

The SCEJ 46th Autumn Meeting 2014 PROGRAM

Room	Day 1		Day 2		Day 3	
	AM	PM	AM	PM	AM	PM
A	1F 2103	S-21 Progress in Advanced Powder and Particle Process Technology -Particle design, Functionalization, Measurement, Characterization and Unit operation-				
		(9:00-12:00)	(13:00-16:20)	(10:00-12:00)	(13:00-16:40)	
B	1 F 2104	S-23 Bubbles, Drops, and Particles Dispersion Engineering 2014		S-22 Extended Mixing Technology -Clarification of mixing phenomena and new applications		
		(9:00-12:00)	(13:00-16:40)	(10:00-12:00)	(13:00-16:40)	(9:00-12:00) (13:00-15:00)
C	1 F 2105	S-24 Cutting Edge Technologies for Transport Phenomena and Fluid Engineering 2014		S-45 Special session "Aiming at realization of the hydrogen energy society"		
		(9:00-12:00)	(13:00-18:00)	(13:00-17:00)		
D	1 F 2106	S-16 Symposium of polymer/gel technology, self-organization process and functional particles		S-4 Chemical engineering that supports development of food industries: Creation of technique for manufacturing food		S-16 Symposium of polymer/gel technology, self-organization process and functional particles
		(10:00-12:00)	(13:00-17:20)	(9:40-12:00)	(13:00-16:40)	(9:00-12:00) (13:00-14:00)
E	2 F 2201	S-27 Fundamentals and Applications of Separation Technology (Oral)		S-6 Potentials of bioinformatics based engineering for development of the bioindustry		S-19 Material Engineering for Chemical Equipments Concerning to Energy Generation, Storage and Transportation
		(9:00-11:40)	(13:00-15:40)	(9:00-11:40)		(9:20-11:40)
F	2 F 2202	S-30 Advanced Technologies in Particle-Fluid Separation				
		(10:00-12:00)	(13:00-16:00)	(10:00-12:00)		
G	2 F 2203	Internship 2014		S-37 CVD & Dry Processes - Reaction engineering for controlling microstructure and functions		
		(13:00-17:00)		(9:00-12:00) (13:00-17:00)		
H	2 F 2204	S-41 Development of Intensified Reaction & Separation Systems and Computer-Aided Process Engineering		S-38 Micro Chemical Process Technology -Opening Next Generation-		
		(9:40-12:00)		(13:00-17:00) (10:00-12:00) (13:00-16:40)		(9:00-12:20)
I	2 F 2207	S-40 Integration Engineering for Supporting Creation of Superior Scenarios		S-12 The Subjects and Approaches to Process Safety Management		
		(13:00-16:20)		(9:00-11:40) (13:20-15:40)		
J	2 F 2208	S-42 The Cost Engineering for Progress of the Globalization and Decrease in Domestic Demands		S-39 Recent Research and Development of Process Systems Engineering		S-43 13th Process Design Contest for Students
		(13:00-15:00)		(9:00-11:40) (13:20-15:40)		(9:00-12:00) (14:00-15:40)
K	2 F 2209	S-3 Biofilm engineering: Carving out a new era		S-5 Development of global standard technologies for production of next-generation antibody drugs		
		(13:00-17:00)		(13:00-16:40)		
L	3 F 2301	Lecture of Gender Equality Committee				
		(17:00-19:30)				
M	2 F 2210	S-13 Materials and Process in Electronics		S-10 Biochemical and thermochemical conversion of biomass and their collaboration		
		(9:00-12:00) (12:40-17:20)		(15:40-17:00) (9:00-12:00) (13:00-17:00)		
N	2 F 2211	S-11 Advanced technologies on energy conversion, storage, and utilization for sustainable society				
		(13:00-16:40)		(9:00-12:00) (13:00-17:00)		(9:40-12:00)
O	2 F 2212	S-25 Symposium on Thermal Engineering		S-26 New Development of Chemical Engineering by Plasma Processing		
		(9:20-12:00) (13:00-17:00)		(9:40-12:00) (13:00-15:20)		
P	2 F 2215	S-32 Trend of extraction, ion-exchange and adsorption				
		(10:00-12:00) (13:00-16:20)				
Q	2 F 2216	S-33 Recent progress of membrane technologies and processes				S-33 Recent progress of membrane technologies and processes
		(9:00-12:00) (13:00-17:00)		(9:00-10:00)		(9:00-12:00)
R	3 F 2308	S-31 Elemental Technologies in the Energy-Saving Distillation Process		S-34 The session of the membrane technologies in the industrial application 2014		
		(9:20-12:00)		(10:20-12:00) (13:00-16:00)		
S	3 F 2303	S-35 Innovative Challenges of Chemical Reaction Engineering Contributing to Resources, Energy and Environmental	S-36 Poster session for chemical reaction engineering (Flash presentation)	S-35 Innovative Challenges of Chemical Reaction Engineering Contributing to Resources, Energy and Environmental		
		(9:40-11:00) (11:00-12:00)	(15:00-17:00)	(9:00-12:00) (13:00-17:00)		(9:40-12:00) (13:00-15:00)
T	3 F 2304	S-7 Developments toward the Technological Innovation in Sub- and Supercritical Fluids				
		(9:40-11:20)		(13:00-17:00) (10:00-12:00) (13:00-17:20)		(10:00-12:00)
U	3 F 2305	S-8 Frontier of Physical Properties in Sub- and Supercritical Fluid		S-20 The physical properties research for latest development of industrial process -Measurement and simulation		
		(10:00-12:00)		(13:40-15:20) (10:00-12:00) (9:40-12:00)		
V	3 F 2306	S-9 Frontiers of Fuel Cells, Solar Cells, Batteries and Other Device Technologies for Future Energy Systems -Materials, Processing and Systems Approach-				
		(9:40-12:00)		(13:00-17:00) (9:00-12:00) (13:00-14:20)		(9:40-12:00) (13:00-16:20)
W	4 F 2403	S-14 Symposium of the Division of Materials Engineering and Interfacial Phenomena: Cutting-edge research of Materials Processing and Interfacial study		S-14 Symposium of the Division of Materials Engineering and Interfacial Phenomena: Cutting-edge research of Materials Processing and Interfacial study		
		(9:00-12:00) (13:00-17:00)		(9:00-12:00)		(9:00-12:00) (13:00-16:20)
X	4 F 2306	S-17 Symposium by Division of Environment				
		(10:20-12:00)		(13:00-17:00) (9:00-12:00) (13:00-17:00)		(9:00-11:20)
Y	4 F 2307	S-1 Cutting Edge of Biochemical Engineering (Flash Presentation)		S-18 Frontier of Climate Change Research with a Focus on IPCC Fifth Assessment Reports		S-2 Roles of chemical engineering for widespread application of regenerative medicine
		(9:00-12:00)		(13:00-16:20)		(9:40-12:00) (13:00-17:00)
ZA	I2CNER	S-1 Cutting Edge of Biochemical Engineering (Poster Session)				
		(13:00-16:00)				
ZB	I2CNER	S-36 Poster session for Chemical Reaction Engineering				
		(13:00-15:00)				
ZC	I2CNER			S-15 Poster Session of the Division of Materials Engineering and Interfacial Phenomena: Cutting-edge research of Materials Processing and Interfacial study		
				(13:00-15:00)		
ZD	I2CNER			S-28 Fundamentals and Applications of Separation Technology (Poster)		
				(13:00-16:00)		
ZF	I2CNER	S-44 Poster session "Drying Technology"				
		(15:00-19:30)				
Terra Hall		Young Researcher Mixer				
		(18:30-20:30)				
Hotel Nikko Fukuoka				Banquet		
				(19:00-21:00)		

Technical program

--- Room A ---

--- Day 1 ---

Symposium <Progress in Advanced Powder and Particle Process Technology - Particle design, Functionalization, Measurement, Characterization and Unit operation ->

(9:00~10:00)(Chair Tokoro C.)

