grad. Sch. Sci., Nagoya Univ.) ○EGUCHI, Keitarou; AWAGA, Kunio
- 2PA-027** Investigation of the experimental conditions for purification of single-wall carbon nanotubes using aqueous two-phase systems and test for film-making (Faculty of Science, Kyoto Sangyo University) ○ISHIDA, Ryo; OHTSUKA, Marin; ONO, Akira; NAGASAWA, Hiroshi; SUZUKI, Shinzo
- 2PA-028** Possibility of the artificial active proton transport by asymmetric proton channel of coordination polymers (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.; Fac. Sci., Hokkaido Univ.) ○OTA, Yuki; MARUTA, Goro; KAGEYAMA, Yoshiyuki; TAKEDA, Sadamu
- 2PA-029** Synthesis, Structures, and Physical Properties of Novel Charge Transfer Complexes based on Catechol-fused EDT-TTF (ISSP, The Univ. of Tokyo; Fac. Sci., Tokyo Univ. of Sci.) ○DOI, Ryohei; UEDA, Akira; ENOMOTO, Masaya; MORI, Hatsumi
- 2PA-030<sup>#</sup>** Interaction between squaric acid substituted TTF derivatives and transition metal ions (Fac. Eng., Univ. of Toyama) ○KOIZUMI, Shin; YOSIOKA, Ryo; MIYAZAKI, Akira
- 2PA-031** Development of new Schiff-base type TTF-metal complexes and fabrication of their thin film devices (Grad. Sch. Sci. Eng., Ibaraki Univ.) ○WACHI, Atsushi; SHIGA, Takuya; OSHIO, Hiroki; NISHIKAWA, Hiroyuki
- 2PA-032** Structures and Physical properties of (S,S)-DM-MeDH-TTP salts (Grad. Sch. Sci. Eng., Ibaraki Univ.) ○YOSHIMURA, Yuki; NISHIKAWA, Hiroyuki; WATANABE, Takeshi
- 2PA-033** Structural and Physical Properties of Molecular Conductors Derived from DT-MET and Its Dimethyl-Substituted Derivatives (Grad. Sch. Mat. Sci., Univ. of Hyogo) ○MATSUMURA, Ryosuke; KADOYA, Tomofumi; YAMADA, Jun-ichi
- 2PA-034** Structural and Physical Properties of Molecular Conductors Derived from Donor Molecules with a Sulfur-Containing Seven-Membered Ring (Grad. Sch. Mat. Sci., Univ. of Hyogo) ○NISHIUCHI, Reika; KADOYA, Tomofumi; YAMADA, Jun-ichi
- 2PA-035** Development of new multi-functional materials using TTF-transition metal quinolino composite molecules (Grad. Sch. Sci., Osaka Pref. Univ.) ○MIKI, Ayano; FUJIWARA, Hideki
- 2PA-036** Synthesis and physical properties of metal thiolate complexes using TTF derivatives with a pyridine ring (Grad. Sch. Sci., Osaka Pref. Univ.) ○OKUNO, Ryota; FUJIWARA, Hideki
- 2PA-037** Development of new multifunctional materials using TTF derivatives containing stable organic radicals (Graduate School of Science, Osaka Prefecture University) ○HORIKIRI, Kazuki; FUJIWARA, Hideki
- 2PA-038** Development of new photofunctional materials using donor-acceptor dyads (Grad. Sch. Sci., Osaka Pref. Univ.) ○KISHI, Yosuke; FUJIWARA, Hideki
- 2PA-039** Synthesis and Physical Properties of Single-component Molecular Conductor, [Pd(hfdt)] (Coll. Hum. Sci., Nihon Univ.; TIMS, Univ. of Tsukuba) ○LIU, Qizhi; ZHOU, Biao; OGURA, Satomi; KOBAYASHI, Akiko; NISHIBORI, Eiji; KASAI, Hidetaka
- 2PA-040<sup>#</sup>** Uniaxial Strain Effects on  $\beta$ "-type BEDT-TTF salts (Grad. Sch. Sci., Eng., Ehime Univ.) ○OKII, Yuichi; YAMAMOTO, Takashi; NAITO, Toshio; KONISHI, Kensuke
- 2PA-041<sup>#</sup>** New Ambient-Pressure BEDT-TTF-Based Superconductor Formed with Polymeric Silver(I) Complex Anion (Faculty of Agriculture) ○YOSHIDA, Yukihiko; HAYAMA, Hiromi; ISHIKAWA, Manabu; OTSUKA, Akihiro; YAMACHI, Hideki; NAKAMURA, Yuto; KISHIDA, Hideo; ITO, Hiroshi; MAESATO, Mitsuhiko; SAITO, Gunzi
- 2PA-042** Synthesis and negative-magnetoresistance in phthalocyanine molecular alloyed compound TPP[Cr<sub>x</sub>Co<sub>1-x</sub>(Pc)(CN)<sub>2</sub>]<sub>2</sub> (0 < x < 1) (Sch. Sci., Osaka Univ.) ○ISHII, Ryuta; IKEDA, Mitsuo; MURAKAWA, Hiroshi; NISHI, Miki; MATSUDA, Masaki; INABE, Tamotsu; HANASAKI, Noriaki
- 2PA-043** Photoinduced Magnetic Properties of Covalent Organic Framework (COF) of Cu Phthalocyanine (Fac. Sci., Niigata Univ.; Center for Inst. Anal., Niigata Univ.; IMS; Sch. Physical Sci., SOKENDAI) WATANABE, Seiya; ONO, Kenta; ○FURUKAWA, Ko; JIN, Shanbin; JIANG, Donglin
- 2PA-044** Effect of distorted  $\pi$ -conjugation on intra- and intermolecular magnetic interactions in a new nitronyl nitroxide biradical. (Fac. Sci., Osaka Pref. Univ.; IMR, Tohoku Univ.) ○OTSUKA, Rei; AMAYA, Naoki; YAMAGUCHI, Hironori; ONO, Toshio; NOJIRI, Hiroyuki; HOSOKOSHI, Yuko
- 2PA-045** Spin dynamics of TTF derivatives with a aminoxyl radical (Fac. Sci., Niigata Univ.; Grad. Sch. Sci., Osaka Pref. Univ.) ○ABE, Masanori; FURUKAWA, Ko; HORIKIRI, Kazuki; FUJIWARA, Hideki
- 2PA-046<sup>#</sup>** Synthesis and properties of a tetra-aza-macrocycle with tetrathiofulvalene, for preparation of multi-functional metal complexes. (Grad. Sch. Sci., Tohoku Univ.) ○LIANG, Zhifu; COSQUER, Goulven; YAMASHITA, Masahiro
- 2PA-047** Syntheses, crystal structures and physical properties for transition metal complexes of stable radical anion ligands having a thiadiazole dioxide moiety (Grad. Sch. Sci., Nagoya Univ.) ○SHUKU, Yoshiaki; AWAGA, Kunio
- 2PA-048<sup>#</sup>** Magnetic Phase Transition in Two-dimensional Quadratic Lattice Magnet Bis(glycolato)metal(II) (Grad. Sch. Nat. Sci., Nagoya City Univ.) NAKANE, Tomohiro; ○FUJITA, Wataru
- 2PA-049<sup>#</sup>** Synthesis and physical properties of magnetic alloy nanoparticles (Grad. Sch. Sci., The Univ. of Tokyo) ○TANIGUCHI, Takano; TAKEDA, Takuma; NASU, Tomomichi; MIYAMOTO, Yasuto; YOSHIKIYO, Marie; NAMAI, Asuka; OHKOSHI, Shin-ichi
- 2PA-050** Electron transfer dynamics of CdSe-CdS core-shell quantum dots-accepter systems (Sch. Tech., Kwansai Gakuin Univ.) ○NONAKA, Kohei; OKUHATA, Tomoki; KATAYAMA, Tetsuro; TAMAI, Naoto
- 2PA-051** The Control of multiexciton relaxation process in a single quantum dot by a metal-coated AFM tip (Sch. Sci. Tech., Kwansai Gakuin Univ.) ○KOIZUMI, Norihisa; TAKATA, Hiroki; NAIKI, Hiroyuki; MASUO, Sadahiro
- 2PA-052** The long-term relaxation of the stress-induced birefringence (Fac. Eng., Oita Univ.) ○UENO, Hiroki; TAKAHASHI, Toru; HIRAO, Shoutaro; HARADA, Takunori; OHGA, Yasushi
- 2PA-053<sup>#</sup>** Photochromic Properties of Nafion Membranes Incorporating Cationic Diarylethenes (Fac. Eng., Tokyo Univ. of Sci., Yamaguchi) ○KONISHI, Shohei; FUNASAKO, Yusuke; INOKUCHI, Makoto

## Physical Chemistry -Chemical Kinetics and Dynamics-

- 2PA-055<sup>#</sup>** Withdrawn
- 2PA-056** Pressure dependence of rate coefficients for the unimolecular decomposition of Si<sub>2</sub>HCl<sub>5</sub> and related bimolecular reactions (Grad. Sch. Creative Sci. Eng., Waseda Univ.) ○NODA, Kaito; KUNIOSHI, Nilson; FUWA, Akio
- 2PA-057<sup>#</sup>** Computational Investigation on the Mechanism of High Temperature Reaction of Indenyl Radical with Molecular Oxygen (ETRI, AIST) ○TSUCHIYA, Kentaro; MISHIMA, Hiroshi
- 2PA-058<sup>#</sup>** The A-X transition of bismuth dimer embedded in solid rare gas matrices. (Fac. Sci. Eng., Kinki Univ.) ○ENDO, Asuka; HATANAKA, Miho; MORISAWA, Yusuke; WAKABAYASHI, Tomonari
- 2PA-059** Preparation of [Au<sub>6</sub>C]<sup>2+</sup> clusters from acetylene gold complexes (Grad. Sch. Sci. Eng., Ibaraki Univ.) ○KUMASAKA, Aika; IZUOKA, Akira
- 2PA-060** Dissociation Energy for Oxygen Release from Iron Oxide Clusters by Gas-Phase Temperature-Programmed Desorption Experiment and Quantum Chemical Calculation (Grad. Sch. Arts and Sci., The Univ. of Tokyo) ○KUDOH, Satoshi; KOYAMA, Kohei; MIYAJIMA, Ken; MAFUNE, Fumitaka
- 2PA-061** Manufacture of the 9,10-bis(phenyl ethynyl) anthracene nanoparticles by the laser ablation method out of the liquid (NNCT) ○AIZUKA, Marie; MURAKAMI, Yoshinori; HIRAKAWA, Tsutomu
- 2PA-062** Photoconversion of pentacene precursor in a single crystal -Shape change of crystal upon the photoconversion- (Sch. Sci. Tech., Kwansai Gakuin Univ.) ○MIYAMOTO, Yuya; SUZUKI, Mitsuharu; ARATANI, Naoki; YAMADA, Hiroki; MASUO, Sadahiro
- 2PA-063** One-color reversible control of photochromic reactions in a diarylethene derivative by higher-order multiphoton absorption under Ti: Sapphire laser irradiation (Grad. Sch. Eng. Sci., Osaka Univ.) ○MURAMATSU, Masayasu; YASUDA, Naoki; Ikegami, Takahiro; ITO, Syoji; MIYASAKA, Hiroshi; UNO, Kakishi; TAKAGI, Yuta; MORIMOTO, Masakazu; IRIE, Masahiro
- 2PA-064** Generation of germylene by the triplet sensitization reaction and its reactivity (Grad. Sch. Sci., Eng., Saitama Univ.) ○TAKAHASHI, Rena; YAGO, Tomoaki; WAKASA, Masanobu
- 2PA-065** Photochemistry of Aromatic Thioketones and Possibility of Triplet Fusion (Grad. Sch. Sci., Eng., Saitama Univ.) ○KUMAGAI, Rei; YAGO, Tomoaki; WAKASA, Masanobu
- 2PA-066** Fluorescence behavior of benzothiazole nanoparticles doped with diarylethene-benzothiazole dyad (Fac. Eng., Ehime Univ.) ○WATANABE, Tomohiro; SASAKI, Shino; ISHIBASHI, Yukihide; FUKAMINATO, Tsuyoshi; ASAH, Tsuyoshi
- 2PA-067<sup>#</sup>** Formation of photoluminescent Au cluster encapsulated in protein assisted by UV light irradiation (Grad. Sch. Sci., Josai Univ.) ○UWADA, Takayuki; TAKENAKA, Yoshiki; YOSHIDA, Kazuki; ISHIKAWA, Mitsuru
- 2PA-068** Two-Photon ionization of Spiropyran derivative in the presence of Cyclodextrin by using Two-Laser Pulse irradiation. (Fac. Eng., FUT) ○YANO, Atsushi; TAKESHITA, Tatsuya; HARA, Michihiro
- 2PA-069<sup>#</sup>** Vibrational assignment of nuclear wavepacket motion that modulates the fluorescence intensity in a solvent-solute ultrafast electron transfer system. (Coll. Life Sci., Ritsumeikan Univ.; Sch. Eng. Sci., Osaka Univ.) ○YUTAKA, Nagasawa; YONEDA, Yusuke; NAMBU, Shohei; TAKEUCHI, Eisuke; MIYASAKA, Hiroshi
- 2PA-070** Fluorescence dynamics of human D-aminoacid oxidase: Study of functional inhibitory effect (ILT) ○TANIGUCHI, Seiji; CHOSROWJAN,

Haik; TANAKA, Fumio

- 2PA-071** Self-propelled Motion of Monodisperse Oil Droplets Prepared by a Flow-Focusing Microfluidic Device (Grad. Sch. Arts and Sci., The Univ. of Tokyo) ○UENO, Naoko; ASAMI, Arisa; BANNO, Taisuke; KAZAYAMA, Yuki; MORIMOTO, Yuya; OSAKI, Toshihisa; TAKEUCHI, Shoji; TOYOTA, Taro

## Materials Chemistry

### Inorganic Materials

- 2PA-073** Hydrothermal synthesis of sodium tin phosphate,  $\text{NaSn}_2(\text{PO}_4)_3$  (Fac. Sci., Kochi Univ.) SUGAHARA, Kenta; SATOU, Hiroki; ○KUROSAKA, Takanori; SHIMANOUE, Rie
- 2PA-074** Optical and Scintillation Properties of  $\text{Eu:SrCO}_3$  Ceramics Prepared by Spark Plasma Sintering Method (Grad. Sch. Mat. Sci., NAIST) ○NAKAUCHI, Daisuke; OKADA, Go; YANAGIDA, Takayuki
- 2PA-075** The synthesis of multi component metal nanoparticles supported by DNA gel (School of Environment, Nagoya Univ.) ○TANIGUCHI, Shotai; ZINCHENKO, Anatoly; MURATA, Shizuaki
- 2PA-076** Preparation of transparent zirconia nanoparticle-poly(dimethylsiloxane) composite (Sumitomo Osaka Cement Company, Limited) ○HARADA, Kenji; OTSUKA, Takeshi
- 2PA-077** Discoloration mechanism of aluminum alloys: Synchrotron PES and XAFS (DENSO CORP.) ○ITO, Shinichi; MIYACHI, Haruhiko; SHIMIZU, Sumera; MIYAKAWA, Toshihiko; ASAI, Hideo; KAJIKAWA, Syunji
- 2PA-078** Structure and band gap of Perovskite halide (Grad. Sch. Industrial Tech., Nihon Univ.) ○HINO, Satomi; YAMANE, Yohei; YAMADA, Koji
- 2PA-079** Fabrication and characterization of  $\text{Eu}_2\text{O}_3$ -added Pollucite Phosphor by the high-temperature solid-phase reaction method (Dept. Mat. Sci. Eng., Nat. Def. Acad.) ○ARUGA, Atsushi; HAMADA, Sho
- 2PA-080** Synthesis and photocatalytic property of porous  $\text{SrTiO}_3$  nanoparticles (Fac. Eng., Tokyo Univ. of Sci., Yamaguchi) ○ITAI, Takaaki; SAKAI, Munetoshi; KALOUSEK, Vit; IKEUE, Keita

### Organic Materials

- 2PA-081** Electrochromic properties of porphyrins and phthalocyanines (Grad. Sch. Med., Eng., Univ. of Yamaguchi) ○OGAWA, Kazuya; KAMIMURA, Kenji; MAEKAWA, Kazuyoshi
- 2PA-082** Synthesis and characterization of the vinyl urethane adhesive for wood (NIT Hachinohe College, Mater. & Bio. Eng Course) ○SAGAWA, Fumika; SATOH, Kumiko
- 2PA-083** Photoluminescence Properties of Polymer-Stabilized Liquid Crystals Containing Gold Complexes (Grad. Sch. Life Sci., Ritsumeikan Univ.) ○SAMI, Hussain; YOUNIS, Osama; YAMADA, Shigeyuki; TSUTSUMI, Osamu
- 2PA-084** Synthesis and Physical Property of Coordination Polymers with HATNA Derivatives including Alkylsulfanyl Groups. (Fac. Sci. Eng., Kinki Univ.) ○TAKEDA, Kazuki; NAKATANI, Kenji; OKUBO, Takashi; MAEKAWA, Masahiko; KURODA-SOWA, Takayoshi
- 2PA-085** Thermoelectric Properties of Alternating Copolymers based on Cyclopentadiene and Benzothiadiazole Units. (Grad. Sch. Mat. Sci., NAIST) ○SATO, Dai; NONOGUCHI, Yoshiyuki; KAWAI, Tsuyoshi
- 2PA-086** Synthesis of azatriphenylene derivatives for electron transport materials (Grad. Sch. Life Sci., Ritsumeikan Univ.) ○KIGOSHI, Sayaka; WATANABE, Shun; KITAJIMA, Yuta; IWANAGA, Satomi; KOMORI, Noriaki; KANEKO, Kosuke; HANASAKI, Tomonori
- 2PA-087** An experimental and theoretical study towards organic host/guest systems with different transition dipole alignment (Grad. Sch. Sci., Tohoku Univ.) ○MU, Shuai; TAKAISHI, Shinya; YAMASHITA, Masahiro
- 2PA-088** The Synthesis and the ER Effect of the Liquid Crystalline Cyclosiloxane Derivatives with Side-on Mesogens (Grad. Sch. Life Sci., Ritsumeikan Univ.) ○KISHI, Yuki; KANEKO, Kosuke; HANASAKI, Tomonori
- 2PA-089** The Synthesis of the Cyclosiloxane Derivatives with the Side-on Chiral Mesogens and Their Physical Properties (Grad. Sch. Life Sci., Ritsumeikan Univ.) ○KITAJIMA, Yuta; KANEKO, Kosuke; HANASAKI, Tomonori
- 2PA-090** The Synthesis and Evaluation of Liquid Crystalline Organic Semiconductor with a Polymerizable Part (Grad. Sch. Life Sci., Ritsumeikan Univ.) ○WAKABAYASHI, Mikio; INOUE, Ryo; KANEKO, Kosuke; HANASAKI, Tomonori
- 2PA-091** The Synthesis of Gold Nanoparticles Coated with Fluorescent Mesogens and the Measurement of Their Physical Properties (Grad. Sch. Life Sci., Ritsumeikan Univ.) ○YAMADA, Naoki; KANEKO, Kosuke; HANASAKI, Tomonori
- 2PA-092** Development of Thin Film Solar Cells using d- $\pi$  Complexes of HATNA- $\text{Me}_6$  and Copper Halides (Fac. Sci. Eng., Kinki Univ.; PRESTO, JST) ○HORII, Toshiya; OKUBO, Takashi; MAEKAWA, Masahiko; KURODA-SOWA, Takayoshi
- 2PA-093** Preparation of polyrotaxane-containing polymeric materials aiming for improvement in mechanical property (Grad. Sch. Sci., Osaka Univ.) ○KOYANAGI, Kohei; TAKASHIMA, Yoshinori; YAMAGUCHI,

Hiroyasu; HARADA, Akira

- 2PA-094** Synthesis and properties of molecular dyads of porphyrin acceptors with donors (Osaka Municipal Technical Research Institute; Grad. Sch. Sci., Kobe Univ.) ○TAKAO, Yuku; MATSUMOTO, Fukashi; MORIWAKI, Kazuyuki; MIZUNO, Takumi; OHNO, Toshinobu; SETSUNE, Jun-ichiro
- 2PA-095** Synthesis of a phase transfer catalyst of guanidine salt with two long-chain alkyl group (Sch. Eng., Tokyo Denki Univ.) ○TANAKA, Satomi
- 2PA-096** Fabrication and characterization of Pperovskite Solar Cells including a buffer layer of Copper Thiocyanate. (Fac. Sci. Eng., Kinki Univ.; PRESTO, JST) ○MUKAI, Yasutomo; OKUBO, Takashi; MAEKAWA, Masahiko; KURODA-SOWA, Takayoshi
- 2PA-097** Dielectric characteristic and ER effect of dual frequency liquid crystals (Grad. Sch. Life Sci., Ritsumeikan Univ.) ○FUKUI, Takato; KANEKO, Kosuke; OKUMURA, Yasushi; KIKUCHI, Hirotsugu; FUKAO, Koji; HANASAKI, Tomonori
- 2PA-098** Development of Thin Film Solar Cells with d- $\pi$  Hybrid Materials consisting of Copper Halides and  $\text{HAT}(\text{CN})_6$  (Fac. Sci. Eng., Kinki Univ.; PRESTO, JST) ○NAKAMURA, Kana; HIMOTO, Kento; OKUBO, Takashi; MAEKAWA, Masahiko; KURODA-SOWA, Takayoshi
- 2PA-099** Synthesis and Property of Polymer Bearing Ferulic Acid Derivatives as Side Chain (Fac. Sys. Eng., Wakayama Univ.) ○ATARASHI, Hironori; TAKASHIMA, Airi; OSUGA, Hideji; SAKAMOTO, Hidefumi
- 2PA-100** Synthesis and Mechanical Properties of Polymer Bearing Ethyl Ferulate (Fac. Sys. Eng., Wakayama Univ.) ○TAKASHIMA, Airi; ATARASHI, Hironori; OSUGA, Hideji; SAKAMOTO, Hidefumi
- 2PA-101** Creation of Novel Methanofullerenes Having Various n-Hexyl Substituted Bithiophene and the Application to Photovoltaics (Osaka Municipal Technical Research Institute; Grad. Sch. Sci. Tech., Ryukoku Univ.) ○MORIWAKI, Kazuyuki; HARAYAMA, Ayata; IWASAWA, Tetsuo; MATSUMOTO, Fukashi; IWAI, Toshiyuki; TAKAO, Yuku; ITO, Takatoshi; MIZUNO, Takumi; OHNO, Toshinobu
- 2PA-102** Synthesis of p-Type Semiconducting Materials Including a Phenothiazine Unit and Application to Organic Photovoltaics (Kinki Univ.; PRESTO, JST) ○NAKATANI, Kenji; YASUHARA, Minoru; OKUBO, Takashi; MAEKAWA, Masahiko; KURODA-SOWA, Takayoshi

### Composite Materials

- 2PA-103** Synthesis and application of raspberry-shaped particles by utilizing polyallylamine (TRI-OSAKA) ○HAYASHI, Hirokazu; NAKASHIMA, Yoichi; YOSHIOKA, Yaiji; KIMOTO, Masaki
- 2PA-104** Synthesis and swelling behavior of PNIPAAm-SA-saponite nanocomposite gel (Sch. Eng., Tokyo Denki Univ.) AKIMOTO, Takumi; ○ISHIMARU, Shin'ichi
- 2PA-105** Adsorption-Desorption Behavior of  $\text{In}^{3+}$  and  $\text{Sn}^{2+}$  on Clay-Poly(*N*-Isopropylacrylamide) Nanocomposite (Grad. Sch. Eng., Tokyo Denki Univ.) ○YASHIRO, Yu; ISHIMARU, Shin'ichi
- 2PA-106** Preparation of Polyimide-composites Consisted of Two Kinds of Particles with Drastically Different Diameters (TRI-OSAKA) ○NAKAHASHI, Akiko; ASAO, Katsuya
- 2PA-107** The Synthesis and Physical Properties of Silica Nanoparticles Coated with Fluorescent Mesogenic Groups (Grad. Sch. Life Sci., Ritsumeikan Univ.) ○OGIDA, Yuji; KANEKO, Kosuke; SANADA, Tomoe; HANASAKI, Tomonori; KOJIMA, Kazuo
- 2PA-108** Immobilization of nano silica particle onto carbon material surfaces by polymer chain (Grad. Sch. Sci. and Technol., Niigata Univ.; Fac. Eng., Niigata Univ.) HIRANO, Fumiya; IKARASHI, Takuya; HASHIMOTO, Kumi; TAMESUE, Shingo; YAMAUCHI, Takeshi; ○TSUBOKAWA, Norio

### Carbon Materials

- 2PA-109** Intercalation of lithium ions into pillared carbons (Sch. Eng., Univ. of Hyogo) ○AOTO, Ai; MATSUO, Yoshiaki
- 2PA-110** Evaluation of surface characteristic for the carbon materials by using temperature programmed desorption and temperature programmed oxidation (Fac. Eng., Oita Univ.) ○FUKAMACHI, Kento; KINUMOTO, Taro; TSUMURA, Tomoki; TOYODA, Masahiro
- 2PA-111** Interaction of carbon particles with albumin and fibrinogen: effect of particle shape and chemical surface modification (Sch. Sci. Eng., CIST) ○TAKADA, Tomoya; AKAHANE, Syuhei; KASHIMA, Kazuki

### Low Dimensional Materials

- 2PA-112** Carbon nanotube/Cellulose nanofiber Composite (R&D Center, Nippon Shizai Co., Ltd.) ○INOUE, Hitoshi
- 2PA-113** The effect of pulsed light irradiation on thin films of various carbon materials (PRI, AIST) ○TACHIBANA, Hiroaki; AUMI, Reiko
- 2PA-114** High-yield production of boron nitride nanosheets by direct exfoliation using ionic liquids (Toyota Central R&D Labs., Inc.) ○MORISHITA, Takuya; OKAMOTO, Hirotaaka; KATAGIRI, Yoshihide; MATSUSHITA, Mitsumasa; FUKUMORI, Kenzo
- 2PA-115** Synthesis and characterization of imogolite nanotube functionalized with methyl groups from the precursor solution (Kitakyushu Nat. Coll. of Tech.) ○YAMAMOTO, Kazuya; SUGISHITA, Motoki
- 2PA-116** Single Layer Etching of  $\text{MoS}_2$  using Inward-Plasma (NRI, AIST)

- KUBO, Toshitaka; MIYAWAKI, Jun; SHIMIZU, Tetsuo; SHIMBORI, Shunnichiro; TAKAHASHI, Satoshi; ANDO, Atsushi  
**2PA-117** Preparations of nanostructured SrTiO<sub>3</sub> for organic thin-film solar cells and evaluations of their photovoltaic performances (Grad. Sch. Energy Sci., Kyoto Univ.) ○TAKEUCHI, Azusa; SAGAWA, Takashi; HACHIYA, Kan  
**2PA-118<sup>#</sup>** Withdrawn

### Ionic Liquid

- 2PA-119<sup>#</sup>** Synthesis and Properties of Imidazolium Salts with Carbazole as pi-Conjugated Molecules (Department of Natural Science, Osaka-Kyoiku University) ○HORI, Kazushige; UCHIDA, Kazuki; TANI, Keita

### Functions of Materials

- 2PA-121** Mechanical Property of Oriented Collagen Film Prepared by Means of Surface Relief Structure (Chem. Res. Lab., Tokyo Tech) ○HASHIMOTO, Yuya; TOKUCHI, Saki; AIZAWA, Miho; AKAMATSU, Norihisa; FUJIKAWA, Shigenori; SASAKI, Takeo; SHISHIDO, Atsushi  
**2PA-122<sup>#</sup>** Vascularization into cardiomyocyte cell sheets in vivo using VEGF releasing particle loaded fiber mats (Tokyo Women's Med Univ. Inst Adv Biomed Eng Sci) ○NAGUMO, Yuhei; NAGUMO, Yuhei; NAGASE, Kenichi; CHUNG, Hye Jin; KIM, Hee Jung; KYUNG, Heiwon; KIM, Miri; SEKINE, Hidekazu; SHIMIZU, Tatsuya; KANAZAWA, Hideko; OKANO, Teruo; LEE, Seung Jin; YAMATO, Masayuki  
**2PA-123** Development of Membrane Protein Mimics Responsive to Biochemical Stimulus (IMRAM, Tohoku Univ.) ○SUGAWARA, Naoyuki; MURAOKA, Takahiro; KINBARA, Kazushi  
**2PA-124<sup>#</sup>** Photochromism of a diarylethene having perfluorocyclohexene ring (Fac. Sci. Tech., Ryukoku Univ.; Coll. Sci., Rikkyo Univ.; Sch. Pharm., TUPLS; RIKEN RINC; JASRI) ○HATANNO, Eri; MORIMOTO, Masakazu; YOKOJIMA, Satoshi; NAKAMURA, Shinichiro; YASUDA, Nobuhiro; UCHIDA, Kingo  
**2PA-125** Fluorescence switching in polymers bearing fluorene and diarylethene in side chains (Grad. Sch. Eng., Osaka City Univ.) ○NAKAHAMA, Tatsumoto; KOBATAKE, Seiya  
**2PA-126<sup>#</sup>** Thermal cycloreversion reaction of diarylethene closed-ring isomers accompanying acid addition (Grad. Sch. Eng., Osaka City Univ.) ○MAEMICHI, Hiroyuki; KOBATAKE, Seiya  
**2PA-127<sup>#</sup>** Photochromic Reaction Behavior of Thiophene-S,S-dioxidized Diarylethenes Having Different Heterocyclic Rings (Grad. Sch. Eng., Osaka City Univ.) ○TANAKA, Koki; KOBATAKE, Seiya  
**2PA-128** Thermal bleaching reaction of thiophene-S,S-dioxidized diarylethenes in various media. (Grad. Sch. Eng., Osaka City Univ.) ○NAKAI, Yoshihiro; KOBATAKE, Seiya  
**2PA-129<sup>#</sup>** Mg-Vapor Deposition Modulation on Photochromic Diarylethene Crystal Surface (Osaka Kyoiku Univ.) ○YAMAMOTO, Kazuki; LIN, Ying; UCHIDA, Kingo; TSUJIOKA, Tsuyoshi  
**2PA-130<sup>#</sup>** Thermal bleaching reaction of photochromic diarylethenes having electron-withdrawing group with thiophene-S,S-dioxide (Grad. Sch. Eng., Osaka City Univ.) ○TANAKA, Satoshi; KOBATAKE, Seiya  
**2PA-131<sup>#</sup>** Influence of the chemical structures of the dispersants on photochromic properties of tungsten oxide/methylcellulose composite films (Grad. Sch. Sci. Eng., Yamaguchi Univ.) ○SHIMIZU, Dai; ADACHI, Kenta; TANI, Seiji; YAMAZAKI, Suzuki  
**2PA-132** Reversible photo-switching of optical trapping force by using photochromic reaction (Sch. Eng. Sci., Osaka Univ.) ○MITSUISHI, Morio; ITO, Shoji; SETOURA, Kenji; MIYASAKA, Hiroshi; MORIMOTO, Masakazu; UNO, Kagishi; TAKAGI, Yuta; IRIE, Masahiro  
**2PA-133** Microscopic phase-separation dynamics of polymer blends evaluated with single-molecule imaging methods (Sch. Eng. Sci., Osaka Univ.) ○FUJITA, Hajime; ITO, Syoji; MIYASAKA, Hiroshi; TAKEI, Satoshi; UNO, Kakishi; TAKAGI, Yuta; MORIMOTO, Masakazu; IRIE, Masahiro  
**2PA-134** Substituent effects on thermal bleaching reactivity of photometric terarylenes (Grad. Sch. Mat. Sci., NAIST) ○FUJIWARA, Kohei; NAKASHIMA, Takuya; KAWAI, Tsuyoshi  
**2PA-135** Photochromic reaction behavior of diarylethene nanoparticles prepared by reprecipitation method (Grad. Sch. Sci., Eng., Ehime Univ.) ○MASUDA, Keisuke; ISHIBASHI, Hideyuki; ASAH, Tsuyoshi  
**2PA-136<sup>#</sup>** Exciton dynamics of the hybrid system of 1,10-phenanthroline-attached bithienylene and semiconductor nanoparticles. (Sch. Sci. Tech., Kwansai Gakuin Univ.) ○KINOSHITA, Ken; UEMOTO, Kenta; KATAYAMA, Tetsuro; YOKOYAMA, Yasushi; TAMAI, Naoto  
**2PA-137** Photochromic and fluorescence performances of fluorescent diarylethene derivatives in water (Coll. Sci., Rikkyo Univ.) ○INATOME, Toru; YAGI, Akira; MORIMOTO, Masakazu; IRIE, Masahiro  
**2PA-138<sup>#</sup>** Selective-metal vapor deposition on photochromic diarylethene surface -dependence on metal species- (Osaka Kyoiku Univ.) ○MATSUMOTO, Saki; TSUJIOKA, Tsuyoshi  
**2PA-139** Synthesis and Substituent Effects of Tetracoordinate Cationic Boron Complexes Having a Solid-State Photochromic Character (Grad. Sch. Sci. Eng., Univ. of Toyama) ○HATTA, Naoya; YOSHINO, Junro; HAYASHI, Naoto; HIGUCHI, Hiroyuki  
**2PA-140<sup>#</sup>** Photochromism of novel diarylethene derivatives with intramolecular hydrogen bond (Grad. Sch. Eng., Yokohama Natl. Univ.) ○KOBAYASHI, Hiroaki; NAKAGAWA, Tetsuya; YOKOYAMA, Yasushi  
**2PA-141** Control of circularly polarized luminescence (CPL) of chiral binaphthyl compound by substituent (Kinki Univ.; Grad. Sch. Mat. Sci., NAIST) ○MIZUSAWA, Takaya; KITAYAMA, Yoko; FUJIKI, Michiya; IMAI, Yoshitane  
**2PA-142** Circularly Polarized Luminescence(CPL) property of chiral organic fluorophore having fluorescent naphthalene unit (Fac. Sci. Eng., Kinki Univ.) ○SATO, Takuya; NAKABAYASHI, Kazuki; TAJIMA, Nobuo; KITAMATU, Mizuki; FUJIKI, Michiya; IMAI, Yoshitane  
**2PA-143<sup>#</sup>** Polymorphic Phase Transition and Fluorescence Color Change of Diarylethene Crystals (Grad. Sch. Eng., Osaka City Univ.; Coll. Sci. Eng., Aoyama Gakuin Univ.) ○KITAGAWA, Daichi; MUTOH, Katsuya; KOBAYASHI, Youichi; ABE, Jiro; KOBATAKE, Seiya  
**2PA-144<sup>#</sup>** Development of liquid-crystalline cyclic trinuclear gold complexes with photoluminescence and carrier-transport properties (Coll. Life Sci., Ritsumeikan Univ.) ○NAKAMURA, Shin-ya; NAKASATO, Hitoya; YAMADA, Shigeyuki; TSUTSUMI, Osamu  
**2PA-145** Synthesis and properties of 4,5-bis(9-phenylanthracene-10-yl) xanthene (Fac. Sci., Josai Univ.) ○TAKAYAMA, Kentō; OKADA, Seiichirou; HASHIMOTO, Masashi  
**2PA-146** Synthesis and Properties of Iridium complexes with 5-aryldipyromethene. (Fac. Sci., Josai Univ.) ○MASAI, Kanato; OKADA, Seiichirou; HASHIMOTO, Masashi  
**2PA-147** Fluorescent self-assembled aggregates generated from trigonal azobenzene derivatives (Fac. Eng., Tottori Univ.) ○ABE, Ikuo; HAN, Mina; MATSUURA, Kazunori  
**2PA-148<sup>#</sup>** Excited-State Dynamics of 2,2'-Bipyridine Moieties Embedded in Periodic Mesoporous Organosilica (Toyota Central R&D Labs., Inc.) ○YAMANAKA, Ken-ichi; MAEGAWA, Yoshifumi; INAGAKI, Shinji  
**2PA-149<sup>#</sup>** Development of functional material using an engineered reactive photoreceptor (IMRAM, Tohoku Univ.) ○MAEJIMA, Tatsuya; UI, Mihoko; ARAKI, Yasuyuki; WADA, Takehiko; KINBARA, Kazushi  
**2PA-150<sup>#</sup>** Two-photon induced photodegradation in pi-conjugated organoboron compounds (GNCT, Chem. and Mater. Sci.; Fac. Eng., Nagaoka Univ. of Tech.) ○HARUNO, Hayate; KURAKAMI, Yuri; KATO, Misaki; FUKUSHIMA, Satomi; FUJINO, Masaie; ITO, Haruhiko  
**2PA-151** Development of Solid-State Dye-Sensitized Solar Cells Employing Self-Assembled Metal Nano-Clusters (Gifu Univ.) MANSEKI, Kazuhiro; ○SHIBUTANI, Yuki; SUGIURA, Takashi  
**2PA-152** Low-Temperature Synthesis of Self-Assembled Rutile Titania Nanocrystals and Their Application for Dye-sensitized Solar Cells (Gifu Univ.) MANSEKI, Kazuhiro; ○SUGIMOTO, Shusei; SUGIURA, Takashi  
**2PA-153<sup>#</sup>** Photocatalysis characteristics of perylene derivative/lead phthalocyanine p-n bilayer acting in VIS-NIR region (Grad. Sch. Sci. Tech., Hirosaki Univ.; Chem. Res. Lab., Tokyo Tech) ○MENDORI, Daiki; NAGAI, Keiji; ABE, Toshiyuki  
**2PA-154<sup>#</sup>** Preparation and Characterization of Electrodeposited Iron Chalcogenide Superconductors (Coll. Sci. Eng., Kanto Gakuin Univ.) ○WATANABE, Nobuaki; MASUI, Takahiko; SUMIYOSHI, Rie; KOIKE, Shoma; MOTOMURA, Minoru; YOSHIDA, Kei; SHIMOJI, Ippei  
**2PA-155<sup>#</sup>** Polymerization and thin film formation of liquid-crystalline semiconductor based on olig(3,4-ethylenedioxythiophene) unit (Fac. Eng., Kagawa Univ.) ○HOSUGI, Takahiro; SEIKE, Kunihiko; FUNAHASHI, Masahiro  
**2PA-156<sup>#</sup>** Synthesis and mesomorphic property of perylene tetracarboxylic bisimide bearing polymerizable cyclotetrasiloxane rings and a triethylene oxide chain (Fac. Eng., Kagawa Univ.) ○TAKAOKA, Shunsuke; FUNAHASHI, Masahiro  
**2PA-157<sup>#</sup>** LC Photonic Semiconductor Based on Chiral Phenylterthiophene Dimer Emitting Circularly Polarized Fluorescence at Room Temperature (Fac. Eng., Kagawa Univ.) ○AOKI, Takuya; FUNAHASHI, Masahiro  
**2PA-158** Photo-Alignment Control of Polymer-Stabilized Dye-Doped Liquid Crystal (Chem. Res. Lab., Tokyo Tech) ○USUI, Koji; KATAYAMA, Erika; SHISHIDO, Atsushi  
**2PA-159** Adsorption of urea on molecularly imprinted acrylamide/acrylic acid copolymer gels (Coll. Industrial Tech., Nihon Univ.) ○NAKAYAMA, Katsushi; TAKAHASHI, Daisuke; YAMADA, Kazunori  
**2PA-160<sup>#</sup>** Effect of additives on physical properties in electrodeposited aluminum from dimethyl sulfone solution(1) (Coll. Sci. Eng., Kanto Gakuin Univ.) ○ITO, Yuya; MATSUBARA, Kyohei; SHIMOJI, Ippei; TASUGI, Naoya; SANO, Katsuhito; HONGO, Sho; FUJITA, Daiki; SUMIYOSHI, Rie; WATANABE, Nobuaki; KOIWA, Ichiro  
**2PA-161<sup>#</sup>** Effect of additives on physical properties in electrodeposited aluminum from dimethyl sulfone solution(2). (Coll. Sci. Eng., Kanto Gakuin Univ.) ○MATSUBARA, Kyohei; ITO, Yuya; SHIMOJI, Ippei; TASUGI, Naoya; SANO, Katsuhito; HONGO, Sho; FUJITA, Daiki; SUMIYOSHI, Rie; WATANABE, Nobuaki; KOIWA, Ichiro  
**2PA-162** Color Change of Naphthalenetetracarboxylic Acid Diimide Derivatives by Odor Substances (TRI-OSAKA) ○YAMASHITA, Reiko; KITA, Kohji  
**2PA-163** Effects of the chemical composition of a w/o emulsion on the morphology of organosilica microcapsules (Fac. Eng., Shinshu Univ.) ○KOIDE, Takashi; OKADA, Tomohiko  
**2PA-164** Effect of heat treatment on the photocatalytic activity of titania-

- supported organosilica particles (Fac. Eng., Shinshu Univ.) ○YAMAUCHI, Masahiro; MAKI, Yusuke; IDE, Yusuke; OKADA, Tomohiko
- 2PA-165** Adsorption of glucose to the clay mineral, and the effects of amino acid addition (Fac. Eng., Shinshu Univ.) ○MATSUMOTO, Jumpei; OKADA, Tomohiko
- 2PA-166** Deposition of a layered silicate on hollow silica microspheres occluding magnetic particles (Fac. Eng., Shinshu Univ.) ○KOBARI, Hanae; OKADA, Tomohiko
- 2PA-167** Optical Resolution of an Organometallic Complex by Clay-Silica Core-shell Particles (Fac. Eng., Shinshu Univ.) ○OGURI, Mutsuki; OKADA, Tomohiko; YAMAGISHI, Akihiko; SATO, Hisako

## Applications of Materials

### Sensors

- 2PA-169** Indicator for the Diagnosis of Electrons and Ions in Plasma Using Noble Metal Ions as the Sensor (Kinki Univ.) ○SATAHIRA, Kosei; IHARA, Tatsuhiko

### Batteries

- 2PA-170** Synthesis of carbon-manganese oxide composite powder and characterization as anode material for lithium ion batteries (Fac. Eng., Oita Univ.) ○NISHIKAWA, Masafumi; KINUMOTO, Taro; TSUMURA, Tomoki; TOYODA, Masahiro
- 2PA-171<sup>#</sup>** Synthesis and Evaluation of Liquid Crystalline Electrolyte in Li-ion Cell (Grad. Sch. Sci. Technol., Shizuoka Univ.) ○SAITO, Yusuke; JITSUKATA, Hoshimi; MINAMIHORI, Masashi; KUBONO, Atsushi; MASE, Nobuyuki

### Functional dyes

- 2PA-172** Preparation and properties of latent pigments of P.R.272 by microwave irradiation (Coll. Eng., Shibaura Inst. of Tech.; NSED, JAEA) ○KIMURA, Yu; OHISHI, Tomoji; WATANABE, Masayuki; AOYAGI, Noboru

### Adhesion, surface functions

- 2PA-173** Functionalization of adhesion between hard materials through host-guest interaction. (Sch. Sci., Osaka Univ.) ○SHOJIMA, Yasushi; SEKINE, Tomoko; TAKASHIMA, Yoshinori; YAMAGUCHI, Hiroyasu; HARADA, Akira
- 2PA-174<sup>#</sup>** Protein adsorption behavior onto a polyurethane nanofiber surface with different segment distribution prepared by electrospinning (Fac. Eng., Univ. of Fukui) ○MORITA, Yuko; KOIZUMI, Gaku; SAKAMOTO, Hiroaki; SUYE, Shin-ichiro
- 2PA-175** Friction on Shape-Tunable Wrinkles (AIST; Sch. Sci. Eng., CIST) ○SUZUKI, Kosuke; HIRAI, Yuji; SHIMOMURA, Masatsugu; OHZONO, Takuya
- 2PA-176** Practical surface modification of materials catalyzed by various tris (pentafluorophenyl)borane-Lewis base complexes (Dept. of Chem. Eng., NNCT) ○KUROSAKI, Ryo; IWAIDA, Kohji; ICHII, Shun; KAMEI, Toshiyuki; SHIMADA, Toyoshi

### Lifescience

- 2PA-177<sup>#</sup>** Gold nanocrystals with well-defined crystallographic {111} facets suppress pathological neovascularization (Seoul National University) JO, Dong Hyun; HONG, Jong Wook; KIM, Jin Hyoung; HAN, Sang Woo; ○KIM, Jeong Hun
- 2PA-178<sup>#</sup>** Radiochemical synthesis of Ag nanoparticles and their antimicrobial efficiency (Sch. Eng., Osaka Univ.) ○SEINO, Satoshi; IMOTO, Yasuo; KOSAKA, Tomoya; JONOUCHI, Masayuki; NISHIDA, Tomoki; NAKAGAWA, Takashi; YAMAMOTO, Takao A.

### Materials for environment

- 2PA-179<sup>#</sup>** Cesium absorption efficiency of some clay materials: X-ray fluorescence study (NIMS X-ray lab.) DELATTRE, Emmanuel; EBA, Hiromi; YAMADA, Hirohisa; ○SAKURAI, Kenji

### Hybrid materials

- 2PA-180** Preparation and Applications of Fluorinated Alcohols/Boric Acid/Alkyl-modified Cellulose Nanocomposites (Grad. Sch. Sci. Tech., Hirosaki Univ.; UNIMATEC) ○JIN, Natsuki; SAITO, Tomoya; KIJIMA, Tetsushi; MIYATA, Momoko; KANEUMI, Yoshiyama; SAWADA, Hideo
- 2PA-181** Preparation of Fluoroalkyl End-capped Vinyltrimethoxysilane Oligomeric Nanocomposites Possessing Alkyl-Modified Cellulose Units - Application to the Surface Modification (Fac. Sci. Tech., Hirosaki Univ.; Grad. Sch. Sci. Tech., Hirosaki Univ.; Nippon Chemical Industrial Co.,Ltd.) ○SUTO, Yuko; SAITO, Tomoya; YAMADA, Satoshi; SUGIYA, Masashi; SAWADA, Hideo

- 2PA-182** Preparation of Fluoroalkyl End-capped Vinyltrimethoxysilane Oligomer/Magnesium Fluoride Nanocomposites - Application of These Nanocomposites to the Surface Modification (Grad. Sch. Sci. Tech., Hirosaki Univ.; Kanto Denka Kogyo Co.,Ltd.) ○OIKAWA, Yuri; SAITO, Tomoya; GOTO, Yuki; SAWADA, Hideo
- 2PA-183** Preparation of Fluoroalkyl End-capped Vinyltrimethoxysilane Oligomer/Cyclodextrin Polymer Nanocomposites - Application to the Separation of Oil and Water (Grad. Sch. Sci. Tech., Hirosaki Univ.; Kankyo Kogaku; Nippon Chemical Industrial Co.,Ltd.) ○TAKEGAHARA, Yutaro; OIKAWA, Yuri; SUZUKI, Jun-ichi; YAMADA, Satoshi; SUGIYA, Masashi; SAWADA, Hideo
- 2PA-184** Separation of Oil and Water by Using Perfluoroacyl Fluoride/Calcium Carbonate Nanocomposites Possessing the Superhydrophilic/Superoleophobic Characteristic (Grad. Sch. Sci. Tech., Hirosaki Univ.; Mitsubishi Chemicals Electronic Co., Ltd.; Mitsubishi Materials Co., Ltd.) ○SAITO, Tomoya; HONDA, Tsunetoshi; KAMIYA, Takeshi; FUJITA, Masato; TAKANO, Daisuke; SAWADA, Hideo
- 2PA-185** Preparation of Flammable and Nonflammable Fluoroalkyl End-capped Vinyltrimethoxysilane Oligomer/Boric Acid Nanocomposites (Grad. Sch. Sci. Tech., Hirosaki Univ.; AIST Chubu) ○AOMI, Yuta; NISHIDA, Masakazu; TANAKA, Tomoko; SAWADA, Hideo
- 2PA-186** Preparation and Property of Fluoroalkyl End-capped Oligomer/Polymethacrylamide Nanocomposites (Grad. Sch. Sci. Tech., Hirosaki Univ.) ○NISHIURA, Katsuhito; SAWADA, Hideo
- 2PA-187** Facile micro patterning method of organic-inorganic hybrid film containing latent pigments by sol-gel method using photo-acid-generator (Grad. Sch. Eng. Sci., Shibaura Inst. of Tech.) ○KAWAGUCHI, Saori; OHISHI, Tomoji

Friday, March 25, AM

(12 : 30~14 : 00)

## Inorganic Chemistry

- 2PB-001<sup>#</sup>** Synthesis of well-dispersible rare earth element-doped layered double hydroxides by rapid-mixing/hydrothermal method (National Institute of Technology, Ichinoseki College; Fac. Eng., Iwate Univ.) ○KIMURA, Hiroe; AISAWA, Sumio; SHINOHARA, Satsuki; SANG, Jing; KURE, Shochiku; HIRAHARA, Hidetoshi
- 2PB-002<sup>#</sup>** The Effect of Constituent Metals on Anion Exchange Properties of Layered Double Hydroxides (Grad. Sch. Fac. Sci. Eng., Shimane Univ.; Grad. Sch. Fac. Sci. Eng., Shimane Univ.) ○SUE, Kunihiko; FUJIMURA, Takuya; SASAI, Ryo
- 2PB-003** Synthesis and Structure of  $RbCa_2MnNb_3TiO_{13}$  ( $M = Mn, Co$ ) (MANA, NIMS) ○EBINA, Yasuo; SASAKI, Takayoshi
- 2PB-004<sup>#</sup>** Crystal growth of layered perovskite niobate and its hydration swelling (MANA, NIMS) ○IYI, Nobuo; SONG, Yeji; SASAKI, Takayoshi
- 2PB-005<sup>#</sup>** Gigantic hydration swelling of layered perovskite oxide crystals in aqueous solutions containing various organoammonium ions and their exfoliation behaviors (MANA, NIMS) ○SONG, Yeji; IYI, Nobuo; HOSHIDE, Tatsumasa; EBINA, Yasuo; OZAWA, Tadashi; MA, Renzhi; MIYAMOTO, Nobuyoshi; SASAKI, Takayoshi
- 2PB-006<sup>#</sup>** Anion Exchange Properties of Carbonate-type Layered Double Hydroxides with Various Chemical Compositions. (Grad. Sch. Fac. Sci. Eng., Shimane Univ.) ○SUGATA, Mako; FUJIMURA, Takuya; SASAI, Ryo
- 2PB-007<sup>#</sup>** Preparation and Ion Exchange of Layer Structured Tantalate  $Rb_4Ta_6O_{17} \cdot 3H_2O$  (Tokuyama Coll. of Tech.) ○OHASHI, Masao; YATSUZUKA, Ryohei
- 2PB-008** Synthesis of LiNbO<sub>3</sub>-type solid solution,  $xLiTaO_3-(1-x)Mn_4Ta_2O_9$  (Sch. Sci., Tokai Univ.) ○OTOBE, Saki; KATSUMATA, Tetsuhiro
- 2PB-009** Influence of calcine temperature of precursors at sol-gel synthesis of aluminum molybdate (Fac. Sci., Kochi Univ.) YOSHITAKE, Asuka; NAKAMURA, Yuko; ○SHIMANOUCI, Rie
- 2PB-010** Synthesis and properties of solid solutions with scandium tungstate-type crystal structure (Fac. Sci., Kochi Univ.) SHINDO, Junya; ○UEYAMA, Ayumi; SHIMANOUCI, Rie
- 2PB-011** Synthesis and interlayer pillaring of B-, Al- and Ga-substituted swellable micas (Fac. Eng., Shinshu Univ.) ○IMAI, Yusuke; YAMAGUCHI, Tomohiro; TARUTA, Seiichi
- 2PB-012** Synthesis of  $Mn^{2+}:ZnAl_2O_4$  by Homogeneous Precipitation Method (Suzuka Nat. Coll. of Tech.) ○SAKURAGI, Tomohito; WADA, Noriyuki; KOJIMA, Kazuo
- 2PB-013** Synthesis of titanium dioxide assemblies with 2D hexagonal nanostructure (Sch. Env. Sci. Eng., KUT) ○KUMABE, Yoshitaka; OHTANI, Masataka; KOBIRO, Kazuya
- 2PB-014** Size control and surface modification of hollow spherical titanium oxide nanoparticle assemblies (Sch. Env. Sci. Eng., KUT) ○IRIZAWA, Akitō; OHTANI, Masataka; KOBIRO, Kazuya
- 2PB-015<sup>#</sup>** Solvent extraction for lanthanide with dithiocarbamate extractant and analyses of electronic structure by using DFT calculation (Hiroshima Univ.) ○SHINGU, Kazutoshi; KANEKO, Masashi; MIYASHITA, Sunao; NAKASHIMA, Satoru
- 2PB-016<sup>#</sup>** Synthesis and photocatalytic activity of Ta-modified titanium oxides

having rutile structure (Sch. Sci. Tech., Gunma Univ.) OIWAMOTO, Shinji; NAKAMURA, Shohei; TAKAGISHI, Mayu

**2PB-017** Synthesis and Reactions of Organosilicon Compounds Having the Bulky MPind Groups (Fac. Sci. Eng., Kinki Univ.) OMAGAMI, Kosuke; HAYAKAWA, Naoki; MATSUO, Tsukasa

**2PB-018** Interaction between functional compounds and a phyllosilicate-organic hybrid with a covalent bond (Adv. Key Tech. Div., NIMS; MANA, NIMS) OFUJII, Kazuko; HILL, Jonathan; HASHIZUME, Hideo; SHIMOMURA, Shuichi; ARIGA, Katsuhiko; ANDO, Toshihiro

**2PB-019** Syntheses and structure of mono-nuclear Co complex with catechol ligands-Effect of substituents- (Fac. Sci. Eng., Kinki Univ.; RIST, Kinki Univ.) SUENAGA, Yusaku; OYAMASHITA, Shintaro; YAMAO, Norifumi; OKUBO, Takashi; KURODA, Takayoshi; MAEKAWA, Masahiko

**2PB-020** Synthesis and magnetic property of trinuclear iron(III) complex with S-shaped ligand (Fac. Sci. Eng., Kinki Univ.) OMURATA, Hiroki; ISHIZAKI, Toshiharu; YAMAO, Norifumi; SUGIMOTO, Kunihisa; OKUBO, Takashi; MAEKAWA, Masahiko; KURODA-SOWA, Takayoshi

**2PB-021** Synthesis, magnetic property and fluorescence property of novel lanthanoid complexes with chiral salen ligand (Fac. Sci. Eng., Kinki Univ.) OYOSHIHARA, Junji; YAMAO, Norifumi; OKUBO, Takashi; MAEKAWA, Masahiko; KURODA-SOWA, Takayoshi

**2PB-022** Mukaiyama aldol reaction in aqueous media catalyzed by Zr(IV)-containing polyoxometalate as Lewis acid (Fac. Sci., Kanagawa Univ.) OFUNAKOSHI, Atsuki; ICHINOSE, Tomohiro; TAKAKURA, Akira; NOMIYA, Kenji

**2PB-023** Isomerization of mono-vacant Dawson-type phosphotungstates and preparation of metal-substituted  $\alpha$ 1-Dawson-type compound (Grad. Sch. Eng., Hiroshima Univ.) OYAMANE, Kohei; SADAKANE, Masahiro; SANO, Tsuneji; TSUNOJI, Nao

**2PB-024** Molecular structure of novel trimeric, tri-titanium(IV)-substituted Dawson polyoxometalate bridged by  $\text{Ca}^{2+}$  ions (Fac. Sci., Kanagawa Univ.) OHOSHINO, Takahiro; MATSUKI, Yusuke; NOMIYA, Kenji

**2PB-025** Oligomerization of Di-Ti(IV)-substituted Dawson Polyoxometalate Monomer with Alkaline-Earth Metal Cations (Fac. Sci., Kanagawa Univ.) OMASUDA, Kana; MATSUNAGA, Satoshi; NOMIYA, Kenji

**2PB-026** Introduction of the organic functional groups to open-Dawson Polyoxometalate using silane coupling reagent (Fac. Sci., Kanagawa Univ.) OYOSHIMIZU, Takumi; INOUE, Yusuke; MATUNAGA, Satoshi; NOMIYA, Kenji

**2PB-027** Syntheses and molecular structures of the open-Dawson polyoxometalates containing vanadium (V or IV) (Fac. Sci., Kanagawa Univ.) OINOUE, Yusuke; MATSUNAGA, Satoshi; NOMIYA, Kenji

**2PB-028** One-pot solvothermal synthesis of cheek-brush  $\text{TiO}_2$  assemblies using aromatic ester as an additive. (Sch. Env. Sci. Eng., KUT) OHAMA-UZU, Hiromu; DURIYASART, Parkfun; OHTANI, Masataka; KOBIRO, Kazuya

**2PB-029** Preparation of potassium cation encapsulated Preyssler-type phosphotungstic acid and activity as acid catalyst (Grad. Sch. Eng., Hiroshima Univ.) OHAYASHI, Akio; SADAKANE, Masahiro; OTA, Hiromi; SANO, Tsuneji; TSUNOJI, Nao

**2PB-030** Electrochemical studies and catalytic activities for alcohol oxidation of mono-ruthenium substituted polyoxometalates with a water ligand (Grad. Sch. Eng., Hiroshima Univ.) OUMEHARA, Naoya; NISHIKI, Kensuke; TSUNOJI, Nao; SANO, Tsuneji; SADAKANE, Masahiro

**2PB-031** DBU-intercalated  $\alpha$ -zirconium phosphate as a latent thermal catalyst for reaction of hexamethylene diisocyanate and phenol (Fac. Eng., OIT) SHIMOMURA, Osamu; OKUSU, Hideki; BABA, Kazuma; YAMAGUCHI, Shunro; ICHIHARA, Junko; OHTAKA, Atsushi; NOMURA, Ryoki

**2PB-032** Interaction of boric acid and boronic acid with polysaccharide gel matrix (Fukuoka Univ. of Educ.) OMIYAZAKI, Yoshinobu; ASADA, Kei; FUJIMORI, Takao; MATSUOKA, Shiro; YOSHIMURA, Kazuhisa

**2PB-033** Preparation of Ti-Ni layered composite oxides and their adsorption properties for organic molecules (Fac. Sci., Kyushu Univ.) OHIRAYAMA, Masahige; HATA, Shinichi; KITANO, Sho; SADAKIYO, Masaaki; YAMAUCHI, Miho

**2PB-034** The effect of the heat treatment and coexistent anions for the cesium uptake by vermiculite. (Showa Pharm. Univ.) OSUZUKI, Noriko; YOSHIMOTO, Masayuki; CHIKUMA, Toshiyuki

**2PB-035** Adsorption Properties of Montmorillonite Varied in the Interlayer Cations (Kirin Co., Ltd.) OYAMAMOTO, Kenichiro

**2PB-036** Production of high quality  $\text{MoS}_2$  nanosheets by chemical exfoliation and their stability (MANA, NIMS) ONURDIWIJAYANTO, Leanddas; WU, Jinghua; MA, Renzhi; SAKAI, Nobuyuki; SASAKI, Takayoshi

**2PB-037** Influence of the lateral size for  $\text{IrO}_2$  nanosheet on the oxygen evolution reaction activity (Grad. Sch. Sci. Technol., Shinshu Univ.; Fac. Textile Sci. Technol., Shinshu Univ.; X-Breed, Shinshu Univ.) OTAKIMOTO, Daisuke; ISHIDA, Takanobu; AYATO, Yusuke; MOCHIZUKI, Dai; SUGIMOTO, Wataru

**2PB-038** Aggregate formation of nonionic surfactant in ionic liquid and their application to the synthesis of metal nanoparticles (Fac. Human Life Env., Nara Women's Univ.) OYAMAMOTO, Miho; ASANO, Chihiro; HARADA, Masafumi

## Organic Chemistry -Reaction and Synthesis-Aromatic Compounds

**2PB-041** Diels-Alder Reactions of Diacene[1,2-b:1',2'-d]thiophene with Quinones (Grad. Sch. Eng., Univ. of Hyogo) OFUKUOKA, Yoshiaki; NISHIDA, Jun-ichi; KAWASE, Takeshi

**2PB-042** Synthesis and Properties of Aniline-linked and Fused Perylene Bisimide (Grad. Sch. Mat. Sci., NAIST) OKOJIMA, Mitsuru; ARATANI, Naoki; YAMADA, Hiroko

**2PB-043** Synthesis and Fluorescence Properties of Styryl Derivatives of Pyridine and Bipyridine (Fac. Sci., Toho Univ.; Research Center for Materials with Integrated Properties, Toho Univ.) OASAOMO, Satomi; YABUKI, Madoka; WATANABE, Soichiro

**2PB-044** Synthesis and Fluorescence Properties of Styryl Derivatives of Benzo [h]isoquinoline (Fac. Sci., Toho Univ.; Research Center for Materials with Integrated Properties, Toho Univ.) OHIYAMA, Hiroaki; WATANABE, Soichiro

**2PB-045** Triazole-modified hexahomotrioxacalix[3]arene as fluorescent chemosensor for 2,4,6-trinitrophenol (TNP) explosive through CH hydrogen bonding interaction (Grad. Sch. Sci. Eng., Saga Univ.) OWU, Chong; YAMATO, Takehiko

**2PB-046** Photocyclization of Stilbene Derivatives Using Metal Iodide Salts or Stable Nitroxyl Radical (Fac. Sci., Toho Univ.; Research Center for Materials with Integrated Properties, Toho Univ.) OMA TSUSHIMA, Tomoya; KOBAYASHI, Sayaka; WATANABE, Soichiro

**2PB-047** Synthesis and Structure of Triplehelicene (Fac. Sci., Toho Univ.; Research Center for Materials with Integrated Properties, Toho Univ.) OSAITO, Hiromu; UCHIDA, Akira; WATANABE, Soichiro

**2PB-048** Synthetic study of methoxy-substituted azacyclophanes (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ONARI, Mayu; OKAMOTO, Hideki

**2PB-049** Solution-processable photoprecursors of fullerene derivatives: Synthesis and application in organic photovoltaics. (Grad. Sch. Mat. Sci., NAIST) OKAWAJIRI, Kazuki; KAWANOUE, Takahiro; YAMATO, Masaki; TERA I, Kengo; YAMAGUCHI, Yuji; SUZUKI, Mitsuharu; NAKAYAMA, Ken-ichi; YAMADA, Hiroko

**2PB-050** Synthesis and optical properties of chlorophyll derivatives possessing various 1-alkenyl groups at the 3-position (Grad. Sch. Sci. Tech., Ryukoku Univ.) TAMI AKI, Hitoshi; OTSUJI, Kazuki; KIMURA, Yuki; MIYATAKE, Tomohiro

**2PB-051** Synthesis and optical properties of tetrabenzofluorene derivatives having a spiro[4.4]nonane structure (Grad. Sch. Eng., Univ. of Hyogo) OKIMURA, Yu-suke; KAWASE, Takeshi; NISHIDA, Jun-ichi

**2PB-052** Developing photoprecursor compounds of p-type semiconductors towards high-performance photovoltaic cells having a multi-layer structure (Grad. Sch. Mat. Sci., NAIST) ONAGAMI, Naoto; UCHINAGA, Kensuke; QUINTON, Cassandre; TAKAHIRA, Katsuya; SUZUKI, Yuji; SUZUKI, Mitsuharu; NAKAYAMA, Ken-ichi; YAMADA, Hiroko

**2PB-053** Synthesis of novel bismethanofullerene derivatives having highly fused ring system (Osaka Municipal Technical Research Institute; Grad. Sch. Sci. Tech., Ryukoku Univ.) OIWAI, Toshiyuki; YAMADA, Masaya; IWASAWA, Tetsuo; MATSUMOTO, Fukashi; MORIWAKI, Kazuyuki; TAKAO, Yuko; ITO, Takatoshi; MIZUNO, Takumi; OHNO, Toshinobu

**2PB-054** Photochemical Synthesis of Novel Angularly-Fused Thienobisbenzothienophene and Its Basic Properties (Sch. Eng., Osaka Pref. Univ.; Grad. Sch. Eng., Osaka Pref. Univ.; The Research Inst. for Molecular Electronic Devices, Osaka Pref. Univ.) OMISHIMA, Kei; OGAKI, Takuya; MATSUI, Yasunori; OHTA, Eisuke; IKEDA, Hiroshi

**2PB-055** Diels-Alder reaction of ketolactam open-cage fullerenes bearing a silylmethyl group (Grad. Sch. Fac. Sci., Kanagawa Univ.) OTANAKA, Teruhiko; SHUGIYAMA, Yoshiki; NOJIRI, Ryuiti; SAWAI, Ryohei; KABE, Yoshio

**2PB-056** Synthesis of spiro lactone by the reaction of helical quinone derivatives with several halogenating reagents (Grad. Sch. Eng., Utsunomiya Univ.) OSHAHABUDDIN, Mohammad; SALIM, Mohammad; KIMURA, Takao; KARIKOMI, Michinori

**2PB-057** Synthesis and Properties of an Oligomer Connected with Trioxo-triangulene Neutral Radical (Fac. Eng., Aichi Inst. of Tech.) OMA TSUI, Takanobu; MURATA, Tsuyoshi; MORITA, Yasushi; TSUJI, Ryouutarou; TAKEMOTO, Ichiki

**2PB-058** Design and Synthesis of Fluorinated Phthalocyanine-Derivatives for Anti-freezing Molecules (Grad. Sch. Eng., Nagoya Inst. of Tech.) ODAS, Pulakesh; MORI, Satoru; OGAWA, Naoya; TOKUNAGA, Etsuko; SHIBATA, Norio

**2PB-059** Iron Catalyzed Dehydration of Aldoximes to Nitriles (Fac. Sci. Tech., Ryukoku Univ.) OYAMAZAKI, Masayuki; HYODO, Kengo; UCHIDA, Kingo

**2PB-060** Preparation of 1,4-benzoioxanes by iron(III)-catalyzed cycloaddition of o-quinone (Fac. of Sci., Okayama Univ. of Sci.) OKUBOKI, Atsuhito; MORITA, Kenta; OKAZAKI, Yoshihisa; OKANO, Masakazu; SUEZAKI, Yoshie; OHIRA, Susumu

**2PB-061** Desilylative Acyloxylation of Trimethylsilylrenes (Grad. Sch. Sci. Eng., Saga Univ.) OGONDO, Keisuke; KITAMURA, Tsugio; OYAMADA, Juzo

**2PB-062** Asymmetric Barbier-type allylation of ketones using chiral bis

- (imidazoline) catalysts in water (Grad Sch. Eng., Nagoya Inst. of Tech.)  
 ○HARA, Yoshichika; HIRASHITA, Tsunahisa; NAKAMURA, Shuichi
- 2PB-063<sup>#</sup>** Synthesis of helical quinone derivatives by use of optically active bis-oxazoline ligands (Grad. Sch. Eng., Utsunomiya Univ.)  
 ○SHAHABUDDIN, Mohammad; TANAKA, Yoshiaki; KIMURA, Takao; KARIKOMI, Michinori
- 2PB-064<sup>#</sup>** The Microwave-assisted Vilsmeier Reaction of Anisole (Sch. Life Dent., The Nippon Dental Univ.) ○SUZUKI, Tsuneo; TANEMURA, Kiyoshi
- 2PB-065** Michael addition reaction with  $\alpha, \beta$ -unsaturated carbonyl compounds as Michael accepters under microwave irradiation (Coll. Sci. Eng., Kanto Gakuin Univ.) ○TAKAHASHI, Kie; AKATSU, Yusuke; MIZUKAMI, Kazushi; MATSUKAWA, Minako; NATORI, Syou; SUGIMOTO, Asuka; IIDA, Hirokazu
- 2PB-066** The reaction of benzenedis(diazonium)salt with mono-substituted benzenes (Fac. Sci. Eng., Soka Univ.) ○MIYASHITA, Kiyoshi; UCHIDA, Nozomi; HOSOKAWA, Yuji; ITO, Masato
- 2PB-067<sup>#</sup>** Transformation of ynone bearing azulene into enamionone and construction of a heterocyclic ring using enamionone (Fac. Eng., KAIT) YAMAGUCHI, Jun-ichi; ○SUGIYAMA, Sayuri
- 2PB-068** Synthesis and structure determination of phenyl indane derivatives by dimerization of cinnamic acids (Dept. Mat. Sci., Wakayama Nat. Coll. of Tech.) ○NODA, Takumi; NOMURA, Eisaku
- 2PB-069** Stereoselective Reduction of Bicyclic 2-Indanone Derivatives Using Tetraalkylammonium Salt (Grad. Sch. Of Humanities and Sci., Ochanomizu Univ.) ○TSUJIMURA, Aya; YAMADA, Shinji
- 2PB-070** Esterification of multi-hydroxyl compounds by use of a green chemical process (Toyo Univ.) ○AIKAWA, Shunichi; YOSHIDA, Yasuhiko

## Catalysts and Catalysis

### structure/physical properties/calculation

- 2PB-073** Structural analysis of high activity catalyst for decarbonylation by X-ray absorption spectroscopy and XANES simulation (JASRI)  
 ○HONMA, Tetsuo; NAKADA, Kengo; KUME, Kurumi; ISHIDA, Tamao; MURAYAMA, Haruno; TOKUNAGA, Makoto
- 2PB-074<sup>#</sup>** Three-dimensional atomic distribution in bimetallic catalysts at work evaluated by an iterative EXAFS analysis (Toyota Central R&D Labs., Inc.)  
 ○NISHIMURA, Yusaku; HAMAGUCHI, Tsuyoshi; DOHMAE, Kazuhiko; KATO, Akihiko; NAGAI, Yasutaka

### catalyst preparation

- 2PB-075** Preparation of gold catalysts using gold(I) dimethylsulfide complexes (Grad. Sch. Sci., Kyushu Univ.) ○NASU, Ken-ya; MURAYAMA, Haruno; TOKUNAGA, Makoto
- 2PB-076<sup>#</sup>** Effects of ruthenium precursor, support, and activation process on ammonia synthesis activity of supported ruthenium catalysts under high reaction pressure (Dept. of Chem. and Biochem., NCT) AKIYAMA, Kentaro; MORI, Taiyo; ○INAZU, Koji

### hydrogenation

- 2PB-077<sup>#</sup>** Mg-transition metal mixed oxide as a Ru catalyst support for ammonia synthesis (FREA, AIST) ○JAVAID, Rahat; NANBA, Tetsuya
- 2PB-078** Supported metal alloy catalyst for ammonia synthesis (MCES, Tokyo Tech) ○TSUJI, Yuuki; KITANO, Masaaki; HOSONO, Hideo
- 2PB-079** Reduction of nitrate in water by nickel particles prepared using hydrazine (Grad. Sch. Sci. Eng., Univ. of Toyama) ○OSAWA, Tsutomu; TANIKAWA, Ayumi; HASEGAWA, Kaori; GOTO, Natsumi
- 2PB-080<sup>#</sup>** Synthesis of nickel-loaded catalysts from carbide precursor and investigations on their catalytic activities (Nanoscience and Nanotechnology Research Center, Osaka Pref. Univ.) NAKAUE, Takayuki; ○KAMEGAWA, Takashi

### hydrogenolysis

- 2PB-081** Studies on catalytic performance of Nickel-based intermetallic compounds for methane steam reforming (Sch. Eng., Osaka Pref. Univ.)  
 ○KOBAYASHI, Ryo; OKUMURA, Rei; HORIUCHI, Yu; KANENO, Yasuyuki; MATSUOKA, Masaya
- 2PB-082<sup>#</sup>** Steam reforming of ethanol over metal-oxide promoted rhodium catalysts (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) ○ITO, Shin-ichi

### mesoporous materials

- 2PB-083** Preparation of metallosilicate catalyst derived from grafting of several metal acetylacetonate complexes, and its catalytic property in olefin epoxidation (Fac. Eng., Hiroshima Univ.) YABUSHITA, Sho; ○TSUNOJI, Nao; YAGENJI, Yuuya; SADAKANE, Masahiro; SANO, Tsuneji

### environmental

- 2PB-084** Temporal analysis of catalytic reactions in monolithic catalyst (ACRC, Nagoya Inst. of Tech.) ○HANEDA, Masaaki; HATTORI, Masatomo
- 2PB-085** Thermal stability of nano-composite catalyst (EcoTopia Sci. Inst., Nagoya Univ.) ○OZAWA, Masakuni; NISIO, Yosito
- 2PB-086** Alkaline-sulfate doping with La2O3-based catalysts for high OCM activity (Grad. Sch. Eng., Saitama Inst. of Tech.) ○AKUTSU, Masaru; ARITANI, Hirofumi

### photocatalyst

- 2PB-087** Design of photoelectrode system for high-selective production of hydrogen peroxide in oxidative reaction (Fac. Sci. Technol., Tokyo Univ. of Sci.; RCPV, AIST) ○MIYASE, Yuta; FUKU, Kojiro; MISEKI, Yugo; GUNJI, Takahiro; SAYAMA, Kazuhiro
- 2PB-088** 2-step Water Splitting Using BiVO<sub>4</sub> Photoanodes and Selenide Photocathodes (Grad. Sch. Eng., The Univ. of Tokyo; PRESTO, JST)  
 ○SUGISAKI, Sho; KANEKO, Hiroyuki; KUANG, Yongbo; MINEGISHI, Tsutomu; DOMEN, Kazunari
- 2PB-089<sup>#</sup>** Photoelectrochemical photovoltaic cells for water electrolysis consist of semiconductor electrodes fabricated by particle transfer method (Grad. Sch. Eng., The Univ. of Tokyo) ○KAGESHIMA, Yosuke; MINEGISHI, Tsutomu; HISATOMI, Takashi; KUBOTA, Jun; DOMEN, Kazunari
- 2PB-090<sup>#</sup>** Hydrogen evolution from water under sunlight using cadmium telluride photocathode modified with CdS and Pt (Fac. Eng., The Univ. of Tokyo) ○SU, Jin; MINEGISHI, Tsutomu; DOMEN, Kazunari
- 2PB-091** Photoelectrochemical properties of GaN:ZnO solid solution electrodes prepared by particle transfer method (Grad. Sch. Eng., The Univ. of Tokyo) ○SUZUKI, Kenta; WATANABE, Osamu; HISATOMI, Takashi; MINEGISHI, Tsutomu; DOMEN, Kazunari
- 2PB-092** Investigation of surface modification of Ta<sub>3</sub>N<sub>5</sub> photoanodes (Grad. Sch. Eng., The Univ. of Tokyo; PRESTO, JST) ○ODOI, Kakeru; SEO, Jeongsuk; SHINOHARA, Yuki; MINEGISHI, Tsutomu; DOMEN, Kazunari
- 2PB-093** Overall Water Splitting Driven by the Combination of La<sub>5</sub>Ti<sub>2</sub>(Cu, Ag)<sub>5</sub>S<sub>5</sub>O<sub>7</sub> Photocathode and BaTaO<sub>2</sub>N Photoanode with Absorption Edges of Over 650 nm (Grad. Sch. Eng., The Univ. of Tokyo) ○HIGASHI, Tomohiro; SHINOHARA, Yuki; OHNISHI, Atsushi; LIU, Jingyuan; UEDA, Koichiro; OKAMURA, Shintaro; HISATOMI, Takashi; KATAYAMA, Masao; NISHIYAMA, Hiroshi; YAMADA, Taro; MINEGISHI, Tsutomu; DOMEN, Kazunari
- 2PB-094** Effects of doping on the photoelectrochemical properties of La<sub>5</sub>Ti<sub>2</sub>AgS<sub>5</sub>O<sub>7</sub> - La<sub>5</sub>Ti<sub>2</sub>CuS<sub>5</sub>O<sub>7</sub> solid solutions (Grad. Sch. Eng., The Univ. of Tokyo) ○OHBA, Shohei; HISATOMI, Takashi; LIU, Jingyuan; MINEGISHI, Tsutomu; KATAYAMA, Masao; DOMEN, Kazunari
- 2PB-095<sup>#</sup>** Enhancement of the photoanodic property of La<sub>5</sub>Ti<sub>2</sub>CuS<sub>5</sub>O<sub>7</sub> for water oxidation by doping (Grad. Sch. Eng., The Univ. of Tokyo)  
 ○WANG, Zheng; HISATOMI, Takashi; MA, Guijun; ZHONG, Miao; KATAYAMA, Masao; MINEGISHI, Tsutomu; YAMADA, Taro; DOMEN, Kazunari
- 2PB-096<sup>#</sup>** CO<sub>2</sub> reduction electrocatalysts by using bifunctional macrocyclic metal complexes. (Grad. Sch. Sci., Tohoku Univ.) ○HABIB, Md. Ahsan; BREEDLOVE, K. Brian; YAMASHITA, Masahiro
- 2PB-097<sup>#</sup>** Preparation of sodium titanate and silver titanate photocatalysts and the photocatalytic activity for CO<sub>2</sub> reduction (Grad. Sch. Human and Environ. Stud., Kyoto Univ.) ○AMANUMA, Soichiro; FUKUO, Naoto; YAMAMOTO, Akira; YOSHIDA, Hisao
- 2PB-098<sup>#</sup>** Photocatalytic property of Ba-Ti mixed oxide to the overall H<sub>2</sub>O splitting (Grad. Sch. Sci. Eng., Yamaguchi Univ.) ○SAKATA, Yoshihisa; AKAHORI, Taishi; IMAMURA, Hayao
- 2PB-099** Synthesis and Photocatalytic properties of  $\beta$ -Iron Disilicide/ SiC composite (Kanagawa Ind. Tech. Ctr.) ○AKIYAMA, Kensuke; TAKAHASHI, Ryo; FUNAKUBO, Hiroshi; IRIE, Hiroshi; MATSUMOTO, Yoshihisa
- 2PB-100** Water oxidation over In<sub>2</sub>O<sub>3</sub>-Fe<sub>2</sub>O<sub>3</sub> composite photocatalyst utilizing redox mediator under visible light (Fac. Sci. Technol., Tokyo Univ. of Sci.; RCPV, AIST) ○FUJITA, Kana; MISEKI, Yugo; GUNJI, Takahiro; SAYAMA, Kazuhiro
- 2PB-101** Synthesis and evaluation of plasmonic photocatalyst working under irradiation of red light (Kinki Univ.) ○NISHIJIMA, Ryuta; TANAKA, Atsuhiko; HASHIMOTO, Keiji; KOMINAMI, Hiroshi
- 2PB-102<sup>#</sup>** Improving the Au/TiO<sub>2</sub> catalytic activity by controlling Au grafting with Ethylene Glycol (Hokkaido Univ.; KU Leuven) ○INOSE, Tomoko; KENENS, Bart; AUBERT, Remko; CHAMTOURI, Maha; UJI-I, Hiroshi
- 2PB-103** Nitrile conversions over metal-loaded titanium(IV) oxide photocatalyst (Fac. Sci. Eng., Kinki Univ.) ○TACHIBANA, Masashi; NAKANISHI, Kousuke; IMAMURA, Kazuya; HASHIMOTO, Keiji; KOMINAMI, Hiroshi
- 2PB-104** Light intensity dependence on water oxidation over TiO<sub>2</sub> photocatalyst using redox reagents (Grad. Sch. Fac. Sci. Technol., Tokyo Univ. of Sci.) ○TERASHIMA, Naohiro; MISEKI, Yugo; GUNJI, Takahiro; SAYAMA, Kazuhiro
- 2PB-105<sup>#</sup>** Photocatalytic degradation of gaseous acetaldehyde by Cr(III)

modified TiO<sub>2</sub> film under visible light irradiation (Fac. Sci., Yamaguchi Univ.) ○KOZASA, Keisuke; ADACHI, Kenta; YAMAZAKI, Suzuki

**2PB-106** Mechanism for photocatalytic semihydrogenation of triple bond of organosilanes (Kinki Univ.) ○KOJIMA, Yasumi; HASHIMOTO, Keiji; KOMINAMI, Hiroshi

**2PB-107** Photocatalytic partial oxidation of phenanthrene to dibenzopyranone studied by using TiO<sub>2</sub> powder and photoelectrodes (Osaka. Pref. Univ. Col. Tech.) ○SHIMIZU, Daiya; OOI, Kanae; MATSUMURA, Michio; HIGASHIDA, Suguru

**2PB-108** Reaction rate in photofuel cells using allophane-titania composite electrodes (Grad. Sch. Eng., Osaka Univ.; Fac. Eng., Shinshu Univ.) ○FURUICHI, Naoyuki; NISHIKIORI, Hiromasa; YAMASHITA, Hiromi

Friday, March 25, PM

(15 : 00~16 : 30)

## Resources Utilization Chemistry

**2PC-001** Direct conversion of methane using a parallel-plate-type dielectric barrier discharge device (Grad. Sch. Industrial Tech., Nihon Univ.) ○SAKAGUCHI, Teppi; OKADA, Masaki; NAGAI, Akiyoshi; SATO, Toshiyuki; HIAKI, Toshihiko

**2PC-002** Formation behavior of organic acids during wet oxidation of polysaccharides (RLHC, Kochi Univ.) ○OKUDA, Kazuhide

**2PC-003<sup>#</sup>** Chemical analyses on macromolecules in buried Japanese cedar (Fac. Life Env. Sci, Pref. Univ. of Hiroshima) KOBAYASHI, Mio; ○AOYAGI, Mitsuru

**2PC-004** Synthesis and properties of UV-curable resin using isosorbide (Coll. Sci. Eng., Kanto Gakuin Univ.) ○OSUGI, Mioka; KOUZAI, Hiroaki

**2PC-005<sup>#</sup>** Solvolysis of bio-ethanol production residue in water-ethanol cosolvent (Grad. Sch. Eng., Iwate Univ.) ○NAGASAWA, Yoshiyuki; KAKIZAKI, Ryotaro; NANAŌ, Hidetaka; SATO, Osamu; YAMAGUCHI, Aritomo; SHIRAI, Masayuki