A101 Development of materials for chemical heat storage by mechanochemical synthesis
(Tokyo Tech) ○Ryu Junichi, Hara Yuki, Kato Yuki

A102 Production of calcined shell fine particles by mechanical grinding and its antibacterial activity
(Graduate School of Muroran Inst. Tech.) ○Shoji Hiroki, Yamanaka Shinya, Simadu Masamitsu, Ohira Yuichi, Kuga Yoshikazu

A103 Preparation of shell nanoparticles by mechanical grinding and its application to plywood adhesive
(Graduate School of Muroran Inst. Tech.) ○Magara Kohei, (Forest Products Res. Inst.) Hirabayashi Yasushi, (Graduate School of Muroran Inst. Tech.) Yamanaka Shinya, Fujimoto Toshiyuki, Kuga Yoshikazu

(10:00~11:00)(Chair Yamanaka S.)

A104 Hydrothermal Synthesis of Zeolite from Flyash by Microwave Heating with Pulverization
(Hiroshima U.) ○Shibata D, Fukui K., Yoshida H.

A105 DEM simulation analysis for effects of adhesive force of admixed particles on an improvement of particle-bed packing fractions
(Okayama U.) ○Takatsuki R, Sakamoto G, Oshitani J., Gotoh K., Yoshida M.

A106 Mn removal from spent filter sand by surface grinding using Intensive mixer
(Waseda U.) ○Okada S, Fujihashi D, Tsunazawa Y, Tokoro C.

(11:00~12:00)(Chair Oshitani J.)

A107 Effect of Particle Shape on Mixing Behaviour for A Rotating Drum
(SUMITOMO BAKELITE/Tohoku U.) ○Yamamoto Michinori, (GSES, Tohoku U.) Ishihara Shingo, (IMRAM, Tohoku U.) Kano Junya

A108 ADEM simulation for breakage analysis of irregularly shaped particles
(Tohoku U.) ○Ishihara Shingo, Zhang Q., Kano Junya

A109 Estimation of shear force acting on wheel using sand trajectories measured with PEPT
(Okayama U. Sci.) ○Kuwagi Kenya, Kinugasa Tetsuya, (U. Birmingham) Leadbeater Thomas W., Joseph Gargiuli, David J. Parker, (U. Surrey) Jonathan P. K. Seville

(13:00~13:40)(Chair Shimizu T.)

A113 [Invited lecture] Operational Status of Karita Power Station with Pressurized Fluidized Bed Combustion Combined Cycle

(Kyushu Electric Power) ○Watanabe Osamu

(13:40~15:00)(Chair Kuwagi K.)

A115 Effect of powder properties and air velocity on apparent density of gas-solid fluidized beds
(Okayama U.) ○Tanaka N, Yoshida M., Gotoh K., Oshitani J.

A116 Effect of mechanical vibration on particle behavior in a tapered fluidized bed
(KIT) ○Katamune Hikaru, Mawatari Yoshihide, Yamamura Masato, Kage Hiroyuki

A117 Defluidization conditions for a fluidized bed evaporator in desalination process
(U. Tokyo) ○Mizuo Hiroyuki, Kansha Yasuki, Ishizuka Masanori, Tsutsumi Atsushi

A118 Modeling for triple-bed circulating fluidized bed flow behavior analyze using equivalent circuit
(U. Tokyo) ○Ishizuka Masanori, Kansha Yasuki, Tsutsumi Atsushi

(15:00~16:20)(Chair Mawatari Y.)

A119 Effects of Draft Tube and Particle Property on Flow Characteristics of a Spout-Fluid Bed
(Fukuoka U.) ○Kawashiri Yuta, Nagashima Hiroshi, Suzukawa Kazumi, Ishikura Toshifumi

A120 Effects of Stirring and Aeration on Dynamic Flow Characteristics of Fine Powders
(Fukuoka U.) ○Nagashima Hiroshi, Ishikura Toshifumi

A121 Particle circulation rate of a L-type loop seal for multi-compartment internal circulating fluidized beds
(Gunma U. Graduate school of Sci. Tech.) ○Noda Reiji, (Gunma U. Graduate school of Sci. and Tech.) Sugimoto Masaya

A122 Process for heat recovery from molten slag using fluidized bed
(Niigata U.) ○Shimizu T, Ono T, Furukawa Y, Kim H, Li L

--- Day 2 ---

(10:00~11:00)(Chair Nomura T.)

A204 Influence of ion species absorbed on particle surface in aggregation phenomena of colloid.
(Doshisha U.) ○Shimamura Takuya, (Kyoto U.) Higashitani Ko, (Doshisha U.) Tsuchiya Katsumi, Mori Yasushige

A205 Evaluation of interaction force in high viscous polymer solution by colloid probe AFM method
(LINTEC/TUAT) ○Mori T., (TUAT) Kamiya H., (LINTEC) Matsuda T.

A206 Direct Measurement of Solvophobic Attraction between Modified Silica Surfaces by Colloid Probe Atomic Force Microscopy

- (Okayama U.) ○Ishida N., Soga Y., Ikeda K., Imanaka Hiroyuki, Imamura Koreyoshi
(11:00~12:00)(Chair Ishida N.)
- A207 Measurement of living E. coli adhesion force using colloidal probe AFM technique
(Osaka Pref. U.) ○Toyoda Syunsuke, Konishi Yasuhiro, Nomura Toshiyuki
- A208 Adhesion and internalization of polymer nanoparticles toward yeast
(Osaka Pref. U.) ○Kuriyama Yuta, Konishi Yasuhiro, Nomura Toshiyuki
- A209 Rheological characteristics of composed natural polysaccharides
(Yamaguchi U.) ○Okazaki Yuka, Saeki Takashi
(13:00~14:20)(Chair Ogi T.)
- A213 Particle classification performance by use of electrostatic potential
(Hiroshima U.) ○Yoshida Hideto, Tuyama Takayuki, Fukui K., (Hitachi Kasei Co. Ltd.) Matuzawa Mituharu
- A214 Investigation for mechanism of compression-speed dependence of tablet strength formed by nanoparticles
(Okayama U.) ○Morishita A., Yoshida M., Oshitani J., Gotoh K.
- A215 Quantification method for the force acting on a nanoparticle agglomerate during mixing operation
(Okayama U.) ○Okano M., Yoshida M., Oshitani J., Gotoh K., (AIST) Ogura I.
- A216 Fragmentation of nanoparticle agglomerates by collisions
(Kansai U.) ○Miyazaki Shintaro, Oshio Nao, Okada Yoshiki
(14:20~15:40)(Chair Taniguchi I.)
- A217 Synthesis of metal oxide nanoparticles in a flame reactor
(Kansai U.) ○Mizutori Atsushi, Ishibashi Akihiro, Okada Yoshiki
- A218 Visualization of particle behavior in plasma reactor
(Sepuluh Nopember Inst. Tech) Heru Setyawan, (Hiroshima U.) Ratna Balgis, (Sepuluh Nopember Inst. Tech) Widiyastuti, (Hiroshima U.) ○Ogi Takasi, Okuyama Kikuo
- A219 Preparation of visible light absorption enhanced TiO₂ by atmospheric pressure water vapor plasma
(Soka U.) ○Shimanaka Tadahiko, Watanabe Soshi, Ida Junichii, Matsuyama Tatsushi, Yamamoto Hideo
- A220 Solid-phase coating of iron particles with the copper oxide particles generated by Ultrasonic Spray Pyrolysis.
(Graduate School of Muroran Inst. Tech.) ○Ito Fuyuki, Fujimoto Toshiyuki, Yamanaka Shinya, Kuga Yoshikazu
(15:40~16:40)(Chair Okada Y.)
- A221 Synthesis of Manganese oxides and their structure and morphology control