**2PC-006** Degradation reaction of Vulcanized Rubber Using Lipid Peroxidation (Coll. Sci. Eng., Kanto Gakuin Univ.) ○SUGANO, Shou; KOUZAI, Hiroaki

**2PC-007<sup>#</sup>** Influence of alkyl-substituents for reduction of aromatic rings in lignin derivatives (Grad. Sch. Comprehensive Scientific Research, Pref. Univ. of Hiroshima) ○YOKOYAMA, Daiki; YANO, Yutarō; AYOYAGI, Mitsuru; MITOMA, Yoshiharu

**2PC-008** Synthesis and mechanical properties of vegetable oil based network polymers by reversible Diels-Alder reaction (TRI-OSAKA) ○INOUE, Yohtarō; TACHI, Hideki

## Energy and Related Chemistry, Geo and Space Chemistry

**2PC-011** Development of new dye molecules containing two types of anchor groups for dye-sensitized solar cells (Grad. Sch. Sci., Osaka Pref. Univ.; Grad. Sch. Eng., Osaka Pref. Univ.) ○MIYAZAKI, Tetsu; FUJIWARA, Hideki; MAEDA, Takeshi; NAKAZUMI, Hiroyuki

**2PC-012** Development of dye-sensitized solar cells using zinc dipyrromethene complexes (Grad. Sch. Sci., Osaka Pref. Univ.; Grad. Sch. Eng., Osaka Pref. Univ.) ○NAKAGAEA, Takahiro; FUJIWARA, Hideki; MAEDA, Takeshi; NAKAZUMI, Hiroyuki

**2PC-013** Development of dye-sensitized solar cells using dye molecules containing 8-hydroxyquinoline with an electron withdrawing group (Grad. Sch. Sci., Osaka Pref. Univ.; Grad. Sch. Eng., Osaka Pref. Univ.) ○HASHIMOTO, Kasumi; HARLÉ, Jean-baptiste; FUJIWARA, Hideki; MAEDA, Takeshi; NAKAZUMI, Hiroyuki

**2PC-014** Effect of new cobalt complexes as a dopant for a hole-transporting material of Perovskite solar cells (RCPV, AIST) ○ONOZAWA-KOMATSUZAKI, Nobuko; FUNAKI, Takashi; KAZAŌUI, Said; MURAKAMI, Takuro; SAYAMA, Kazuhiko

**2PC-015<sup>#</sup>** Synthesis of Novel Photosensitized Dyes having Trifluoromethyl Group in an Acceptor-anchor Moiety and their Influence upon the IPCE Performance (Fac. Sci. and Technol., Seikei Univ.) ○IWATA, Satoru; ISHIZAKA, Hikaru; YOSHIHARA, Tatsuki; TANAKA, Kiyoshi

**2PC-016** Synthesis and Properties of Novel Donor-Acceptor  $\pi$ -conjugated Dyes with Different Molecular Planarity (Grad. Sch. Sci., Josai Univ.) ○TAKAHASHI, Katsuya; IDUTSU, Daiki; FUJIYA, Takumu; MITSUKE, Koichiro; HASHIMOTO, Masashi

**2PC-017** Efficiency of the dye-sensitized solar cell utilizing multiple reflection (Nara Univ. of Educ.) ○HOTTA, Hiroki; NISHIMURA, Yuri

**2PC-018** Electrochemical impedance analysis of positive electrode formed by low melting point solid electrolyte (Toyota Central R&D Labs., Inc.) ○MORISHITA, Shinya; SAEKI, Tooru; ASAOKA, Takahiko

**2PC-019<sup>#</sup>** Properties of Redox Capacitors with MnO<sub>2</sub>/Activated Carbon Fiber Cloth Composite Electrodes (Fac. Eng., OIT) ○SUN, Xiaomin; TANAHASHI, Ichiro

**2PC-020<sup>#</sup>** Electric Double Layer Capacitors with Activated Carbon Chip Polarizable Electrodes Prepared from Shredded Papers (Fac. Eng., OIT) ○MIZUNO, Shota; TANAHASHI, Ichiro

**2PC-021** Preparation and electrochemical characterization of nanostructured

metal oxide deposited on macro-porous metallic monolith (Osaka Municipal Technical Research Institute) ○MITAMURA, Koji; WATANABE, Mitsuru; WATASE, Seiji; MATSUKAWA, Kimihiro

**2PC-022<sup>#</sup>** Immobilization of Fe porphyrin dimers for efficient CO<sub>2</sub> to CO heterogeneous conversion (Inst. Sci. Tech. Res., Chubu Univ.) ○MOHAMED Eman; ZAHARAN, Zaki N.; NARUTA, Yoshinori

**2PC-023** The electrochemical study of the cytochrome *bc*<sub>1</sub> complex of the thermophilic purple sulfur photosynthetic bacterium *Thermochromatium tepidum* (Hachinohe National College of Technology) ○TSURUGAI, Rina; FUKUMATSU, Takahiro; SAITO, Takayuki

**2PC-024** Effect of amino groups on hydrogen storage capacity of zinc-2-aminoterephthalic acid framework at ordinary temperatures (Grad. Sch. Eng., Oita Univ.) ○KITAZAKI, Akihito; SHINSHO, Momoko; KINUMOTO, Taro; TSUMURA, Tomoki; TOYODA, Masahiro

**2PC-025** Analysis of nitrite and nitrate ions generated by ultrasonic cavitation (Osaka Pref. Univ.) ○ASADA, Shota; OKITSU, Kenji

**2PC-026<sup>#</sup>** Analysis temperature characteristics and chemical action of the acoustic bubble (Osaka Pref. Univ.) ○NAKATA, Yuki; OKITSU, Kenji

**2PC-027<sup>#</sup>** Epimerization of alanylalanine induced by gamma-rays irradiation (Dept. Nat. Sci. Edu., Naruto Univ. of Edu.) ○MUNEGUMI, Toratane; TANAKA, Hiroaki; HAZEHARA, Kei; ABE, Tomohiro

## Environmental and Green Chemistry

**2PC-029** Environmental Monitoring of Aminoglycoside Antibiotics Kasugamycin and Validamycin A in River Water around the Paddy Field (Hokkaido Research Organization) ○KARIYA, Ryo; TAHARA, Ruriko

**2PC-030<sup>#</sup>** Complete Dehalogenation of a Brominated Flame Retardant under Mild Conditions (AIST) ○UKISU, Yuji

**2PC-031** Fluorine removal from fluoride-containing wastewater with layered double hydroxide (Fac. Env. Urban Eng., Kansai Univ.) ○KIYOKAWA, Takayasu; KOBAYASHI, Shintaro; IKENAGA, Naoki

**2PC-032<sup>#</sup>** Oxidative decomposition of fluoropolymer PCTFE using supercritical and subcritical water (Grad. Sch. Fac. Sci., Kanagawa Univ.) ○FURUSAWA, Yuki; HORI, Hisao

**2PC-033** Influence of inorganic salt addition on sonochemical degradation of aromatic compounds in water (Osaka Pref. Univ.) ○HATANŌ, Kenji; OKITSU, Kenji

**2PC-034** Synthesis of Diol Transformation Product of Imidacloprid (Grad. Sch. Sci., Eng., Kagoshima Univ.; IDEA Consult. Inc.) ○JODOI, Taiji; SHIMOHIGOSHI, Riko; YAMAMOTO, Kazuya; UEDA, Takehiko; TAKANASHI, Hirokazu; KADOKAWA, Jun-ichi; MIYAMOTO, Nobukazu; ISHIKAWA, Hidenori

**2PC-035** Degradation processing of 3,4-dichlorophenol by cavitation-based hybrid processes (Grad. Sch. Eng., Osaka City Univ.) ○TAKEUCHI, Shuhei; KOMETANI, Noritsugu

**2PC-036<sup>#</sup>** Proposition of cesium-free mineralization for volume reduction and reuse of radioactive contaminated soil in Fukushima (QBSC, JAEA) ○SHIMOYAMA, Iwao; HONDA, Mitsunori; KOGURE, Toshihiro; BABA, Yuji; HIRAO, Norie; OKAMOTO, Yoshihiro; YAITA, Tsuyoshi; SUZUKI, Shinichi

**2PC-037** Study as for relationship of Structure and Toxicity of halogenated anilines (Sch. Sci., Tokai Univ.) ○SAKUMA, Tsubasa; ISHIHARA, Yoshimi; TAKANO, Jiro

**2PC-038** Effect of humic precursors on N-formylation of CO<sub>2</sub> using organophosphorous metal catalysts (Grad. Sch. Eng., Hokkaido Univ.) ○IGARASHI, Mami; FUKUSHIMA, Masami

**2PC-039** Catalytic activity to bromophenol oxidation by non-heme catalysts including pyridine macrocyclic nitrogen ligands (Sch. Eng., Hokkaido Univ.) ○ODA, Kohki; FUKUSHIMA, Masami; IGARASHI, Mami

**2PC-040<sup>#</sup>** Supercritical carbon dioxide extraction of useful materials from Kuji amber (Fac. Eng., Iwate Univ.) ○NAGASAWA, Yoshiyuki; SASAKI, Hiroki; CHIBA, Toshiya; NANAŌ, Hidetaka; KAWAMURA, Tetsuaki; KIMURA, Ken-ichi; SHIRAI, Masayuki

**2PC-041** Development of colored recycling bottle by cellulose silica hybrid film containing latent pigments (Grad. Sch. Eng. Sci., Shibaura Inst. of Tech.) ○SHIRASAWA, Tomoki; OHISHI, Tomoji

**2PC-042** Accumulation of metal ions by DNA-silica composite material (Fac. of Sci., Okayama Univ. of Sci.) ○NISHIMURA, Ayato; YAMADA, Masanori

**2PC-043** Synthesis of Phenol from Benzene Using TiO<sub>2</sub> Photocatalyst by Hydrofluoric Acid Treatment (Osaka. Pref. Univ. Col. Tech.) ○HIROTA, Eri; HIGASHIDA, Suguru; MATSUMURA, Michio

**2PC-044<sup>#</sup>** Photoelectrochemical properties of photoanodes prepared using BaMg<sub>1-x</sub>Ta<sub>1-x</sub>O<sub>2+3x</sub>N<sub>1,3x</sub> solid solutions by particle transfer method (Grad. Sch. Eng., The Univ. of Tokyo; GREEN, NIMS) ○UEDA, Koichiro; MINEGISHI, Tsutomu; HIGASHI, Tomohiro; TAKATA, Tsuyoshi; HISATOMI, Takashi; KATAYAMA, Masao; YAMADA, Taro; DOMEN, Kazunari

**2PC-045** Development of low-cost preparation method of titanium oxide photocatalytic powder for using in water purification (Nagoya Municipal Industrial Research Institute) ○ONO, Satomi; KISHIKAWA, Nobuyuki; KAWASE, Satoru; HAYASHI, Tomoko; ASANO, Narihiro

**2PC-046<sup>#</sup>** Visible-light induced photocatalytic decomposition of monoethanolamine in water by use of graphitic carbon nitride (Grad. Sch. Fac. Sci.,



- Kanagawa Univ.; AIST) ○WACHI, Shohei; SANO, Taizo; HORI, Hisao  
**2PC-047** Effect of loading WO<sub>3</sub> with Cu on the degradation of methylene blue in aqueous suspension (Coll. Life Sci., Ritsumeikan Univ.)  
 ○YAMAMOTO, Akifumi; AMAIKE, Yuki; TANAKA, Atsuhiko; SANADA, Tomoe; KOJIMA, Kazuo  
**2PC-048** Research for co-catalyst amount dependence of photocatalytic performance of iron complex-loaded Tungsten Oxide (Nagoya Municipal Industrial Research Institute) ○KISHIKAWA, Nobuyuki; KAWASE, Satoru; HAYASHI, Tomoko; ASANO, Narihiro; ONO, Satomi

## Theoretical Chemistry, Chemoinformatics, and Computational Chemistry

### Electronic Structure

- 2PC-051<sup>#</sup>** Effect of triplet on cyclization reaction of diarylethene linked to fluorescent dye (Sch. Pharm., TUPLS) ○YOKOJIMA, Satoshi; SHINODA, Keiko; FUKAMINATO, Tsuyoshi; NAKAMURA, Shinichiro  
**2PC-052** Theoretical investigation on effect of central metal on electronic structure, optical and magnetic properties of quadruple-decker phthalocyanines (Sch. Eng., The Univ. of Shiga Pref.; Sch. Eng., The Univ. of Shiga Pref.)  
 ○SUZUKI, Atsushi; OKU, Takeo  
**2PC-053** Development of embedded cluster model under periodic boundary condition (Sch. Advanced Sci. Eng., Waseda Univ.) ○HIRAI, Takahiro; ISHIKAWA, Atsushi; NAKAI, Hiromi  
**2PC-054<sup>#</sup>** Theoretical study on excited-state properties of Ru complex as a DNA intercalator under different environments (Grad. Sch. Of Humanities and Sci., Ochanomizu Univ.) ○OTSUKA, Miho; TAKANO, Keiko  
**2PC-055** Implementation and application of excited-state calculation program based on two-component relativistic theory (Sch. Advanced Sci. Eng., Waseda Univ.) ○HIRAGA, Kenta; IKABATA, Yasuhiro; NAKAI, Hiromi  
**2PC-056** Theoretical study of the excited states of dacarbazine (Gifu Univ.)  
 ○HASHIMOTO, Tomohiro

### Chemical Reaction

- 2PC-057** Computer Simulation of Isotope-Selective Vibrational Excitation of Lithium Chloride Molecules by Optical Pulses (JAEA) ○ICHIHARA, Akira  
**2PC-058** Analysis of the dynamics of Si(100) surface reactions with SiHCl<sub>3</sub> and SiCl<sub>2</sub> (Grad. Sch. Creative Sci. Eng., Waseda Univ.) ○ANZAI, Keisuke; KUNIOSHI, Nilson; FUWA, Akio  
**2PC-059** Theoretical prediction of CO<sub>2</sub> reduction reaction by disilane derivatives (Grad. Sch. Sci., Eng., Tokyo Tech) ○KOMASAKI, Hiroki; KAWAUCHI, Susumu  
**2PC-060** Molecular dynamics study on the behavior of the Hf catalyst and the counter anion in chain shuttling polymerization (Nagoya Univ. Graduate School of Information Science) ○MATSUMOTO, Kentaro; KARAKKADPARAMBIL SANKARAN, Sandhya; TAKAYANAGI, Masayoshi; KOGA, Nobuaki; NAGAOKA, Masataka  
**2PC-061** Theoretical study on the size effect of catalytic NO reduction by Rh clusters (Grad. Sch. Advanced Sci. Eng., Waseda Univ.) ○DEUSHI, Fumiko; ISHIKAWA, Atsushi; NAKAI, Hiromi

### Bio-related

- 2PC-062** The analysis on the interaction between HIV-1 envelope protein gp120 and its neutralizing antibody by large-scale quantum chemical calculations (Coll. Liberal Arts Sci., Kitasato Univ.) ○NOO, Kaori  
**2PC-063** Density Functional Study on Formation of External Aldimine in the Glutamate Decarboxylase from *Escherichia coli* (Grad. Sch. Eng., Mie Univ.) ○MITANI, Masaki; TAKEUCHI, Kazuya; YOSHIOKA, Yasunori  
**2PC-064** Theoretical study on predicting the efficacy of EGFR tyrosine kinase inhibitors (Fac. Pharm., Yasuda Women's Univ.) ○SHIMODO, Yasuyo; DOI, Miyuki; YAMAGUCHI, Toshikazu  
**2PC-065<sup>#</sup>** ONIOM Study of Stepwise and Concerted Mechanisms for Peptide Bond Formation in the Ribosome (Sch. Med., Hyogo Coll. Med.)  
 ○FUKUSHIMA, Kazuaki; ESAKI, Hiroyoshi

### Simulation

- 2PC-066** Free-energy analysis of solvation effect on ubiquitin structure (Grad. Sch. Eng. Sci., Osaka Univ.) ○TOKUNAGA, Yoshihiko; YAMAMORI, Yu; ISHIZUKA, Ryosuke; MATUBAYASI, Nobuyuki  
**2PC-067<sup>#</sup>** Compounds screening by ensemble docking method: an application to Estrogen receptor (Inst. Sci. Eng., Kanazawa Univ.) ○SAITO, Hiroaki; KAWAGUCHI, Kazutomo; NAGAO, Hidemi  
**2PC-068** Molecular Dynamics simulation on the Smectic phase transition of 4-decyl-4'-cyanobiphenyl (Tokyo Tech) ○ISHIKAWA, Ryo; KAWAUCHI, Susumu  
**2PC-069** Computational analysis of sodium-ion electrical conductivity in ionic liquid with all-atom molecular dynamics simulation and time correlation function theory (Sch. Eng. Sci., Osaka Univ.) ○KAWASE, Kentaro; ISHIZUKA, Ryosuke; MATUBAYASI, Nobuyuki

### Others

- 2PC-070** Crystal structure exploration of aromatic hydrocarbons by Generalized Scaled Hypersphere Search method using MMFF94 force field (Grad. Sch. Sys. Eng., Wakayama Univ.) ○KODAYA, Yoshitomo; YAMAKADO, Hideo; OHNO, Koichi  
**2PC-071** Introduction of multiplier method to the generalized hypersphere search method (Fac. Sys. Eng., Wakayama Univ.; Grad. Sch. Sys. Eng., Wakayama Univ.; Grad. Sch. Sci., Tohoku Univ.; Institute for Quantum Chemical Exploration) ○YAMAKADO, Hideo; KODAYA, Yoshitomo; OHNO, Koichi

Saturday, March 26, AM

(10 : 00~11 : 30)

## Coordination Chemistry, Organometallic Chemistry

### Ag

- 3PA-001** Recognition Behaviors of Tiara-Shaped Metal Thiolate Clusters with Silver(I) Ions (Fac. Env. Earth Sci., Hokkaido Univ.) ○OZAWA, Shun; YOSHIDA, Keisuke; SHICHIBU, Yukatsu; KONISHI, Katsuaki  
**3PA-002** Synthesis, Molecular Structure and Antimicrobial Activities of Silver(I) Complexes with Hexapodal *N*-Heterocyclic Carbene Ligand (Fac. Sci., Kanagawa Univ.) ○MOROZUMI, Soichiro; SAKAMOTO, Ryosuke; YANAGAWA, Yuki; CHIKARASHI, Noriko; NOMIYA, Kenji  
**3PA-003<sup>#</sup>** The stability difference of MO<sub>4</sub><sup>2-</sup> (M = Mo, W) encapsulating silver(I) ethynide clusters (Coll. Hum. Sci., Nihon Univ.) ○OHASHI, Kenji; KOJIMA, Tatsuhiko; SADAKANE, Masahiro; HASHIMOTO, Masato; OZEKI, Tomoji

### Al

- 3PA-004** Different reactivity between Na salt and K salt of tris(oxalato)aluminate(III) with tris(bipyridine) transition metal(II) (Fac. Sci., Josai Univ.) ○HARAKAWA, Kazuya; MIYAMAE, Hiroshi

### Au

- 3PA-005<sup>#</sup>** Synthesis and Structure of Heptanuclear Gold(I) Complexes Supported by Hexaphosphine Ligands (Fac. Sci., Nara Women's Univ.) ○MIKITA, Yumina; CHIKANISHI, Mio; NAKAMAE, Kanako; KURE, Bunsho; NAKAJIMA, Takayuki; TANASE, Tomoaki  
**3PA-006** Synthesis of Phosphine Ligand-supported 1,2-Diauriobenzene (Graduate School of Science, The University of Tokyo) ○FUKUI, Satoshi; UBE, Hitoshi; SHIONOYA, Mitsuhiko  
**3PA-007<sup>#</sup>** Construction of Oxygen- and Carbon-centered Gold(I) clusters Supported by *N*-Heterocyclic Carbene Ligands (Grad. Sch. Sci., The Univ. of Tokyo) ○ZHANG, Qian; UBE, Hitoshi; SHIONOYA, Mitsuhiko

### Ce

- 3PA-008** Slow magnetic relaxation behaviors of Ln(III) complexes which belong to the D<sub>3</sub> point group (Fac. Sci., Nara Women's Univ.; IMR, Tohoku Univ.) ○NAKANISHI, Saki; OGAWA, Haruna; KAYAHARA, Saori; IRIE, Natsumi; KATAOKA, Yumiko; KAJIWARA, Takashi; YAMAMURA, Tomoo

### Yb

- 3PA-009** Synthesis and SMM behavior of Yb(III) mononuclear complex which belongs to the D<sub>3</sub> point group (Fac. Sci., Nara Women's Univ.; IMR, Tohoku Univ.) ○OGAWA, Haruna; NAKANISHI, Saki; KAYAHARA, Saori; IRIE, Natsumi; KATAOKA, Yumiko; KAJIWARA, Takashi; YAMAMURA, Tomoo

### Co

- 3PA-010<sup>#</sup>** Synthesis of Chiral Co(II) Complex with Maleimide Terminals and Dynamic Transformation by Acid-Base Stimuli (Grad. Sch. Sci., Osaka City Univ.) ○TSUJI, Daisuke; SHINODA, Satoshi; MIYAKE, Hiroyuki  
**3PA-011<sup>#</sup>** Syntheses of Chiral Metal Complexes with (*S*)-Alanine Derivatives (Grad. Sch. Sci., Osaka City Univ.) ○KOYANO, Daichi; SHINODA, Satoshi; MIYAKE, Hiroyuki  
**3PA-012<sup>#</sup>** Thermal properties and crystal structures of cobalt(III) complexes with monoalkyl cyclam ligands (Grad. Sch. Sci., Kobe Univ.) ○OBA, Yukiko; MOCHIDA, Tomoyuki  
**3PA-013** Syntheses and Hydrogen-Evolving Activity of Macrocyclic Cobalt-NHC Complexes Tethered to Pendant Viologen Acceptors (Fac. Sci., Kyushu Univ.; WPI-I<sub>2</sub>CNER, Kyushu Univ.; CMS, Khushu Univ.) ○YATSUZUKA, Koichi; KAWANO, Ken; YAMAUCHI, Kosei; SAKAI, Ken

- 3PA-014** Photochemical hydrogen evolution catalyzed by anionic cobalt complexes using a vesicular system (Grad. Sch. Arts and Sci., The Univ. of Tokyo) ○IKUTA, Naoya; TAKIZAWA, Shin-ya; MURATA, Shigeru
- 3PA-015<sup>#</sup>** Observation of slow magnetic relaxations in the molecular tetrahedral high-spin cobalt(II) complex having bisisindole moieties as the ligands (Grad. Sch. Sci., Osaka Univ.) ○ISHIZAKI, Toshiharu; FUYUHIRO, Akira; FUKUDA, Takamitsu; ISHIKAWA, Naoto
- 3PA-016<sup>#</sup>** Pressure dependence of a ferromagnetic transition for cobalt layered hydroxides with diarylethene derivatives (Grad. Sch. Chem. Sci. Technol., Tokyo Univ. of Sci.) ○INADA, Yu; OKAZAWA, Atsushi; KOJIMA, Norimichi; ENOMOTO, Masaya
- 3PA-017** Optimization of reaction conditions in the photochemical hydrogen generation system using a cobalt complex catalyst (Grad. Sch. Arts and Sci., The Univ. of Tokyo) ○KOIKE, Momoyo; IKUTA, Naoya; TAKIZAWA, Shin-ya; MURATA, Shigeru
- 3PA-018<sup>#</sup>** Preparation of Horseradish Peroxidase reconstituted with a Cobalt Tetrahydrocorrin as a Model of Methionine Synthase (Grad. Sch. Eng., Osaka Univ.; PRESTO, JST) ○TANG, Ning; MORITA, Yoshitsugu; OOHORA, Koji; HAYASHI, Takashi
- 3PA-019<sup>#</sup>** Theoretical study on the formation of a CH<sub>3</sub>-Co(III) bond and reaction mechanism of transmethylation in reconstituted Myoglobin (IMCE, Kyushu Univ.) ○SAWADA, Akiyoshi; KAMACHI, Takashi; YOSHIZAWA, Kazunari; MORITA, Yoshitsugu; OOHORA, Koji; HAYASHI, Takashi

## Cr

- 3PA-020<sup>#</sup>** Temperature dependence of crystal volume of manganese hexachyanochromate (Div. of Chem., Fac. Pure Appl. Sci., Univ. of Tsukuba) ○MATSUNAGA, Takuya; TOKORO, Hiroko; NAKAGAWA, Kosuke; MIYAMOTO, Yashuto; OHKOSHI, Shin-ichi

## Cu

- 3PA-021** Synthesis and Reactivity of Tri- and Tetranuclear Copper (I) Hydride Complexes (Fac. Sci., Nara Women's Univ.) ○KAMIRYO, Yoshia; HACHIKEN, Kanae; KURE, Bunsho; NAKAJIMA, Takayuki; TANASE, Tomoaki
- 3PA-022** Synthesis of Tripodal Tridentate Ligand for Metal Complexes Involving a Cyclotriphosphazene Ring as a Main Backbone. (Sch. Sci., Kitasato Univ.) KAJIYAMA, Kazumasa; ○IWANAMI, Junpei; YUGE, Hidetaka
- 3PA-023** Synthesis of chiral MOF using (*R*)-BINOL-3,3'-dibenzoic acid and its application for enantiomer separation (Fac. Chem. Materials and Bioeng., Kansai Univ.) ○UNO, Ryoosuke; TANAKA, Koichi
- 3PA-024** Structure and Adsorption Properties of Porous Copper Complex with Fluorinated Anions inside Pores (RIES, Hokkaido Univ.) ○TAKAHASHI, Yukiko; NORO, Shin-ichiro; KUBO, Kazuya; NAKAMURA, Takayoshi
- 3PA-025<sup>#</sup>** Study of flexible structure and absorption feature, on the novel inorganic-organic hybrids constructed from chloranilic acid and *n*-alkylamine (Fac. Sci., Fukuoka Univ.) ○YAGISHITA, Sadahiro; HIMEGI, Akiko; ISHIKAWA, Ryuta; KAWATA, Satoshi; ONO, Masumi
- 3PA-026<sup>#</sup>** Supramolecular Porphyrin-Based Metal-Organic Frameworks: Crystal Structure and Gas-Occlusion Properties. (Toyota Central R&D Labs., Inc.) ○OHMURA, Tetsushi; USUKI, Arimitsu
- 3PA-027** Asymmetric ring-opening reaction with aniline derivative in the presence of chiral MOF derived from (*R*)-BINOL-6,6'-dicarboxylic acid. (Fac. Chem. Materials and Bioeng., Kansai Univ.) ○UZAKI, Takayuki; OTSUBO, Yasuhiro; TANAKA, Koichi
- 3PA-028** Asymmetric ring opening of cyclohexene oxide with aniline derivatives in the presence of homochiral MOF derived from (*R*)-BINOL-5,5'-dicarboxylic acid (Fac. Chem. Materials and Bioeng., Kansai Univ.) ○KINOSHITA, Maya; TANAKA, Kouichi
- 3PA-029** Diels-Alder reaction by using porous chiral MOF as heterogeneous catalyst (Fac. Chem. Materials and Bioeng., Kansai Univ.) ○KOTANI, Masashi; TANAKA, Koichi
- 3PA-030<sup>#</sup>** Photophysical properties of mixed-ligand copper(I) complexes bearing an expanded  $\pi$ -conjugated ligand (Fac. Sci. and Technol., Seikei Univ.) MORIKUBO, Jun; NISHIKAWA, Michihiro; ○TSUBOMURA, Taro
- 3PA-031<sup>#</sup>** Synthesis and Luminescent Properties of Halobenzenethiolato Copper(I) Complexes with Pyridine and Phosphine Derivative Ligands (Fac. Sci., Univ. of Toyama) ○SATO, Masaki; SUZUKI, Tatsuya; OHTSU, Hideki; TSUGE, Kiyoshi
- 3PA-032** Preparation of bis(1,8-naphthalenediyl)diphosphine derivatives and their reaction to form metal complexes (Grad. Sch. Sci., Hiroshima Univ.) ○MATSUOKA, Miho; FUJIWARA, Koji; KUBO, Kazuyuki; KUME, Shoko; MIZUTA, Tsutomu
- 3PA-033** Synthesis of  $\alpha$ -cyano-4-pentenoic amides from allylic alcohols and malononitriles (Grad. Sch. Life Med. Sci., Doshisha Univ.) ○NAKASHIMA, Yasuhiro; NAKAMURA, Yushi; OHTA, Tetsuo; OE, Yohei
- 3PA-034** Syntheses and anti-tumor activities of far-red-absorbing metal porphyrin derivatives as a PDT drug (Grad. Sch. Sci. and Eng., Kansai Univ.) ○IWASAKI, Yuta; HIGASHINO, Ryo; NAKAI, Misaki; CLARKE,

Ryan; STORR, Tim; YANO, Shigenobu; NAKABAYASHI, Yasuo

- 3PA-035** DNA Binding of Copper(II)Complexes Containing Dithiocarbamate (Fac. Chem. Materials and Bioeng., Kansai Univ.) ○FUSHIDA, Masaya; NAKAI, Misaki; NAKABAYASHI, Yasuo
- 3PA-036<sup>#</sup>** Allosteric Regulation of Type I Copper Site in Blue Copper Protein (Grad. Sch. Sci. Eng., Ibaraki Univ.; Frontier Research Center for Applied Atomic Sci., Ibaraki Univ.; Montana State Univ.) ○YAMAGUCHI, Takahide; SZILAGYI, Robert; KOHZUMA, Takamitsu

## Dy

- 3PA-037<sup>#</sup>** Synthesis of Metal-Organic Framework Containing Lanthanide Binuclear Clusters (Grad. Sch. Sci., Tohoku Univ.) ○IWAMI, Hikaru; NAKANISHI, Ryo; KATOH, Keiichi; YAMASHITA, Masahiro
- 3PA-038<sup>#</sup>** Effect of sample state on slow magnetic relaxation of a dysprosium complex (Grad. Sch. Sci., Tohoku Univ.) ○KAMILA, Mritunjoy; COSQUER, Goulven; YAMASHITA, Masahiro

## Eu

- 3PA-039<sup>#</sup>** Structure-photoluminescence property relationship of porous lanthanide coordination polymers (Dept. Chem., Konan Univ.) ○KATAGIRI, Kosuke; MATSUO, Naoya; KAWAHATA, Masatoshi; MASU, Hyuma; ITOH, Tsutomu; YAMAGUCHI, Kentaro
- 3PA-040<sup>#</sup>** Preparation and structural properties of octa-coordinated Eu complexes. (Grad. Sch. Eng., KIT) ○HIROSAKI, Satoshi; MORIGUCHI, Tetsuji; TSUGE, Akihiko

## Fe

- 3PA-041** Synthesis of V/Fe/S, Mo/Fe/S and Fe/S Clusters having a Phenoxide-Based tridentate [O,E,O] (E = N, O, P) Ligand. (RCMS, Nagoya Univ.) ○TANIYAMA, Nobuhiro; OHKI, Yasuhiro; TATSUMI, Kazuyuki
- 3PA-042<sup>#</sup>** Synthesis of Trinuclear Iron Complexes with a Cage-type Ligand having Bis(imino)pyrrole groups (Grad. Sch. Sci., Osaka Univ.; PRESTO, JST) ○WADA, Musashi; NAGATA, Kojiro; HATANAKA, Tsubasa; FUNAHASHI, Yasuhiro
- 3PA-043<sup>#</sup>** Synthesis and properties of multinuclear iron(II) complexes bridged by bis-bidentate type Schiff base ligands containing imidazole groups (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○TANAKA, Tsubasa; SUNATSUKI, Yukinari; SUZUKI, Takayoshi
- 3PA-044<sup>#</sup>** Synthesis and Structure of Diiron Complexes with Isoquinoline-Based Ligands Derived from TPA (Fac. Sci., Nara Women's Univ.) ○AONO, Yuri; YAMAKAWA, Saki; MIKATA, Yuji
- 3PA-045<sup>#</sup>** Theoretical Studies on Performance of molecular device made of Biferrocenium dimer (Fac. Eng., Kogakuin Univ.) ○ODATE, Fumiya; TOKUNAGA, Ken
- 3PA-046** Phase transition on charge-transfer salts composed of an iron-complex donor and a dihydrobipyridinium (Coll. Sci., Rikkyo Univ.; Research center for smart molecules, Rikkyo Univ.) ○TANAKA, Rikako; MATSUSHITA, Nobuyuki
- 3PA-047** Synthesis and physical properties of the iron mixed-valence complexes with decamethylmetalloceniums as an intercalants (Grad. Sch. Chem. Sci. Technol., Tokyo Univ. of Sci.; Grad. Sch. Arts and Sci., The Univ. of Tokyo) ○OHASHI, Nami; IDA, Hiromichi; OKAZAWA, Atsushi; KOJIMA, Norimichi; ENOMOTO, Masaya
- 3PA-048<sup>#</sup>** Magnetic Properties of V-Substitution Effect in an Iron Mixed Valence Complex (Grad. Sch. Chem. Sci. Technol., Tokyo Univ. of Sci.; Grad. Sch. Arts and Sci., The Univ. of Tokyo) ○SHIDA, Norihiro; SUZAWA, Yoshiki; INABA, Michikazu; OKAZAWA, Atsushi; KOJIMA, Norimichi; ENOMOTO, Masaya
- 3PA-049** Multielectron and proton transfer reaction of iron (II) complex with redox-active triamine ligand (Fac. Sci. Eng., Chuo Univ.) ○WANG, Longkun; YAMAMOTO, Risa; CHANG, Ryongsok; WAKIZAKA, Masanori; MATSUMOTO, Takeshi; CHANG, Ho-chol
- 3PA-050** Chelate effects of half-sandwich Fe complexes [CpFe(P-P)L] PF<sub>6</sub> (Grad. Sch. Industrial Tech., Nihon Univ.) ○KITAMURA, Hikaru; TSUNO, Takashi; BRUNNER, Henri
- 3PA-051** Silicon-Sulfur bond activation by a silyl iron complex (Fac. Edu., Univ. of Ryukyus) FUKUMOTO, Kozo; ○OSHIRO, Sayaka; TERUYA, Toshiaki
- 3PA-052** Solution Structure and Reactivities of [4Fe-4S] Cluster Sufficiently Covered with Arenethiolato Ligands Having Bulky Acylamino Groups (Grad. Sch. Sci., Osaka Univ.) ○NAKAMORI, Yumi; OKAMURA, Taka-aki; ONITSUKA, Kiyotaka
- 3PA-053<sup>#</sup>** Multistep Phase Transitions of [2]pseudorotaxane Composed of Dibenzo[24]crown-8-ether and Ferrocene-containing Dialkylammonium Salt (Chem. Res. Lab., Tokyo Tech) ○SUZAKI, Yuji; TADAMI, Hiroko; OSAKADA, Kohtaro

## Gd

- 3PA-054** Complex formation using bis- and trisnitroxides toward 4f-2p high-spin molecules (Sci. Eng., The Univ. of Electro-Communications) ○MAKIMURA, Kayoko; ISIDA, Takayuki

Si-P-P ligand (Grad. Sch. Eng., Yokohama Natl. Univ.) ○WATANABE, Kyosuke; MINATO, Makoto

## Ir

- 3PA-055** Synthesis and Reaction of Dinuclear Iridium Complexes Supported by a Tetrakisphosphine dpmppe (Fac. Sci., Nara Women's Univ.) ○OISHI, Manami; NAKAMAE, Kanako; KURE, Bunsho; NAKAJIMA, Takayuki; TANASE, Tomoaki
- 3PA-056<sup>#</sup>** Synthesis of an iridium(III) complex containing a hydride acceptor as a part of ligands and its reactivity (Dept. of Material & Life Chem., Kanagawa Univ.) ○MOCHIZUKI, Taishi; MATSUBARA, Yasuo; IZUMI, Yuta; KOIDE, Yoshihiro
- 3PA-057<sup>#</sup>** Syntheses of Phosphorescent Iridium Complexes with Tridentate 3 {5}-Substituted Pyrazole Ligands and Proton-induced Tuning of their Photophysical Properties (Grad. Sch. Sci. Eng., Chuo Univ.; Grad. Sch. Sci. Eng., Univ. of Toyama) ○ODAKA, Tomoko; OZAWA, Hiroaki; MAEBA, Junichi; NOZAKI, Koich; HAGA, Masa-aki
- 3PA-058** Synthesis and Surface Immobilization of Emissive Ir Complexes Containing Reactive Coordination Site (Fac. Sci. Eng., Chuo Univ.) ○KATO, Yuri; OZAWA, Hiroaki; HAGA, Masa-aki
- 3PA-059<sup>#</sup>** Preparation of Iridacyclopentadiene Complexes Bearing the Ind-P Ligand towards Photoreaction with Molecular Oxygen (Grad. Sch. Human. Sci., Nara Women's Univ.) ○IWASAKI, Reina; TAKAHARA, Aoi; URA, Yasuyuki; KATAOKA, Yasutaka
- 3PA-060** Iridium-catalyzed hydrosilane reduction of amides to form  $\pi$ -conjugated enamines: steric and electronic effects of amides and the iridium complexes on the catalytic activity. (Grad. Sch. Eng. Sci., Kyushu Univ.) TAHARA, Atushi; ○UNE, Yuta; MIYAMOTO, Yasumitsu; SHIGETA, Keisuke; SUNADA, Yusuke; NAGASHIMA, Hideo

## Lu

- 3PA-061<sup>#</sup>** Synthesis and Properties of Heteroleptic Triple-decker Sandwich Dinuclear Lu(III) Complex Containing Octamethyl-substituted and Unsubstituted Phthalocyanines (Part 1) (Fac. Sci., Kyushu Univ.) ○TAKAHASHI, Kazuhiro; SUENAGA, Masahiko

## Mg

- 3PA-062<sup>#</sup>** Synthesis and characterizations of hydride-based coordination polymers (Grad. Sch. Eng., Kyoto Univ.) ○KADOTA, Kentaro; HORIKE, Satoshi; KITAGAWA, Susumu
- 3PA-063<sup>#</sup>** Synthesis and structures of light metal coordination polymers using 4-(methylsulfonyl)benzoate (CRIS, Hokkaido Univ.) ○OCHI, Rika; NORO, Shin-ichiro; KUBO, Kazuya; NAKAMURA, Takayoshi

## Mn

- 3PA-064<sup>#</sup>** Tuning of the Magnetic Properties of Manganese-Diarylethene Photochromic Complex by Light Irradiation (Grad. Sch. Sci., Tohoku Univ.) ○FETOH, Ahmed; YOUSSEF, Heba; COSQUER, Goulven; MORIMOTO, Masakazu; IRIE, Masahiro; YAMASHITA, Masahiro
- 3PA-065<sup>#</sup>** Synthesis and Reactivity of Metal Semiquinonato Complex (Ibaraki Nat. Coll. of Tech.) ○AWANO, Yusaku; KOMATSUZAKI, Hidehito; KUBOTA, Toshio; AKITA, Munetaka; HIKICHI, Shiro
- 3PA-066<sup>#</sup>** Synthesis and properties of manganese complexes with bi- and tridentate iminopyrrole ligands (Grad. Sch. Sci., Osaka Univ.; PRESTO, JST) ○KUSUMOTO, Masaaki; HATANAKA, Tsubasa; FUNAHASHI, Yasuhiro
- 3PA-067<sup>#</sup>** Structures and Properties of Dinuclear Manganese Complexes with Quinoline- and Quinoxaline-Based Ligands having Different Coordination Ability (Fac. Sci., Nara Women's Univ.) ○NAITO, Kyoko; MURAKAMI, Kana; KURODA, Yasuko; OCHI, Ayaka; MIKATA, Yuji
- 3PA-068<sup>#</sup>** Synthesis and structures of incomplete cubane-type manganese clusters having a lithium or calcium ion. (Okayama Univ.) ○KONISHI, Yusuke; INOUE, Marina; SUZUKI, Takayoshi; SUNATSUKI, Yukinari
- 3PA-069** Physicochemical properties of a new nanocapsule incorporating manganese ions for the magnetic resonance bio-imaging (MIC, NIRS; Inst. Frontier Med. Sci., Kyoto Univ.) ○ARAI, Kazutaka; JO, Jun-ichiro; MURAYAMA, Shuhei; AOKI, Ichio; SAGA, Tsuneo
- 3PA-070** Synthesis of Mesoporous Organosilica with Mn(I) Complexes and Its Photocatalysis for CO<sub>2</sub> Reduction (Grad. Sch. Sci., Eng., Tokyo Tech) ○SUZUKI, Yutaka; TAKEDA, Hiroyuki; MAEGAWA, Yoshifumi; IKAI, Masamichi; INAGAKI, Shinji; ISHITANI, Osamu