- (Tokyo Inst. Tech.) ○Ogata Naofumi, Taniguchi Izumi
- A222 Hydrothermal synthesis of organic-modified TiO₂ nanocrystals and control in their crystal structure
(Tohoku U.) ○mizuno yusuke, takami seiichi, houjou daisuke, aoki nobuaki, aida tutomu, (Tohoku U.) adschiri tadahumi
- A223 Fabrication of Mg-LHS and its chemical heat storage property
(Nagoya U.) ○Yamashita Seiji, Sugie Yoshimasa, Kita Hideki

--- Room B ---

--- Day 1 ---

Symposium <Bubbles, Drops, and Particles Dispersion Engineering 2014>

- (9:00~10:00)(Chair Honma J.)
- B101 Abatement of VOCs by Atomizing Acrylamide Polyampholyte (APA) Solution Using One-fluid Spray Nozzles
(Kogakuin U.) ○Namiki Norikazu, Takagi Tsuyoshi, (Tokyo Inst. Tech.) Kagi Naoki, (Techno Medical Co., Ltd) Morita Tatsuo, (ESPO Chemicals Corp.) Kobayashi Shunsuke
- B102 Effects of dissolved gases on mist formation generated by ultrasonic irradiation
(Doshisha U.) ○Noguchi S., Mori Yasushige, Tsuchiya Katsumi
- B103 Development of a liquid atomizing device using capillary action and electric field as driving forces
(Tokyo U. Agr. Tech.) ○Takematsu Yusuke, Wuled Lenggoro
(10:00~11:00)(Chair Tsuchiya K.)
- B104 Numerical analysis of the impact of a freely falling droplet on an immiscible fluid layer
(U. Tokushima) ○Hashimoto Yusuke, Ohta Mitsuhiro, (Florida State U.) Mark Sussman
- B105 Numerical analysis of bubble formation process in a shear-thinning liquid
(U. Tokushima) ○Oku Shosei, Ohta Mitsuhiro
- B106 The drag on a methane bubble in zigzag motion
(A. I. S. T.) ○Kiyono F., Yamamoto Y., (Tokai U.) Shimizu Y.
- (11:00~12:00)(Chair Ohta M.)
- B107 Bubbling behaviors under mechanical vibration in a two-dimensional fluidized bed
(KIT) ○Shimizu Yoshiki, Mawatari Yoshihide, Yamamura Masato, Kage Hiroyuki
- B108 Characteristics of pressure fluctuations during defluidization in a fluidized catalyst bed
(Kagoshima U.) ○Tanaka N., Kai T., Mizuta K., Nakazato T.
- B109 A DEM-VOF coupling method for numerical simulation of solid-gas-liquid flows
(Tokyo U.) ○Sun Xiaosong, Sakai Mikio, Shigeto Yusuke

- (13:00~14:00)(Chair Kobayashi D.)
- B113 Synthesis of Silica Particle by Using Gas-liquid Slug Flow in a Mini-channel
(Keio U.) ◯Matsumoto H, Fujioka S, Terasaka K
- B114 Influence of surface control additives on the thin film formation by wet process
(Kyushu U.) ◯Ando K., Harada H., Fukai J., Sakanoue K.
- B115 Effect of gas-liquid interaction in oil/gas blowout
(Osaka U.) ◯Takagi Y., Okano Y., Kato N.
- (14:00~15:00)(Chair Yoshimoto M.)
- B116 Gas Absorption Properties of Micro Bubble Generator Using Titanium Porous Membrane
(Tokyo U. Sci.) ◯Sugiyama H, Kobayashi D., Shimada Y., Otake K., Shono A.
- B117 The separation method of the fine particles by using the fine bubbles
(IHI) ◯Yoshida Yuka, Kubota Nobuhiko
- B118 Flotation of protein from domestic wastewater by microbubbles
(Keio U.) ◯Tanaka A, Terasaka K, Fujioka S
- (15:00~16:00)(Chair Fujioka S.)
- B119 Characteristics of gas-liquid two-phase flows in a treatment system based on ozonation for wastewater containing milk
(Shizuoka U.) ◯Wang Chenxu, (Graduate School of Shizuoka U.) Shinohara Daisuke, (Graduate School of Sci. and Tech., Shizuoka U.) Sato Katsuaki, (Res. Inst. Green Sci. and Tech., Shizuoka U.) Saito Takayuki
- B120 Effects of geometry and liquid depth on the shear rate in bubble columns as evaluated with liposomes
(Grad. Sch. Medicine, Yamaguchi U.) ◯Natsume T., Yoshimoto Makoto, (Yamaguchi U.) Nakao K.
- B121 Effects of gas-liquid contacting mode on liquid phase mass transfer coefficient of dispersed bubbles
(Yamaguchi U.) ◯Nakao K., (Oshima Nat. Col. Mari. Tech.) Furumoto K., (Yamaguchi U. Dept. Appl. Mol. Biosci.) Yoshimoto Makoto
- (16:00~16:40)(Chair Honma S.)
- B122 Modeling of self-propelled particles - Interaction between particles and structured walls
(Kyoto U.) ◯Oyama Norihiro, Molina John, Yamamoto Ryoichi
- B123 [JCEJ Outstanding Paper Award] A Simple Scheme for Interface Tracking
(Sumitomo Chemical) ◯Dhar Abhinav, (Sumitomo Chemical) Shimada Naoki, (Sumitomo Chemical) Tomiyama Akio
- Day 2 ---
- (10:00~11:00)(Chair Sakai M.)
- B204 Viscoelastic changes of dense colloidal dispersions by kneading processes
(U. Tokyo) ◯Hosaka N., Koike O., (U. Tokyo) Yamaguchi Y.
- B205 Compound Droplet Formation Mechanism with Flow Focusing
(Saitama U.) ◯Homma Shunji, Kim Taeseon, Koga Jiro
- B206 CFD analysis for effect of neighboring pore in a membrane emulsification
(Tohoku U.) ◯Ono Takumi, Enomoto Hiroki, Ota Masaki, Sato Yoshiyuki, Inomata Hiroshi, (Sumitomo Osaka Cement) Kinoshita Tooru
- (11:00~12:00)(Chair Honma S.)
- B207 Newly developed method for foam measurement via a Single-Tip Optical fiber Probe (S-TOP) based on 3D-ray tracing simulation
(Shizuoka U.) ◯Nihei A., (Res. Inst. Green Sci. and Tech., Shizuoka U.) Saito Takayuki
- B208 [Keynote lecture] Measurement Technologies in Bubbles and Drops Dispersion Systems and Its Applications
(Shizuoka U.) ◯Saito Takayuki
-
- Symposium <Extended Mixing Technology -Clarification of Mixing Phenomena and New Applications>**
- (13:00~13:40)(Chair Horie T.)
- B213 [Keynote lecture] Two-phase flow in complex geometry and application to mixing device by lattice Boltzmann method
(Fukuoka U.) ◯Matsukuma Y.
- (13:40~15:00)(Chair Nishi K.)
- B215 Effect of a particle size on unsteady CFD by MPS method about Newton fluid mixing
(Kozo keikaku eng. Inc.) ◯Awasaki T., Yamada T., (Shiseido Co., Ltd.) Tanaka A., Yokokawa Y.
- B216 CFD on an emulsification phenomenon with a change of viscosity by agitation depending on shear rate as a key factor
(Shiseido CO., LTD.) ◯Tanaka A., Yokokawa Y., (Kozo Keikaku Eng. Inc.) Yamada T., Awasaki T.
- B217 Evaluation of rotation-revolution mixing by using numerical simulation and particle count in solution
(Hitachi, Ltd., Hitachi Res. Laboratory) ◯Fukumura M., Inaba T., (Hitachi High-Technologies) Imai K., (Hitachi, Ltd., Yokohama Res. Laboratory) Kogi O.
- B218 Numerical study of non-Newtonian fluid mixing applied to estimate mixing time and Metzner-Otto constant
(Kao) ◯Narushima T., Ishihara H., Matsumoto H.
- (15:00~16:00)(Chair Shouno A.)
- B219 Mixing Mechanism of Large Paddle Impeller Based on Streak Line Observation
(N.I.T) Kato Y., ◯Hiramatsu M., Furukawa H., Tada Y.
- B220 Quantification of structure of streak lobe in laminar mixing vessel equipped with single or double stage paddle impeller