## Mo

- 3PA-071<sup>#</sup>** Solvatochromism of Mo(VI) Complexes Supported by Tridentate Aminobis(phenol) Ligands (Grad. Sch. Sci. & Tech., Kumamoto Univ.; Fac. Sci., Kumamoto Univ.) ○KAWATSU, Takahiro; HIGASHIBARA, Yuki; HANAOKA, Satoki; MASUDA, Yuki; ARAE, Sachie; IRIE, Ryo
- 3PA-072<sup>#</sup>** Synthesis of a noncentrosymmetric pentacyanidonitrosylmolybdate-based metal assembly showing a nonlinear optical effect (Grad. Sch. Sci., The Univ. of Tokyo) ○KOMINE, Masaya; IMOTO, Kenta; MIYAMOTO, Yasuto; NAKABAYASHI, Koji; OHKOSHI, Shin-ichi
- 3PA-073** Reactivity of molybdenum acetylide hydrido complex bearing P-P-

## Nb

- 3PA-074<sup>#</sup>** Syntheses, and magnetic properties of 3-dimensional cyano-bridged molecular magnets based on octacyanonitrate (Grad. Sch. Sci., The Univ. of Tokyo) ○OHNO, Takuro; IMOTO, Kenta; OHKOSHI, Shin-ichi

## Nd

- 3PA-075** Photophysical properties of neodymium porphyrin complexes (IIS, The Univ. of Tokyo) ○YAMASHITA, Yuki; ISHII, Kazuyuki

## Ni

- 3PA-076<sup>#</sup>** Preparation of coordination compounds from cationic solvatochromic complexes and pyridine-type multidentate ligands (Grad. Sch. Sci., Kobe Univ.) ○HOSOKAWA, Hitoshi; MOCHIDA, Tomoyuki
- 3PA-077** Rational Synthesis of Cyclic Metal Complexes and Porous Structure Using a Flexural Ligand (Fac. Sci., Kyushu Univ.) ○CHIKITA, Daiki; MISHIMA, Akio; YOU, Tetsu; TSUJI, Yasuhiro; KOSHIYAMA, Tomomi; OHBA, Masaaki
- 3PA-078** Characterization of one-electron oxidized group 10 metal-salen type complexes having various substitutions (Coll. Sci., Ibaraki Univ.) ○SHIMAZAKI, Yuichi
- 3PA-079<sup>#</sup>** Preparation of novel coordination polymers using nickel(II) and zinc (II) dithiocarbamate complexes as bridging ligands (Fac. Eng., OIT) NOMURA, Ryoki; MAN, Yusuke; ○KOJIMA, Tatsuya; OHTAKA, Atsushi; SHIMOMURA, Osamu
- 3PA-080** Crystal structure analysis of alkyl quaternary ammonium-[Ni(dmit)<sub>2</sub>] complex salts bearing terminal cyclohexyl group (Grad. Sch. Chem. Sci. Technol., Tokyo Univ. of Sci.) ○KAKIHARA, Shunta; SAEKI, Masahiro; MIYAMURA, Kazuo
- 3PA-081<sup>#</sup>** Utilization of nickel(II) dithiocarbamate complexes having carboxyl group at the terminal as bridging ligands (Fac. Eng., OIT) NOMURA, Ryoki; ○MATSUDA, Takashi; OHTAKA, Atsushi; SHIMOMURA, Osamu
- 3PA-082** Synthesis, Crystallization, and Molecular Recognition of Pentafluorophenyl substituted Bis(glyoximate)Nickel(II) Complexes. (Grad. Sch. Sci., Kitasato Univ.) ○ITAMURA, Akio; HORI, Akiko; YUGE, Hidetaka
- 3PA-083<sup>#</sup>** Reaction of nickel(II) dithiocarbamate complexes derived from amino acids with several metal ions (Fac. Eng., OIT) NOMURA, Ryoki; ○MAN, Yusuke; KOJIMA, Tatsuya; OHTAKA, Atsushi; SHIMOMURA, Osamu

## Pd

- 3PA-084** Synthesis and Applications of Chiral Selenazoline Ligand (Fac. Eng., Gifu Univ.) ○FUKUNAGA, Tomoki; SHIBAHARA, Fumitoshi; MURAI, Toshiaki
- 3PA-085<sup>#</sup>** Protonation of Multinuclear Palladium Complexes with Bridging Silylene or Germylene Ligands (Chem. Res. Lab., Tokyo Tech) ○TANAKA, Kimiya; TOI, Hiroyuki; TANABE, Makoto; OSAKADA, Kohtaro
- 3PA-086<sup>#</sup>** Synthesis and properties of nickel(II), palladium(II) and platinum(II) complexes containing 2-methyl-8-(diphenylphosphino)quinoline (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○MORI, Masatoshi; ARIYOSHI, Keita; SUZUKI, Takayoshi; SUNATSUKI, Yukinari
- 3PA-087<sup>#</sup>** Preparation and molecular recognition of phosphorous coordination capsule (Dept. Chem., Konan Univ.) KATAGIRI, Kosuke; ○MATSUI, Yoshimichi; KAWAHATA, Masatoshi; YAMAGUCHI, Kentaro
- 3PA-088<sup>#</sup>** Electrochemical Reduction of Proton Catalyzed by Heterometallic Trinuclear Complexes (Grad. Sch. Eng., Nagoya Inst. of Tech.; Grad. Sch. Sci., Osaka City Univ.) ○MAEDA, Yuri; NISHIOKA, Takanori
- 3PA-089** Photosensitizing Properties of Cyclometalated Palladium Complexes (Fac. Sci., Kanagawa Univ.) INOUE, Keisuke; SHIMODAIRA, Takashi; INOUE, Satoshi; KATAOKA, Yusuke; ○KAWAMOTO, Tatsuya
- 3PA-090<sup>#</sup>** Redox Behaviors of Linear Octanuclear Palladium Complexes Supported by Chiral Tetrakisphosphine Ligand, *rac*-dpmpm (Fac. Sci., Nara Women's Univ.) ○KANEKO, Yukino; YAMAMOTO, Kana; MORITA, Konomi; NAKAMAE, Kanako; KURE, Bunsho; NAKAJIMA, Takayuki; TANASE, Tomoaki
- 3PA-091<sup>#</sup>** Photoluminescence of palladium(0) complexes with monodentate phosphine ligands (Fac. Sci. and Technol., Seikei Univ.) ○KAKIZOE, Daichi; NISHIKAWA, Michihiro; TSUBOMURA, Taro
- 3PA-092<sup>#</sup>** Synthesis of palladium complexes bearing  $\sigma$ -electron ligand of silane,germane and stannane (Fac. Sci., Osaka Pref. Univ.) ○KINOSHITA, Kazuki; KAWAMOTO, Tatuya; KAMEO, Hazime; NAKAZAWA, Hiroshi; MATUZAKA, Hiroyuki
- 3PA-093<sup>#</sup>** Study on the Reactivity of 3-Oxocyclobut-1-en-1-yl Pd(II) Complex (Grad. Sch. Eng., Saitama Inst. of Tech.; Fac. Eng., Saitama Inst. of Tech.) ○AZAMI, Hidekazu; ANDOU, Hidemi; MATSUMURA, Atsuki; IWASAKI, Masakazu
- 3PA-094<sup>#</sup>** Translating the stimuli response of the metal complexes with flexible macrocyclic ligands to the polymer materials (OIST) ○FILONENKO,

Georgy; KHUSNUTDINOVA, Julia

## Pt

- 3PA-095** Stepwise synthesis of asymmetric Schiff base-Pt complexes and their properties (IIS, The Univ. of Tokyo) ○HOGA, Yuki; MA, Yilan; ACHIRA, Hiroto; YOSHIKAWA, Isao; MUTAI, Toshiki; MATSUMURA, Kazunari; HOUJOU, Hirohiko
- 3PA-096** Synthesis and Emission Property of Acetylido-bridged Tetranuclear Platinum(II) Complex (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) ○KAWASUMI, Mako; NIHEI, Masayuki; OSHIO, Hiroki
- 3PA-097** Syntheses and Characterization of the Metal Complexes of the Optically Active Dispirocyclotriphosphazenes Bearing (Diphenylphosphino) phenoxy Groups (Grad. Sch. Sci., Kitasato Univ.) KAJIYAMA, Kazumasa; ○AOYAGI, Kouki; YUGE, Hidetaka
- 3PA-098<sup>#</sup>** Structure Determination of Platinum Complexes with Long Alkyl Chains on Highly Ordered Pyrolytic Graphite Surface by Scanning Tunneling Microscope (Sch. Sci. Tech., Kwansei Gakuin Univ.) ○SHIOJIRI, Nao; CHANG, Ho-chol; TANAKA, Daisuke
- 3PA-099<sup>#</sup>** Structural and Luminescent Properties of Tartrate-Bridged Dinuclear Platinum(II) Complexes (Fac. Sci., Saitama Univ.) ○KUSANO, Yukiko; FUJIHARA, Takashi; NAGASAWA, Akira; OHNO, Keiji; KAIZAKI, Sumio
- 3PA-100** Hydrogen-Evolving Catalytic Activity of a Highly Photostable Platinum Porphyrin Complex (Fac. Sci., Kyushu Univ.; WPI-I<sub>2</sub>CNER, Kyushu Univ.; CMS, Khushu Univ.) ○MORITA, Kohei; OZAWA, Hironobu; SAKAI, Ken
- 3PA-101<sup>#</sup>** Solvent Effect on Excimer Emission in N<sup>+</sup>C<sup>-</sup>N-Coordinated Platinum(II) Complex (Grad. Sch. Nanobiosci., Yokohama City Univ.) ○IWAKIRI, Asako; SHINOZAKI, Kazuteru
- 3PA-102** Humidity-dependence of luminescence of the charge-transfer salt composed of tetracyanidoplatinate(II) and dipropylviologen (Coll. Sci., Rikkyo Univ.) ○KATO, Akane; MATSUSHITA, Nobuyuki
- 3PA-103** Synthesis of new platinum(II) complex with catecholato substituted with long alkyl chains (Fac. Sci. Eng., Chuo Univ.) ○ARA, Junpei; SAKAZUME, Yasutaka; WAKIZAKA, Masanori; MATSUMOTO, Takeshi; CHANG, Ho-chol
- 3PA-104** Catalytic hydrogenation of nitroarenes by platinum nanoparticles stabilized by ammonium salts of hyperbranched polystyrene (Grad. Sch. Eng. Sci., Kyushu Univ.) NAGASHIMA, Hideo; ○MAEDA, Yuki; YAMAMOTO, Yuma; ARADA, Chaiyanurakkul; LEI, Gao

## Re

- 3PA-105** CO<sub>2</sub> capture using Re(I) complexes and Ru(II)-Re(I) dinuclear complexes with various diimine ligands. (Sch. Sci., Tokyo Tech) ○UENO, Kazuki; CHIBA, Hiroyuki; OHKUBO, Kei; TAMAKI, Yusuke; ISHITANI, Osamu
- 3PA-106<sup>#</sup>** Synthesis and photochemical properties of rhenium phthalocyanine complexes (IIS, The Univ. of Tokyo) ○KOIKE, Yosuke; ISHII, Kazuyuki

## Rh

- 3PA-107** Reactions of Tetranuclear Rhodium(I) Complexes Supported by Tetrphosphine Ligands with Small Molecules (Fac. Sci., Nara Women's Univ.) ○AOKI, Risa; SATO, Kaduki; OTAKI, Risa; KURE, Bunsyo; NAKAJIMA, Takayuki; TANASE, Tomoaki
- 3PA-108** Synthesis of Heterobimetallic Complexes Containing a Lewis Acid and Their Activity for Catalytic Reductions of Organic Compounds Utilizing the Cooperative Effect (Chem. Res. Lab., Tokyo Tech) ○TSUDA, Erika; OHKURA, Yusuke; KOIZUMI, Take-aki

## Ru

- 3PA-109** Acid-base equilibrium and redox behavior of ruthenium complexes having a heterocyclic ring ligand containing multiple nitrogen atoms (Grad. Sch. Sci., Rikkyo Univ.) ○ANDO, Tomohiro; WADA, Tohru
- 3PA-110** Synthesis and Crystal Structure of Ruthenium(II) Complex with a 2,2'-Bipyridine and an Acetylacetonato (Dept. Chem., Konan Univ.; Sch. Sci. Eng., Meiji Univ.) ○FUJIMOTO, Daichi; IWATSUKI, Satoshi; TOYAMA, Mari; NAGAO, Noriharu
- 3PA-111** Selective Immobilization of Metal Complexes to the Inner Surface of Liposome (Fac. Sci., Kyushu Univ.) ○MIYAKE, Kyohei; KOSHIIYAMA, Tomomi; OHBA, Masaaki
- 3PA-112** Synthesis and Characterization of Ruthenium(II) Complex with two Di-2-pyridylamine and a Picolinato (Dept. Chem., Konan Univ.; Sch. Sci. Eng., Meiji Univ.) ○MISHIMA, Daichi; SATOSI, Iwatuki; TOYAMA, Mari; NAGAO, Noriharu
- 3PA-113<sup>#</sup>** Synthesis and characteristic of ruthenium-lanthanide hetero-binuclear complex (Urban Environmental Sci., TMU) ○TAMAI, Sakurako; SATO, Kiyoshi; YAMAGUCHI, Motoo
- 3PA-114** Mixed-Valent State of a Ruthenium Triple-decker Complex Bearing Stannole Ligands (Grad. Sch. Sci., Eng., Saitama Univ.; IMR, Tohoku Univ.) ○HAMADA, Jumpei; FURUKAWA, Shunsuke; MIYASAKA, Hitoshi; SAITO, Masaichi

- 3PA-115** Ruthenium carbonyl complexes containing various polypyridyl ligands: Evaluation of supporting ligands based on redox properties (Fac. Symb. Sys. Sci., Fukushima Univ.) ○TAKAHASHI, Kasumi; TAKASE, Tsugiko; OYAMA, Dai
- 3PA-116** Selective synthesis of geometrical isomers in ruthenium complexes containing two kinds of polypyridyl supporting ligands (Fac. Symb. Sys. Sci., Fukushima Univ.) ○ABE, Ryosuke; KIMURA, Ryota; TAKASE, Tsugiko; OYAMA, Dai
- 3PA-117<sup>#</sup>** Solid-phase Synthesis of Terpyridine Complexes Utilizing Coordination Bond Formation on Resins (Coll. Sci. Tech., Nihon Univ.) ○EBATA, Yayoi; SUGAWA, Kosuke; OTSUKI, Joe
- 3PA-118** Synthesis and Structure of Ru(II) Complex Bearing Tridentate Ligands Hmdppd Forming Two Kinds of Chelate Rings (Dept. of Sci. Tech., Meiji Univ.) ○OONO, Takuya; MURANAKA, Yu; TOYAMA, Mari; NAGAO, Noriharu
- 3PA-119** Interactions between a Mononuclear Ruthenium-Bis(terpyridyl) anthracene Complex and Metal ions as Lewis acid (Grad. Sch. Sci., Rikkyo Univ.) ○MISHIMA, Kanae; WADA, Tohru
- 3PA-120<sup>#</sup>** Electrochemically induced linkage isomerization switched on/off by protolysis in 2-mercaptopyridine ruthenium(II) complexes (Fac. Sci., Fukuoka Univ.) ○HAMAGUCHI, Tomohiko; INOUE, Yoshimasa; KANEKO, Miho; NAGAI, Eriko; ANDO, Isao
- 3PA-121** Photo-driven Hydrogen Evolution using Ionic Liquid Systems (Fac. Sci., Kyushu Univ.; WPI-I<sub>2</sub>CNER, Kyushu Univ.; CMS, Khushu Univ.) ○KUGE, Keita; YAMAUCHI, Kousei; SAKAI, Ken
- 3PA-122** Substituent Effects of Ruthenium Sensitizers on the Photosensitization Ability for the Solar Water-Splitting Reaction (Fac. Sci., Kyushu Univ.; WPI-I<sub>2</sub>CNER, Kyushu Univ.; CMS, Khushu Univ.) ○HAMAGIRI, Makoto; OZAWA, Hironobu; SAKAI, Ken
- 3PA-123** Anticancer Activity of Ruthenium(II) Complexes in PACT (Fac. Chem. Materials and Bioeng., Kansai Univ.) ○MUKAI, Kohei; KAKUTA, Ryota; NAKAI, Misaki; NAKABAYASHI, Yasuo

## Si

- 3PA-124** Synthesis of molecular capsules using siloxane bond formation (Fac. Sci., Kanagawa Univ.) ○KAWAKAMI, Yoshiteru; FUKUSHIMA, Takumi; WAGA, Yuki; KABE, Yoshio
- 3PA-125** Synthetic Study of Silicon-Functionalized 2,2'-(silyl)(boryl)biphenyls (Fac. Bio., Hosei Univ.; Grad. Sch. Sci., Eng., Hosei Univ.) ○SHIMIZU, Tomomi; KAWACHI, Atsushi
- 3PA-126** A Convenient Synthesis Route of Trisiloxane-1,5-diol from Cyclic Trisiloxanes (Sagami Chemical Research Institute) ○TANAKA, Ryoji; FUJIWARA, Kiyotaka; FUKAWA, Marina; UEMATSU, Ryouta
- 3PA-127<sup>#</sup>** Hydrogen Molecule Activation by *o*-(Hydrosilyl)(boryl)benzene: Observation of H-D Exchange Reaction (Fac. Bio., Hosei Univ.) ○KAWACHI, Atsushi; SHINBO, Fumitaka; ABE, Keisuke

## Tb

- 3PA-128** Synthesis, single molecule magnetic evaluation, and self-assembling on surfaces of terbium porphyrin double-decker complexes with long alkyl chains (Grad. Sch. Sci., Osaka Univ.) ○OKIMURA, Yukiko; TANAKA, Daisuke; INOSE, Tomoko; YAMASHITA, Ken-ichi; OGAWA, Takuji

## Ti

- 3PA-129** Synthesis of an O,N,O,N-tetradentate ligand and titanium complex. (Sci. Tec., Sophia Univ.) ○SHIBA, Keisuke; SATO, Keisuke; YONEYAMA, Satoru; MASUYAMA, Yoshiro; SUZUKI, Noriyuki

## W

- 3PA-130<sup>#</sup>** Investigation of Hydrogen Sorption Equilibrium of Organo-Tungsten Complex by in-situ FT-IR measurement (Toyota Central R&D Labs., Inc.) ○MATSUMOTO, Mitsuru; HASEGAWA, Naoki; IKUTA, Yasuhiro; KAWAGUCHI, Hiroyuki; TOMITA, Ikuyoshi; NISHIYAMA, Hiroki; KUZUYA, Takashi; ISHIBASHI, Kazunobu
- 3PA-131<sup>#</sup>** Synthesis of Polymers Possessing Phosphametalocene Units in the Main Chain Directed Towards Novel Hydrogen Storage Materials (Interdisciplinary Grad. Sch. Sci. and Eng., Tokyo Tech) ○NISHIYAMA, Hiroki; MATSUMOTO, Mitsuru; HASEGAWA, Naoki; KUZUYA, Takashi; ISHIBASHI, Kazunobu; KAWAGUCHI, Hiroyuki; INAGI, Shinsuke; TOMITA, Ikuyoshi

## V

- 3PA-132** Synthesis of Titanium and Vanadium Complexes with a Sterically Demanding Diphenylmethyl-substituted [ONO] Ligand (Grad. Sch. Sci., Eng., Tokyo Tech) ○HASEGAWA, Sui; ISHIDA, Yutaka; KAWAGUCHI, Hiroyuki
- 3PA-133<sup>#</sup>** Syntheses and Crystal Structures of Vanadium Dinitrogen Complexes with Toriamidoamine Ligands (Fac. Eng., Aichi Inst. of Tech.) ○TSUDUKI, Kazuki; KAJITA, Yuji
- 3PA-134** Synthesis and structure of the novel vanadium complex with the

ONO tridentate ligand as a VHPO model (Aichi Inst. of Tech.)

○ARAKAWA, Daiki; KAJITA, Yuji

- 3PA-135<sup>#</sup>** Chirality Sensing of Pyroglutamic Acid by Ternary Complexation with Lanthanide Complex and Cu(II) Ion (Grad. Sch. Sci., Osaka City Univ.) SHINODA, Satoshi; ○NAKAJIMA, Junya; MIYAKE, Hiroyuki

## Zn

- 3PA-136** Synthesis of Metal Complex Compound Composed of Imidazole Analogs Ligand (Grad. Sch. Sci., Kyushu Univ.) ○KURAMOTO, Takahiro; SADAKEYO, Masaaki; YAMAUCHI, Miho
- 3PA-137<sup>#</sup>** Complete Spontaneous Resolution of Zn-Tb-Zn Type Trinuclear Complexes with Tripodal Ligands (Faculty of Science, Okayama University) ○HORINO, Yuki; WADA, Koki; MATSUSHIMA, Misaki; ISOZAKI, Manami; SUNATSUKI, Yukinari; SUZUKI, Takayoshi
- 3PA-138** Synthesis and Properties of Redox-active Metal Complexes Based on Long Alkyl Chain-substituted Ammonium Cation (Fac. Sci. Eng., Chuo Univ.) ○NAKAMURA, Yuichi; SAKAZUME, Yasutaka; WAKIZAKA, Masanori; MATSUMOTO, Takeshi; CHANG, Ho-chol
- 3PA-139<sup>#</sup>** The Control of Crystal Surface Structure of Interdigitated Porous Coordination Polymers (Sch. Sci. Tech., Kwansei Gakuin Univ.) ○KAMAKURA, Yoshinobu; TANAKA, Daisuke
- 3PA-140<sup>#</sup>** Investigation on intermolecular interaction of dithiocarbamate complex bearing function to hydrogen bonding with polymers (Fac. Eng., OIT) NOMURA, Ryoki; ○KAWAMOTO, Kazuki; SAWANO, Takumi; FUKUI, Yoshihiro; OHTAKA, Atsushi; SHIMOMURA, Osamu

## Zr

- 3PA-141<sup>#</sup>** Solid-state Electrochemistry in MOFs: Reversible Redox Activity of Ligand (Fac. Sci., Toho Univ.) ○WU, Bin; TAKAISHI, Shinya; YAMASHITA, Masahiro

## Biofunctional Chemistry ; Biotechnology

### Molecular recognition

- 3PA-143** Femtosecond pump-probe spectroscopy of paracentron, an analogue of a marine carotenoid fucoxanthin (Sch. Sci. Tech., Kwansei Gakuin Univ.) ○HASHIMOTO, Hideki; YUKIHARA, Nao; FUJIWARA, Masazumi; NISHIOKA, Yuto; SHINADA, Tetsuro; SAKAGUCHI, Kazuhiko; KATSUMURA, Shigeo
- 3PA-144** Femtosecond pump-probe spectroscopy of fucoxanthin reconstituted into the light-harvesting G9+ complex from a purple photosynthetic bacterium *Rhodospirillum rubrum* G9+ (Sch. Sci. Tech., Kwansei Gakuin Univ.) ○YUKIHARA, Nao; SUGAI, Yuki; FUJIWARA, Masazumi; URAGAMI, Chiasa; IHA, Masahiko; SAKAGUCHI, Kazuhiko; KATSUMURA, Shigeo; HASHIMOTO, Hideki
- 3PA-145** Control of photoinduced electron transfer by the addition of polyvinylpyrrolidone (Grad. Sch. Sci., Osaka Univ.) ○TAKASAKI, Tomoe; YAMAGUCHI, Hiroyasu
- 3PA-146** Synthesis of the membrane-anchored macrocyclic rare earth complexes and its fluorescence property in lipid vesicle (Grad. Sch. Eng. Sci., Shibaura Inst. of Tech.) ○YOSHIDA, Kai; HOSOKAWA, Sadaya; MATSUMURA, Kazunari
- 3PA-147<sup>#</sup>** Development of fluorescent sensors for zinc ion activated by enzymatic reaction (IBB, Tokyo Med. and Dental Univ.) ○SHIRAIISHI, Takuya; HIRANO, Tomoya; SAITO, Toshiki; KAGECHIKA, Hiroyuki
- 3PA-148<sup>#</sup>** Development of Novel Fluorescent Molecular Probes for the Highly Selective Detection of Dopamine (AIST) ○SUZUKI, Yoshio; NAGASAKA, Kazuaki; TAKASHIMA, Ichiro; YAMAMOTO, Shinya
- 3PA-149<sup>#</sup>** Photophysical properties of hetero co-assemblies by chlorophyll self-aggregates and zinc chlorophyll derivatives (Grad. Sch. Life Sci., Ritsumeikan Univ.) ○SHOJI, Sunao; TAMIAMI, Hitoshi
- 3PA-150<sup>#</sup>** Conversion of vinyl group of tetrapyrroles through iodination (Grad. Sch. Eng., Utsunomiya Univ.; Grad. Sch. Eng., Utsunomiya Univ.) OBA, Toru; ○MIYATA, Kota; MASUYA, Takuto; ITO, Satoshi
- 3PA-151<sup>#</sup>** Photophysical Properties of Cobalt Complex-Chlorin Dyads (Coll. Sci. Tech., Nihon Univ.) ○SHINOZAKI, Yoshinao; OTSUKI, Joe
- 3PA-152** Synthesis of Metal-Substituted Chlorophyll Derivatives toward Reconstitution into Photosynthetic Proteins (Fac. Sci. Eng., Kinki Univ.; PRESTO, JST) SAGA, Yoshitaka; ○AMARI, Kenta
- 3PA-153** Development of the protein-surface binding molecule utilizing boronate ester bond formation (Fac. Sci., Fukuoka Univ.) ○KONISHI, Sae; KUSANO, Shuhei; HAYASHIDA, Osamu
- 3PA-154<sup>#</sup>** Synthesis of bipyridinium conjugate incorporated azacrown ether and its ion recognition (Grad. Sch. Med., Eng., Univ. of Yamanashi) ○KUWABARA, Testuo; SATAKE, Ryota; MACHIDA, Shin-nosuke; TAKAHASHI, Masaki
- 3PA-155** Cytotoxicity of Ruthenium(II) Complexes with Dithiocarbamate (Fac. Chem. Materials and Bioeng., Kansai Univ.) ○IKEDA, Mayuko; NAKAMURA, Ayaka; WADA, Azumi; NAKAI, Misaki; NAKABAYASHI, Yasuo
- 3PA-156** Anticancer Activity of Palladium(II) Complexes as Intercalators (Fac. Chem. Materials and Bioeng., Kansai Univ.) ○EGI, Shotaro; FUJII, Masashige; NAKAI, Misaki; NAKABAYASHI, Yasuo
- 3PA-157** Anticancer Activities of Dinuclear Ruthenium(II) Complexes Bridged Various Ligands (Fac. Chem. Materials and Bioeng., Kansai Univ.) ○TAKAHAMA, Yohei; NAKAI, Misaki; NAKABAYASHI, Yasuo

## Nucleic Acids

- 3PA-158** Off-on detection of DNAs by <sup>19</sup>F NMR using fluorine-modified bisbenzimidazole derivatives (Sch. Mat. Sci., JAIST) ○HASEGAWA, Daisaku; SAKAMOTO, Takashi; FUJIMOTO, Kenzo
- 3PA-159<sup>#</sup>** Construction of Pyridine-Modified Artificial DNA Junction Structures for Metal Coordination-driven Thermal Stabilization (Grad. Sch. Sci., The Univ. of Tokyo) ○KAMIMOTO, Hiroki; TAKEZAWA, Yusuke; SHIONOYA, Mitsuhiro
- 3PA-160<sup>#</sup>** Photochemical DNA editing using 3-cyanovinylcarbazole modified oligodeoxyribonucleotide as a method for site-directed mutagenesis (Sch. Mat. Sci., JAIST) ○SETHI, Siddhant; SAKAMOTO, Takashi; FUJIMOTO, Kenzo
- 3PA-161** Development of a Novel Fluorescence *In Situ* Hybridization Method Using Photoresponsive 3-Cyanovinylcarbazole Containing Oligodeoxyribonucleotide (Sch. Mat. Sci., JAIST) ○TOYOSATO, Kei; SAKAMOTO, Takashi; FUJIMOTO, Kenzo
- 3PA-162<sup>#</sup>** Synthesis of Natural-like Cross-linked duplex RNA for Biochemical Studies (IMRAM, Tohoku Univ.) ○HAZEMI, Madoka Eurika; ONIZUKA, Kazumitsu; YAMADA, Ken; NAGATSUGI, Fumi
- 3PA-163** Synthesis and evaluation of a fluorescence-quenching probe to detect oxidative damage of deoxyguanosine (Fac. Eng., KAIT) ○YAMANAKA, Takehiro; TAKAMURA, Takeji
- 3PA-164** Synthesis of saccharide-modified RNA using RNA polymerase (Grad. Sch. Human Dev. Env., Kobe Univ.) ○KUWAHARA, Masato; YAMABE, Miyuki; EBARA, Yasuhito
- 3PA-165<sup>#</sup>** Examination of reaction conditions for the coupling of 5' - monomethoxytritylamino-5' - deoxynucleoside phosphoramidites on the synthesis of 5' -amino-modified oligonucleotides (Teikyo Univ. of Sci. & Tech.) ○IWASE, Reiko; MAEKAWA, Tsuyohito; MUTOU, Kensaku; UEDA, Kenji
- 3PA-166** Synthesis and evaluation of novel DNA photo-cross-linker having glycidol skeleton (Sch. Mat. Sci., JAIST) ○MOCHIDUKI, Takumi; SAKAMOTO, Takashi; FUJIMOTO, Kenzo
- 3PA-167** Design and Synthesis of linkers for the sugar modification of antisense oligonucleotides. (Sch. Biosci. Biotech., Tokyo Tech) ○KISHIMURA, Tomohiro; INDE, Takeshi; MASAKI, Yoshiaki; SEKINE, Mitsuo; SEIO, Kohji
- 3PA-168** Development of a new synthetic method of nucleoside triphosphates which are unstable under basic condition (Grad. Sch. Biosci. Biotech., Tokyo Tech) ○ODA, Yuki; ITO, Hyugo; KANAMORI, Takashi; OHKUBO, Akihiro; MASAKI, Yoshiaki; SEKINE, Mitsuo; SEIO, Kohji
- 3PA-169** Synthesis and optical evaluation of novel photochromic nucleobases with pyrrolinone derivatives. (KIT) ○NAKAMURA, Kazuki; SUGITA, Takayuki; ARAI, Taichiro; YAMAYOSHI, Asako; MURAKAMI, Akira; KOBORI, Akio
- 3PA-170** Development of a new method of DNA synthesis using 3'-O-protected nucleoside 5'-triphosphate derivatives (Grad. Sch. Biosci. Biotech., Tokyo Tech) ○TANAKA, Hiroto; SHIRAIWA, Takuma; KANAMORI, Takashi; YUASA, Hideya; OHKUBO, Akihiro
- 3PA-171<sup>#</sup>** Identification of oncogene TLS as a G-quadruplex-binding protein (Fac. Sci., Shizuoka Univ.) ○YAGI, Ryota; TAKAHAMA, Kentaro; OYOSHI, Takanori
- 3PA-172** Binding mechanism between RNA aptamer and target protein using molecular simulation (Sch. Eng., Nihon Univ.) ○YOSHIDA, Hisae; SEKIGUCHI, Masahiro; ISHIKAWA, Takeshi; MIYAKAWA, Shin; SAKAMOTO, Taiichi; YAMAGISHI, Kenji
- 3PA-173<sup>#</sup>** Development of a novel drug delivery system for targeting micro-RNA (KIT; Dep. Chem., Sch. Sci., Kyoto Univ.) ○KISHIMOTO, Yusuke; TAMURA, Rie; MURAMATSU, Chie; KOBORI, Akio; ASHIHARA, Eishi; MURAKAMI, Akira; YAMAYOSHI, Asako
- 3PA-174<sup>#</sup>** Development of a novel system for evaluation of binding affinities between RISC and antisense oligonucleotides (KIT) ○KONISHI, Ryo; ARIYOSHI, Junpei; MATSUYAMA, Yohei; NAKAMURA, Hiromi; KOBORI, Akio; MURAKAMI, Akira; YAMAYOSHI, Asako
- 3PA-175** Development of Electrochemical DNA sensors using electrodes with pillar structure. (Grad. Sch. Eng., Univ. of Hyogo) ○YAMASHITA, Tomoya; TAKADA, Tadao; NAKAMURA, Mitsunobu; YAMANA, Kazushige
- 3PA-176** Development of the reversible DNA photocrosslinking using DNA strand displacement (Sch. Mat. Sci., JAIST) ○KAWABATA, Hayato; NAKAMURA, Shigetaka; FUJIMOTO, Kenzo
- 3PA-177** Photoelectric conversion system based on DNA templated dye aggregates (Grad. Sch. Eng., Univ. of Hyogo) ○JOMURA, Ayumi; NAKAMURA, Mitsunobu; TAKADA, Tadao; YAMANA, Kazushige
- 3PA-178** Construction of dye aggregates using DNAs and ligation of the aggregates (Grad. Sch. Eng., Univ. of Hyogo) ○SUZUKI, Junpei; NAKAMURA, Mitsunobu; TAKADA, Tadao; YAMANA, Kazushige
- 3PA-179** Construction and characterization of the DNzyme encapsulated  $\gamma$ -PGA/GPTMS (Fac. Eng. Nagoya Inst. of Tech.) ○MIZUNO, Koji;

KOEDA, Shuhei; IGUCHI, Makito; OBATA, Akiko; KASUGA, Toshihiro; MIZUNO, Toshihisa

### Protein

- 3PA-180** Kinetics and Reaction Mechanism of an Alkaline Esterase Hydrolyzing Aryl-carboxylic Acid Esters. (Sch. Eng., The Univ. of Shiga Pref.) ○SUGIYAMA, Katsunori; NISHIMURA, Masatoshi; TAKEHARA, Munenori; INOUE, Yoshinori; KITAMURA, Chitoshi
- 3PA-181** Plasminogen Binding Properties of Synthetic Partial Peptide Antigen from *Plasmodium falciparum* (Grad. Sch. Sci. Tech., Gunma Univ.) ○KIMOTO, Yudai; OKU, Hiroyuki; YAMADA, Keiichi; YANO, Kazuhiko; KANO, Shigeyuki
- 3PA-182<sup>#</sup>** Adhesion property of the nanofiber protein AtaA from the highly adhesive bacterium (Grad. Sch. Eng., Nagoya Univ.) ○YOSHIMOTO, Shogo; NAKATANI, Hajime; IWASAKI, Keita; HORI, Katsutoshi

### Protein(Metal)

- 3PA-183<sup>#</sup>** Creation of Lanthanoid Binding Protein Based on Natural Coiled-Coil Protein (Grad. Sch. Eng., Nagoya Univ.) ○KITAHAARA, Chie; SUZUKI, Atsuo; HORI, Katsutoshi
- 3PA-184<sup>#</sup>** Structure and electron transfer reaction of blue copper protein Met16Gly pseudoazurin mutant (Grad. Sch. Sci. Eng., Ibaraki Univ.) ○TAMAOKI, Saori; OSHITA, Hiromi; YAMAGUCHI, Takahide; UNNO, Masaki; KOHZUMA, Takamitsu
- 3PA-185<sup>#</sup>** The effect of the hydrogen bond network on the oxygen reduction of cytochrome c oxidase (Sch. Sci., Univ. of Hyogo) ○AOYAGI, Yudai; NISHIGUCHI, Tatsuhito; SHINZAWA-ITOH, Kyouko; YOSHIKAWA, Shinya; NAKASHIMA, Satoru; OGURA, Takashi
- 3PA-186<sup>#</sup>** Biochemical and Structural Characterization of Chimeric [FeFe]-hydrogenases (Institute for Protein Research, Osaka University) ○OHNISHI, Yusuke; KIYOTA, Daiki; TANAKA, Hideaki; HAPPE, Thomas; KURISU, Genji
- 3PA-187** C3-Hydases and C13<sup>2</sup>-demethoxycarbonylase involved in the chlorosomal pigment biosynthetic pathways of photosynthetic green sulfur bacteria (Kurume Univ. Sch. of Med.) ○HARADA, Jiro; TERAMURA, Misato; MIZOGUCHI, Tadashi; TSUKATANI, Yusuke; YAMAMOTO, Ken; TAMIAMI, Hitoshi
- 3PA-188** The effect of phospholipids on the photocurrent generation by light harvesting 1-reaction center complex (LH1-RC) in reconstituted lipid bilayers (Fac. Eng. Nagoya Inst. of Tech.) ○TAKEDA, Nobutaka; MIZUTANI, Naoto; KONDO, Masaharu; NANGO, Mamoru; DEWA, Takehisa

### Protein(Peptide)

- 3PA-189** Molecular Structure of Bacterial Basic Poly(amino acid)s Exhibiting a Wide Spectrum of Antimicrobial Activity (Sch. Eng., The Univ. of Shiga Pref.) HOSHIYAMA, Takafumi; YOSHIDA, Iori; LI, Jianping; ○TAKEHARA, Munenori; INOUE, Yoshinori; KITAMURA, Chitoshi
- 3PA-190** Synthesis and Ion Channel Activity of Aib Peptides Containing Hinge Sequence (Grad. Sch. Sci. Eng., Saga Univ.) KAWASETSU, Akane; WATANABE, Yudai; JELOKHANI-NIARAKI, Masoud; OSADA, Satoshi; ○KODAMA, Hiroaki
- 3PA-191<sup>#</sup>** Agonistic and Antagonistic properties of triazole-containing non-formyl peptides against formyl peptide receptors (Grad. Sch. Sci. Eng., Saga Univ.) ARIMA, Kenshin; KURIHARA, Koki; KATAFUCHI, Yukari; KODAMA, Hiroaki; ○OSADA, Satoshi
- 3PA-192** Suppression of pathological protein aggregation by secretion signal peptide of ovalbumin. (KIT) ○TAKASHIMA, Shingo; UEMURA, Takuya; KOBAYASHI, Yukako; WAKU, Tomonori; TANAKA, Naoki
- 3PA-193** Interaction of antigen-loaded peptide nanofibers with cells (KIT) ○SATAKE, Sho; KASAI, Ayane; WAKU, Tomonori; KUNUGI, Shigeru; TANAKA, Naoki
- 3PA-194** Screening of combination of fibrous peptides and DNAs with secondary structures for forming peptide-nucleic acid hybrid nanostructure (FIRST, Konan Univ.) ○SHIMOOKA, Masayuki; OKADA, Arisa; YANAGIHARA, Taishi; USUI, Kenji
- 3PA-195** Establishment of novel methods for monomerization and fibrillation of fibrous peptides using peptide-immobilized microbeads (FIRST, Konan University) HIKIDA, Shin-ya; MINAMINO, Yuuki; OKAHIRA, Riko; ○USUI, Kenji
- 3PA-196<sup>#</sup>** Two step microaggregate formation of elastin derived polypeptide (C (WPGVG)<sub>3</sub>)<sub>2</sub> (Fac. Arts and Sci., Kyushu Univ.) ○TATSUBO, Daiki; SUYAMA, Keitaro; NOSE, Takeru
- 3PA-197<sup>#</sup>** Effects of N-terminal modification on self-assembly property of the elastin-peptide analog (FPGVG)<sub>3</sub> (Fac. Arts and Sci., Kyushu Univ.) ○SATO, Keiji; SUYAMA, Keitaro; MAEDA, Iori; NOSE, Takeru
- 3PA-198** Synthesis of Gold Nanocrystals Using a Peptide Template in the Presence of Metal Ion Contaminant (Fac. Sci. Tech., Ryukoku Univ.) ○OKAMOTO, Takuya; WADA, Tubasa; IMAI, Takahito; TOMIZAKI, Kin-ya
- 3PA-199** Calcium Phosphate Precipitation from Simulated Body Fluid onto the Surface of Self-Assembled Peptide Nanoarchitecture (Fac. Sci. Tech., Ryukoku Univ.) ○YOKOE, Daichi; IMAI, Takahito; TOMIZAKI, Kin-ya