- (Yokohama Nat. U.) ○Hayashi M., Misumi R., Nishi K., Kaminoyama M.
- B221 Evaluation of mixing performance with a periodic analysis of mixing pattern induced by a rotationally reciprocating impeller
(Kobe.U.) ○Yamagami Noriyuki, Senda Saki, Komoda Yoshiyuki, (Osaka.U.) Hirata Yushi, (Kobe.U.) Suzuki Hiroshi, Hidema Ruri
(16:00~16:40)(Chair Mizumi R.)
- B222 A study about the mixing effect in using a micromixing device utilizing the Marangoni convection on a gas-liquid free interface applied in a larger-scale channel
(SIT) ○Yamada T, Ono N
- B223 Fundamental study on fluid heating with mixing blade heated by induction heating
(Fukui U. Tech.) ○Shimada Y., (Kansai Electric Power Co., INC.) Nakao N., (Fukui U. Tech.) Nakao K.

--- Day 3 ---

- (9:00~9:40)(Chair Kuratsu M.)
- B301 [Keynote lecture] Recent Emulsifying Technology and Equipment
(Mizuho Ind. Co., Ltd) ○takagi K
(9:40~11:00)(Chair Kato Y.)
- B303 Quantification of drop size distribution under high-concentrated dispersion state in an annular centrifugal contactor by pattern matching image analysis
(Yokohama Nat. U.) ○Ishihara N., Misumi R., Nishi K., Kaminoyama M., (JAEA) Sano Y., Sakamoto A., Ogino H., Koizumi K.
- B304 Development and Performance Assessment of Specific Impellers for Gas Dispersion from Liquid Surface.
(Mixing Laboratory) ○Goto N, Nemoto T, Kato Y
- B305 Development of a static mixer with stacked elements and evaluation for its mixing performance
(Yamaguchi U.) ○Kurusu Takaaki, (Isel) Mochizuki Noboru, (Yamaguchi U.) Saeki Takashi
- B306 Mixing effect of swirl flow ejector on in-line mixing process of high-reactive components
(Asahi Organic Chemicals Ind.) ○Sawamoto T, Okada T, (Asahi Organic Chemicals Ind./Yamagata U.) Hanada T, (Yamagata U.) Takahashi K
(11:00~12:00)(Chair Kuratsu M.)
- B307 Effects of impeller geometry and liquid viscosity on the starting torque of vertical paddle impellers
(Yokohama Nat. U.) ○Bando Y., Nishi K., Misumi R., Kaminoyama M.
- B308 Effects of impeller geometry and liquid viscosity on the horizontal load to vertical paddle impeller
(Yokohama Nat. U.) ○Ninomiya K., Misumi R., Nishi K., Kaminoyama M.
- B309 Power consumption for disc turbine type fractal shaped impeller

(Fukuoka U.) ○Miyazaki T., Tomoda K., Suzukawa Kazumi

- (13:00~13:40)(Chair Yoshikawa S.)
- B313 Effect of Thickness of Impeller Blade on Power Consumption
(N.I.T) Kato Y., ○Fujii K., Furukawa H., Tada Y.
- B314 Power Consumption in Gas-High Viscous Liquid Mixing Vessel with Dual Impeller and Laege Ring Sparger
(DAICEL) Kamei Noboru, (NIT) Kato Y., ○Suzuki Tomoya, Furukawa H., Tada Y.
(13:40~15:00)(Chair Takahashi K.)
- B315 Direct measurement of particle collisions with impeller blades in a stirred vessel by high-speed video camera system synchronized with impeller rotation
(Yokohama Nat. U.) ○Tomura S., Misumi R., Nishi K., Kaminoyama M.
- B316 The effects of particle diameter and density on particle collision phenomena with the impeller blades in a stirred vessel
(Yokohama Nat. U.) ○Iijima H., Misumi R., Nishi K., Kaminoyama M.
- B317 Population balance simulation of cooling crystallization with seeding in consideration of time evolution of supersaturation
(Yokohama Nat. U.) ○Higashiguchi T., Misumi R., Nishi K., Kaminoyama M.
- B318 The Effect of Impeller Type on Behavior of Solid Dispersion in a Stirred Tank
(Kobe U.) ○Yamashita Naoki, Masuda Hayato, Horie Takafumi, Ohmura Naoto

--- Room C ---

--- Day 1 ---

Symposium <Cutting Edge Technologies for Transport Phenomena and Fluid Engineering 2014>

- (9:00~10:00)(Chair Ban T.)
- C101 Unsteady flow in mixing and reaction processes between an aqueous polymer solution and a metal ion
(Tokyo U. Agriculture and Tech.) ○Tagawa S, (School of Medicine, Nihon U.) Iijima J, (Tokyo U. Agriculture and Tech.) Nagatsu Y
- C102 Immiscible viscous fingering with a decrease in interfacial tension induced by a chemical reaction
(Tokyo U. Agriculture and Tech.) ○Tsunami R, (Tokyo U. Agriculture and Tech./JST PRESTO) Nagatsu Y
- C103 Effects of combination of dissolved ionic species and particle size on the thermophoresis of suspended particle
(Tokyo Tech) ○Taniguchi I, Ookawara S, Yoshikawa S.
(10:00~11:00)(Chair Nagatsu Y.)
- C104 Combined effects of thermal and solutal Marangoni convections on flow patterns in a half zone liquid bridge

- (U. Ryukyus) ○Minakuchi H, Yoshino T, (Osaka U.) Okano Y.
- C105 Relation between the pattern formation in thermal convection and entropy production rate (Osaka U.) ○Ban Takahiko, Shigeta Keigo
- C106 Viscoelastic Flow Simulation of Flim Casting Process (U. Fukui) ○Tanoue Shuichi, Uematsu Hideyuki, Iemoto Yoshiyuki, (ZEON Corp.) Sato Takashi
(11:00~12:00)(Chair Iwata S.)
- C107 Effects of particle size on infiltration speed into porous medium (Fukuoka U.) ○Kubokawa Y., Matsukuma Y., Uchiyama H., Hirohashi Y.
- C108 Numerical Analysis of Stefan Problem by Phase Field Method (Division of Materials Sci., Graduate School of Sci. and Eng., Saitama U.) ○Koga Jiro, Koga Jun-chi, Homma Shunji
- C109 [JCEJ Outstanding Paper Award] A Front-Tracking Method for Three-Phase Computations of Solidification with Volume Change (Ritsumeikan U.) ○Vu Truong, (U. Notre Dame) Tryggvason Gretar, (Saitama U.) Homma Shunji, (Ritsumeikan U.) Wells John, Takakura Hideyuki
(13:00~13:40)(Chair Ohkawara S.)
- C113 [Keynote lecture] Physical modeling of biological matters such as soft tissue (Kyoto U.) ○Yamamoto Ryoichi
(13:40~14:20)(Chair Maekawa M.)
- C115 [Invited lecture] Application and development of multi-phase CFD simulation including mass transfer for chemical processes (Adv. Simulation Group, Chemical Eng. Laboratory, MCHC R&D Synergy Center, Inc.) ○Ishiba Yasushi
(14:20~15:20)(Chair Yamamura M.)
- C117 The Direct Numerical Simulation of self-propelled particles that mimic the bacteria (Kyoto U.) ○Okamura Junya, (Kyoto) John Molina, (Kyoto U.) Yamamoto Ryoichi
- C118 Numerical simulation of a solid-fluid two phase flow in a twin screw kneader (Tokyo U.) ○Basinskas G., Sakai M., Shigeto Y., Sun X.
- C119 Development of a numerical analysis method for molding products by particle methods (UTokyo) ○Mizutani Shin, Sun Xiaosong, Sakai Mikio
(15:20~16:40)(Chair Saeki T.)
- C120 Ribbing instability of fluids coated on a patterned surface (KIT) ○Kai T, Mawatari Yoshihide, Kage Hiroyuki, Yamamura Masato
- C121 Flow Characteristics of Hyaluronate Solution in Micro Abrupt Contraction-Expansion Channels Having Different Contraction-Expansion Ratio (Kobe U.) ○Hidema Ruri, Suzuki Hiroshi, Komoda Yoshiyuki
- C122 A study of micromixing flow utilizing the effect of the Marangoni convection on a gas-liquid free interface with a constricted shape of the channel (SIT) ○Yamada T, Ono N
- C123 Vortex deformation in two-dimensional turbulence due to drag reduction effects of rod-like micelles. (Kobe U.) ○Hisamatsu Shion, Hidema Ruri, Suzuki Hiroshi, Komoda Yoshiyuki
(16:40~18:00)(Chair Matsukuma Y.)
- C124 Two-dimensional flow polarization measurement and visualization around an air bubble under pressure-oscillating field. (Nagoya Inst. Tech.) ○Horiuchi H, Iwata S, Mori H, Nagumo R, (Nagaoka U. Tech.) Takahashi T, (Photoron) Onuma T
- C125 Evaluation scheme of heat transfer characteristics of flat heat-pipe heat spreader (Kagoshima U.) ○Mizuta K., (Kyoto U.) Saito Yasushi, (Kagoshima U.) Goshima Takashi, Tsutsui Toshio
- C126 Effect of baffle on mass transfer in a falling film microreactor (Daiichi Sankyo/Tokyo Tech) ○Ishikawa H, (Tokyo Tech) Ookawara S, Yoshikawa S.
- C127 Behavior of suspended particles in spiral microchannel with the modified and rectangular cross-section (Tokyo Tech) ○Kanashiro Syota, Ookawara S, Yoshikawa S.
- Day 2 ---
- Special session <Aiming at Realization of the Hydrogen Energy Society>**
(13:00~17:00)(Chair Uemiya S., Nakagaki T.)
- C213 [Invited lecture] Fukuoka's Challenges Towards a Hydrogen Society -Fukuoka Hydrogen Strategy- (Fukuoka Pref.) ○Fujita Y
- C215 [Invited lecture] Storage and Transportation Technology of "SPERA " Hydrogen Energy in Large-scale (Chiyoda) ○Yasui M, Okada Y
- C217 [Invited lecture] Hydrogen Energy Carrier Using Ammonia (Hiroshima U.) ○Kojima Y
- C219 [Invited lecture] Current Status of Fuel Cell Vehicle Development (Fuel Cell Cutting-Edge Res. Center Tech. Research Association) ○Onaka H
- C221 [Invited lecture] Hydrogen supply and usage through pipeline in Kitakyushu Hydrogen Town (HySUT) ○Awazu Y
General Discussion
- --- Room D ---
--- Day 1 ---

**Symposium <Symposium of Polymer/Gel Technology,
Self-organization Process and Functional Particles>**

(10:00~11:00)(Chair Seida Y.)

D104 Effect of nanogel matrix composition on the catalytic activity of immobilized palladium (Graduate School of Eng., Kyushu U.) ○Yoneda Tamami, Morii Takato, Seto Hirokazu, Hoshino Y., Miura Yoshiko

D105 Thermal Responsive Microgel Particle Composed Films as CO₂ Absorbent (Kyushu U.) ○Yue Mengchen, Hoshino Y., Miura Yoshiko

D106 Development of Super Gelator with Sugar Derivatives and Preparation of Gel-Emulsions (Kyushu U.) ○Ono Fumiyasu, (Nissan Chemical Industries, Ltd) Hirata Osamu, (Kyushu U.) Ichimaru Keiko, (Nissan Chemical Industries, Ltd) Saruhashi Koichiro, (ISIT) Shinkai Seiji, (Kyushu U./Nissan Chemical Industries, Ltd) Watanabe Hisayuki

(11:00~12:00)(Chair Tokuyama H.)