**3PA-200** Withdrawn

### Protein(Protein Engineering)

- 3PA-201** Substrate specificity of monoclonal antibodies against a steroid hormone (Grad. Sch. Sci., Osaka Univ.) ○YAMAGUCHI, Hiroyasu; HIROTANI, Takeshi; TOYODA, Michisato; HARADA, Akira
- 3PA-202<sup>#</sup>** Purification of Chiral Compound Using Monoclonal Antibodies for a Binaphthol Derivative (Grad. Sch. Sci., Osaka Univ.) ○ADACHI, Takuma; ODAKA, Tomoki; TAKASHIMA, Yoshinori; YAMAGUCHI, Hiroyasu; HARADA, Akira
- 3PA-203** Biological features of catalytic antibody T99 clone being effective against influenza virus (Grad. Sch. Eng., Oita Univ.) ○YOSHIDA, Keita; UDA, Taizou; HIHUMI, Emi
- 3PA-204** The cytotoxicity against cancer cells by human catalytic antibody light chains (I) (Grad. Sch. Eng., Oita Univ.) ○MOTOHASHI, Tomoko; HIROSE, Akiko; YOSHIDA, Keita; NAKASHIMA, Hiroki; NONAKA, Tamami; UDA, Taizou; HIFUMI, Emi
- 3PA-205** The cytotoxicity against cancer cell by human catalytic antibody light chains (II) (Grad. Sch. Eng., Oita Univ.) ○HIROSE, Akiko; MOTOHASHI, Tomoko; NAKASHIMA, Hiroki; NONAKA, Tamami; UDA, Taizou; HIFUMI, Emi
- 3PA-206** Design of new PG-surfactants having  $\beta$ -turn foldamer and evaluation of solubilization properties for membrane proteins (Grad. Sch. Eng., Nagoya Inst. of Tech.) ○IDO, Yuya; KOEDA, Shuhei; UMEZAWA, Naoki; NOJI, Tomoyasu; KAWAKAMI, Keisuke; DEWA, Takehisa; HIGUTI, Tobuosunehiko; KAMIYA, Nobuo; ITO, Shigeru; MIZUNO, Toshihisa; AMANO, Yuiti
- 3PA-207<sup>#</sup>** Enantioselective boron conjugate additions to  $\alpha,\beta$ -unsaturated ketone using an engineered protein scaffold (Grad. Sch. Eng., Osaka Univ.) ○KATO, Shunsuke; HIMIYAMA, Tomoki; ONODA, Akira; NAKAO, Yoshiaki; HAYASHI, Takashi
- 3PA-208** Electrochemical Evaluation of Hemoprotein Adsorption on an ITO Electrode Covalently Modified with Carbon Nanotubes (Grad. Sch. Eng., Osaka Univ.) ○KAMII, Ayumi; ONODA, Akira; HAYASHI, Takashi
- 3PA-209** Preparation of functional proteoliposome by baculovirus-liposome fusion (Sch. Eng., Kyoto Univ.) ○ISHIKAWA, Raga; YOSHIDA, Shosuke; AKIYOSHI, Kazunari; SASAKI, Yoshihiro; SAWADA, Shinichi

### Sugar

- 3PA-210** Synthesis and application of sulfated-chitins bearing cationic organocatalysts as counter ion (Grad. Sch. Fac. Sci. Eng., Shimane Univ.; Fac. Sci. Eng., Shimane Univ.) ○WATANABE, Mirai; SAKAI, Takuya; IIDA, Hiroki
- 3PA-211** Intracellular delivery using hydrophobized polysaccharide nanosphere (Sch. Eng., Kyoto Univ.) ○ZHANG, Ruoshi; TAKEDA, Shigeo; SAWADA, Shinichi; SASAKI, Yoshihiro; AKIYOSHI, Kazunari
- 3PA-212** Synthesis of 2-Acetamido-2-deoxy-D-allopyranoside Derivatives having Sulfate Group as an Inhibitor against Dengue Virus Infection (Aichi Univ. of Educ.) ITO, Maho; HIDARI, Kazuya; ○NAKANO, Hirofumi

### Lipid

- 3PA-213<sup>#</sup>** Elucidation of characteristic of thermal degradation of unsaturated fatty acid at the  $\beta$  position in the triacylglycerols (NFRI) ○KANAI, Yoshikazu; TSUZUKI, Wakako
- 3PA-214** Variation of lipids and fatty acids of the Japanese freshwater eel, *Anguilla japonica*, during spawning migration (Ishikawa Pref. Univ.) ○SAITO, Hiroaki; KUROGI, Hiroaki; CHOW, Seinen; MOCHIOKAI, Noritaka
- 3PA-215<sup>#</sup>** Analysis of volatile compounds of brown rice stored under various conditions using head-space trap GC-MS method (NFRI) ○TSUZUKI, Wakako; KANAI, Yoshikazu

### Lipid/Biomembrane

- 3PA-216** Construction of Three-Dimensional Layered Lipid Bilayers and Observation of Phase Separated Structures by AFM. (Fac. Eng. Nagoya Inst. of Tech.) ○HAYASHI, Soichiro; MOMOTA, Koji; YAMADA, Tatsuki; KONDO, Masaharu; NANGO, Mamoru; DEWA, Takehisa
- 3PA-217** Energy Transfer of Photosynthetic Light-harvesting Complexes Reconstituted into Stacked Lipid Bilayers (Grad. Sch. Eng., Nagoya Inst. of Tech.) ○MOMOTA, Koji; YAMADA, Tatsuki; KONDO, Masaharu; NANGO, Mamoru; DEWA, Takehisa
- 3PA-218** Synthesis of the 2H-labeled sphingomyelin for investigating mobility and orientation of its head group in lipid rafts (Grad. Sch. Sci., Osaka Univ.) ○MURAKAMI, Kazuhiro; HANASHIMA, Shinya; TSUCHIKAWA, Hiroshi; MATSUMORI, Nobuaki; MURATA, Michio
- 3PA-219** The effect of long chained sphingomyelin on artificial lipid membrane and the phase behavior analysis (Grad. Sch. Sci., Osaka Univ.; ERATO, JST; Fac. Sci., Kyushu Univ.; Abo Akademi University) ○MORIUCHI, Mai; TSUCHIKAWA, Hiroshi; HANASHIMA, Shinya; YASUDA, Tomokazu; MURATA, Michio; MATSUMORI, Nobuaki; SLOTTE, J. Peter
- 3PA-220** Preparation and Properties of pH-Responsive Cerasomes for

Molecular Communication (NAIST) ○KAWANAKA, Chikako; YAMAZAKI, Taku; KIKUCHI, Jun-ichi

- 3PA-221** Chemical Shift Thermometer for measuring Solid-State NMR of hydrated lipid bilayers (Sch. Sci., Osaka Univ.) ○SHIMONISHI, Takeshi; UMEGAWA, Yuichi; HANASHIMA, Shinya; TSUCHIKAWA, Hiroshi; MURATA, Michio
- 3PA-222<sup>#</sup>** Design of Lipid Molecules for Specific Domain Formation in Artificial Cell Membranes (Grad. Sch. Mat. Sci., NAIST) ○ISHIKURA, Yuri; HORIUCHI, Yoshiyuki; YAMAZAKI, Taku; YASUHARA, Kazuma; KIKUCHI, Jun-ichi

### Cell

- 3PA-223** Novel methodology to construct cellular assemblies without any artificial scaffold: Application of laser tweezers (Fac. Life Med. Sci., Doshisha Univ.) ○TSUJI, Shoto; YOSHIDA, Aoi; HASHIMOTO, Shu; TANIGUCHI, Hiroaki; YOSHIKAWA, Kenichi
- 3PA-224** Control of collagen gel structure by the secretion signal sequence of ovalbumin and its application for cell culture. (KIT) ○NARITA, Yuri; KOJIMA, Chie; WAKU, Tomonori; TANAKA, Naoki

### Bioinformatics

- 3PA-225** Characterization of photosynthesis in *Galdieria sulphuraria* under high CO<sub>2</sub> condition (Univ. of Tsukuba) ○MINODA, Ayumi; JU, Xiaohui; ITO, Megumi

### Environmental biotechnology, food biotechnology, biosensor

- 3PA-226<sup>#</sup>** Sensing of toxic substances causative of cellular respiratory inhibition using luminous *Escherichia coli* (KIT) ○IHARA, Yutaka; OKAMOTO, Daiki; KARATANI, Hajime

### Medical

- 3PA-227** A novel nanogel-cross-linked hydrogel prepared via self-assembly (Grad. Sch. Eng., Kyoto Univ.) ○KOJIMA, Taisei; TAHARA, Yoshiro; MUKAI, Sada-atsu; SAWADA, Shimichi; SASAKI, Yoshihiro; AKIYOSHI, Kazunari
- 3PA-228<sup>#</sup>** Enhancing effect of coumaryl alcohol derivative on Photodynamic Therapy (Grad. Sch. Eng., Osaka City Univ.) ○AZUMA, Hideki; KONISHI, Takahiro; KOJIMA, Akiko; NAGASAKI, Takeshi
- 3PA-229** Examination of enzymatic reaction conditions for selective measurement of glycine (Hiroshima City Univ.) ○KUGIMIYA, Akimitsu; FUKADA, Rie; AMANO, Shoko

### Biocatalysis

- 3PA-230** Preparation of Optically Active Alcohols by Enzymatic Hydrolysis of Aliphatic Dicarboxylic Acid Diesters (Sch. Sci. Eng., Meisei Univ.) IGAWA, Yuuta; ○ICHINOSEKI, Sakina; KOBAYASHI, Ai; MAEDA, Fumie; MATSUMOTO, Kazutsugu
- 3PA-231** Immobilization of a lipase on monolith polymers (WINTeC) ○YOSHIMURA, Yuko; TSUCHITANI, Akane; MORI, Megumi; OSAKI, Shusuke; MIYAZAKI, Takashi; MORI, Hajime
- 3PA-232** Lipase Catalyzed Acylation using Solid Acyl Donors (Grad. Sch. Sci., Osaka Pref. Univ.) ○SUGIMOTO, Masaki; SATO, Masaaki; KOJIMA, Hideo
- 3PA-233<sup>#</sup>** Synthesis of Quinic Acid Derivatives with Pancreatic Lipase Inhibitory Activity (Grad. Sch. Sci., Osaka Pref. Univ.) ○NISHIDA, Kotaro; KOJIMA, Hideo
- 3PA-234** Enzymatic Galloylation of Alcohols using Immobilized Tannase (Grad. Sch. Sci., Osaka Pref. Univ.) ○MORIZANE, Masaaki; KOJIMA, Hideo
- 3PA-235** Preparation of Optically Active Alcohols using Submerged Aquatic Plants as Biocatalysts (Grad. Sch. Sci., Osaka Pref. Univ.) ○OKUBO, Fumito; KOJIMA, Hideo
- 3PA-236** Substrate specificity investigation of the oxidation reaction by Baeyer-Villiger monooxygenase (BVMO) from *Fusarium* sp. NBRC109816 (Sch. Biosci. Biotech., Tokyo Tech) ○NEMOTO, Hiroumi; MASUDA, Ayaka; MATSUDA, Tomoko
- 3PA-237** Construction of overexpression system and characterization of aldehyde dehydrogenase from *Geotrichum candidum* NBRC 4597 (Grad. Sch. Biosci. Biotech., Tokyo Tech) ○HOSHINO, Tomoyasu; YAMABE, Emi; MATSUDA, Tomoko
- 3PA-238<sup>#</sup>** Towards a creation of a whole cell catalyst for H<sub>2</sub> production by heterologous expression of [FeFe]-hydrogenase and its related genes in *Escherichia coli* (Grad. Sch. Sci., Eng., Saitama Univ.) ○FUJISHIRO, Takashi; TAKAHASHI, Yasuhiro
- 3PA-239<sup>#</sup>** Investigation of operation characteristics and electrode reaction mechanisms of direct alginate fuel cells that utilize photocatalytic anodes (Grad. Sch. Eng., Osaka Univ.) ○MAZUMDER, Joyotu; TOAKE, Hitoshi; YOSHIKAWA, Hiroyuki; TAMIYA, Eiichi

### Protein

- 3PA-240<sup>#</sup>** Synthesis and structure-activity relationship of new arylpropynoic acid amide as Wnt signaling inhibitors (Fac. Eng., Iwate Univ.) KAWANO, Tomikazu; ○WATANABE, Anzu; NISHIYA, Naoyuki; OGAWA, Satoshi

### Organic Crystals

- 3PA-243** Switch of optical properties of naphthoquinone pigment by substituent (Kinki Univ.; NIMS) ○SAKO, Akihiro; AKIYAMA, Hirotsuka; TAJIMA, Nobuo; KURODA, Reiko; IMAI, Yoshitane
- 3PA-244** Preparation of chiral BINAP-lanthanoid hybrid luminophore and its circularly polarized luminescence (CPL) properties (Kinki University) KONO, Yuki; KITAMURA, Sayaka; SHIZUMA, Motohiro; FUJIKI, Michiya; ○IMAI, Yoshitane
- 3PA-245** Current-induced mutual conductivity change along orthogonal crystal axes in an ion-radical salt of cyclophane-type donor. (Grad. Sch. Sci., Nagoya Univ.) ○TONOUCHI, Daiki; MATSUSHITA, Michio; AWAGA, Kunio; SUGAWARA, Tadashi
- 3PA-246** Synthesis and photophysical properties of benzene derivative showing crystal polymorphism (Coll. Sci. Tech., Nihon Univ.) ○KIDA, Yuki; SHINOZAKI, Yoshinao; SUGAWA, Kosuke; OTSUKI, Joe
- 3PA-247** Synthesis and structures of charge-transfer complex of anthracene and TCNQ derivatives. (Fac. Sys. Eng., Wakayama Univ.) ○SONE, Kentō; SAKAI, Kensaku; YAMAKADO, Hideo
- 3PA-248** Crystal structure and physical properties of thiapendione-TCNQ (Fac. Sys. Eng., Wakayama Univ.) ○TOKUNO, Wataru; MIDORO, Yuuki; YAMAKADO, Hideo
- 3PA-249** Photochromism appearance of zinc complexes whose ligands are salicylideneaniline derivatives (Sch. Sci., Tokyo Tech) ○TAKEMURA, Sho; SUGIYAMA, Haruki; SEKINE, Akiko; UEKUSA, Hidehiro
- 3PA-250<sup>#</sup>** Pore modification of Porous Organic Salts (POSS) constructed by bulky amines with pyridyl groups (Sch. Eng., Osaka Univ.) ○YAMAMOTO, Kensuke; MIYANO, Tetsuya; HISAKI, Ichiro; MIYATA, Mikiji; TOHNAI, Norimitsu
- 3PA-251** Crystal structure and physical properties of Phenazine-(TCNQ<sub>(1-3)</sub>FTCNQ<sub>4</sub>) mixed crystal (Grad. Sch. Sys. Eng., Wakayama Univ.) ○SAKAI, Kensaku; YAMAKADO, Hideo
- 3PA-252<sup>#</sup>** Crystal Structures of Cyclic and Spherical Aromatic Amides (CAI, Chiba Univ.) MARUYAMA, Sho; ○MASU, Hyuma; HIRAYAMA, Yuto; AZUMAYA, Isao
- 3PA-253** Photoluminescence of Chalcone Epoxides Crystals: Relationship between Molecular and Crystal Structures and Luminescent Properties (Grad. Sch. Educ., Hiroshima Univ.) ○YOSHIDA, Koichi; HASE, Kiyofumi; AMIMOTO, Kiichi
- 3PA-254<sup>#</sup>** Tuning the optical properties of 2,6-bis(methylsulfonyl)aniline through the structural modification (Fac. Eng., Yamagata Univ.; Grad. Sch. Sci., Eng., Yamagata Univ.) ○KUDO, Shoh; BEPPU, Teruo; KATAGIRI, Hiroshi
- 3PA-255<sup>#</sup>** Crystal Patterning of Deposited Film of Diarylethene Derivatives Having Chiral Substituents (Fac. Sci. Tech., Ryukoku Univ.; Dept. of Chem., Asahikawa Med. Univ.; Osaka Kyoiku Univ. Graduate School of Education; Sch. Pharm., TUPLS; RIKEN RINC) ○KAWASAKI, Kana; MAYAMA, Hiroyuki; TSUJIOKA, Tsuyoshi; YOKOJIMA, Satoshi; NAKAMURA, Shinichiro; UCHIDA, Kingo
- 3PA-256** Searching for relative configuration of dimer of benzene and acenes (n=2,3) (Grad. Sch. Sys. Eng., Wakayama Univ.; Tohoku Univ.) ○KATSUNO, Naoya; KODAYA, Yoshitomo; YAMAKADO, Hideo; OHNO, Koichi
- 3PA-257<sup>#</sup>** Helical structure of molecular array through hydrogen bonding observed in aromatic sulfonamides and optical activity of the crystals (Fac. Pharm. Sci., Toho Univ.; CAI, Chiba Univ.; Dept. Chem., Konan Univ.) ○AZUMAYA, Isao; KIKAWA, Shoko; MASU, Hyuma; KATAGIRI, Kosuke; HIKAWA, Hidemasa
- 3PA-258<sup>#</sup>** Enantioselective Inclusion of Alcohols into Amine Salts of *N*-Trityl Amino Acids and Amines (Grad. Sch. Eng., Chiba Univ.) AKAZOME, Motohiro; ○KOBAYASHI, Tetsuhiro; MATSUMOTO, Shoji
- 3PA-259<sup>#</sup>** Crystal Structures and Inclusion Abilities of *N*-2,6-Xylyl Amides Derived from Amino Acids (Grad. Sch. Eng., Chiba Univ.) AKAZOME, Motohiro; ○ISONO, Akira; NORITA, Naoto; MATSUMOTO, Shoji
- 3PA-260** Controlling the conformation and Crystal structures of Bis Phenol derivative (Sch. Sci., Tokyo Tech) ○ISHII, Kohei; SEKINE, Akiko; UEKUSA, Hidehiro
- 3PA-261<sup>#</sup>** X-Ray crystallographic analysis of  $\alpha$ - and  $\beta$ -amino acid derivatives and the control of chirality by dynamic crystallization (Grad. Sch. Eng., Chiba Univ.; Dept. Eng. Edu. Center, Chiba Inst. of Tech.) ○MATSUMOTO, Arisa; YOSHIDA, Yasushi; KASASHIMA, Yoshio; MINO, Takashi; SAKAMOTO, Masami
- 3PA-262<sup>#</sup>** X-Ray Crystallographic Analysis of  $\beta$ -Amino Ketones and The Asymmetric Induction Involving Dynamic Crystallization (Grad. Sch. Eng., Chiba Univ.; Dept. Eng. Edu. Center, Chiba Inst. of Tech.) ○SHIMOBAYASHI, Haruna; YOSHIDA, Yasushi; KASASHIMA, Yoshio; MINO, Takashi; SAKAMOTO, Masami
- 3PA-263<sup>#</sup>** Asymmetric Synthesis of Amino Acid Derivatives from  $\alpha$ ,  $\beta$ -

Unsaturated Amides Involving Dynamic Crystallization (Grad. Sch. Eng., Chiba Univ.; Dept. Eng. Edu. Center, Chiba Inst. of Tech.) ○KAJI, Yuki; KASASHIMA, Yoshio; YOSHIDA, Yasushi; MINO, Takashi; SAKAMOTO, Masami

**3PA-264** Study on the amount of residual monomer in photo-polymerization of 1,6-Di-(carbazolyl)-2,4-hexadiyn nanocrystals (Grad. Sch. Sci., Eng., Ehime Univ.) ○YAMAOKA, Yohei; ONODERA, Tsunenobu; OIKAWA, Hidetoshi; ASahi, Thuyoshi

Saturday, March 26, AM

(12 : 30~14 : 00)

## Physical Organic Chemistry Structures and Properties

**3PB-001<sup>#</sup>** Synthesis of Chiral Macrocyclic 3,3'-Disubstituted 2,2'-Binaphthyls (Fac. Chem. Materials and Bioeng., Kansai Univ.) ○IKESHITA, Masahiro; FUJII, Yuuki; UMEDA, Rui; NISHIYAMA, Yutaka

**3PB-002** Synthesis and photophysical properties of extended  $\pi$ -conjugated giant molecules based pyrenes (Grad. Sch. Sci. Eng., Saga Univ.) ○NODA, Yuki; YAMATO, Takehiko

**3PB-003<sup>#</sup>** Synthesis of  $\pi$ -extended compounds based on anthraquinone and 1,3-dithiol ring (Sch. Eng., Univ. of Hyogo) ○OHTA, Katsutoshi; NISHIDA, Jun-ichi; KAWASE, Takeshi

**3PB-004<sup>#</sup>** Synthesis and property of new imide derivatives derived from acenaphthenequinone-5,6-dicarboxylic imides (Sch. Eng., Univ. of Hyogo) ○ISHIKAWA, Hiroyuki; NISHIDA, Jun-ichi; KAWASE, Takeshi

**3PB-005** Synthesis of 1,8-Anthracene Cyclic Trimer with Vinylene Linkers (Fac. of Sci., Okayama Univ. of Sci.) ○INOUE, Masataka; IWANAGA, Tetsuo; TOYOTA, Shinji

**3PB-006** Theoretical Evaluation of Strain in Anthracene-Acetylene Cyclic Dimers Having Two Intraannular Alkyl Groups (TMCIT; Fac. of Sci., Okayama Univ. of Sci.; Grad. Sch. Sci., Eng., Tokyo Tech) ○IKEDA, Hiroshi; IWANAGA, Tetsuo; WAKAMATSU, Kan; TOYOTA, Shinji

**3PB-007<sup>#</sup>** Synthesis of chromogenic azoniahelices bearing stilbazolium dyes (Urban Environmental Sci., TMU) ○TORII, Moe; SATO, Kiyoshi; YAMAGUCHI, Motoo

**3PB-008** Synthesis and properties of covalently-linked face-to-face perylene dimer (Grad. Sch. Mat. Sci., NAIST) ○MURAYAMA, Tomohisa; ARATANI, Naoki; YAMADA, Hiroko

**3PB-009** Synthesis of [8] and [10]Cycloparaphenyleneacetylene Derivatives and Their Properties (Grad. Sch. Eng., Kyoto Univ.) ○NODA, Takeru; MIKI, Koji; SAIKI, Kenzo; BAEK, Jinseok; UMEYAMA, Tomokazu; IMAHORI, Hiroshi; OHE, Kouichi

**3PB-010<sup>#</sup>** Synthesis, structure, and physical properties of the 5,5'-position alkylated indigo (I<sub>2</sub>CNER, Kyushu Univ.) ○WATANABE, Motonori; UEMURA, Naoki; GOTO, Kenta; HAGIWARA, Hidehisa; IDA, Shintaro; ISHIHARA, Tatsumi

**3PB-011<sup>#</sup>** Synthesis of *meso*-Dibenzoporphyrane with Two Different Substituents at Each Fused Benzene Moiety (Grad. Sch. Eng., Osaka Univ.; PRESTO, JST) ○TANAKA, Yasunobu; OOHORA, Koji; HAYASHI, Takashi

**3PB-012** Synthesis and Properties of 2,7-Dihydroxynaphthalene-Bridged Cofacial Porphyrin Dimers (Graduate School of Science, Osaka University) YAMASHITA, Ken-ichi; ○FURUTANI, Kazuhiro; KURAMOCHI, Narumi; OGAWA, Takuji

**3PB-013** Dependence of physical properties of porphyrin arrays on the sequence of central metals (Sch. Sci., Osaka Univ.) ○SHIMOJITOSHO, Akira; TAMAKI, Takashi; OGAWA, Takuji; YAMASHITA, Ken-ichi; TANI, Yosuke

**3PB-014** Synthesis of face-to-face porphyrin arrays by consecutive coupling reaction (Grad. Sch. Sci., Osaka Univ.) ○HASEGAWA, Shohei; TAMAKI, Takashi; YAMASHITA, Kenichi; OGAWA, Takuji

**3PB-015<sup>#</sup>** Synthesis of porphyrin arrays with anthracenylene linkers by consecutive coupling (Grad. Sch. Sci., Osaka Univ.) ○GOTO, Yusuke; TAMAKI, Takashi; YAMASHITA, Ken-ichi; TANI, Yosuke; OGAWA, Takuji

**3PB-016** The Structure-Property Relationship of The Acid-Responsive Extended  $\pi$ -Electronic Conjugated Porphyrin Derivatives Carrying Anthracene or *p*-Phenylene as a Spacer (Grad. Sch. Innovative Life Sci., Univ. of Toyama; Fac. Sci., Univ. of Toyama; Grad. Sch. Sci. Eng., Univ. of Toyama) ○KEMPE, Hideto; YAMAMOTO, Junya; TAKAHASHI, Nobutomo; YOSHINO, Junro; HAYASHI, Naoto; HIGUCHI, Hiroyuki

**3PB-017** Synthesis and Property of The Extended  $\pi$ -Electronic Conjugated System of Porphyrin Derivatives Containing Two Anthracene Rings (Fac. Sci., Univ. of Toyama; Grad. Sch. Innovative Life Sci., Univ. of Toyama; Grad. Sch. Sci. Eng., Univ. of Toyama) TAKAHASHI, Nobutomo; KEMPE, Hideto; YOSHINO, Junro; HAYASHI, Naoto; ○HIGUCHI, Hiroyuki

**3PB-018<sup>#</sup>** Synthetic study of Donor-Bridge-Acceptor triad with three-layered [3.3]cyclophanes as bridge (Oita Univ.) ○SHIBAHARA, Masahiko; WATANABE, Motonori; MIYAZAKI, Takaaki; SHINMYOZU, Teruo

**3PB-019** Synthesis and Properties of Oxygen Bridged [3.5](3,9)Carbazolophane Derivatives (Osaka Kyoiku Univ.) ○ASAI, Miho; TANI, Keita; HORI, Kazushige; GOTO, Kenta; TANI, Fumito; TAKEMURA, Hiroyuki

**3PB-020** Synthesis and Properties of Methacrylate Polymers Having [3.3](3,9) Carbazolophane Moiety (Osaka Kyoiku Univ.) ○YASHIMA, Toru; TANI, Keita; HORI, Kazushige; GOTO, Kenta; TANI, Fumito; SAKAKIBARA, Keita; TSUJII, Yoshinobu

**3PB-021** Synthesis and Properties of [3.n](3,9)Carbazolophane Derivatives Having Hexyl Group (Osaka Kyoiku Univ.) ○NAKANO, Masaya; MIYANAGA, Kanae; HORI, Kazushige; GOTO, Kenta; TANI, Fumito; TAKEMURA, Hiroyuki; TANI, Keita

**3PB-022** Radical Polymerization of [3.5](3,9)Carbazolophane Derivative Having Hexyl Group (Osaka Kyoiku Univ.) ○AOKI, Takanori; HORI, Kazushige; SAKAKIBARA, Keita; TSUJII, Yoshinobu; TAKEMURA, Hiroyuki; TANI, Keita

**3PB-023<sup>#</sup>** Synthesis and physicochemical properties of tetrathiafulvalene derivatives with hydrogen-bonding groups (Grad. Sch. Sci. Tech., Nihon Univ.) ○KANEKO, Ryuji; WU, Guohua; SUGAWA, Kosuke; OTSUKI, Joe

**3PB-024<sup>#</sup>** Oxidated states of a condensed ring thiophene with terminal ferrocenyl groups (Kobe Univ. maritime sciences) ○HIRAI, Naoki; ASANO, Tomohiro; SATO, Masaaki

**3PB-025<sup>#</sup>** Oxidated states of fused oligothiophenes with ferrocenyl groups (Kobe Univ. maritime sciences) ○MIZUNO, Taiki; NISHIMURA, Ryotaro; SATO, Masaaki

**3PB-026<sup>#</sup>** Synthesis and properties of viologen derivative extended by noncovalent interactions (Sch. Sci., Kitasato Univ.) ○NAKAZATO, Tomoya; OISHI, Akane; KOBAYAKAWA, Kosuke; HASEGAWA, Masashi; MAZAKI, Yasuhiro

**3PB-027** Stable Radical Species of Phosphorous(V) Phthalocyanine Complexes (Fac. Textile Sci. Technol., Shinshu Univ.) ○OHSHIMA, Teruaki; FURUYAMA, Taniyuki; KIMURA, Mutsumi; KOBAYASHI, Nagao

**3PB-028** Fabrication and Characterization of Organic Field-Effect Transistors Using DF-ET and Its Alkyl Derivatives (Grad. Sch. Mat. Sci., Univ. of Hyogo) ○TAKEI, Koki; KADOYA, Tomofumi; TAJIMA, Hiroyuki; YAMADA, Jun-ichi

**3PB-029** Photoswitching of the electric property of organic semiconductor using diarylethene derivatives (Grad. Sch. Eng., Kyoto Univ.; PRESTO, JST; MANA, NIMS) ○SHIMADA, Shinya; HIGASHIGUCHI, Kenji; WAKAYAMA, Yutaka; MATSUDA, Kenji

**3PB-030<sup>#</sup>** Preparation of Extremely  $\pi$ -Extended Phenacenes and Their Application to Organic Field-Effect Transistor (Grad. Sch. Nat. Sci. Technol., Okayama Univ.; NARD Institute Ltd.) ○OKAMOTO, Hideki; GOHDA, Shin; KUBOZONO, Yoshihiro

**3PB-031** Syntheses of Alkyl-Substituted Tetrathienonaphthalenes by Photocyclization—Dehydrogenation Reactions and Their Semiconductor Characteristics (Sch. Eng., Osaka Pref. Univ.; Grad. Sch. Eng., Osaka Pref. Univ.; The Research Inst. for Molecular Electronic Devices, Osaka Pref. Univ.; Grad. Sch. Sci., Osaka Pref. Univ.) ○KUMEDA, Motoki; YAMAMOTO, Atsushi; MATSUI, Yasunori; ASADA, Toshio; TAKAGI, Kenichiro; SUENAGA, Yu; OHTA, Eisuke; NAITO, Hiroyoshi; KOSEKI, Shiro; IKEDA, Hiroshi

**3PB-032** Solution process for organic semiconductor films by using thermal conversion methods (Fac. Eng. Nagoya Inst. of Tech.) ○MAKINO, Yuya; ONO, Katsuhiko

**3PB-033** Dye Sensitizers using Boron  $\beta$ -Ketoiminate with a D-A- $\pi$ -A Type Structure (Fac. Eng. Nagoya Inst. of Tech.) ○ISHIKAWA, Fumiya; ONO, Katsuhiko

**3PB-034<sup>#</sup>** Synthesis of Ionic Lead Halides Containing Butadiene Frameworks (Grad. Sch. Sci., Eng., Saitama Univ.) ○MURAKAMI, Tatsuya; FURUKAWA, Shunsuke; SAITO, Masaichi

**3PB-035** Steric-hindered isoindigo derivatives (Fac. Textile Sci. Technol., Shinshu Univ.) ○NAKAMURA, Fumiya; FURUYAMA, Taniyuki; KIMURA, Mutsumi; KOBAYASHI, Nagao

**3PB-036** Synthesis and Solid State Optical Properties of Near-Infrared Light Absorbing Alkylthio Substituted 2,5-Di(1,3-dithiol-2-ylidene)-1,3-dithiolane-4-thione Derivatives (Grad. Sch. Eng., Shizuoka Univ.) ○UEDA, Kazumasa; KUSANAGI, Hiroki; CHUJO, Koki

**3PB-037<sup>#</sup>** Synthesis and optical properties of highly polarized benzo[k] fluoranthene imide derivatives (Grad. Sch. Eng., Univ. of Hyogo) ○KAWAJIRI, Ikumi; NISHIDA, Jun-ichi; KAWASE, Takeshi

**3PB-038** Synthesis and Properties of Cyclophanes Bearing Dibenzofuran Bridged by Disiloxane or Disilane Linkages (Grad. Sch. Sci. Tech., Gunma Univ.) ○ISONO, Yuta; KATO, Shin-ichiro; NAKAMURA, Yosuke

**3PB-039<sup>#</sup>** Synthesis and chromic characteristics of new acenes having two spiroyrans units (Grad. Sch. Sci., Kitasato Univ.) ○YAMAGISHI, Misaki; HASEGAWA, Masashi; MAZAKI, Yasuhiro

**3PB-040<sup>#</sup>** Mechanochromism of Donor- $\pi$ -Acceptor Compounds Consisted of 5-Membered Heteroaromatic Carboxylic Acids as an Acceptor (Grad. Sch. Eng., Chiba Univ.) MATSUMOTO, Shoji; ○ITO, Yuji; HATAKEYAMA, Hiroki; AKAZOME, Motohiro

**3PB-041** Studies on the synthesis of new hydrocarbon salt (Sch. Sci., Osaka Univ.) ○TAKADA, Aya; NISHIUCHI, Tomohiko; HIRAO, Yasukazu; KUBO, Takashi

**3PB-042** Conformational change of Acridine-Anthranol coupled molecule based on photo-induced proton coupled electron transfer (Sch. Sci., Osaka Univ.) ○NAGAMACHI, Nobuhiro; HIRAO, Yasukazu; NISHIUCHI, Tomohiko; KUBO, Takashi

**3PB-043** Synthesis of the Cumulene-based Molecules for Singlet Fission



- (Sch. Sci., Osaka Univ.) OIHARA, Keiji; HIRAO, Yasukazu; NISHIUCHI, Tomohiko; KUBO, Takashi
- 3PB-044** Synthesis and properties of anthracene based cyclic  $\pi$ -cluster (Sch. Sci., Osaka Univ.) OWANG, Zhongkai; NISHIUCHI, Tomohiko; HIRAO, Yasukazu; KUBO, Takashi
- 3PB-045** Switching of single-molecule conductance by protonation/deprotonation of terbium porphyrin double-decker complexes (Grad. Sch. Sci., Osaka Univ.; Grad. Sch. Eng. Sci., Osaka Univ.) OSAKAI, Takashi; SUMITANI, Nobuto; INOSE, Tomoko; OHTO, Tatsuhiko; YAMADA, Ryo; TADA, Hirokazu; TANAKA, Daisuke; OGAWA, Takuji
- 3PB-046** Crystal Structure and Physical Properties of a Mixed-Valence Salt of Trioxatriangulene Containing Optically Active Ammoniumcation (Fac. Eng., Aichi Inst. of Tech.) OHIRAMATSU, Shouya; TORII, Takeshi; MURATA, Tsuyoshi; MORITA, Yasushi
- 3PB-047** Synthesis and magnetic properties of chiral ionic radical liquid crystals (Grad. Sch. Human and Environ. Stud., Kyoto Univ.) OMIURA, Atsushi; TAKEMOTO, Yusa; UCHIDA, Yoshiaki; SHIMONO, Satoshi; KATO, Tatsuhisa; TAMURA, Rui
- 3PB-048** Research on the nitroxide radicals that adsorbed to the porous compound (Coll. Hum. Sci., Nihon Univ.) OAKINIWA, Kento; KOBAYASHI, Hirokazu; IWAHORI, Fumiyasu
- 3PB-049** Study on synthesis of a biradical compound from spiro-junctioned biacridines (Grad. Sch. Sci. Eng., The Univ. of Electro-Communications) OKANETOMO, Takuya; ISHIDA, Takayuki
- 3PB-050** Synthesis and characterization of derivatives of salicylideneaniline carrying nitronyl nitroxide radical (Fac. Sci. Tech., Keio Univ.) OHOSONOME, Keisuke; NAKAGOME, Shin; MIURA, Youhei; YOSHIOKA, Naoki
- 3PB-051** Self-assembled thin films of air-stable organic neutral radicals fabricated by vapor deposition (KFTRAL, KANEKA CORP.) OKEISHIMA, Miwa; MIYATA, Takahiro; ITO, Hiroshi; TSUJI, Ryotaro; MURATA, Tsuyoshi; MORITA, Yasushi
- 3PB-052** Evaluation of the  $\beta$  Value of the Thiophene-2,5-diyl Unit by Probing Exchange Interaction between Biradicals (Grad. Sch. Eng., Kyoto Univ.) OMIZOKAWA, Tsubasa; HIGASHIGUCHI, Kenji; MATSUDA, Kenji
- 3PB-053** Photoexcited states of a UV-A-absorbing molecule : hexyl diethylaminohydroxybenzoylbenzoate (Uvinul A Plus) (Grad. Sch. Eng., Yokohama Natl. Univ.; Shiseido Company, Limited) OSHAMOTO, Yuta; KIKUCHI, Azusa; OGUCHI-FUJIYAMA, Nozomi; MIYAZAWA, Kazuyuki; YAGI, Mikio
- 3PB-054** Fluorescence Photoswitching of Photochromic Naphthopyrane Derivatives bearing a BODIPY Fluorophore (Graduate School of Engineering, Yokohama National University) OMIYAZAWA, Yusuke; HIRAMOTO, Yuya; YAGI, Mikio; KIKUCHI, Azusa
- 3PB-055** Synthesis and Fluorescence Properties of Fast Photochromic Naphthopyrane Derivatives Conjugated with a BODIPY Fluorophore (Grad. Sch. Eng., Yokohama Natl. Univ.) OMABUCHI, Akira; YAGI, Mikio; KIKUCHI, Azusa
- 3PB-056** Evaluation of up-conversion based on triplet-triplet annihilation of tetraphenyltetraazaporphyrin (Fac. Eng., Shizuoka Univ.) ONAGATA, Masaki; KAWAI, Hideki
- 3PB-057** Evaluation of up-conversion based on triplet-triplet annihilation in polymer thin films (Fac. Eng., Shizuoka Univ.) OUDA, Shinnosuke; KAWAI, Hideki
- 3PB-058** Evaluation of up-conversion based on triplet-triplet annihilation in polymeric micelles (Fac. Eng., Shizuoka Univ.) OHARADA, Shinji; KAWAI, Hideki
- 3PB-059** Triazatriangulene (TATA) derivatives having extended  $\pi$ -conjugated system and the emission properties (Grad. Sch. Eng., Kyoto Univ.) ONOGUCHI, Hiromu; YOKOYAMA, Soichi; HIROSE, Takashi; MATSUDA, Kenji
- 3PB-060** Design of a highly emissive [5]helicene derivative based on the control of molecular orbital level by introducing peripheral substituents. (Grad. Sch. Eng., Kyoto Univ.) OKUBO, Hiromu; HIROSE, Takashi; MATSUDA, Kenji
- 3PB-061** Study of a substituent effect on the bioluminescent properties of firefly luciferin analogues (Sci. Eng., The Univ. of Electro-Communications) OITOU, Soichiro; KAKIUCHI, Michio; HIRANO, Takashi; MAKI, Syojiro
- 3PB-062** Development of fluorophores based on the firefly light-emitter: benzothiazole carboxylic acid derivatives (Sci. Eng., The Univ. of Electro-Communications) OTAKAHASHI, Yusuke; UEHARA, Takuya; YAMAJI, Minoru; MAKI, Shojiro; HIRANO, Takashi
- 3PB-063** Study on factors for high efficiency of imidazopyrazinone chemiluminescence (Sci. Eng., The Univ. of Electro-Communications) OKANAI, Yuki; SUGAI, Nozomi; MAKI, Shojiro; HIRANO, Takashi
- 3PB-064** Synthesis and photophysical properties of naphthalimide dyes with conjugation extended by thiophenes (Coll. Sci. Tech., Nihon Univ.) OYAMANO, Minoru; SUGAWA, Kosuke; OTSUKI, Joe
- 3PB-065** Synthesis of aminonaphthalimide derivatives and their solvatochromic properties (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) OFUJII, Mayu; NAMBA, Misa; YAMAJI, Minoru; OKAMOTO, Hideki
- 3PB-066** Effect of substituent at 9-position on spectroscopic properties of dihydroacridine derivatives (Fac. Sci. Tech., Keio Univ.) OHOSHINO, Hidetaka; HOSODA, Takumi; MAEDA, Naruaki; SUZUKI, Ryouta; MIURA, Youhei; YOSHIOKA, Naoki
- 3PB-067** The solvatochromism phenomenon of trifluoroethoxy substituted phthalocyanine benzene-fused dimers (Fac. Eng. Nagoya Inst. of Tech.) OTSUJI, Kyohei; MORI, Satoru; TOKUNAGA, Etsuko; SHIBATA, Norio
- 3PB-068** Synthesis and Emission Properties of 3,3'-Diaryl-2,2'-bithiophene Derivatives (Grad. Sch. Eng., Yokohama Natl. Univ.) ITO, Suguru; OTAGUCHI, Tomohiro; ASAMI, Masatoshi
- 3PB-069** Synthesis of AIE dyes with improved hydrophilicity (FIRST, Konan Univ.) OHOSHIKAWA, Takaya; MURASHIMA, Takashi; KAWAMURA, Koji
- 3PB-070** Fluorescence properties of N-aryl-1,8-naphthalimide adsorbed on alumina surface. (GNCT, Chem. and Mater. Sci.) OKONDO, Hiro; NAKAJIMA, Satoshi
- 3PB-071** Solid state emission from imidazole functionalized diketone ligands (Grad. Sch. Mat. Sci., NAIST) OHAYASHIDE, Akiko; KAWAI, Tsuyoshi; YUASA, Junpei
- 3PB-072** Solid-State ES IPT Luminescence of Imidazopyridine Derivatives Bearing Intermolecular Interaction Site (IIS, The Univ. of Tokyo) OKANETA, Shohei; YOSHIKAWA, Isao; HOUJOU, Hirohiko; MUTAI, Toshiaki
- 3PB-073** Influence of substituent on the fluorescence property of arylpyridinium and quinolinium salts (Urban Environmental Sci., TMU) ONOZAKI, Kengo; SATO, Kiyoshi; YAMAGUCHI, Motoo
- 3PB-074** Preparation and DFT studies on Sensor properties of Tetraphenylporphyrin Derivatives-Fluoroalcohol Complexes (3) (National Institute of Technology, Niihama College; Grad. Sch. Sci., Eng., Ehime Univ.) ONAKAGAWA, Katsuhiko; KAMIMOTO, Konatsu; OTSUKA, Satomi; TSUTSUMI, Chikara; MABUCHI, Michiaki; SADAOKA, Yoshihiko
- 3PB-075** Carboxylic acid recognition of a Diguandine Having an Anthracene Unit (KIT) OMURA, Ryosuke; OHTAGAKI, Yasuhiro; KUSUKAWA, Takahiro
- 3PB-076** Phosphonic Acid Recognition of an Ethyl-substituted Diamidine Having an Anthracene Unit. (KIT) OHARUMOTO, Yuuya; INOUE, Kouta; KUSUKAWA, Takahiro
- 3PB-077** Synthesis of a Diamidine Having a Tetraphenylethylene Unit (KIT) OEYOB ASHENAFI, Tessema; KUSUKAWA, Takahiro
- 3PB-078** Synthesis and evaluation of fluorescent anionic sensors having silanols as recognition sites (Grad. Sch. Sci., Eng., Yamagata Univ.) OZAMA, Ryo-hei; KONDO, Shin-ichi
- 3PB-079** Synthesis of an isophthaloylamide-based anion receptor bearing two 8-hydroxy quinolyl groups (Grad. Sch. Sci., Eng., Yamagata Univ.) OABE, Iбуки; KONDO, Shin-ichi
- 3PB-080** Bisthiourea-Binaphthyl-Bithiophene Triad: Synthesis, Spectroscopic Properties, and Application to Anion Sensing (Grad. Sch. Eng., Osaka Univ.) OSONODA, Sayaka; FUKUHARA, Gaku; MORI, Tadashi; INOUE, Yoshihisa
- 3PB-081** Anion Recognition by Dibenzofuran-Based C<sub>2</sub>-Symmetric Chiral Bisurea (Grad. Sch. Eng., Yokohama Natl. Univ.) ITO, Suguru; OKUNO, Manami; IKEDA, Kengo; ASAMI, Masatoshi
- 3PB-082** Synthesis and Properties of 9,10-Bis(1,3-dithiol-2-ylidene)-9,10-dihydroanthracene Derivatives Bearing Guest Recognition Groups at the 1,8-Positions (Fac. Sci., Shinshu Univ.) OKATO, Rei; FUJIMORI, Shiori; OHTA, Akira
- 3PB-083** Synthesis of Cyclophane Dimers Having Acylhydrazone Linkages and Their pH - Responsive Degradation Behavior (Fac. Sci., Fukuoka Univ.) OSHIGETOMI, Shun; ANDO, Setsuko; KUSANO, Shuhei; HAYASHIDA, Osamu
- 3PB-084** Iso-elution temperatures and homologous series for Hexachloro biphenyl isomers by a use of isothermal gas-chromatography (Grad. Sch. of Integrated Pharmaceutical and Nutritional., Univ. of Shizuoka) OMAKINO, Masakazu; SATO, Yoshihiko; MIYASHIRO, Yuki; YAMADA, Kenta
- 3PB-085** Withdrawn
- 3PB-086** Molecular recognition by cyclic siloxanes having aryl groups (Fac. Sci., Yamagata Univ.) OOGAWA, Hiroki; KONDO, Shin-ichi
- 3PB-087** Synthesis and molecular recognition properties of amide dendrimer type compounds with  $\pi$ -conjugated termini (Grad. Sch. Sci. Eng., Tokyo Denki Univ.) OSUZUKI, Eri; ADACHI, Naoya
- 3PB-088** Synthesis of argentivorous molecules for dendrimers (Fac. Sci., Toho Univ.; Research Center for Materials with Integrated Properties, Toho Univ.; Dept. Eng. Edu. Center, Chiba Inst. of Tech.) ONEMOTO, Fumika; IWASE, Miki; IKEDA, Mari; KUWAHARA, Shunsuke; HABATA, Yoichi
- 3PB-089** Dynamics of silver complexes with bis(tetra-armed cyclen)s (Fac. Sci., Toho Univ.; Research Center for Materials with Integrated Properties, Toho Univ.; Dept. Eng. Edu. Center, Chiba Inst. of Tech.) OIWASE, Miki; KACHI-TERAJIMA, Chihiro; IKEDA, Mari; KUWAHARA, Shunsuke; HABATA, Yoichi
- 3PB-090** Fluorescence property and structures of metal complexes with diphenylamine-containing pyridine ligands (Dept. Eng. Edu. Center, Chiba Inst. of Tech.; Research Center for Materials with Integrated Properties, Toho Univ.; Fac. Sci., Toho Univ.; Gyeongsang National University) OIKEDA, Mari; BAN, Takaya; KACHI-TERAJIMA, Chihiro; KUWAHARA, Shunsuke; LEE, Shim Sung; HABATA, Yoichi
- 3PB-091** Self-assembled properties of film state  $\pi$ -conjugated oligomers (Grad. Sch. Sci. Eng., Tokyo Denki Univ.) OKADA, Mari; ADACHI, Naoya

- 3PB-092** Dithienyl Ketone-Benzene Copolymer that Undergoes Conformational Changes in Response to External Stimuli (Grad. Sch. Eng., Osaka Pref. Univ.; The Research Inst. for Molecular Electronic Devices, Osaka Pref. Univ.) OTANI, Shuichi; OGAKI, Takuya; OHTA, Eisuke; MATSUI, Yasunori; IKEDA, Hiroshi
- 3PB-093** Flowing microenvironments regulate pitch of semi-artificial helical polymer (Grad. Sch. Life and Env. Sci., Kyoto Pref. Univ.) HIROSE, Naoya; ONAKADOZONO, Takuya; NUMATA, Munenori
- 3PB-094** Creation of kinetically stabilized porphyrin microfilms through synchronized hydrogen-bonding interactions in microflow (Grad. Sch. Life and Env. Sci., Kyoto Pref. Univ.) NISHINO, Yuri; OASAI, Atsushi; NUMATA, Munenori
- 3PB-095<sup>#</sup>** Synthesis of Schiff-base type oligomers with a 1,3-disubstituted 4-hydroxybenzoic acid (Grad. Sch. Fac. Sci., Kanagawa Univ.) OKANEKO, Moe; SUZUKI, Kentaro; SUGAWARA, Tadashi
- 3PB-096<sup>#</sup>** Construction of a self-reproducing anionic GV (Grad. Sch. Fac. Sci., Kanagawa Univ.) OHYAMA, Shota; SUZUKI, Kentaro; SUGAWARA, Tadashi
- 3PB-097<sup>#</sup>** Synthesis of New Caged Oleic Acid for Construction of Phototactic Oil-droplet with High Photo-sensitivity (Fac. Sci., Kanagawa Univ.) NAKAYAMA, Naoyuki; SUZUKI, Kentaro; SUGAWARA, Tadashi
- 3PB-098<sup>#</sup>** Influence of Length of DNA in Vesicular Protocol on the Activity of Membrane Lipid Production (Grad. Sch. Fac. Sci., Kanagawa Univ.) OOOKA, Hironori; HATTORI, Sayaka; MATSUO, Muneyuki; SUZUKI, Kentaro; SUGAWARA, Tadashi
- 3PB-099<sup>#</sup>** Withdrawn
- 3PB-100<sup>#</sup>** Design and synthesis of redox-responsible molecule with variable its effective volume to control the macroscopic motion of oleate assembly (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) OKUROKOME, Yuta; KAGEYAMA, Yoshiyuki; TAKEDA, Sadamu
- 3PB-101** Rates of liposome collapse by cyclodextrins (Fac. Eng., Hiroshima Univ.) OFUNADA, Rikushi; SUGIKAWA, Kouta; IKEDA, Atsushi
- 3PB-102** Functionalization of Cyclodextrin-Fullerene Complexes and Their Photodynamic Activity (Sch. Eng., Kyoto Univ.) OKAKIUCHI, Yui; MIKI, Koji; OHE, Kouichi
- 3PB-103** Synthesis of fluorescent oxadiazolopyridine derivatives and their application in biochemistry. (Fac. Eng., Kyushu Sangyo Univ.) OFU, Wenqiang; ISOBE, Shinichiro
- 3PB-104** Supramolecular Nanostructure Constructed from Acetylene-Linked Benzimidazolone Oligomers through Zipper-Type Multiple Hydrogen Bonds and Hierarchical Aggregation (Grad. Sch. Eng., Nagoya Inst. of Tech.) OTAKAGI, Yuya; OHKITA, Masakazu
- 3PB-105** Evaluation of the Hydrogen Bonding Ability of Benzimidazolone-Based Self-Complementary Duplex Strands: Comparison of the 6-Fold, 10-Fold and 14-Fold Zipper-Type Hydrogen Bonds (Grad. Sch. Eng., Nagoya Inst. of Tech.) OTAKAGI, Yuya; OHKITA, Masakazu
- 3PB-106** Supramolecular Polymers Based on Duplex Formation of Ditopic Self-Complementary Monomers Having a Flexible Spacer through Zipper-Type Multiple Hydrogen Bonds (Fac. Eng. Nagoya Inst. of Tech.) OMINAGAWA, Ayumu; MITSUYA, Yasuto; TAKAGI, Yuya; OHKITA, Masakazu
- 3PB-107** Study of self-aggregation behavior of diarylporphyrin zinc complexes bearing amino groups. (GNCT, Chem. and Mater. Sci.) OTAKENAMI, Hiroshi; NAKAJIMA, Satoshi
- 3PB-108<sup>#</sup>** Introverted Phosphorous-Au Cavitations for Catalytic Use (Grad. Sch. Sci. Tech., Ryukoku Univ.) OKANAURA, Mao; IWASAWA, Tetsuo
- 3PB-109** Cyclic Oligomers of 4-(diethylboryl)pyridine: Release of Incorporated Molecules (Fac. Health Sci., SUMS; Grad. Sch. Eng., Mie Univ.) OWAKABAYASHI, Shigeharu; WAKABAYASHI, Shigeharu; ITOH, Takahito
- 3PB-110** Synthesis and Characterization of Pyridine-Thiophene Alternating Macrocycles (Grad. Sch. Eng., Nagoya Inst. of Tech.) OKAMIYA, Yoshinori; OHKITA, Masakazu
- 3PB-111** Construction of  $\pi$ -Stacks Using Spiroborate-type Hollow Molecules (Konan Univ.) OKUSUMOTO, Kazuki; HASHIMOTO, Yuhki; KIDENA, Yuki; KATAGIRI, Kosuke; KAWAHATA, Masatoshi; DANJO, Hiroshi; YAMAGUCHI, Kentaro
- 3PB-112** Preparation of Supramolecular Polymers using Spiroborate-type Molecular Connecting Modules with Hydrogen Bonding Ability (Konan Univ.) ONAKATANI, Mizuki; KAWANISHI, Hiroko; KATAGIRI, Kosuke; KAWAHATA, Masatoshi; DANJO, Hiroshi; YAMAGUCHI, Kentaro
- 3PB-113** Preparation of Supramolecular Nanotubes Using Cyclic Spiroborates (Dept. Chem., Konan Univ.) OKAMBARA, Keigo; NAKAGAWA, Toshi; MORII, Akio; TAKESUMI, Hayato; MURAKI, Yusuke; SUDOH, Koichi; DANJO, Hiroshi
- 3PB-114** Spiroborate-type Hosts Bearing Characteristic Cavities: Preparation and Evaluation of Their Molecular Recognition Behavior (Dept. Chem., Konan Univ.) OKITAI, Takashi; MATSUMOTO, Tomohiro; MASUDA, Yuki; KATAGIRI, Kosuke; KAWAHATA, Masatoshi; DANJO, Hiroshi; YAMAGUCHI, Kentaro
- 3PB-115** Development of New Metallo-Macrocycles Using a Rigid Bent Ligand Based on a Triptycene Scaffold (Grad. Sch. Nat. Sci. Technol., Kanazawa Univ.) OSAITO, Daiki; SAKATA, Yoko; AKINE, Shigehisa
- 3PB-116** Synthesis and Structure of Pseudo-Macrocycles Hydrated by Water Molecular (Fac. Eng. Nagoya Inst. of Tech.) ONAKAGAWA, Tomohiro; ONO, Katsuhiko
- 3PB-117** Introduction Effects of Pyridine Rings to a Macrocyclic Tetramer of 2-Phenyl-1,3,4-Oxadiazole (Fac. Eng. Nagoya Inst. of Tech.) OKARASUDA, Satoshi; ONO, Katsuhiko
- 3PB-118<sup>#</sup>** Association behavior of molecular tweezers containing a 1,9,10-anthryridine skeleton (Chem. Res. Lab., Tokyo Tech) OKOIZUMI, Takeaki; HARIU, Tomohiro
- 3PB-119** Contribution of Harpooning Mechanism on Shuttling Dynamics in Rotaxane Type Molecular Machines (Grad. Sch. Eng. Sci., Osaka Univ.) HIROSE, Keiji; OUMEZAKI, Shota; KANO, Ryohei; YOUNG, Philip Geoffrey; TOBE, Yoshito
- 3PB-120<sup>#</sup>** Effect of Leaving Ligands in Starting Mononuclear Pd(II) complex on the formation of Coordination Self-Assembly (Grad. Sch. Arts and Sci., The Univ. of Tokyo) OKAI, Shumpei; MASUZAKI, Daigo; SHIGETA, Taro; KOJIMA, Tatsuo; HIRAOKA, Shuichi
- 3PB-121<sup>#</sup>** Creation of a Peptide-Metal Assembly Based on  $\alpha$ -Helix Motif (Grad. Sch. Eng., The Univ. of Tokyo) OWU, Yueqiao; SAWADA, Tomohisa; FUJITA, Makoto
- 3PB-122<sup>#</sup>** Self-assembly of 4,4'-Bipyridyl-type Ligands with Pd(II) Ions (Fac. Eng., The Univ. of Tokyo) FUJITA, Makoto; FUJITA, Daishi; OFUKU, Masafumi
- 3PB-123<sup>#</sup>** Challenges for Synthesis of Larger  $M_nL_{2n}$ -type Spherical Complexes (Fac. Eng., The Univ. of Tokyo) OYOSHIDA, Nobuhiro; FUJITA, Daishi; FUJITA, Makoto
- 3PB-124<sup>#</sup>** Preparation and properties of organogelators having the catechol unit. (Grad. Sch. Eng., KIT) OKAMOTO, Ryouta; MORIGUCHI, Tetsuji; ARAKI, Koji; TSUGE, Akihiko
- 3PB-125<sup>#</sup>** Preparation and properties of ligand-based organogelators. (Grad. Sch. Eng., KIT) OSUEHARA, Shunpei; MORIGUCHI, Tetsuji; ARAKI, Koji; TSUGE, Akihiko
- 3PB-126** Synthesis and Functional Assessment of Polymeric Nanoparticles Containing Fullerenes and cyanine dyes. (Grad. Sch. Eng., Hiroshima Univ.) OKUBO, Atsuki; SUGIKAWA, Kouta; IKEDA, Atsushi
- 3PB-127** Crystal structures of *N,N'*-Bis(5-(alkyloxy)tropon-2-yl)piperazine and *N,N'*-Bis(4-(alkyloxy)benzoyl)piperazine (Fac. Eng., Hokkai Gakuen Univ.; Grad. Sch. Eng. Sci., Kyushu Univ.; IMCE, Kyushu Univ.; Fac. Eng., Oita Univ.) OKUBO, Kanji; YAMAMOTO, Emi; MATSUMOTO, Taisuke; UJIE, Seiji; MORI, Akira
- 3PB-128** Design of Siloxane-Containing Liquid Crystalline Compounds Forming Bicontinuous Cubic Phases (Fac. Eng., Gifu Univ.) OKAWAFUCHI, Akane; MIWA, Yohei; KUTSUMIZU, Shoichi
- 3PB-129** Effects of Concentration of Azobenzene Derivative and Temperature on Light-Induced Smectic C - Bicontinuous Cubic Liquid Crystalline Phase Transition (Fac. Eng., Gifu Univ.) OMIZUTANI, Mariko; MIWA, Yohei; KUTSUMIZU, Shoichi
- 3PB-130** Synthesis of Liquid-Crystalline  $\pi$ -Conjugated Molecules and Their Functionalization through Self-Organization (Grad. Sch. Eng., The Univ. of Tokyo) OISHIBASHI, Kenta; SOBERATS, Bartolome; NISHIMURA, Tatsuya; YOSHIO, Masafumi; KATO, Takashi
- 3PB-131** Research of single molecule rectifier aiming at integral threshold device (Sch. Sci., Osaka Univ.) OTANI, Yuya; CHEN, Zhijian; YAMASHITA, Ken-ichi; TANI, Yosuke; HANDAYANI, Murni; OGAWA, Takuji
- 3PB-132<sup>#</sup>** Synthesis and Electronic Properties of Donor-Acceptor (DA) Single Molecular Diode Based on Perpendicularly Connected Porphyrin-Imide Dyad (Grad. Sch. Sci., Osaka Univ.) OCHEN, Zhijian; HANDAYANI, Murni; TANAKA, Hirofumi; YAMADA, Ryo; TADA, Hirokazu; OGAWA, Takuji
- 3PB-133<sup>#</sup>** Effect of redox active molecular wire upon electron transport in networked gold nanoparticles (Grad. Sch. Fac. Sci., Kanagawa Univ.) OKOBAYASHI, Yuki; CHINO, Shohei; SUZUKI, Kentaro; SUGAWARA, Tadashi
- 3PB-134<sup>#</sup>** Synthesis of Rhodium Porphyrin-Gold Nanoparticle Complexes as a First Step to Synthesis Porphyrin-SWNTs Triple Junction (Grad. Sch. Sci., Osaka Univ.) OKAKBAR, Ari Yustisia; TANI, Yosuke; OGAWA, Takuji
- 3PB-135** Preparation of 3D nanoporous structure using graphene oxide (Grad. Sch. Sci. & Tech., Kumamoto Univ.) ONEGI, Takafumi; OGATA, Tomonari; KIM, Sunnam; FUKAMINATO, Tsuyoshi; KURIHARA, Seiji
- 3PB-136** Organic pigments derived from ferulic acid with improved dispersibility (WINTEC) OMORI, Megumi; TSUCHITANI, Akane; MORI, Takeshi; MORI, Hajime; TOKINO, Seiji; MIYAKE, Yasuhito
- 3PB-137<sup>#</sup>** Effects of axis length on meshing of circularly arranged hexad triptycene gear molecules (Grad. Sch. Sci., The Univ. of Tokyo) OYAMADA, Ryo; ISHIDA, Junichi; UBE, Hitoshi; SHIRO, Motoo; SHIONOYA, Mitsuhiko
- 3PB-138<sup>#</sup>** Synthesis of the C13<sup>2</sup>-substituted chlorophyll *a/a'* analogs and their stereochemistry (Grad. Sch. Life Sci., Ritsumeikan Univ.) OOGASAWARA, Shin; INOSHITA, Masaki; TAMIAMI, Hitoshi
- 3PB-139** Construction of Aromatic Layered Squaramide (Grad. Sch. Of Humanities and Sci., Ochanomizu Univ.; IMCB, The Univ. of Tokyo; CAI, Chiba Univ.; IBB, Tokyo Med. and Dental Univ.) OARIMURA, Maiko; KANDA, Midori; FUJII, Shinya; MASU, Hyuma; KAGECHIKA, Hiroyuki; TANATANI, Aya
- 3PB-140** Conformational properties of aromatic multilayered helical oligourcas with carboxyl groups (Grad. Sch. Of Humanities and Sci., Ochanomizu

Univ.; GNCT, Chem. and Mater. Sci.; CAI, Chiba Univ.) ○FUNAKI, Ai; KUDO, Mayami; MASU, Hyuma; TANATANI, Aya

**3PB-141**<sup>#</sup> Proposal of Conformational Code Rules for 3D Chemical Structural Search (AIST) ○IZUMI, Hiroshi

## Organic Chemistry -Reaction and Synthesis- Heterocyclic Compounds

**3PB-143**<sup>#</sup> Synthesis of Propellanes Using Methylenebis(cyclohexanedione)s (Dept. Sci., Fac. Sci., Kumamoto Univ.) ○CHIKAMATSU, Ayaka; NISHINO, Hiroshi

**3PB-144**<sup>#</sup> Oxidative Cyclization of Indolylmethyl 3-Oxobutanoate with Manganese(III) Acetate (Dept. Sci. Fac. Sci., Kumamoto Univ.) ○OBATA, Megumi; NISHINO, Hiroshi

**3PB-145**<sup>#</sup> Oxidation of Bis(cycloketamide)s with Mn(OAc)<sub>3</sub> (Dept. Sci., Fac. Sci., Kumamoto Univ.) ○NISHIKAWA, Satomi; NISHINO, Hiroshi

**3PB-146**<sup>#</sup> Synthesis of Cyclic Amidines via Cyclization of Bisthiomides (Fac. Eng., Iwate Univ.) ○SHIMADA, Kazuaki; TAKANO, Shingo; ENDO, Masatomo; KORENAGA, Toshinobu

**3PB-147** Computational Study for the Cyclization Reactions of Bistrifluoroacetylated Butadienes with Hydrazines (Grad. Sch. Eng., Kobe Univ.) KAWANISHI, Shunsuke; ○KAMITORI, Yasuhiro; OTA, Norio; OKADA, Etsuji

**3PB-148**<sup>#</sup> Development of Lewis acid catalyzed Prato reaction (Fac. Eng., Sojo Univ.; Phoenix) ○UEMURA, Yu; HATTA, Taizo

**3PB-149**<sup>#</sup> The consideration for the lactonization of the alkenyl carboxylic acid by the ionic liquids (Grad. Sch. Sci., Eng., Yamagata Univ.) ○SUTO, Toru; KURIYAMA, Yasunao

**3PB-150** Chiral Ionic Liquids System producing Asymmetry Chromene Derivatives (Fac. Eng., Oita Univ.) ○OHGA, Hirotaka; NOBUOKA, Kaoru; KITAOKA, Satoshi; OHGA, Yasushi; ISHIKAWA, Yuichi

**3PB-151** Addition reaction of benzylamines with conjugated dienes catalyzed by lithium alkylamide (27) Reactivity of Vinylbenzimidazoles (Fac. Eng., Saitama Inst. of Tech.) ○HAMANA, Hiroshi; NISHIMURA, Yuuichi; SONE, Yoshitomo; SUTOU, Kouki; KAWAMURA, Soushi; SUZUKI, Michiteru

**3PB-152** Carboxylative Cyclization of Propargylic Amines Catalyzed by N-Heterocyclic Carbene (IRC3, AIST; Grad. Sch. Sci. Eng., Ibaraki Univ.) FUJITA, Ken-ichi; ○FUJII, Akira; SATO, Junichi; ONOZAWA, Shun-ya; YASUDA, Hiroyuki

**3PB-153**<sup>#</sup> Preparation of Soluble Phthalocyanines Utilizing Ionic Liquids (Fac. Eng., Kinki Univ.) ○KITAOKA, Satoshi; INOUE, Daiju; NOBUOKA, Kaoru

**3PB-154** Palladium-Catalyzed Oxidative Annulation of Anilines with Allenyl Esters Leading to Indole Derivatives (Fac. Sci. Technol., Tokyo Univ. of Sci.) ○ENOMOTO, Kota; OGIWARA, Yohei; SAKAI, Norio

**3PB-155**<sup>#</sup> Synthesis and Photochemical Reactions of 1-Alkyl-4-methoxy-7-azaisatins (Fac. Eng., Aichi Inst. of Tech.) ○TATSUGI, Jiro; KARASAWA, Yoshikatsu

**3PB-156** NHC-palladacycle catalyzed synthesis of  $\gamma$ -aryl- $\gamma$ -lactones via 1,2-addition of arylboronic acid derivatives with  $\gamma$ -ketoesters (Sch. Eng., Tokyo Denki Univ.) ○AKIYAMA, Ryo; YAMAMOTO, Tetsuya; SHINOZAKI, Hiraku

**3PB-157** Copper-catalyzed coupling reaction of cyclic iodonium salts with potassium thioacetate as facile synthesis of dibenzothiophenes (KIT) ○OGAWA, Mai; SHIMIZU, Masaki

**3PB-158**<sup>#</sup> Synthesis of New Pyrazole-fused Heterocycles via Regioselective Claisen Rearrangement and Hydroesterification (Grad. Sch. Industrial Tech., Nihon Univ.) ○TAKASHIMA, Hiroki; ICHIKAWA, Hayato; SHIMIZU, Shoichi

**3PB-159**<sup>#</sup> Reaction of 1,3-dithiolane with *N*-sulfonyl-1,2,3-triazole (Kobe City Coll. Technol.) ○YABUUCHI, Yuto; KOIZUMI, Takuya

**3PB-160**<sup>#</sup> Chemoselective onium ylide formation of 1,3-oxathiolane (Kobe City Coll. Technol.) ○FUJII, Ikuya; KOIZUMI, Takuya

**3PB-161**<sup>#</sup> Synthesis of 1-aryl-1,3-dihydrobenzo[*c*]thiophenes (Grad. Sch. Eng., Tottori Univ.) ○SHIGEMURA, Yuho; KOBAYASHI, Kazuhiro

**3PB-162**<sup>#</sup> Stereo- and Regioselective Intramolecular Cycloaddition of Nitro-nates by Lewis acid-promoted Acetal Exchange and Transformations to 2-Isoxazolines (Fac. Eng., Tokushima Univ.) ○MORITO, Daisuke; NISHIUCHI, Masaki; YAGISHITA, Fumitoshi; KAWAMURA, Yasuhiko

**3PB-163**<sup>#</sup> Regioselective Synthesis of 2-Isioxazolines by Lewis acid-promoted Fragmentation of Bicyclic Isoxazolidines (Fac. Eng., Tokushima Univ.) ○KUME, Toshinori; NISHIUCHI, Masaki; YAGISHITA, Fumitoshi; KAWAMURA, Yasuhiko

**3PB-164**<sup>#</sup> Synthesis of lactones via intermolecular tandem addition-cyclization reaction under visible-light irradiation (Gifu Pharm. Univ.) ○MAEJIMA, Saki; YAMAGUCHI, Eiji; ITOH, Akichika

**3PB-165**<sup>#</sup> Synthesis of 6,7-dihydropyrido[2,3-*d*]pyrimidin-5(8*H*)-ones starting with DCSP (Grad. Sch. Eng., Tottori Univ.; IHARA CHEMICAL INDUSTRY CO. LTD.) ○CHIKAZAWA, Yuuki; ONO, Ryoga; ISHITOBI, Kouki; KOBAYASHI, Kazuhiro; HIYOSHI, Hidetaka; UMEZU, Kazuto

**3PB-166** Synthesis of Nitrogen-Containing Polycyclic Compounds via Intramolecular Diels-Alder Reaction of Furans as the Key Step (Sch. Eng., Tokyo Denki Univ.) ○ARIKAWA, Takashi; MATSUDA, Yuto;

NAKAJIMA, Risa; YAMAMOTO, Tetsuya; SHINOZAKI, Hiraku

**3PB-167** Synthesis of oxadiazolopyridine derivatives bearing hydrophilic group (Grad. Sch. Eng., Kyushu Sangyo Univ.) ○YAMASAKI, Toshiaki; ISOBE, Shinichiro

**3PB-168** The Intriguing Reactions of 4-Dialkylamino-3-trifluoroacetylquinolines with Lawesson's Reagent (Grad. Sch. Eng., Kobe Univ.) ○KAWAGUCHI, Genki; OKADA, Etsuji

**3PB-169** Enantioselective synthesis of 1-substituted tetrahydroisoquinolines through intramolecular aza-Michael reaction (Department of Chemistry, Fukuoka University of Education) MIYASHIRO, Ryosuke; ○MURAOKA, Satsuki; ITO, Katsuji

**3PB-170** Nucleophilic *N-N* Exchange Reaction of 7-Dimethylamino-2-phenyl-8,10-bis(trifluoroacetyl)benzo[*h*]quinolines with Various Amines (Grad. Sch. Eng., Kobe Univ.) ○YAMAMOTO, Kazutaka; OKADA, Etsuji

**3PB-171** Three Components Condensation of 4-Amino-2-dimethylamino-3-trifluoroacetylquinoline with Aldehydes and Ammonia: Synthesis of Fluorine-Containing Pyrimido[5,4-*c*]quinolines (Grad. Sch. Eng., Kobe Univ.) ○MIHARA, Kota; OKADA, Etsuji

**3PB-172** Synthesis of indolobenzothiazine derivatives from pyrrolobenzothiazines (IRC3, AIST; Fac. Sci. Technol., Tokyo Univ. of Sci.) ○MASUDA, Kotaro; TANAKA, Shinji; ANDO, Wataru; SAKAI, Norio; SHIMIZU, Masao

**3PB-173**<sup>#</sup> The first general synthesis of 1,2-dihydroisoquinoline-3,4-diones using the reaction of 2-(1,1-dialkoxyethyl)phenyllithiums with dimethyl oxalate (Fac. Eng., Tottori Univ.) ○HONDA, Yuuya; KURODA, Minami; KOBAYASHI, Kazuhiro

**3PB-174** Titanium Tetraiodide Induced Cyclization of Cyanoketones into Iodoisoquinolines and Their Applications (Grad. Sch. Eng., Mie Univ.) SAKATA, Keito; ○NAGOSHI, Shintaro; YASHIRO, Kai; HACHIYA, Iwao; SHIMIZU, Makoto

**3PB-175** Synthesis of 2-Aminopyridines Directed to the Synthesis of  $\alpha$ -Carbolines (Grad. Sch. Eng., Mie Univ.) FUKUTOMI, Makoto; ○SHIMADA, Satoshi; HACHIYA, Iwao; SHIMIZU, Makoto

**3PB-176** Development and application of cage type amine organocatalyst (Grad. Sch. of Eng., Muroran Inst. of Tech.) ○OGASAWARA, Ayumi; KOHARI, Yoshihito; SEKI, Chigusa; UWAI, Koji; OKUYAMA, Yuku; NAKANO, Hiroto

**3PB-177** Synthesis of new anti-influenza candidate molecules using organo-catalyzed asymmetric Diels-Alder reaction of 1,2-dihydropyridines with dienophiles as a key reaction (Grad. Sch. of Eng., Muroran Inst. of Tech.) ○TAKAGI, Ryohei; SEKI, Chigusa; OGAWA, Haruko; IMAI, Kunitoshi; UWAI, Koji; NAKANO, Hiroto

**3PB-178** Asymmetric Michael addition of  $\beta$ -keto esters with nitroalkenes using amino alcohol organocatalyst. (Sch. Eng., Muroran Inst. of Tech.) ○MIZUSHIMA, Ryosuke; U. V., Subba Reddy; SEKI, Chigusa; UWAI, Koji; KWON, Eunsung; OKUYAMA, Yuku; NAKANO, Hiroto

**3PB-179** Synthesis and resolution of optically active halogenolamellarin N derivatives (Grad. Sch. Eng., Nagasaki Univ.) ○SHIRAKAWA, Chihiro; YOSHIOKA, Mikiko; FUKUDA, Tsutomu; IWAO, Masatomo

**3PB-180** Chiral Bis(imidazolide)-consisting NCN Pincer Rhodium Complex for Catalytic Asymmetric Mannich Reaction of Malononitrile with Isatin-derived Ketimines (Grad. Sch. Sci., Chiba Univ.) ○TOSAKA, Takuya; MORIBATAKE, Takuma; ARAI, Takayoshi

**3PB-181** Catalytic Asymmetric Michael/aldol Reaction: Synthesis of Novel Chiral Thiochromanyl-Spirooxindoles (Grad. Sch. Sci., Chiba Univ.) ○MIYAZAKI, Tomoya; OGAWA, Hiroki; ARAI, Takayoshi

**3PB-182**<sup>#</sup> Application of polymer-supported planar-chiral terpyridines to catalytic asymmetric cyclopropanation (Sch. Advanced Sci. Eng., Waseda Univ.) ○UE, Kenta; KANOMATA, Nobuhiro

**3PB-183**<sup>#</sup> Polymer immobilization of planar-chiral phase-transfer catalysts having hydroxyl groups and their use for asymmetric reactions (Sch. Advanced Sci. Eng., Waseda Univ.) ○KOMAKI, Seiju; KANOMATA, Nobuhiro

**3PB-184** Substituent Effect on Catalytic Activity of Chiral Proline based Ionic Liquids (Fac. Eng., Oita Univ.) ○ONO, Ayami; NOBUOKA, Kaoru; KITAOKA, Satoshi; ISIKAWA, Yuichi

**3PB-185** Synthesis of BICMAP Derivatives as Chiral Ligands (Grad. Sch. Eng., Chiba Univ.) MINO, Takashi; ○MIZUTANI, Yuki; MIURA, Kazuki; YOSHIDA, Yasushi; SAKAMOTO, Masami

**3PB-186** Development of Catalytic Enantioselective Allylation of Isatin Derivatives with New  $\beta$ -Amidoallyl Boronates (Grad. Sch. Eng., Shizuoka Univ.) SENGOKU, Tetsuya; ○ITAKURA, Yuuya; SUGIYAMA, Akihiro; TAKAHASHI, Masaki; YODA, Hidemi

**3PB-187** Synthesis of 2,3-naphthalene, 1,8-naphthalene and 1,6-methano[10]annulene-3,4-dicarboximides having a dimethylamino group on the nitrogen and their emission behavior (Fac. Sci., Shinshu Univ.) ○ARIYASU, Kousuke; ODA, Mitsunori; MIYATAKE, Ryuta

**3PB-188** Synthesis and properties of 7,12-diarylbenzo[*k*]fluoranthene-9,10-dicarboximides (Fac. Sci., Shinshu Univ.; Grad. Sch. Sci. Eng., Univ. of Toyama) ○SHIMOSASA, Haruki; ODA, Mitsunori; MIYATAKE, Ryuta

**3PB-189** Synthesis and emission property of 1,3-disubstituted 6*H*-cyclohepta[*c*]furan-5,7-dicarbaldehydes (Fac. Sci., Shinshu Univ.; Grad. Sch. Sci. Eng., Univ. of Toyama) ○KOBAYASHI, Naoki; SHIMOSASA, Haruki; ODA, Mitsunori; MIYATAKE, Ryuta

**3PB-190** Synthesis and properties of 4-substituted  $\lambda^5$ -phosphinines (Grad.

- Sch. Sci., Eng., Ehime Univ.) O DAM THI HUYEN, Trang; SHIMAHARA, Kiyoka; OHTA, Hidetoshi; HAYASHI, Minoru
- 3PB-191** Synthesis and Characterization of 5-Arylimidazo[1,5-a]pyridine-3-ylidene Complexes (Fac. Eng., Gifu Univ.) O MIZUNO, Takahiro; KOTO, Takahiro; SHIBAHARA, Fumitoshi; MURAI, Toshiaki
- 3PB-192** Synthesis of Fluorescent Ionic Liquids with Coumarin Scaffolds (Fac. Eng., Oita Univ.) O UTSUNOMIYA, Yuki; NOBUOKA, Kaoru; KITAOKA, Satoshi; ISHIKAWA, Yuichi
- 3PB-193** Synthesis and Properties of 1- and/or 5- Alkenyl Imidazo[1,5-a]pyridines (Fac. Eng., Gifu Univ.) O IMAI, Masahiko; SAKAI, Yuusuke; SHIBAHARA, Fumitoshi; MURAI, Toshiaki

## Organic Chemistry -Reaction and Synthesis- Organic Photochemistry

- 3PB-195** Synthesis of New Perylene Derivatives from Related Tetracarboxylate and Their Spectral Properties (Fac. Eng., Shizuoka Univ.; Grad. Sch. Eng., Shizuoka Univ.) TAKAHASHI, Masaki; OASABA, Kyouhei; SENGOKU, Tetsuya; YODA, Hidemi
- 3PB-196** Synthesis of New Linear Shaped Polyanthracene Derivatives and Their Spectral Properties (Fac. Eng., Shizuoka Univ.) TAKAHASHI, Masaki; O SANTO, Keisuke; SENGOKU, Tetsuya; YODA, Hidemi
- 3PB-197** Cross-Photocyclodimerization of Anthracene derivatives Mediated by Human Serum Albumin (Grad. Sch. Eng., Osaka Univ.) O KUROKAWA, Yuki; NISHIJIMA, Masaki; FUKUHARA, Gaku; MORI, Tadashi; INOUE, Yoshihisa
- 3PB-198<sup>#</sup>** Elucidation of highly enantiodifferentiating site of human serum albumin for mediating photodimerization of 2-anthracenecarboxylate with xenon as site-specific inhibition/quenching (Office for University-Industry Collaboration, Osaka Univ.) O NISHIJIMA, Masaki; PACE, Tamara; BOHNE, Cornelia; MORI, Tadashi; WADA, Takehiko; INOUE, Yoshihisa
- 3PB-199** Photophysical Properties of Aromatic Amides and [3+2]-Photocycloadditions of the Amides with Alkenes (Grad. Sch. Fac. Sci. Eng., Shimane Univ.) O UEDA, Yasuke; SHIRATORI, Hideo; KUBO, Yasuo
- 3PB-200** Photochemical Reactions of N-Acyloxy Aromatic Imide Compounds (Grad. Sch. Fac. Sci. Eng., Shimane Univ.) O ICHINOSE, Goya; SHIRATORI, Hideo; KUBO, Yasuo
- 3PB-201<sup>#</sup>** Photoinduced electron-transfer reactions of pyridine N-oxides : Generation of active oxygen species and damaging of plasmid DNA (Fac. Eng., Tokushima Univ.) O ISHIMARU, Ryuji; UETA, Syoko; YAGISHITA, Fumitoshi; NISHIUCHI, Masaki; KAWAMURA, Yasuhiko
- 3PB-202** Study of photochemistry and photodegradation of caged compounds having carbonyl group (Div. of Chem., Fac. Pure Appl. Sci., Univ. of Tsukuba) O SUGIMOTO, Ryo; ARAI, Tatsuo
- 3PB-203<sup>#</sup>** Synthesis of dimeric imidazo[1,5-a]pyridine and its photophysical properties (Fac. Eng., Tokushima Univ.) YAGISHITA, Fumitoshi; O KOZAI, Natsumi; UETA, Shoko; NISHIUCHI, Masaki; KAWAMURA, Yasuhiko
- 3PB-204<sup>#</sup>** Absolute asymmetric synthesis of pyrrolinone derivatives by photoisomerization and dynamic crystallization (Grad. Sch. Eng., Chiba Univ.) O SHIRATSUKI, Ko; YOSHIDA, Yasushi; MINO, Takashi; SAKAMOTO, Masami
- 3PB-205<sup>#</sup>** Supramolecular asymmetric photochirogenesis mediated by synthetic antibody: The effect of temperature upon photodimerization of 2-anthracenecarboxylate mediated by scFv antibody (IMRAM, Tohoku Univ.; UIC & Dept. Appl. Chem., Osaka Univ.; Grad. Sch. Eng., Osaka Univ.) O YOSPANYA, Wijak; SAKAMOTO, Seiji; ARAKI, Yasuyuki; NISHIJIMA, Masaki; INOUE, Yoshihisa; WADA, Takehiko
- 3PB-206** Photo-induced Pinacol Coupling Reaction of Benzophenone Derivatives Using Sparteinium salts (Grad. Sch. Of Humanities and Sci., Ochanomizu Univ.) O YOSHIOKA, Mayuko; YAMADA, Shinji
- 3PB-207** Photoreaction of 4,5-dimethoxy-2-nitrobenzyl esters having isopropyl, cyclohexyl and tertiarybutyl group at  $\alpha$ -position. (Grad. Sch. Fac. Sci., Kanagawa Univ.) O OKAMURA, Naomichi; SAITO, Yusuke; CHIKARAISHI, Noriko; YAMAGUCHI, Kazuo
- 3PB-208** Control of photoreaction with hyper-coordinate allylsilicon reagents by substituents on ligands (Grad. Sch. Fac. Sci. Eng., Shimane Univ.) O YOSHIOKA, Hiroki; SUZUKI, Masaaki; NISHIGAICHI, Yutaka
- 3PB-209** Photo-induced electron transport across vesicle membranes using a riboflavin derivative as a sensitizer (Grad. Sch. Arts and Sci., The Univ. of Tokyo) O SATO, Yuta; IKUTA, Naoya; TAKIZAWA, Shin-ya; MURATA, Shigeru
- 3PB-210** Luminescent Properties of Six-Coordinate Aluminum Complexes Possessing Diaroylmethane Ligands (Sch. Eng., Osaka Pref. Univ.; Grad. Sch. Eng., Osaka Pref. Univ.; The Research Inst. for Molecular Electronic Devices, Osaka Pref. Univ.) O NISHIO, Kasumi; TANAKA, Mirai; SAKAI, Atsushi; MATSUI, Yasunori; OHTA, Eisuke; IKEDA, Hiroshi

## Natural Products Chemistry

- 3PB-213** Evaluation of antifungal activities of (+)-Ipomeamarone and its stereoisomers. (Grad. Sch. Sci., Osaka City Univ.) O KAMEDA, Soushi; FUJITA, Ken-ichi; USUKI, Yoshinosuke; SATO, Tetsuya
- 3PB-214<sup>#</sup>** Studies on chemical constituents from *Saussurea flexuosa* (Grad. Sch. Sci., Osaka City Univ.) O WIJEDEERA, Erandi; MIZUHARA, Naoko;