D107 Investigation of Ion Adsorption Properties of Sulfobetaine Gel and Relationship with Its Swelling Behavior (Hiroshima U.) ○Eva Oktavia Ningrum, Ohfuka Yasuhiro, Sakohara Shuji

D108 Adsorption/Desorption properties of the endocrine disruptor on/from the thermo-sensitive polymer copolymerized with reactive surfactant (Hiroshima U.) ○Gotoh T., Kawase S., Sakohara Shuji

D109 Structure formation and mechanical property of PVA during freezing-thawing process (Toyo U.) ○Seida Y.

(13:00~13:40)(Chair Goto T.)

D113 [Keynote lecture] Prospects for Gel Technology (Tokyo Tech.) ○Nakano Yoshio

(13:40~14:20)(Chair Yoshida M.)

D115 [Keynote lecture] Electrical Twisting Ball Display (Soken chemical & Eng. Co. Ltd) ○Takizawa Yoichi, Akita Hiroya

(14:20~15:20)(Chair Kurumada K.)

D117 Asymmetric Recognition Induced by Self-Organized Membrane Structure and Its Application for Chiral Separation (Osaka U.) ○Ishigami T., Sugita K., Suga K., Okamoto Y., Umakoshi H.

D118 Evaluation of Membrane Properties of Fatty Acid Vesicles and Its Application (Osaka U.) ○Suga K., Kondo D, Okamoto Y., Umakoshi H.

D119 Effect of operating condition on degree of cure in Roll-to-Roll UV nanoimprint process (Yamagata U.) ○Taki Kentaro, Kondo Shunsuke, Ito Hiroshi

(15:20~16:20)(Chair Higuchi T.)

D120 Effect of monomer molecular chain length on kinetic constants of propagation and termination in UV curing process (Yamagata U.) ○Taki Kentaro, Taguchi Takehiro, Ito Hiroshi

D121 Fabrication of a micromotor system propelled under steady DC field (Doshisha U.) ○Yamamoto D., Yamamoto R., Shioi A., Yoshikawa Kenichi

D122 Synthesis of phenol-formaldehyde gels by sol-gel polycondensation and control of their porous structure (Kyoto U.) ○Sugiura K, Sano N., Tamon H.

(16:20~17:20)(Chair Yamamoto D.)

D123 Evaluation of thickness and uniformity of zeolite membrane prepared via alkoxide method (Yamagata U.) Sakuma Toshiki, ○Higuchi Takeshi, Aita Tadahi

D124 Role of surface phenomenon in the gate effect of molecularly imprinted polymer (Shibaura Inst. Technol.) ○Yoshimi Yasuo

D125 Comparative evaluation of surface water-repellency of granular materials by static or kinematic observation (Fukushima NCT) ○Kurumada Keinichi, Oie Wakana, Suzuki Ayami

--- Day 2 ---

Symposium <Chemical Engineering that Supports

**Development of Food Industries: Creation of
Technique for Manufacturing Food>**

(9:40~10:40)(Chair Kobayashi T.)

D203 Efficient entrapment of enzyme into vesicles by lipid-coated ice droplet hydration method and their application for the enzymatic reaction inside vesicles (Faculty of Life and Environmental Sci., U. Tsukuba) ○Morimoto Gaku, Sato Seigo, Ichikawa Sosaku

D204 Preparation characteristics of submicron O/W emulsions by premix nanochannel emulsification (Nat. Food Res. Inst., NARO) ○Kobayashi Isao, Hori Yuko, (U. Tsukuba/Nat. Food Res. Inst., NARO) Neves Marcos A, (Nat. Food Res. Inst., NARO) Uemura Kunihiko, (U. Tsukuba/Nat. Food Res. Inst., NARO) Nakajima Mitsutoshi

D205 Preparation and characterization of submicron O/W emulsions encapsulating vitamin D (U. Tokyo/NFRI, NARO) Khalid Nauman, (NFRI, NARO) ○Kobayashi Isao, (U. Tsukuba/NFRI, NARO) Wang Zheng, Neves Marcos A, (NFRI, NARO) Uemura Kunihiko, (U. Tsukuba/NFRI, NARO) Nakajima Mitsutoshi, (NFRI, NARO/U. Tokyo) Nabetani Hiroshi

(10:40~11:20)(Chair Ichikawa S.)

D206 [Keynote lecture] Process development of recovery of bioactive compounds from olive mill water based on mass balance analysis of olive oil processing (U. Tsukuba, Life & Enviro. Sci.) ○Nakajima Mitsutoshi