- KAMEDA, Soushi; USUKI, Yoshinosuke; SATOH, Tetsuya
- 3PB-215<sup>#</sup>** Synthetic study of lycoperdic acid and analogs by asymmetric hydrogenation of  $\alpha$ -dehydroamino acid ester (Grad. Sch. Nanobiosci., Yokohama City Univ.) O MOROKUMA, Kenji; OIKAWA, Masato
- 3PB-216<sup>#</sup>** Synthesis and neuroactivity of a model for clickable dyspherbaeine (Grad. Sch. Nanobiosci., Yokohama City Univ.) O OIKAWA, Masato; FUKUSHIMA, Koichi; ISHIKAWA, Yuichi
- 3PB-217** Synthesis of Brachyidin B in Arrabidaea brachypoda (Fac. Eng., Kinki Univ.) OKADA, Yoshiharu; O HATTORI, Takuya; NAKAMOTO, Masato; NOMURA, Masato
- 3PB-218** Synthesis of Gomisins (Fac. Eng., Kinki Univ.) O OKADA, Yoshiharu; II, Hiroshi; NOMURA, Masato
- 3PB-219<sup>#</sup>** Chemical Approach to Fishing New Binding Proteins with the Ladder-shaped Polyether Yessotoxin (Grad. Sch. Sci., Osaka Univ.) O YEUNG, Clarisse; TSUCHIKAWA, Hiroshi; HANASHIMA, Shinya; MATSUMORI, Nobuaki; MURATA, Michio
- 3PB-220** Synthesis and Physiological Activities of Phenylpropanoids in *Coreopsis lanceolata* L. Petals (Fac. Eng., Kinki Univ.) OKADA, Yoshiharu; KANDORI, Naomi; O NAKABO, Daisuke; NAKAMURA, Kensuke; NOMURA, Masato
- 3PB-221<sup>#</sup>** Analysis of Molecular Mechanism for the Enhanced Stability of Flavonoid Compounds (Grad. Sch. Agr. Sci., Kobe Univ.) URABE, Ayaka; O KIMURA, Yukihiko; OTAKE, Haruka; OHNO, Takashi
- 3PB-222<sup>#</sup>** Total Synthesis of Integracins A and B (Kinki Univ.) O FUJITA, Atsushi; TAKAYAMA, Yoshiko; MAEKAWA, Takehiko; YAMAGIWA, Yoshiro
- 3PB-223<sup>#</sup>** Synthetic study of Integrastatins (Kinki Univ.) O KAWAKAMI, Hideki; SHIGEKAWA, Yuya; YAMAGIWA, Yoshiro
- 3PB-224<sup>#</sup>** Synthesis of 8-alkyl-3-deoxyanthocyanidins (Grad. Sch. Info. Sci., Nagoya Univ.) O ANDO, Hiroki; OYAMA, Kin-ichi; YOSHIDA, Kumi
- 3PB-225<sup>#</sup>** Synthetic studies of Venturicidins based on the newly developed method of a construction Z-alkene by  $S_N2'$  type reduction with borane THF complex (Hokkaido Coll. Pharm.; Sch. Adv. Eng., Kogakuin Univ.) O SUZUKI, Yuji; SATO, Daichi; MIZUKAMI, Megumi; YASUI, Eiko; MIYASHITA, Masaaki; NAGUMO, Shinji
- 3PB-226** Development of selective Diels-Alder reaction using 2-silyl-substituted dienes for efficient synthesis of Spirolide C (Grad. Sch. Sci., Osaka Univ.) O MINAMINO, Kou; TUCHIKAWA, Hiroshi; MURATA, Michio
- 3PB-227** Studies on Asymmetric Total Synthesis of 22-Hydroxy-15(28)-dehydrovenustatriol Isolated from the Marine Red Alga *Laurencia viridis* (Grad. Sch. Sci., Osaka City Univ.) O TOKITA, Moe; TAKI, Naoto; NAKAI, Haruka; HOSHINO, Akihiro; MORINO, Miyako; NISHIKAWA, Keisuke; TACHI, Yoshimitsu; MORIMOTO, Yoshiki
- 3PB-228** Studies on Total Synthesis of Dolastane-type Diterpenes Possessing Antifouling Activity (Grad. Sch. Sci., Osaka City Univ.) O FUKUYAMA, Yuka; NISHIKAWA, Keisuke; TACHI, Yoshimitsu; MORIMOTO, Yoshiki
- 3PB-229** Analysis of Secondary Metabolites from *A. nidulans* Using GC/MS and LC/MS/MS IV. The AN3280 Gene (Grad. Sch. Human. Sci., Nara Women's Univ.; Fac. Sci., Nara Women's Univ.; CRAC, Nara Women's Univ.; Grad. Sch. Med., Nagoya Univ.) O TSUKAMOTO, Nao; KIMURA, Tomoko; SUZUKI, Takahito; AKASHI, Tomohiro; TAKEUCHI, Takae
- 3PB-230** Synthesis and evaluation of saxitoxin derivatives bearing substituents at C11 (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.; Grad. Sch. Agric. Sci., Tohoku Univ.) O OKI, Mana; WANG, Chao; NISHIKAWA, Toru; YAMASHITA, Mari; NAGASAWA, Kazuo
- 3PB-231<sup>#</sup>** Synthetic Studies on the Preparation of Regio- and Stereoselectively Deuterium-Labeled Glutamic Acids via Tetramic Acid Derivatives (Lib. Arts Edu. Center, Shimizu Campus, Tokai Univ.) O OBA, Makoto
- 3PB-232** Synthesis of Cyclic Desmosine for Elucidation of the Three Dimensional Structure of Elastin. (Sci. Tec., Sophia Univ.) O TOKAIRIN, Dai; OGAWA, Keita; HAYASHI, Takahiro; USUKI, Toyonobu
- 3PB-233** Synthetic study of isotopically labeled isodesmosine (Sci. Tec., Sophia Univ.) O TANAKA, Nao; TANIGAWA, Takahiro; USUKI, Toyonobu
- 3PB-234** Gene disruption experiment of hitachimycin biosynthetic genes toward uncovering post PKS modification (Grad. Sch. Sci., Eng., Tokyo Tech) O ANDO, Taishi; KAWAMURA, Kouichi; KUDO, Fumitaka; MIYANAGA, Akimasa; EGUCHI, Tadashi
- 3PB-235<sup>#</sup>** Synthetic studies on JBIR-04 and -05, congeners of prunastatin A (Grad. Sch. Sci., Osaka City Univ.) O IMADA, Takahiro; OGAWA, Hikaru; USUKI, Yoshinosuke; SATO, Tetsuya
- 3PB-236<sup>#</sup>** Synthesis of analogues of quinolizidine alkaloid ( $\pm$ )-Lasbine II (Grad. Sch. Eng., KAIT) O HAYASHI, Kyouhei; SIBAKAWA, Yuka; WATANABE, Saki; MURAOKA, Natuki; SUGIYAMA, Hiroki; NODA, Takeshi
- 3PB-237<sup>#</sup>** Structural analyses of *Aphanothece sacrum* exopolysaccharide, sacran (Sch. Mat. Sci., JAIST) O TAMAKI, Mayumi; OKAJIMA, Maiko; TATEYAMA, Seiji; OKEYOSHI, Kousuke; KANEKO, Tatsuo

## Chemical Biology

- 3PB-239** Design and synthesis of autophagy inhibitors having cell type specificity (Fac. Sci., Toho Univ.) O TAKEDA, Shiori; SUZUKI, Akinobu; FURUTA, Toshiaki
- 3PB-240** Development of DNA methyltransferase inhibitors having cell type

- specificity (Fac. Sci., Toho Univ.) ○SAKAMOTO, Kotoko; SUZUKI, Akinobu; FURUTA, Toshiaki
- 3PB-241** Design and synthesis of ryanodine receptor agonists with cell type specificity (Fac. Sci., Toho Univ.) FUNAYAMA, Mizuki; ○SUZUKI, Akinobu; UENO, Taro; SAITO, Minoru; FURUTA, Toshiaki
- 3PB-242** Development of photoaffinity probes based on gold nanoparticles for exploration of small-molecule binding proteins (Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○KATO, Amane; HATAI, Yuki; SAKURAI, Kaori
- 3PB-243** Development of a photoaffinity probe based on an inactive analog of an antitumor saponin OSW-1 (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○NARITA, Sho; YAMADA, Rika; HIRAIZUMI, Masato; SAKURAI, Kaori
- 3PB-244** Design and synthesis of caged 4-aminopyridine which can be photoactivated in the presence of PLE (Fac. Sci., Toho Univ.) ○IKETANI, Yuki; SUZUKI, Akinobu; FURUTA, Toshiaki
- 3PB-245** Design and synthesis of new caged cyclic nucleotides which can be photo-activated in the presence of specific enzymes (Fac. Sci., Toho Univ.) ○SAKANO, Taichi; SUZUKI, Akinobu; FURUTA, Toshiaki
- 3PB-246** Design and synthesis of caged oligonucleotides with modular nucleotide caging agents (Fac. Sci., Toho Univ.) ○TADA, Shin' nosuke; SUZUKI, Akinobu; FURUTA, Toshiaki
- 3PB-247** Synthesis of caged gRNA for photoactivatable CRISPR-Cas9 (Fac. Sci., Toho Univ.) ○KODAMA, Kazunari; TADA, Shin' nosuke; SUZUKI, Akinobu; FURUTA, Toshiaki
- 3PB-248** Synthesis of cristatin A derivative and evaluation of its G-quadruplexe stabilization ability (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○SHIOZAWA, Motoki; MA, Yue; IIDA, Keisuke; YASUI, Koji; NAGASAWA, Kazuo
- 3PB-249**<sup>#</sup> 4-Bromobenzyl group as a linker for chemical probes (Grad. Sch. Nanobiosci., Yokohama City Univ.) ○IWASE, Akira; OUI, Hoshiyuri; ISHIKAWA, Yuichi; OIKAWA, Masato
- 3PB-250**<sup>#</sup> The search for novel SUMOylated proteins based on reconstitution of split fluorescence proteins (Grad. Sch. Sci., The Univ. of Tokyo) ○KOMIYA, Maki; HIRUMA, Daisuke; HATTORI, Mitsuru; OZAWA, Takeaki
- 3PB-251** Exploration of a new reactive group for specific protein labeling and its application to development of irreversible inhibitors (Grad. Sch. Pharm., Kyushu Univ.) ○HATSUYAMA, Yuji; FUCHIDA, Hirokazu; SHINDO, Naoya; TABATA, Shigekazu; WATARI, Kosuke; ONO, Mayumi; OJIDA, Akio
- 3PB-252**<sup>#</sup> Development of Avidin-Fluorescent Probe Conjugate for Highly Sensitive and Specific Cancer Imaging (Grad. Sch. Med., The Univ. of Tokyo) ○YAMAMOTO, Kyoko; KAMIYA, Mako; URANO, Yasuteru
- 3PB-253** Development of novel off/on type fluorescence probes for proteases based on pterin derivatives (Nagahama Institute of Bio-Science and Technology) ○MATSUMOTO, Minako; KAWAI, Yasushi
- 3PB-254**<sup>#</sup> BODIPY-based photoremovable protective groups with improved photoreaction efficiency (Grad. Sch. Med., The Univ. of Tokyo) ○KAWATANI, Minoru; KAMIYA, Mako; URANO, Yasuteru
- 3PB-255**<sup>#</sup> <sup>129</sup>Xe Nuclear Magnetic Resonance Spectroscopy of Xenon Adsorbed on Mesoporous Materials under Continuous-flow Hyperpolarized Xenon Gas (MCM, AIST) ○HATTORI, Mineyuki
- 3PB-256** Development of spontaneously blinking fluorophores based on nucleophilic addition of intracellular glutathione for super-resolution imaging (Grad. Sch. Pharm., The Univ. of Tokyo) ○MOROZUMI, Akihiko; KAMIYA, Mako; UNO, Shin-nosuke; UMEZAWA, Keitaro; YOSHIHARA, Toshihata; TOBITA, Seiji; URANO, Yasuteru
- all four routes (Sch. Sci. Tech., Kwasei Gakuin Univ.) ○HONDA, Atsushi; ASHIDA, Yuichiro; NAKATSUJI, Hidefumi; TANABE, Yoo
- 3PC-008** Baeyer-Villiger oxidation of multisubstituted cyclic ketone (2) (Grad. Sch. Agr. Sci., Kinki Univ.) ○ASHIDA, Kumiko; FUTAKI, Mikuru; SUGA, Ayaka; YAMAMOTO, Chieko; KITAYAMA, Takashi
- 3PC-009** One-pot Transformation of Aldehydes into One-carbon Homologated Nitriles with Wittig Reaction (Faculty of Science, Chiba University.) ○EZAWA, Masatoshi; MORIYAMA, Katsuhiko; TOGO, Hideo
- 3PC-010** Development of Length-Selective Catalyst Using Hydrogen Bonding between Amides (Grad. Sch. Fac. Sci., Kanagawa Univ.) ○YABE, Joto; KIHARA, Nobuhuro
- 3PC-011** Synthesis of optically active thioamides and evaluation of their antibacterial properties (Fac. Eng., Kitami Inst. of Tech.; Dept. of Sci. Tech., Meiji Univ.; St. Marianna Univ. Sch. of Med.) ○SHIMOTORI, Yasutaka; AIKI, Ayana; MORISAWA, Asami; HOSHI, Masayuki; MIYAKOSHI, Tetsuo; KANAMOTO, Taisei; NAKASHIMA, Hideki
- 3PC-012**<sup>#</sup> Tandem Addition Reaction Using Umpolung Reaction With 2-Oxo-1,4-benzoxazine-3-carboxylate Derivatives (Fac. Eng., Mie Univ.) ○TANAKA, Takanori; SHIMIZU, Makoto
- 3PC-013** Oxidation of Alcohols to Aldehydes or Ketones Using Iodic Acid (Grad. Sch. Sci., Chiba Univ.) ○IMAI, Sho; MORIYAMA, Katsuhiko; TOGO, Hideo
- 3PC-014** Asymmetric acylation of glycerol and its derivatives catalyzed by aminophosphinites (Fac. Textile Sci. Technol., Shinshu Univ.) ○MIYAZAWA, Mikako; MORITA, Yumiko; SANO, Hiroki; FUJIMOTO, Tetsuya
- 3PC-015** Efficient method for the preparation of  $\alpha$ -halogeno- $\alpha$ -formylesters utilizing ZrCl<sub>4</sub>-amine reagent (Sch. Sci. Tech., Kwasei Gakuin Univ.) ○BAN, Yuki; KAJIMOTO, Satomi; ASHIDA, Yuichiro; NAKATSUJI, Hidefumi; TANABE, Yoo
- 3PC-016**<sup>#</sup> Practical Dichlorocyclopropanation of Alkenes using crown ether as a recoverable PTC and its application to asymmetric dichlorocyclopropanation using chiral crown ether (Fac. Textile Sci. Technol., Shinshu Univ.) ○TORIYABE, Kei; TABATA, Keita; NISHII, Yoshinori
- 3PC-017** Practical method for the synthesis of (*R*)-thiolic acid and its ester, and chiral HPLC determination of the optical purity (Sch. Sci. Tech., Kwasei Gakuin Univ.) ○SASAKI, Ryosuke; IMAI, Yasuaki; NAKATSUJI, Hidefumi; TANABE, Yoo
- 3PC-018**<sup>#</sup> Development of Asymmetric Conjugate Addition Reaction of  $\alpha$ -ketoesters Using Bifunctional Chiral Guanidine Catalysts (Grad. Sch. Mat. Sci., Univ. of Hyogo) ○OCHI, Ryosuke; KODUKA, Haruki; NOBUOKA, Shuji; MISAKI, Tomonori; SUGIMURA, Takashi
- 3PC-019** Atropstereoselective Synthesis of Lactone-Bridged Biphenyls (Sch. Pharm., TUPLS) ○MAEDA, Takuya; YUYAMA, Daisuke; TSURUTA, Erina; YAMAGUCHI, Satoru; YANAI, Hikaru; SUZUKI, Keisuke; MATSUMOTO, Takashi
- 3PC-020** Synthesis of an Anti-Bredt Compound with a Fluorocyclobutene Ring (Research Center for Materials with Integrated Properties, Toho Univ.) ○SAWAUCHI, Hirokazu; WATANABE, Soichiro
- 3PC-021** Desymmetrization of *meso*-1,4-Dioxane Derivatives by Asymmetric Reductions and Its Applications (Grad. Sch. Eng., Mie Univ.) SHINDO, Hiroaki; ○YAMAMOTO, Kenta; HACHIYA, Iwao; SHIMIZU, Makoto
- 3PC-022** (*E*), (*Z*)-Stereocomplementary synthesis of  $\alpha, \beta$ -unsaturated amides utilizing stereoselective enol tosylation and stereoretentive cross coupling (Sch. Sci. Tech., Kwasei Gakuin Univ.) ○TAKEMOTO, Taichi; ASHIDA, Yuichiro; NAKATSUJI, Hidefumi; TANABE, Yoo
- 3PC-023** Lanthanoid metal-mediated one-electron reduction in water: The role of the acids as an activating agent (Coll. Edu., Ibaraki Univ.) ○IZUMI, Yoshito; MATSUKAWA, Satoru
- 3PC-024** Efficient Synthesis of  $\alpha$ -Oxyacetaldehyde and Its Conversion of Ester Enolate by *N*-Heterocyclic Carbene (Fac. Eng., Tokyo Univ. of Sci.) ○TAKAHASHI, Akari; HANDA, Shinya; SUGIMOTO, Hiroshi
- 3PC-025**<sup>#</sup> Synthesis of novel [2]catenanes based on 1,1'-binaphthyl-phosphoric acids and -guanidines (University of Duisburg-Essen) ○NIEMEYER, Jochen; MITRA, Raja; THIELE, Maike
- 3PC-026**<sup>#</sup> Novel synthesis of  $\alpha$ -amino ketones by ring-opening of aziridines (Coll. Sci., Ibaraki Univ.) ○HATAKEYAMA, Kouhei; ISOBE, Toshihiro; ORIYAMA, Takeshi
- 3PC-027** Asymmetric synthesis of organic compounds with citrus odor (Fac. Eng., Toyama Pref. Univ.) ○KAWASAKI, Masashi; SHIMIZU, Momo; KUROYANAGI, Saki; SHISHIDO, Yoshiaki; KOMIYAMA, Tsuyoshi; TOYOOKA, Naoki
- 3PC-028**<sup>#</sup> Development of optical resolution transport system using chiral organic molecules based on host-guest interactions (Grad. Sch. Sci., Eng., Kagoshima Univ.) ○TAKIGUCHI, Yosuke; ONITSUKA, Satoaki
- 3PC-029**<sup>#</sup> Mechanistic Studies on Selective Monohydrolysis of Symmetric Diesters with the use of Dynamic Light Scattering/Electrophoretic Light Scattering (Texas Tech University) ○NIWAYAMA, Satomi; HIRAGA, Yoshikazu
- 3PC-030** Synthesis of the novel diposphonium salt and its use as the dehydration reagent and a catalyst (Coll. Edu., Ibaraki Univ.) ○SAIKI, Sayaka; MATSUKAWA, Satoru
- 3PC-031**<sup>#</sup> Novel three-component synthesis of tetrahydrobenzo[*b*]pyran derivatives using DMSO/MgSO<sub>4</sub> (Coll. Sci., Ibaraki Univ.) ○HIRATSUKA, Ryo; ISOBE, Toshihiro; ORIYAMA, Takeshi

Saturday, March 26, PM

(15 : 00~16 : 30)

## Organic Chemistry -Reaction and Synthesis- Aliphatic and Alicyclic Compounds

- 3PC-001** Nucleophilic Addition to Iminium Salts Generated from Cyclic Amino Ketene Silyl Acetals and Application to the Synthesis of the Bioactive Molecules. (Grad. Sch. Eng., Mie Univ.) KAWAMURA, Takato; ○FUKUMOTO, Shinya; SHIMIZU, Makoto
- 3PC-002** Development of Metal-Bisamidine Catalyzed Asymmetric Vinylous Mukaiyama Aldol Reaction of  $\alpha$ -Ketoester (Coll. Sci., Rikkyo Univ.) ○KURASAWA, Kasumi; YAMANAKA, Masahiro
- 3PC-003** Substrate Versatility in Multinuclear Zinc Bisamidinate Catalyzed Asymmetric Et<sub>2</sub>Zn Addition to  $\alpha$ -ketoesters (Coll. Sci., Rikkyo Univ.) ○OKA, Naoki; YAMANAKA, Masahiro
- 3PC-004**<sup>#</sup> Alcoholysis of Epoxide Catalyzed by the Reusable Aniline Resin Salt (Sch. Life Dent., The Nippon Dental Univ.) ○TANEMURA, Kiyoshi
- 3PC-005**<sup>#</sup> Conversion of Aromatic Dioxane to Hydroxypropyl Ester with Pyridinium Hydrobromide Perbromide in Water (Sch. of Med., Fukushima Med. Univ.) ○SAYAMA, Shinsei
- 3PC-006** Introduction of Amide Groups onto Electron-Deficient Nitrogen-Containing Heteroaromatics via Radical Pathway (Faculty of Science, The University of Chiba) ○OKUGAWA, Naoki; MORIYAMA, Katsuhiko; TOGO, Hideo
- 3PC-007** Expedient parallel synthesis of (*E*)- and (*Z*)- Tamoxifens through

- 3PC-032** Synthesis of Nitrogen-Containing Compounds Using Double Nucleophilic Addition Reactions of Dialkynyl Imines (Fac. Eng., Mie Univ.) HACHIYA, Iwao; OGOTO, Ikumi; SHIMIZU, Makoto
- 3PC-033<sup>#</sup>** Ring-opening reaction of aziridines with amines under the influence of dimethyl sulfoxide (Coll. Sci., Ibaraki Univ.) OISOBE, Toshihiro; ORIYAMA, Takeshi
- 3PC-034** Development of Novel Synthesis of Dicarboxylic Acids Utilizing Selective Ring-opening Reaction of  $\alpha$ -Lactone. (Grad. Sch. Eng., Mie Univ.) KOBAYASHI, Yoshinari; OUMESHIMA, Satoshi; MIZOTA, Isao; SHIMIZU, Makoto
- 3PC-035** Tsuji-Trost type reaction of fluoro allyl carbonates (Grad. Sch. Sci., Osaka City Univ.) OIKEDA, Yuya; USUKI, Yoshinosuke; SATOH, Tetsuya
- 3PC-036<sup>#</sup>** Regioselective cationic thiocyanation reaction for aromatic substrates (Sch. Sci. Tech., Kwansei Gakuin Univ.) OIZAWA, Shotaro; ASHIDA, Yuichiro; NAKATSUJI, Hidefumi; TANABE, Yoo
- 3PC-037** *N*-Alkylation of  $\beta, \gamma$ -Alkenyl  $\alpha$ -Iminoester and Subsequent Lactonization (Grad. Sch. Eng., Mie Univ.) ARATAKE, Kana; ONAKAHAMA, Kenta; MIZOTA, Isao; SHIMIZU, Makoto
- 3PC-038<sup>#</sup>** Stereoselective Synthesis of *D-erythro*-Sphingosine from L-Serine via Enone Intermediate (Health Research Inst., AIST) OMURAKAMI, Teiichi; TANAKA, Mutsuo
- 3PC-039<sup>#</sup>** Nucleophilic Organocatalyzed Synthesis of Cyclic Poly lactide with High Purity and Optical Purity (Grad. Sch. Sci. Technol., Shizuoka Univ.) OSHIRAYAMA, Yodai; NAKAYA, Yoshitaka; SATO, Kohei; NARUMI, Tetsuo; WATANABE, Naoharu; MASE, Nobuyuki
- 3PC-040** Asymmetric synthesis of  $\beta$ -keto esters possessing four contiguous chiral centers utilizing key asymmetric Ti-Claisen-Aldol domino reaction sequence (Sch. Sci. Tech., Kwansei Gakuin Univ.) OYODA, Ryohei; MASUYAMA, Yoshikazu; NAKATSUJI, Hidefumi; TANABE, Yoo
- 3PC-041<sup>#</sup>** Development of Asymmetric Alkylation of 5*H*-Oxazol-4-ones Using Chiral Phase Transfer Catalyst (Sch. Sci., Univ. of Hyogo) OITAGAKI, Masafumi; MISAKI, Tomonori; SUGIMURA, Takashi
- 3PC-042** Synthetic Study of (+)-Duocarmycin A Using 1,2-Aza-Brook Rearrangement as a Key Reaction (Fac. Eng., Mie Univ.) IMAZATO, Hayao; OKAKIMOO, Chiaki; SHIMIZU, Makoto
- 3PC-043** Asymmetric total synthetic study of (-)-Pestalotin, a potent synergist for Gibberellin, utilizing asymmetric Mukaiyama aldol reaction (Sch. Sci. Tech., Kwansei Gakuin Univ.) ONAKATA, Kohei; FUJIWARA, Tetsuya; NAKATSUJI, Hidefumi; TANABE, Yoo
- 3PC-044** Tandem Umpolung Reaction of *N*-Trialkylsilyl  $\alpha$ -Imino Ester (Grad. Sch. Eng., Mie Univ.) MIZOTA, Isao; ONAKAMURA, Yusuke; SHIMIZU, Makoto
- 3PC-045** Development of Self-assembled Asymmetric Catalyst Based on Two-point Hydrogen Bonding Interaction (Grad. Sch. Sci., Rikkyo Univ.) OSHISHIDO, Takehito; YAMANAKA, Masahiro

## Organic Chemistry -Reaction and Synthesis- Heteroatom Compounds

- 3PC-047<sup>#</sup>** Synthesis and Characterization of Fused-type Oligothiophene Derivatives with a Pyrrole Core (Fac. Eng., Iwate Univ.) MURAOKA, Hiroki; OJASMIN, Kang; SATOSHI, Ogawa
- 3PC-048<sup>#</sup>** Synthesis of Glycerol Carbonates from Carbon Dioxide and Glycerol, and Development for the Application (Osaka Municipal Technical Research Institute; Grad. Sch. Sci. Tech., Ryukoku Univ.) OMOROGA, Kaname; MIHARA, Masatoshi; IWASAWA, Tetsuo; NAKAI, Takeo; IWAI, Toshiyuki; ITO, Takatoshi; OHNO, Toshinobu; MIZUNO, Takumi
- 3PC-049** Reaction of Diphosphenes with *N*-heterocyclic Carbenes (Fac. Sci. Eng., Kinki Univ.) OTSUIJIMOTO, Shota; HAYAKAWA, Naoki; MATSUO, Tsukasa
- 3PC-050<sup>#</sup>** Synthesis, structure, and redox properties of ethylene-bridged bis (benzotrithiole)s (Fac. Eng., Iwate Univ.) OGAWA, Satoshi; OIKAWA, Jun-ichi; MURAOKA, Hiroki
- 3PC-051** Asymmetric hydrolysis of 2-arylpropanoic acid esters using chiral phase-transfer catalysts (Grad. Sch. Sci., Kyushu Univ.) OMURAKAMI, Akiko; TAKEHISA, Katsuma; KAMACHI, Takashi; YOSHIZAWA, Kazunari; TOKUNAGA, Makoto
- 3PC-052** Generation and Trapping Reaction of Disilylthioketones (Fac. Sci. Eng., Toyo Univ.) OSUGAMATA, Koh; TAKAHASHI, Shu; ISHII, Shigeru
- 3PC-053** Reaction of Hydrodiboron Compounds with Carbon Monoxide (Fac. Sci. Eng., Kinki Univ.) OKANEDA, Shohei; SHOJI, Yoshiaki; HASHIZUME, Daisuke; TAMAO, Kohei; FUENO, Hiroyuki; TANAKA, Kazuyoshi; MATSUO, Tsukasa
- 3PC-054** The modification of the structure and construction of chiral carbon center to optically-active selenophosphonates via those deprotonation (Fac. Eng., Gifu Univ.) OIWATA, Koji; MURAI, Toshiaki; MAEKAWA, Yuuki
- 3PC-055** Hydrolytic Enantioselective Protonation of Esters with Chiral Quaternary Phosphoniums (Fac. Sci., Kyushu Univ.) OTESHIMA, Gaku; HIDANI, Yuki; TOKUNAGA, Makoto
- 3PC-056<sup>#</sup>** Synthesis and properties of aryl-functionalized branched-type oligothiophenes with *D*- $\pi$ - $\pi$  system (Fac. Eng., Iwate Univ.) MURAOKA, Hiroki; OTANGUCHI, Yoshihiro; OGAWA, Satoshi
- 3PC-057** Synthesis of Selenazoles via Selenamide Dianions (Fac. Eng., Gifu

- Univ.) ONAKATSU, Yuta; YAMAGUCHI, Kirara; MURAI, Toshiaki
- 3PC-058** Synthesis of seleno-sugars by application of seleno-Pummerer rearrangement. (Sch. Sci., Tokai Univ.) OHIYOSHI, Yuta; IWAOKA, Michio
- 3PC-059<sup>#</sup>** Synthesis, Structure and Properties of Zinc Complexes Having Selenide Ligands Bearing Pyridylimidazo[1,5-*a*]pyridine as Bidentate Coordination Site (Coll. Eng., Chubu Univ.) ONAKAGAKI, Ryosuke; NIYOMURA, Osamu
- 3PC-060** Nonbonded Interaction Between Thio Groups at 1,2-Positions of Benzene (Grad. Sch. Sys. Eng., Wakayama Univ.) OINOUE, Muneyuki; HAYASHI, Satoko; NAKANISHI, Waro
- 3PC-061** Synthesis and Reaction of Silane Derivatives Introducing Bulky Group (Coll. Sci., Rikkyo Univ.) OYUKIMOTO, Mariko; MINOURA, Mao
- 3PC-062** Synthetic study on the transition metal complex bearing a stable triphosphatridiafulvene (ICR, Kyoto Univ.) OHIRANO, Koki; SASAMORI, Takahiro; TOKITOH, Norihiro
- 3PC-063** Synthesis of redox-active water-soluble cyclic selenides and their polymerization (Sch. Sci., Tokai Univ.) OMAEDA, Takuya; IWAOKA, Michio
- 3PC-064<sup>#</sup>** Developments of Poly(*p*-phenylene sulfide) Derivatives Using Poly Sulfonium Salt Method (Fac. Eng., Iwate Univ.) OGAWA, Satoshi; OTAJIMA, Ki-ichiro; ONO, Taichi; MURAOKA, Hiroki
- 3PC-065<sup>#</sup>** Synthesis of 2-Chlorophosphasilene Coordinated by a *N*-Heterocyclic Carbene (ICR, Kyoto Univ.; University Bonn) OMAJHI, Paresh; SASAMORI, Takahiro; KYRI, Andreas; MIZUHATA, Yoshiyuki; GUO, Jing-dong; NAGASE, Shigeru; STREUBEL, Rainer; TOKITOH, Norihiro
- 3PC-066** Synthesis and Properties of Triarylboranes Bearing an Extended  $\pi$ -Conjugated System Including Triazole Rings (Grad. Sch. Sci. Eng., Univ. of Toyama) OYOSHINO, Junro; KONISHI, Shota; HORIE, Miki; HAYASHI, Naoto; HIGUCHI, Hiroyuki
- 3PC-067** Synthesis and Properties of a Triarylborane Bearing Formyl Groups as a Starting Position to Extend its  $\pi$ -Conjugated System Structure (Grad. Sch. Innovative Life Sci., Univ. of Toyama; Grad. Sch. Sci. Eng., Univ. of Toyama) OKANNO, Ryosei; YOSHINO, Junro; HAYASHI, Naoto; HIGUCHI, Hiroyuki
- 3PC-068<sup>#</sup>** Synthesis and properties of  $\pi$ -extended dithieno-1,4-thiazine derivatives and its application to organic semiconductor (Fac. Eng., Iwate Univ.) OGAWA, Satoshi; OKOMUKAI, Kazuki; MURAOKA, Hiroki

## Organic Chemistry -Reaction and Synthesis- Organometallic Compounds

### Sr

- 3PC-071<sup>#</sup>** Preparation of Metallocycle Intermediates Using Metallic Strontium and Its Application for Strontium Acetylide (Fac. Integrated Arts Sci., Tokushima Univ.) ONISHIZAWA, Takahiro; MIYAZAKI, Yasuaki; OHMURA, Satoshi; UENO, Masaharu; MIYOSHI, Norikazu
- 3PC-072<sup>#</sup>** Development of a new synthetic method using strontium amides (Fac. Integrated Arts and Sci., Tokushima Univ. Grad. Sch.) OTATEDA, Sawa; OHMURA, Satoshi; UENO, Masaharu; MIYOSHI, Norikazu

### Ti

- 3PC-073<sup>#</sup>** Low-valent Titanium-Promoted Deprotection of Amino-Protecting Groups (Fac. Eng., Kanagawa Univ.) MADHAVAN, Suchithra; TAKAGI, Hiromasa; FUKUDA, Shupei; MTSUNO, Chikashi; OKAMOTO, Sentaro
- 3PC-074<sup>#</sup>** Low-valent Titanium Alkoxide-Mediated McMurry Coupling Polymerization (Fac. Eng., Kanagawa Univ.) OENDO, Yukihiko; NAITO, Yusuke; SHIGEMATSU, Ryouhei; MTSUNO, Chikashi; OKAMOTO, Sentaro
- 3PC-075<sup>#</sup>** Low-valent Titanium-Mediated Biscyclization of Enynes and Ethyl Formate (Fac. Eng., Kanagawa Univ.) OUMEHARA, Yuhma; ITO, Shunnosuke; SAWADA, Tomomi; MTSUNO, Chikashi; OKAMOTO, Sentaro

### Nb

- 3PC-076** Low-valent Niobium catalyzed synthesis of bicyclic compounds from cycloaddition reaction of 1,6-enynes with alkynes (Fac. Chem. Materials and Bioeng., Kansai Univ.) OFURUKAWA, Hirohisa; SATOH, Yasushi; OBORA, Yasushi

### Fe

- 3PC-077** DMF-Protected Iron Nanoparticles Catalyzed Synthesis of Aryl Ethers (Fac. Chem. Materials and Bioeng., Kansai Univ.) OKIMURA, Jungo; NAKAMICHI, Seiya; KAWASAKI, Hideya; OBORA, Yasushi

### Ru

- 3PC-078<sup>#</sup>** C-H Activation Reaction of Diazomethylphosphonates Catalyzed by Ru(II)-Pheox (Dept. Env. Life Sci., Toyohashi Univ. of Tech.) OZAKI, Seiya; CHANTHAMATH, Soda; SHIBATOMI, Kazutaka; IWASA, Seiji

**3PC-079** Synthesis of unsymmetric ethers from Acetals and Alcohols with Ruthenium/Lewis Acid Catalytic System (Grad. Sch. Life Med. Sci., Doshisha Univ.) ○UEDA, Ryo; ONAKA, Ryota; OHTA, Tetsuo; OE, Yohei

## Co

**3PC-080<sup>#</sup>** Synthesis of cobalt(II) and iron(II) N-heterocyclic carbene complexes bearing pseudohalogen ligands and their application to catalysis (Grad. Sch. Eng. Sci., Kyushu Univ.; IMCE, Kyushu Univ.) ○YAMAMURA, Takafumi; SUNADA, Yusuke; NODA, Daisuke; NAGASHIMA, Hideo

**3PC-081<sup>#</sup>** Extensive Application of Cobalt-Catalyzed [2+2+2] Cycloaddition of Alkynes and Nitriles (Fac. Eng., Kanagawa Univ.; National Institute of Technology, Anan College) ○SUGIYAMA, Yu-ki; ENDO, Yukihiko; IKARASHI, Miki; MTSUNO, Chikashi; OKAMOTO, Sentaro

## Rh

**3PC-082<sup>#</sup>** Enantioselective Transfer Hydrogenation of Diaryl Ketones Using Rhodium or Ruthenium Catalyst (Fac. Chem. Materials and Bioeng., Kansai Univ.) ○KATO, Ryosuke; TAKEUCHI, Rina; SAKAGUCHI, Satoshi

**3PC-083** Asymmetric Synthesis of  $\alpha$ -Phosphonoazetidiones (Fac. Eng., Kinki Univ.) OKADA, Yoshiharu; ○MATSUBA, Chiho; NOMURA, Msato

## Ir

**3PC-084<sup>#</sup>** Ir-Catalyzed Asymmetric Hydrosilylation of Ketone Using N-Heterocyclic Carbene Linked with Merrifield Resin (Fac. Chem. Materials and Bioeng., Kansai Univ.) ○KUSUMOTO, Takumi; SAKAGUCHI, Satoshi

**3PC-085<sup>#</sup>** Hydrosilylation of Ketone Using Cationic Ir Catalyst Precursor: Utilization of Chiral Azolium Salt without Base (Fac. Chem. Materials and Bioeng., Kansai Univ.) ○TERAMOTO, Hiro; MANABE, Yoshiki; SAKAGUCHI, Satoshi

**3PC-086** Synthesis of New Iridium Complexes Bearing Functional Bipyridone Ligands and Their Catalytic Performance in Hydrogen Production from Methanol-Water Solution (Grad. Sch. Human and Environ. Stud., Kyoto Univ.) ○KAJITA, Shunpei; YOSHIDA, Masato; FUJITA, Ken-ichi

**3PC-087** Dehydrogenative Oxidation of Alcohols in Aqueous Media Catalyzed by Iridium Complexes Bearing Functional 2-Quinolinone Ligands (Grad. Sch. Human and Environ. Stud., Kyoto Univ.) ○TOYOMURA, Kazuki; FUJITA, Ken-ichi

**3PC-088** Hydrogen Evolution from Polyhydric Alcohols Catalyzed by an Iridium Complex Bearing a Functional Bipyridone Ligand (Grad. Sch. Human and Environ. Stud., Kyoto Univ.) ○NAGANO, Yuta; FUJITA, Ken-ichi

## Ni

**3PC-089<sup>#</sup>** Ni-Catalyzed Asymmetric Allylic Alkylation by Allylic Alcohols (Grad. Sch. Eng. Sci., Osaka Univ.) ○ODA, Hiroaki; KITA, Yusuke; MASHIMA, Kazushi

## Pd

**3PC-090** Studies of Chemoselective Hydrogenation Catalyzed by Noble Metals Supported on a PP Nonwoven Fabric (Sci. Eng., The Univ. of Electro-Communications) ○HIGASHI, Shoko; KOBAYASHI, Yoshinao; KAWASAKI, Yuka; HIRANO, Takashi; MAKI, Shojiro

**3PC-091** Palladium-Catalyzed Asymmetric Allylic Alkylation with Malonates Using Axially Chiral Aminophosphine Ligands with Cinnamyl Group (Grad. Sch. Eng., Chiba Univ.) MINO, Takashi; ○SHIMA, Yamato; EBISAWA, Toshibumi; YOSHIDA, Yasushi; SAKAMOTO, Masami

**3PC-092** Synthesis and Application of Axially Chiral Aminophosphine Ligands with 2-Adamantyl Group (Grad. Sch. Eng., Chiba Univ.) MINO, Takashi; ○EBISAWA, Toshibumi; YOSHIDA, Yasushi; SAKAMOTO, Masami

**3PC-093** Direct C-H arylation of thiophene bearing a thioamide group (Fac. Eng., Gifu Univ.) ○ASAI, Yusuke; YAMAUCHI, Takayuki; SHIBAHARA, Fumitoshi; MURAI, Toshiaki

**3PC-094<sup>#</sup>** Pd-Fe-Phosphine Catalyzed Reductive Reaction via Catalytic Dehydrogenation of Alcohols (Fac. Eng., Tokyo Univ. of Sci., Yamaguchi) MORI, Takamichi; ○ISHIKAWA, Kohei; KIMURA, Masanari; HOJO, Makoto

**3PC-095** Selective  $\beta$ -arylation of furans catalyzed by dinuclear palladium complexes. (Fac. Sci., Shizuoka Univ.) ○GOTO, Takahiro; TSUKADA, Naofumi

**3PC-096** The effect of phosphine ligands containing nitrogen substituents for the palladium-catalyzed cross-addition of alkynes (Fac. Sci., Shizuoka Univ.) ○ABE, Yuya; TSUKADA, Naofumi

**3PC-097** Mizoroki-Heck Reaction in Water using Thermoresponsive Polymer Micelle as a Reaction Medium (Sci. Tec., Sophia Univ.) ○TAKABE, Taiga; RIKUKAWA, Masahiro; MASUYAMA, Yoshiro; SUZUKI, Noriyuki

**3PC-098** Palladium-Catalyzed Reaction of 3-(Pinacolatoboryl)allyl Acetates and Aldehydes (Fac. Eng., Univ. of Toyama) HORINO, Yoshikazu;