- (11:20~12:00)(Chair Shiga H.)
- D208 Physical digestion analysis of O/W emulsion gel using Gastric Digestion Simulator
(Tsukuba U.) ○Kozu Hiroyuki, (NFRI) Kobayashi Isao, (Tsukuba U.) Wang Zheng, Nakajima Mitsutoshi, Marcos A Neves, (NFRI) Uemura Kunihiko, (Tsukuba U.) Sato Seigo, Ichikawa Sosaku
- D209 Characteristics of Proteomic Micro-reactor Prepared by Freeze-drying
(Kyoto U.) ○Nakagawa Kyuya, (U. Hyogo) Tamura Akihiro
- (13:00~14:00)(Chair Ohshima T.)
- D213 Encapsulation of flavor in *yarrowia lipolytica*.
(Kagawa U.) ○Miyamoto Ayaka, (Agrosup Dijon) Pham Hoang Bao Ngoc, (Agrosuo Dijon) Wache Yves, (Kagawa U.) Shiga Hirokazu, Yoshii Hidefumi
- D214 Surface-oil ratio and encapsulated-oil yield of spray-dried fish oil powder
(Kagawa U.) ○Shiga Hirokazu, Adachi Sae, (Kyoto U.) Adachi Shuji, (Kagawa U.) Yoshii Hidefumi
- D215 Release behavior of d-limonene from spray-dried powder of emulsified d-limonene
(Kagawa U.) Takashige Shisei, Miyamoto Ayaka, Shiga Hirokazu, Yoshii Hidefumi
- (14:00~14:40)(Chair Kawamura K.)
- D216 [Keynote lecture] Separation of physiologically active substance from natural crops using Hansen solubility parameter
(Kansai U., Fac. Envir. Urban Eng.) ○Yamamoto Hideki
- (14:40~15:40)(Chair Hashimoto A.)
- D218 Kinetics of isomerization of hexoses in subcritical aqueous alcohols
(Kyoto U.) ○Gao Daming, Kobayashi Takashi, Adachi Shuji
- D219 Effect of the complexation with protein hydrolysate on the solubility of poorly water-soluble drugs
(U.Miyazaki) ○Inada Asuka, Wang Min, Oshima Tatsuya, Ohe Kaoru, Baba Yoshinari
- D220 Water dispersibility of carotene and its derivatives complexed with peptides
(U.Miyazaki) Sugawara Mariko, ○Iwakiri Takeru, Oshima Tatsuya, Ohe Kaoru, Baba Yoshinari
- (15:40~16:40)(Chair Kobayashi I.)
- D221 Dehydration and Drying Process of Hydrous Foods by Rotating Fluidized Bed with Functional Porous Particles
(Kanae) ○Ohira T., Ishiwatari N., (Fuji Silysia Chemical) Kuroda K., Asano T., Itou M., (Shizuoka U.) Tatemoto Y., (Tokyo Tech.) Nakano Yoshio
- D222 In situ analysis of interaction states of water in aqueous sugar solution during drying
(Okayama U.) ○Imamura Koreyoshi, Kinugasa Takuma, Okada Mami, Imanaka Hiroyuki, Ishida N.
- D223 Infrared Spectroscopic Characteristics of Gas Phase on Ethanol aqueous solution
(Graduate School of Bioresources, Mie U.)
○Matsubara N., Suehara K., Kameoka T., Hashimoto A.
- Day 3 ---
- Symposium <Symposium of Polymer/Gel Technology, Self-organization Process and Functional Particles>**
(9:00~10:00)(Chair Yamamoto T.)
- D301 Sealing property for lead-free glasses composed of V_2O_5 - MnO_2 - KPO_3 - CuO
(Kagoshima U.) ○Kubo S., (YAMATO Electronic Co., Ltd) Kouhara Y., (Kagoshima U.) Takei T., Yoshida M.
- D302 Evaluation of sealing ability and light transmission property of $Li_2B_4O_7$ - BaO - P_2O_5 - Al_2O_3 lead-free glass powder
(Kagoshima U.) ○Tsuruda K., (YAMATO Electronic Co.) Kouhara Y., (Kagoshima U.) Takei T., Yoshida M.
- D303 Fabrication of uniformly cell-laden porous scaffold by gas foaming technique
(Kagoshima U.) ○Takei T., (Kyushu U.) Aokawa Ryuta, (Kagoshima U.) Shigemitsu Takamasa, Yoshida M.
- (10:00~11:00)(Chair Ogi T.)
- D304 Characterization of size distribution of irregularly shaped bovine bone granules
(Niigata U.) Wei T., Hosaka A., (Hokkaido Res. Org.) Akazawa T., (HSUH) Murata M., (Niigata U.) ○Kimura I.
- D305 Synthesis of micron-sized particle by soap-free emulsion polymerization using oil-soluble initiator
(Nagoya U.) ○Yamamoto Tetsuya
- D306 Development of supercooling control technology for PCM microcapsules using a surfactant
(Okayama U.) ○Seike Yoshiki, Tani Masahiko, Ono Tsutomu
- (11:00~12:00)(Chair Takei T.)
- D307 Synthesis of block copolymer using the metal complex and application of the material surface design elements (Okada) ○Hiratsuka Shoichi, Tanaka Yuuki, Ono Tsutomu
- D308 Synthesis of rare earth-free liquid light emitting material and evaluation optical characterization
(Hirishima U.) ○Aishima Kana, Ogi Takasi, Okuyama Kikuo, (kuraray) Iwasaki Shuji
- D309 Structurization of Carbon Particles from Phenol-resin by Spray-Pyrolysis Method
(Hiroshima U.) ○Mori Takahiro, Ratna Balgis, Ogi Takasi, Okuyama Kikuo, (Noritake) G. M. Anilkumar, Miyajima Keita
- (13:00~14:00)(Chair Ono T.)
- D313 Manufacture of enzyme immobilization carrier with enzyme modification function

- (Kitakyushu Nat. Col. Tech.) ○Goto Muneharu, (U. Kitakyushu Faculty of Environmental Eng.) Uezu Kazuya, (Kurume Nat. Col. Tech.) Okobira Tadashi, (Saga U. Faculty of Sci. and Eng.) Kawakita Hidetaka
- D314 Control of Shell thickness and evaluation of fumigation properties on the soil fumigant microcapsules possessing melamine-formaldehyde membrane
(Kagoshima U.) ○Obara S., Oduno Y., (Miyakonojo N.C.T.) Kiyoyama S., (Miyazaki U.) Shiomori K., (Kagoshima U.) Takei T., Yoshida M.
- D315 Self-healing ability evaluation of TDCB specimen utilized microcapsules immobilized healing agents.
(Kagoshima U.) ○Fukushima M., Oduno Y., (Miyakonojo N.C.T.) Kiyoyama S., (Miyazaki U.) Shiomori K., (Kagoshima U.) Takei T., Yoshida M.

--- Room E ---

--- Day 1 ---

Symposium <Fundamentals and Applications of Separation Technology (Oral)>

(9:00~10:20)(Chair Ohsaka Y.)

- E101 Reclamation and volume reduction technique of irradiation contaminated soil
(U. OKAYAMA) ○Ishiyam Shintaro, (ISHIGAKI.Co.) Yamashita Manabu, Hara Kouji, (U. OKAYAMA) Minami Mamoru
- E102 Production of hydrofluoric acid from iron fluoride by reaction distillation method
(Kansai U.) ○Kobayashi K, Araki S, Yamamoto Hideki
- E103 Continuous treatments of dredged material with a double tube type of solid-liquid separator
(KIT) ○Fujita S., Mawatari Yoshihide, Yamamura Masato, Kage Hiroyuki
- E104 Particle separation by dielectrophoresis using carbon nanotube film with high electrical conductivity
(Kyoto U.) ○Tanemori Y., Sano N., Tamon H.
- (10:20~11:40)(Chair Sano N.)
- E105 Effect of the exhaust gas atmosphere on SO₂ purification performance of dry DeSO_x filter
(Kanazawa U.) ○Dodo K., Osaka Y., Tsujiguchi T., Kodama A.
- E106 Study on miniaturization of the dry DeSO_x filter by substrate-less honeycomb structure
(Kanazawa U.) ○Takahashi F., Osaka Y., Tsujiguchi T., Kodama A.
- E107 Effect of layer of thickness on the water vapor diffusion in silica gel layer
(Kanazawa U.) ○Narumiya K., Osaka Y., Tsujiguchi T., Kodama A.
- E108 Separation enrichment of useful material from biomass using zeolite
(Kagoshima U.) ○Kumamoto Yuki, Mizuta K., Goshima Takashi, Tsutsui Toshio

(13:00~14:20)(Chair Makino T.)

- E113 Adsorption of low concentration CO₂ by CeO₂-based CO₂ adsorbents
(HRL) ○Yoshikawa K, Kaneeda M, (Hitachi Chemical) Nakamura H
- E114 Effect of water on CO₂ separation in blast furnace gas by PSA system
(JFE steel) ○Haraoka Takashi, Mogi Yasuhiro, (Kyusyu U.) Saima Hitoshi
- E115 Effect of mixing condition of reaction solution on ion adsorption on crystal surface in reactive crystallization
(Yokohama Nat. U.) ○Nakamura Kazuho, Toyoda Yuuki, Takagisi Taichi
- E116 Optimal operation of fouling prediction models and long-term transmembrane pressure prediction
(U. Tokyo) ○Oishi Hayato, Kaneko Hiromasa, Funatsu Kimito

(14:20~15:40)(Chair Kaneko H.)