○YOSHIKAWA, Ryuichi; ABE, Hitoshi

**3PC-099** P-C cross-coupling reaction of aryl bromides and triflates (Grad. Sch. Sci., Eng., Ehime Univ.) ○XUE, Qian; TANAKA, Ipppei; OHTA, Hidetoshi; HAYASHI, Minoru

## Cu

**3PC-100<sup>#</sup>** Reversal of Enantioselectivity on N-Heterocyclic Carbene-Cu-Catalyzed Conjugate Addition Reaction (Fac. Chem. Materials and Bioeng., Kansai Univ.) ○NAKANO, Yuki; SAKAGUCHI, Satoshi

**3PC-101** Copper-catalyzed oxidative cross-coupling of naphthols (Dept. of Chem. Eng., NNCT) KAMEI, Toshiyuki; ○SHIMIZU, Yuki; SHIMADA, Toyoshi

**3PC-102** Cu-mediated C-H halogenation of *peri*-xanthoxanthenes (Dept. of Chem. Eng., Nara National College of Technology) KAMEI, Toshiyuki; ○NISHINO, Soshi; SHIMADA, Toyoshi

## Ag

**3PC-103** Asymmetric Addition Reaction of Propargylic Silanes to Aldehydes Catalyzed by Chiral Phosphine-Silver Alkoxide (Grad. Sch. Sci., Chiba Univ.) ○BAMBA, Kentaro; YANAGISAWA, Akira

## Au

**3PC-104** Size-Controlled Thiol-Protected Au Nanoclusters Catalyzed Synthesis of Nitrogen-Containing Compounds from Alkynes (Kansai Univ.) ○ADACHI, Yurina; KAWASAKI, Hideya; OBORA, Yasushi

## Zn

**3PC-105** Reductive Cyclization of Bis-enoates and Keto-enoates Using Rieke Zinc (Fac. Eng., Tokyo Univ. of Sci., Yamaguchi) ○YOSHIMURA, Hiroaki; MORI, Takamichi; HOJO, Makoto

**3PC-106** Studies on Reaction Conditions for Catalytic One-Pot Synthesis of Disilacarboycles from Bis(hydrosilanes) and Terminal Alkynes (Sch. Sci. Eng., Meiji Univ.) ○TANABE, Mikio; TSUCHIMOTO, Teruhisa

## B

**3PC-107** Substituent Effects in Synthesis of Pavine Alkaloid Skeleton Using Tetra-Coordinate Benzylboron Reagents (Fac. Sci. Eng., Shimane Univ.) ○HORI, Yoshiki; SUZUKI, Masaaki; NISHIGAICHI, Yutaka

## Si

**3PC-108** Preparation and properties of phenazashiline diboronic acid esters (Nagoya Municipal Industrial Research Institute; Chem. Res. Lab., Tokyo Tech) ○HAYASHI, Hideki; ISHIGAKI, Yuzo; KOIZUMI, Take-aki

**3PC-109** Intramolecular Electrophilic Silylation of Arenes Using Allylsilanes as Silyl Cation Precursors (Grad. Sch. Sci., Eng., Saitama Univ.) ○ICHIKAWA, Kenjiro; KINOSHITA, Hidenori; MIURA, Katukiyo

## Sn

**3PC-110** Asymmetric  $\alpha$ -Amination of Alkenyl Esters Using Chiral Tin Alkoxide Catalysts (Fac. Sci., Chiba Univ.) ○YAMASHITA, Yoshiki; HORIGUCHI, Moe; IDA, Kazuki; YANAGISAWA, Akira

**3PC-111** Asymmetric  $\alpha$ -Azidation of  $\beta$ -ketoesters Using Chiral Tin Alkoxide Catalysis (Grad. Sch. Sci., Chiba Univ.) ○HORIGUCHI, Moe; IDA, Kazuki; YANAGISAWA, Akira

**3PC-112** Binary remote 1,5-asymmetric induction from a chiral allyl tin reagent containing a nitrogen functionality and stereoselective synthesis of piperidine derivatives (Fac. Sci. Eng., Shimane Univ.) ○JINNO, Yuji; NISHIGAICHI, Yutaka; SUZUKI, Masaaki

## Polymer

**3PC-115** Investigation of Diethylmethoxyborane as a Practical Initiator of Radical Polymerization (Tohoku Seikatsu Bunka Univ.) ○KANNO, Shuichi

**3PC-116<sup>#</sup>** Synthesis of Thermosensitive Copolymers using *N*-Vinylamide Derivatives with Propyl Group at *N*-Position (Grad. Sch. Mat. Sci., NAIST) ○KAWATANI, Ryo; KAN, Kai; AJIRO, Hiroharu; AKASHI, Mitsuru

**3PC-117<sup>#</sup>** Synthesis and Polymerization of Trimethylene Carbamate Derivative Bearing Coumarin Moiety for Photo-gelation materials (Grad. Sch. Mat. Sci., NAIST) ○CHANTHASET, Nalinthip; HARAMIISHI, Yoshiaki; KAN, Kai; AJIRO, Hiroharu; AKASHI, Mitsuru

**3PC-118** Synthesis of poly(sulfonylhydrazine) (Grad. Sch. Fac. Sci., Kanagawa Univ.) ○HORIKE, Shihō; KIHARA, Nobuhiro

**3PC-119<sup>#</sup>** Syntheses of bio-base aromatic polyimides from mellophanic dianhydride (Sch. Mat. Sci., JAIST) ○KARIKOME, Satoru; IBUKI, Yusuke; MAETANI, Shihō; TATEYAMA, Seiji; KANEKO, Tatsuo

**3PC-120** Synthesis of Novel Graft Polymer Branched by Catenane Structure

- (Grad. Sch. Sci. Tech., Nihon Univ.) ○SHIMBO, Kosuke; HOSHI, Toru; AOYAGI, Takao; HAGIWARA, Toshiki
- 3PC-121** Synthesis of Novel Lithium Ion Harvesting Polymer Having Azacrown Structure on the Side Chain (Grad. Sch. Sci. Tech., Nihon Univ.) ○KUNO, Takashi; HOSHI, Toru; AOYAGI, Takao; HAGIWARA, Toshiki
- 3PC-122<sup>#</sup>** Polymerization-Induced Self-Assembly for the Synthesis of Various Nano-Objects (Grad. Sch. Eng., Univ. of Fukui) KIKUKAWA, Takamaru; SUGIHARA, Shinji; ○SUDO, Masahiro; MAEDA, Yasushi
- 3PC-123** Design and synthesis of amphiphilic block copolymers as cell membrane anchors (Sch. Eng., Kyoto Univ.) ○TAKAHASHI, Daiki; KODA, Yuta; MUKAI, Sada-atsu; SAWADA, Shinichi; SASAKI, Yoshihiro; AKIYOSHI, Kazunari
- 3PC-124<sup>#</sup>** Synthesis and Hole-Mobility of Folded  $\pi$ -Stacking Polymers (Fac. Eng., Kanagawa Univ.) ○SHINDO, Takahiro; NAITO, Yusuke; NISHIZAWA, Ayuri; MTSUNO, Chikashi; OKAMOTO, Sentaro
- 3PC-125** Synthesis and physical properties of polyurethanes using carbodiimide-modified MDI (Fac. Sci. Eng., Toyo Univ.; Somar Gomu R&D) ○TAJIMA, Masahiro; SAWAI, Satoshi; MATSUNAGA, Katsuji
- 3PC-126** The research on Polyurethane Elastomer by using 2,4'-methyl diphenyl diisocyanate (Fac. Eng., Aichi Inst. of Tech.) ○CHEN, Yingjie; INOUE, Shin-ichi
- 3PC-127** The characterization of sulfonated polyimide modified with alkyl amine (Sch. Mat. Sci., JAIST) ○KITA, Tomomi; NAGAO, Yuki
- 3PC-128<sup>#</sup>** Liquid-crystalline Properties and Influence of Hydrogen-Bonding for Orientational Behavior on Mesogenic Polyurethanes (Fac. Eng., Oita Univ.) ○WATANABE, Taiki; NATA, Masanori; IWAMI, Yuko; TOMITAKA, Shiori; UJIE, Seiji
- 3PC-129** Thermal Behavior of Water Coordinated to Triblock Copolymeric Ionomer (Grad. Sch. Sci. Tech., Nihon Univ.) ○YAMASHITA, Hiroshi; SASAKI, Daisuke; HOSHI, Toru; HAGIWARA, Toshiki; SAWAGUCHI, Takashi; AOYAGI, Takao
- 3PC-130** Proton transport properties of Langmuir Schaefer polyimide films (Sch. Mat. Sci., JAIST; Grad. Sch. Eng., Nagoya Univ.; Nagoya Univ. VBL) ○ISO, Takehiro; NORO, Masaki; GOTO, Ryosuke; NAGANO, Shusaku; NAGAO, Yuki
- 3PC-131<sup>#</sup>** Thermal Properties and Orientational Control of Novel Liquid-Crystalline Mixtures with Mesogenic Polymer Components (Fac. Eng., Oita Univ.) ○KAKO, Arata; NATA, Masanori; IWAMI, Yuko; TOMITAKA, Shiori; UJIE, Seiji
- 3PC-132<sup>#</sup>** Synthesis and Properties of Polyurethane Elastomers Using Sucrose as Cross-linker (Fac. Eng., Aichi Inst. of Tech.) ○TAKAHARA, Atsumi; KIZUKA, Kazunori; INOUE, Shin-ichi
- 3PC-133<sup>#</sup>** Syntheses of optically-active  $\delta$ -truxinic acid derivative monomers and aromatic bio-based polyamides (Sch. Mat. Sci., JAIST) ○OKUDA, Junya; MAETANI, Shihō; TATEYAMA, Seiji; KANEKO, Tatsuo
- 3PC-134<sup>#</sup>** Syntheses of high performance polybenzimidazole-benzamide copolymers from bio-based 3-amino-4-hydroxybenzoic acid (Sch. Mat. Sci., JAIST) ○MORI, Yosuke; NAG, Aniruddha; ALI, Md Asif; TATEYAMA, Seiji; KANEKO, Tatsuo
- 3PC-135<sup>#</sup>** Synthesis of polyurea from 4-aminophenylalanine (Sch. Mat. Sci., JAIST) ○TAYA, Kazuya; TATEYAMA, Seiji; KANEKO, Tatsuo
- 3PC-136** Water uptake and Proton Transport Property in Organized Sulfonated Polyimide thin films (Sch. Mat. Sci., JAIST) ○MURATA, Kohei; ONO, Yutarō; GOTO, Ryosuke; HARA, Mitsuo; NAGANO, Syusaku; NAGAO, Yuki
- 3PC-137<sup>#</sup>** Effect of Heat Treatment on Co(II)TAPP-Based Surface Nanostructure for Oxygen Reduction Reaction (Sch. Mat. Sci., JAIST) ○UDDIN, S M Nizam; LAMLUA, Banjongsak; OHYAMA, Takahiro; SALINTHIP, Laokroekiat; HARA, Mitsuo; NAGANO, Shusaku; NAGAO, Yuki
- 3PC-138** Development of Polymer Actuators using flexible electrodes containing carbon nanotubes (Shinshu Univ.) ○TAKAHASHI, Saki; IMAMURA, Hiroya; TAYA, Minoru; KIMURA, Mutsumi
- 3PC-139** Synthesis of amphiphilic hyaluronic acid-mediated calcium phosphate particles (Dept. of Chem. and Biochem., NCT) ○YAMAZAKI, Shouta; SAWADA, Shinichi; SASAKI, Yoshihiro; AKIYOSHI, Kazunari; YAMANE, Setsuko
- 3PC-140** Synthesis and function of redox-responsive multi crosslinked nanogel (Grad. Sch. Eng., Kyoto Univ.) ○TANAKA, Genya; KAWASAKI, Riku; SASAKI, Yoshihiro; SAWADA, Shinichi; AKIYOSHI, Kazunari
- 3PC-141** Heteroarm star polymers modifying biocompatibility of medical devices (Grad. Sch. Mat. Sci., NAIST) ○KINOSHITA, Yuji; TOTANI, Masayasu; TERADA, Kayo; KOBAYASHI, Mime; ANDO, Tsuyoshi; TANIHARA, Masao
- 3PC-142** Adsorption ability and selectivity of imprinted polymer membranes including host molecule for the Musty odour component (Hachinohe National College of Technology) ○SATOU, Nobuya; KIKUCHI, Yasuaki; KOBAYASHI, Takaomi
- 3PC-143** Active porous transition towards spatiotemporal control of molecular flow in a crystal membrane (Grad. Sch. Nanobiosci., Yokohama City Univ.) ○TAKASAKI, Yuichi; TAKAMIZAWA, Satoshi
- 3PC-144** Selective permeation through nano-porous polyolefin membrane (Fac. Textile Sci. Technol., Shinshu Univ.) ○YOKOTA, Kazuma; HATORI, Masaru; KIMURA, Mutsumi
- 3PC-145** Gelation of N-isopropylacrylamide Derivatives with Polymerizable Functional Group (Grad. Sch. Sci. Tech., Nihon Univ.) ○KATO, Ryota; HOSHI, Toru; HAGIWARA, Toshiki; AOYAGI, Takao
- 3PC-146<sup>#</sup>** Synthesis of new functional gels cross-linked by viologen units II -Evaluation of an electron transfer catalyst- (Grad. Sch. Sci., Eng., Yamagata Univ.) ○SATO, Nozomi; SYOJI, Kotarou; SATO, Rikiya
- 3PC-147** Adhesion of Gels via Cyclodextrin-Modified Polymers (Grad. Sch. Sci., Osaka Univ.) ○UCHIDA, Masayuki; TAKASHIMA, Yoshinori; YAMAGUCHI, Hiroyasu; HARADA, Akira
- 3PC-148<sup>#</sup>** Novel Hydrogels That Exhibit Responsiveness against Various Molecules (Fac. Eng., Kitami Inst. of Tech.) FUJII, Tsuyoshi; ○KANEKIYO, Yasumasa
- 3PC-149<sup>#</sup>** Development of new functional materials using a hyperbranched polyglycidol II -The introduction of azide or dithiocarbamate groups and applications of the resultant polymers- (Grad. Sch. Sci., Eng., Yamagata Univ.) ○SUGAWARA, Natsumi; MATSUMOTO, Yoshie; SATO, Rikiya
- 3PC-150** Self-cleaning ability of microscopic patterns on biodegradable polymer surfaces by using biomimetic processing (Kanazawa Inst. of Tech.) ○TANIDA, Ikuhiro; ISHIGURO, Wataru; YOSHIZAWA, Manabu; KATSURA, Masanori; OSAWA, Satoshi
- 3PC-151** Synthesis and Optical Properties of Polyimine Macrocycles Based on Chiral 1,1'-binaphthyl Derivatives (Sch. Eng., Tokyo Denki Univ.) ○HIRAMOTO, Tetsuro; MIYASAKA, Makoto
- 3PC-152** Design and Synthesis of a Chiral  $\pi$ -Conjugated Macrocycles Based on Bridged Binaphthyls (Sch. Eng., Tokyo Denki Univ.) ○TOKUNAGA, Hiroki; MIYASAKA, Makoto
- 3PC-153** Medical gel which swells and shrinks with environmental temperature (Fac. Eng., KAIT) ○MUNECHIKA, Ayumu; SAITO, Takashi
- 3PC-154** Synthesis and Liquid Crystallinity of Polyurethanes Having Azine Moieties as a Mesogenic unit (Coll. Sci. Eng., Kanto Gakuin Univ.) ○YAMAGISHI, Yuya; KOUZAI, Hiroaki
- 3PC-155** Effect of ester structure in the polymer on the blood compatibility (Sch. Eng., Tokai Univ.) ○KINOSHITA, Takuya; YAHATA, Chie; MOCHIZUKI, Akira
- 3PC-156** Control of pore size of chitosan scaffold by addition of L-lysine (Kanazawa Inst. of Tech.) ○ANDO, Hironori; TANIDA, Ikuhiro; OSAWA, Satoshi
- 3PC-157** Self-supporting Nanofilms from Spider Silk-mimic Peptide-multi-block Polymers (Grad. Sch. Eng., Doshisha Univ.) ○HARUMOTO, Yushi; KOGA, Tomoyuki; HIGASHI, Nobuyuki
- 3PC-158<sup>#</sup>** Synthesis of thermoresponsive glycopolymers and their self-assembly behavior (Sch. Eng., Kyoto Univ.) ○SUMI, Naoki; KOUDA, Yuta; NISIMURA, Tomoki; MUKAI, Sada-atsu; SAWADA, Shinichi; SASAKI, Yoshihiro; AKIYOSHI, Kazunari

## Colloid and Interface Chemistry

### Fine Particles and Colloidal Dispersions

- 3PC-161<sup>#</sup>** Synthesis of cobalt nitrides by mechanochemical reaction and the physicochemical properties (Grad. Sch. Eng., Kobe Univ.) ○NAGAO, Tomotaka; KAJINAMI, Akihiko; NARIAI, Hiroyuki
- 3PC-162** Synthesis and structural analysis of bimetallic nanoparticles by microwave rapid heating (Fac. Human Life Env., Nara Women's Univ.) ○NAKAYAMA, Sayaka; IKEGAMI, Risa; HARADA, Masafumi
- 3PC-163** Microwave-assisted rapid synthesis and structural analysis of metal oxide nanoparticles (Fac. Human Life Env., Nara Women's Univ.; ICR, Kyoto Univ.) ○KUWA, Masako; HARADA, Masafumi; SATO, Ryota; TERANISHI, Toshiharu
- 3PC-164** Preparation of hollow titania particles using silica template and effect of Pt-loading on the inner wall of pores (Grad. Sch. Eng., Tokyo City Univ.) KASHIMA, Yu; ○TAKAHASHI, Masashi
- 3PC-165<sup>#</sup>** BSA-protected gold nanocluster conjugates organic dye for photodynamic therapy (Fac. Chem. Materials and Bioeng., Kansai Univ.) ○YAMAMOTO, Masaki; YAMAMOTO, Masaki; ARAKAWA, Ryuichi
- 3PC-166<sup>#</sup>** Effect of Additives on the Conductivity of the Low temperature Sintered Film of the Copper Nano particle paste (Fac. Chem. Materials and Bioeng., Kansai Univ.) ○KANZAKI, Mai; ARAKAWA, Ryuichi; KAWASAKI, Hideya
- 3PC-167<sup>#</sup>** Fabrication of Silver Nanoparticles under Simultaneous Irradiations with UV and Near-IR Lasers: Effects of Radiation Pressure and Photothermal Conversion (Grad. Sch. Eng. Sci., Osaka Univ.) ○SETOURA, Kenji; YAMADA, Masaya; ITO, Syoji; MIYASAKA, Hiroshi
- 3PC-168<sup>#</sup>** Synthesis of Biocompatible Gold Nanorods Protected by 2-Methacryloyloxyethyl Phosphorylcholine (MPC) (Fac. Chem. Materials and Bioeng., Kansai Univ.) ○NISHIDA, Keisuke; SANGSUWAN, Arunee; IWASAKI, Yasuhiko; ARAKAWA, Ryuichi; KAWASAKI, Hideya
- 3PC-169** Low Temperature Sintering of Short Chain Amine Protected-Copper Nanoink and the Electrical Conductivity of the Copper film (Fac. Chem. Materials and Bioeng., Kansai Univ.) ○AKIYAMA, Yusuke; KAWASAKI, Hideya
- 3PC-170** Stimuli-responsive structural colored balloons composed of low-molecular-weight polymer (Grad. Sch. Eng., Kyoto Univ.; PRESTO, JST) ○MORITA, Naoki; HIGASHIGUCHI, Kenji; MATSUDA, Kenji
- 3PC-171** State of Water in Ionic Liquids as a Media of CdS Nanoparticles



- Formation. (Dept. Mat. Sci., Wakayama Nat. Coll. of Tech.)  
 ○WADAGUCHI, Naoya; HAYASHI, Junjiro
- 3PC-172** CdS Nanoparticles Formation in Ionic Liquids Containing Water. (Dept. Mat. Sci., Wakayama Nat. Coll. of Tech.) ○FUJII, Takuji; HAYASHI, Junjiro
- 3PC-173** Reversible Fluorescent Changes of Gold Clusters Formed with Weak Polyelectrolytes. (Dept. Mat. Sci., Wakayama Nat. Coll. of Tech.) ○HIGASHI, Kentaro; HAYASHI, Junjiro
- 3PC-174** The synthesis of water soluble carbon quantum dots for photo-dynamic therapy (Fac. Chem. Materials and Bioeng., Kansai Univ.) ○NOZAKI, Takashi; KAWASAKI, Hideya
- 3PC-175** Synthesis and evaluation of thermally-resistant anisotropic platinum-doped silver nanoparticle for photothermal therapy (Coll. Sci. Tech., Nihon Univ.) ○KATO, Masahiro; SUGAWA, Kosuke; OTSUKI, Joe
- 3PC-176** Analysis of the formation process of gold nano particles formed by ultrasonic irradiation (Osaka Pref. Univ.) ○TANAKA, Yuki; OKITSU, Kenji
- 3PC-177** Self-Assembly of Gold Nanoparticles by Amino-Substituted Spirothiopyran (RCSE, Osaka Univ.) ○TANAKA, Haruki; SHIRAI, Yasuhiro; HIRAI, Takayuki
- 3PC-178** Synthesis of Pd nanoparticles showing localized surface plasmon resonance at visible region and their hydrogen absorption property (Coll. Sci. Tech., Nihon Univ.) ○SUGIMOTO, Daiki; SUGAWA, Kosuke; OTSUKI, Joe
- 3PC-179** Synthesis of pyrite FeS<sub>2</sub> nanocrystals and their unique optical properties in the near-infrared region (Coll. Sci. Tech., Nihon Univ.) ○MATSUBARA, Mitsuaki; SUGAWA, Kosuke; OTSUKI, Joe
- 3PC-180** Light emitting Si quantum dot synthesized in solution and surface functionalization (Fac. Sci., Hiroshima Univ.; N-BARD, Hiroshima Univ.) ○FUJIMOTO, Keisuke; XIN, Yunzi; SAITOW, Ken-ichi
- 3PC-181** Expression of chemical reactions using surface plasmon resonance of Au(core)-Pd(shell) type nanospheres (Coll. Sci. Tech., Nihon Univ.) ○EGUCHI, Takumi; SUGAWA, Kosuke; OOTUKI, Jyou
- 3PC-182** Pulsed-laser synthesis of Au-TiO<sub>2</sub> composite particles (Fac. Eng., Tokushima Univ.) ○HORIUCHI, Kana; HASHIMOTO, Shuichi
- 3PC-183** Development of Liquid-Crystalline Calcium Carbonate Nanocrystals Using Acidic Polymers (Grad. Sch. Eng., The Univ. of Tokyo) ○NAKAYAMA, Masanari; KAJIYAMA, Satoshi; NISHIMURA, Tatsuya; KATO, Takashi
- 3PC-184** Functional evaluation of PEG-modified nanographene as a drug delivery carrier (Coll. Sci. Tech., Nihon Univ.) ○TOKUDA, Kyo; SUGAWA, Kosuke; KOSUGE, Yasuhiro; OTSUKI, Joe; ITO, Yoshihisa

### Molecular Assemblies

- 3PC-185** Apparent radius of CIEJ micelle by means of coherent light scattering (Sch. Kno Eng. Tokyo City Univ.) ○MIYAUCHI, Kazuki; TAKAGI, Shinsaku
- 3PC-186** Synthesis and Properties of Homogeneous Polyoxyethylene-type Nonionic Surfactant with Two Branched Alkyl Chains (Fac. Sci., Nara Women's Univ.; Nissan Chemical Industries, Ltd.) ○YOSHIOKA, Yuiko; YADA, Shiho; YOSHIMURA, Tomokazu; HIRASADA, Kazuki; TANAKA, Akihiro
- 3PC-187** Development of Nanoparticles Including Near-Infrared pH-Responsive Cyanine Dyes (Grad. Sch. Eng., Kyoto Univ.) ○TAKAHASHI, Yuuki; MIKI, Koji; KOJIMA, Kentaro; OHE, Kouichi
- 3PC-188** Stability constants of crown ether surfactant/cation complex (Sch. Sci., Tokai Univ.) ○SUZUKI, Maki; FUJIO, Katsuhiko
- 3PC-189** Surfactant Molecules Behaving as Surface-Inactive Agents (Fac. Life Med. Sci., Doshisha Univ.) ○SADAKANE, Koichiro; HACHIYA, Masaki; FUKAO, Koji; SETO, Hideki
- 3PC-190** Construction of Molecular Monolayer Nanotubes with Single Nanometer Scaled Inner Diameters (RISC, AIST) ○KAMETA, Naohiro; MASUDA, Mitsutoshi; SHIMIZU, Toshimi
- 3PC-191** Effect of Inner Diameter Sizes and Thermal Phase Transition of Molecular Monolayer Nanotubes on Their Protein-Refolding Assistance Abilities (RISC, AIST) ○KAMETA, Naohiro; MINAMIKAWA, Hiroyuki; MASUDA, Mitsutoshi; SHIMIZU, Toshimi
- 3PC-192** Nanofiber formation from DNA-templated self-sorting of nucleotide-appended bolaamphiphiles (NARO) ○IWAURA, Rika; KANAI, Yoshikazu; OHNISHI-KAMEYAMA, Mayumi
- 3PC-193** LCST Behavior of pyridine derivatives bearing oligo(ethylene glycol) chains (Grad. Sch. Sci., Eng., Yamagata Univ.) ○KOSEKI, Yugo; ITO, Kazuaki
- 3PC-194** Synthesis and LCST behaviors of partially oligo(ethylene glycol) substituted Gallic acid derivatives (Fac. Eng., Yamagata Univ.) ○KUROTAKE, Masayuki; ITO, Kazuaki
- 3PC-195** Synthesis and CT complex formation of thermal responsible aromatic compounds bearing oligo(ethylene glycol) chains (Fac. Eng., Yamagata Univ.) ○NAKASHIMA, Yuto; ARAI, Masato; ITO, Kazuaki
- 3PC-196** Layer-by-layer Construction of Three-dimensional Cu-MOF<sub>2</sub> on Au Single Crystal Surface (Grad. Sch. Of Humanities and Sci., Ochanomizu Univ.) ○HASE, Mariko; CHUN, Wang-jae; KONDO, Toshihiro
- 3PC-197** Naphthalene diimide-based electronically active molecular assemblies (Graduate School of Science and Technology) ○EGAMI, Sachi; FUJITA, Norifumi
- 3PC-198** Photochemical behavior of a one-dimensional dye-based molecular aggregate (Graduate School of Science and Technology) ○BAN, Yuta; FUJITA, Norifumi
- 3PC-199** Application of ionic liquids to construct unique functional materials (Grad. Sch. Eng., Sojo Univ.) ○NAGAHARA, Kousuke; ISHIDA, Takumi; TAMARU, Shun-ichi; SHINNKA, Seiji
- 3PC-200** Study on the development of dynamic materials utilizing ionic liquids. (Grad. Sch. Eng., Sojo Univ.) ○ISHIDA, Takumi; TOUNOUE, Yuki; NAGAHARA, Kousuke; TAMARU, Shun-ichi; SHINKAI, Seiji
- 3PC-201** Development of supramolecular nanocomposites based on semi-artificial branched polysaccharides (Grad. Sch. Eng., Sojo Univ.) ○HONZAKI, Miyabi; TAKASHIGE, Nozomu; TAMARU, Shun-ichi; SHINKAI, Seiji
- 3PC-202** Characterization of Aggregates Consisting of Ferulic Acid Derivatives in Aqueous Solution (Fac. Sys. Eng., Wakayama Univ.) ○HAGIYAMA, Yurina; ATARASHI, Hironori; OSUGA, Hideji; SAKAMOTO, Hidefumi
- 3PC-203** One-Dimensional Fusion Behavior of Nanocapsules Composed of Poly(methyl methacrylate) Stereocomplex Films. (Sch. Eng., Osaka Univ.) ○SHIOJI, Yuda; KIDA, Toshiyuki; KITAYAMA, Tatsuki; AKASHI, Mitsuru
- 3PC-204** Fabrication of hyaluronic acid - cyanine dye composite thin films and evaluation of their optical properties (Grad. Sch. Energy Sci., Kyoto Univ.) ○NAGASHIMA, Koyuki; SAGAWA, Takashi
- 3PC-205** Synthesis and physical property of 4-Perfluoroalkylbutoxybenzene derivatives functioning as phase-selective gelators (Grad. Sch. Sci. Eng., Yamaguchi Univ.) ○CAO, Banpeng; MATSUE, Yuya; MORITA, Yuki; OKAMOTO, Hiroaki
- 3PC-206** Dependence of the gelation abilities of alkylidene-glucose derivatives on alkyl chain length (KASTEC, Kyushu Univ.; ISIT Nanotechnology Lab.; Nissan Chemical Industries, Ltd.) ○ICHIMARU, Keiko; ONO, Fumiyasu; HIRATA, Osamu; FUKUDA, Makiko; SARUHASHI, Koichiro; SHINKAI, Seiji; WATANABE, Hisayuki
- 3PC-207** Synthesis and properties of anthracene derivatives bearing 2-aryl-1,3,5-oxadiazole moiety at the 9- or 9,10- positions (Fac. Eng., Yamagata Univ.) ○YAMAGUCHI, Hiroka; TAKAHASHI, Fuuka; ANDO, Tomoaki; ITO, Kazuaki
- 3PC-208** Effect of gelling agents and solvents on the stability of phycoerythrin dye (TUT) ○LEE, Jaewon; SHIBATA, Masashi
- 3PC-209** The production of polymerized thin films based on ferroelectric liquid-crystalline phenylterthiophene bearing a cyclotetrasiloxane ring (Fac. Eng., Kagawa Univ.) ○NAKAGAWA, Junpei; SEKI, Atsushi; FUNAHASHI, Masahiro
- 3PC-210** Self-Organization Behavior of Monoamide/urea Pyridine Derivatives (Coll. Eng., Chubu Univ.) ○HAYASHI, Takaki; FUKAO, Yoshihiro; YABUUCHI, Kazuhiro
- 3PC-211** Development of Low-Molecular-Weight Gelators Containing Photodimerization Moieties (Coll. Eng., Chubu Univ.; Fac. Eng., Oita Univ.) ○MATSUO, Nanako; MAEDA, Hiroshi; MORIYAMA, Masaya; YABUUCHI, Kazuhiro
- 3PC-212** Gelation Properties of Hydrogen-Bonding Lophine Derivatives (Coll. Eng., Chubu Univ.) ○MANO, Masahiro; HIRAMATSU, Shinji; YABUUCHI, Kazuhiro
- 3PC-213** Preparation of photo-responsive supramolecular gel cross-linked by rotaxane (Sch. Sci., Osaka Univ.) ○HAYASHI, Yuki; IWASO, Kazuhisa; TAKASHIMA, Yoshinori; YAMAGUCHI, Hiroyasu; HARADA, Akira
- 3PC-214** Mechanistic investigation of chiral nematic liquid crystals by use of ruthenium complex dopants (Grad. Sch. Sci., Kitasato Univ.) ○TAMURA, Shuhei; YOSHIDA, Jun; YUGE, Hidetaka
- 3PC-215** Preparation of supramolecular polymeric materials using host-guest interaction between cyclodextrin and alkyl chain modified with viologen (Grad. Sch. Sci., Osaka Univ.) ○OTANI, Kohei; NAKAHATA, Masaki; TAKASHIMA, Yoshinori; YAMAGUCHI, Hiroyasu; HARADA, Akira
- 3PC-216** Effect of the substituted groups at the terminal position of the fluorine-based organic gelators (Grad. Sch. Sci. Eng., Yamaguchi Univ.; Grad. Sch. Sci. Eng., Yamaguchi Univ.) ○KANESHIGE, Yuta; MORITA, Yuki; OKAMOTO, Hiroaki
- 3PC-217** Synthesis and properties of cholesterol-based gelators without hydrogen bonding. (Chiba Inst. of Tech.) ○OKAMIYA, Yuta; SHIMASAKI, Toshiaki; SHIBATA, Mitsuhiro; TERAMOTO, Naozumi
- 3PC-218** Preparation and Properties of Stable All-Organic Magnetic Nanocapsules Encapsulating Nitroxide Radicals (Grad. Sch. Human and Environ. Stud., Kyoto Univ.) ○NAGURA, Kota; TAKEMOTO, Yusa; UCHIDA, Yoshiaki; SHIMONO, Satoshi; KATO, Tatsuhisa; YAMAUCHI, Jun; TAMURA, Rui
- 3PC-219** Functionalization of Waterborn Pigment Paint Containing Hydrolyzable Emulsifiers (Grad. Sch. Sci. Technol., Shinshu Univ.; Fac. Textile Sci. Technol., Shinshu Univ.) ○ITAKURA, Akinobu; NOZAWA, Ikuya; ITOH, Yoshihiro
- 3PC-220** Isomeric effect on the anti-peptic activity of surfactants having an azulene and a naphthalene rings. (Sch. Sci., Tokai Univ.) ○NAKAMURA, Kosuke; FUJIO, Katsuhiko
- 3PC-221** Separation and Recovery of Ionic Dyes Using Hydrolyzable Surfactants (Fac. Textile Sci. Technol., Shinshu Univ.; Grad. Sch. Sci.

Technol., Shinshu Univ.) ○ITOHO, Yoshihiro; TANIGUCHI, Hironori

**3PC-222** Characterization of Zwitterionic Surfactants Containing an Alkali-hydrolyzable Group (Fac. Textile Sci. Technol., Shinshu Univ.; Grad. Sch. Sci. Technol., Shinshu Univ.) ○ITOHO, Yoshihiro; KOYAMA, Miyako

### Organized Membranes

**3PC-223** Adsorption behavior of newly synthesized thiol-appended tripodal triptycenes on Au surface (Chem. Res. Lab., Tokyo Tech) ○TAGO, Hiromu; ISHIWARI, Fumitaka; SHOJI, Yoshiaki; FUKUSHIMA, Takanori

**3PC-224<sup>#</sup>** Photoelectrochemical Characteristics of Two-dimensional Porphyrin Molecular Layers on Si(111) (Grad. Sch. Of Humanities and Sci., Ochanomizu Univ.) ○SHOKAI, Ayumi; ISHIKAWA, Yurika; HASE, Mariko; KONDO, Toshihiro

**3PC-225** Structural rearrangements observed in the dye molecules by introducing a long-chain alkyl group with STM (Grad. Sch. Chem. Sci. Technol., Tokyo Univ. of Sci.) ○SUZUKI, Kota; TAMAKI, Yoshinori; MIYAMURA, Kazuo

**3PC-226** Phase-separated structure of mixed Langmuir-Blodgett films of long-chain amine and perfluoroalcohol and their application as template for synthesis of patterned TiO<sub>2</sub> thin film (Grad. Sch. Eng., Tokyo City Univ.) TAKAHASHI, Masashi; ○USUI, Akitoshi

**3PC-227** Fusion of lipid bilayer induced by photoionization of malachite green derivative solubilized in vesicle membrane (Dept. of Chem. Eng., NNCT) ○YOSHIKAWA, Yuki; HAYASHI, Keita; UDA, Ryoko

**3PC-228** Electroformation of Lipid Membrane Vesicles under Low Voltage (Fac. Eng., Shinshu Univ.) ○NAKAMURA, Satoshi; OKUMURA, Yukihisa

**3PC-229** Lamellar structure in the mixed system of nonionic surfactant and phospholipid DOPC (Grad. Sch. Sci. Eng., TMU) ○MORI, Miwako; KAWABATA, Youhei; KATO, Tadashi

**3PC-230** Mixing effects of fluorosurfactants on the Kraft transition in a non-ionic surfactant aqueous solution (Grad. Sch. Sci. Eng., TMU) ○TAKAHASHI, Yuto; KAWABATA, Youhei; KATO, Tadashi

**3PC-231<sup>#</sup>** Budding and Division of Giant Vesicles of Synthetic Phospholipid (Grad. Sch. Arts and Sci., The Univ. of Tokyo) CASTRO, Juan; KONNO, Shota; BANNO, Taisuke; ○TOYOTA, Taro

**3PC-232** Preparation of Giant Vesicle Aggregates in Serum. (Grad. Sch. Arts and Sci., The Univ. of Tokyo) ○IWATA, Natsuko; TOYOTA, Taro

**3PC-233** Synthesis and solution properties of a surfactant having an azaazulene ring (Sch. Sci., Tokai Univ.) ○ARIKUNI, Junshiro; FUJIO, Katsuhiko

**3PC-234** Synthesis and solution properties of a surfactant having a naphthalene ring (Sch. Sci., Tokai Univ.) ○OSHIMA, Hisato; FUJIO, Katsuhiko

### Solid Surfaces and Interfaces

**3PC-235<sup>#</sup>** Molecular Mechanism of Interfacial Adhesion between Epoxy Resin and Glass Surface (Fac. Eng., Kyushu Univ.) ○HIGUCHI, Chisa; MURATA, Hiroyuki; SEMOTO, Takayuki; TANAKA, Hiromasa; YOSHIKAWA, Kazunari

**3PC-236** Synthesis of Precursor Molecules Toward Bottom-up Synthesis of Graphene Nanoribbons (Grad. Sch. Mat. Sci., NAIST) ○HAYASHI, Ryunosuke; HAYASHI, Hironobu; YAMADA, Hiroko

**3PC-237<sup>#</sup>** Structural Study of Electrochemically Prepared LiSi Alloys (Grad. Sch. Human. Sci., Ochanomizu Univ.) ○OMACHI, Asami; AOKI, Nana; UOSAKI, Kohei; KONDO, Toshihiro

**3PC-238<sup>#</sup>** Fluorescence enhancement and quenching properties of dyes positioned on plasmonic copper arrays: comparison with those on gold arrays (Coll. Sci. Tech., Nihon Univ.) ○TAKEDA, Hideyuki; SUGAWA, Kosuke; OTSUKI, Joe

**3PC-239<sup>#</sup>** Fabrication of dense assemblies of various metal nanoparticles and their surface-enhanced Raman scattering properties (Coll. Sci. Tech., Nihon Univ.) ○YAMAGUCHI, Kengo; SUGAWA, Kosuke; OTSUKI, Joe

**3PC-240<sup>#</sup>** Molecular orientation analysis at ionic liquid/solid interfaces via Sum Frequency Generation spectroscopy (WPI-AIMR, Tohoku Univ.) ○IMAMURA, Takako; FEDERICI CANOVA, Filippo; MIZUKAMI, Masashi; KURIHARA, Kazuo

**3PC-241** Hydrogen generation by mechanochemical method: the reaction of Si and alkaline solution (Fac. Sci., Hiroshima Univ.; Grad. Sch. Sci., Hiroshima Univ.; N-BARD, Hiroshima Univ.) ○NAKANO, Yasuhiro; OKINO, Yuki; SAITOW, Ken-ichi

**3PC-242** Fabrication of amorphous carbon (a-C) semiconductor with narrow optical gap by plasma enhanced chemical vapor deposition method. (Fac. Sci., Yamaguchi Univ.) ○HAYASHI, Kohei; YAMADA, Masahiro; NAGATA, Yoshiya; KOBAYASHI, Ryutarō; HONDA, Kensuke

**3PC-243** Fabrication of a-C photocatalyst for hydrogen production under visible light irradiation (Fac. Sci., Yamaguchi Univ.) ○OKAFUJI, Keigo; KOBAYASHI, Ryutarō; NAGATA, Yoshiya; HONDA, Kensuke

**3PC-244** Fabrication of interface to which Bone Marrow Cell (BMC) highly adheres by plasma surface treatment (Fac. Sci., Yamaguchi Univ.) ○WATANABE, Kotaro; HONDA, Kensuke; SHIMAI, Yosuke

**3PC-245** Photoelectrochemical Properties of Silver Island Films Modified by Aminothiols Covered with J-Aggregate of Cyanine Dye (Grad. Sch. Pure Appl.

Sci., Univ. of Tsukuba) KIMISAWA, Yusuke; ITAKURA, Keigo; ○SATO, Tomoo

**3PC-246<sup>#</sup>** Electrochemical Preparation of Ni Core - Pt Shell Nanoparticles and Their Electrocatalytic Activity for Oxygen Reduction Reaction (Grad. Sch. Of Humanities and Sci., Ochanomizu Univ.) ○UEDA, Maya; HIROTA, Misako; KONDO, Toshihiro

**3PC-247<sup>#</sup>** Lubricity improvement of ionic liquids by supercritical carbon dioxide treatment (Fac. Eng., Iwate Univ.) ○TAKAHASHI, Kazuki; KUMAGAI, Aira; SHIRAI, Masayuki; NANAŌ, Hidetaka

**3PC-248<sup>#</sup>** Thermal decomposition behavior of stabilizers on Ni nanoparticles (Toyota Central R&D Labs., Inc., Syst. Electron. Eng. Dept. III) ○YATSUGI, Kenichi; ISHIZAKI, Toshitaka; AKEDO, Kunio