- E117 EMolecular dynamics simulation studies for the amino acid ionic liquids in aqueous solution
(Kobe U.) ○Shaikh A., Kasahara S., Kamio E., Matsuyama H.
- E118 Influence of organic acid for separation of bio-ethanol by Silicalite-1 membrane
(Gifu U.) ○Ueno Kyohei, (AIST) Negishi Hideyuki, Ikegami Toru, (Gifu U.) Miyamoto Manabu, Uemiya Shigeyuki, Oumi Yasunori
- E119 Effect of supporting materials on the CO₂ capture efficiency of amine-containing nanogel film
(Kyushu U.) ○Hoshino Y., Yamashita Chie, Ohshiro Yukinori, (Kyushu U.) Miura Yoshiko
- E120 CO₂ Separation Using High-toughness Ion Gel with Tetra-armed Polymer Network
(AIST) ○Makino Takashi, (Yamaguchi U.) Fujii Kenta, (AIST) Kanakubo Mitsuhiro

--- Day 2 ---

Symposium <Potentials of Bioinformatics Based

Engineering for Development of the Bioindustry>

(9:00~9:40)(Chair Takiguchi N.)

- E201 [Invited lecture] Genomic and metabolomics analysis of Aspergillus
(Nat. Res. Inst. Brewing) ○Iwashita Kazuhiro
- (9:40~10:20)(Chair Kurata H.)
- E203 Development of microbial cell factories based on flux balance analysis
(Dept., Bioinfor., Osaka U.) ○Shimizu Hiroshi, Yoshikawa Katsunori, (QBiC, RIKEN) Furusawa Chikara, (Grad Sch of Bio, TITECH) Hirasawa Takashi, (Dept., Bioinfor., Osaka U.) Toya Yoshihiro, Matsuda Fumio
- E204 [JCEJ Outstanding Paper Award] Comprehensive Combination Analysis for Screening of Significant Peptide Epitopes Using a Slide Glass Type-Exclusive Peptide Array from Milk Protein

(Nagoya U.) ○Honda Hiroyuki, Nakatochi Masahiro, Katayama Makoto, Kato Ryuji, Okochi Mina, Yoshida Yasuko

(10:20~11:00)(Chair Takiguchi N.)

E205 [Invited lecture] Engineering application of biological information

(Hiroshima U.) ○Soh Zu, Tsuji Toshio

(11:00~11:40)(Chair Shimizu H.)

E207 BioFNet Database for rational design of biological systems.

(Kyutech) ○Kurata H.

E208 Potential of the biological information on biotechnological application

(Kanazawa U.) ○Takiguchi Noboru, Tanaka Shunsuke, (Hiroshima U.) Soh Zu, Tsuji Toshio

--- Day 3 ---

Symposium <Material Engineering for Chemical Equipments concernig to Energy Generation, Storage and Transportation>

(9:20~10:20)(Chair Isomoto Y.)

E302 Chemical Structure Effect on Thermal Degradation of Epoxy Cortings under Non-oxidative Environment (Tokyo Tech.) ○Kubouchi Masatoshi, Murakami Syou, Ajito Takashi, (Tokyo Gas Co., LTD.) Shimura Toshiki, Kawaguchi Shinobu

E303 Degradation Analysis of a Repaired FRP Tank for Storage of Hydrochloric Acid

(Tokyo Inst. Tech.) ○Kusano Masahiro, Kubouchi Masatoshi, Aoki Saiko, (Nihon U.) Sakai Tetsuya, (Sumitomo Chemical) Nakada Mikitoshi

E304 Effect of Zeolite Fiillers on Degradation of Unsaturated Polyester Resin in Sodium Hydroxide Solution.

(Nihon U.) ○Matsuo Toshihiro, Kikuchi Yuuya, Sakai Tetsuya, Mitomo Nobuo, (Tokyo Inst. Tech.) Kubouchi Masatoshi

(10:20~11:40)(Chair Kubouchi M.)

E305 Development and Application of Corrosion Monitoring by a Simplified Polarization Resistance Method

(Hiroshima U.) ○Isomoto Y., Matsuo S.

E306 Hydrogen Damage of Metal in Chemical Equipments (Mitsui Chemicals) ○matsuda hiroyasu

E307 Hydrogen embrittlement of steels in high pressure hydrogen gas

(Kyushu-U.) ○Matsuoka Saburo

--- Room F ---

--- Day 1 ---

Symposium <Advanced Technologies in Particle-Fluid Separation>

(10:00~11:20)(Chair Katagiri N., Kondo K.)

F104 Ultrahigh-Pressure Expression Assisted with Self-Coagulation of Sewage Sludge Arising from Disruption Operation

(Nagoya U.) ○Yamada M., Iritani E.

F105 Deliquoring behavior of gel layer in the pressure field (Osaka Pref. U.) ○Tanaka T., Iwata M.

F106 A study of sludge volume and turbidity removal by the composite flocculant system

(Azumi Filter Paper. co. ltd.) ○Kadooka H., (Osaka Pref. U.) Goto S., Tanaka T., Iwata M.

F107 Coagulation of Clay Particles by Virus and Its Effect on Membrane Filtration Properties

(Nagoya U.) ○Kohori K., Katagiri N., Iritani E.

(11:20~12:00)(Chair Iwata M.)

F108 [keynote lecture] *****

(U. Tsukuba) ○Adachi Yasuhisa

(13:00~13:40)(Chair Tanaka T.)

F113 [keynote lecture] *****

(TANABE WILLTECH INC.) ○Ando Hidehiko

(13:40~15:00)(Chair Tanaka T.)

F115 Influence of liquid cyclone collection box shape on classification performance

(Hiro.U.) Yoshida H, Fukui K., ○Oshikawa T, Kurimoto N

F116 A study on performance improvement of the louver classifier

(Hiroshima U.) ○Kurimoto N, Yoshida H, Fukui K., Oshikawa T

F117 Influence of Voidage on Centrifugal Sedimentation Rate of Binary Colloids

(Nagoya U.) ○Cao D. Q., Iritani E.

F118 Filtration behavior of food compounds using colloid-multilayered structure on porous membrane (Saga U.) ○Takaoka Yuji, Morisada Shintaro, Ohto Keisuke, Kawakita Hidetaka

(15:00~16:00)(Chair Kawakita H.)

F119 Development of Separation Process of Plasmid DNA Using Affinity Membrane Filtration and Electroporation

(Nagoya U.) ○Kousai M., Katagiri N., Iritani E.

F120 Production of Enzyme by White-Rot Fungus and Decolorization of Dye by Membrane Reactor Using Cultural Supernatant

(Nagoya U.) ○Takatsu M., Katagiri N., Iritani E.

F121 Development of Testing Method of Step-up Pressure Ultrafiltration Using Filter Equipped with One-Stage Reduction in Filtration Area

(Nagoya U.) ○Nakajima R., Iritani E.

--- Day 2 ---

(10:00~11:20)(Chair Mukai Y.)

F204 Evaluation of Microfiltration Properties of Polysaccharide and Protein as Model of Microbial Metabolite

(Nagoya U.) ○Sasakawa T., Katagiri N., Iritani E.

F205 Microfiltration Properties of Yeast Slurry Treated with Disruption Operation

(Nagoya U.) ○Fujii G., Iritani E.

- F206 Effect of the properties of the hollow fiber microfiltration membrane on the filtration characteristics of excess activated sludge (Ehime U.) ○Kawasaki Kenji, Shimada Noriyuki, Fujimoto Takasi
- F207 Ceramic Membrane Filtration of Humic Acid Solution Based on Hybrid Membrane Filtration Method Using the Calcium Carbonate Particles (Yamaguchi U.) ○Sato Takuma, Kazui Takahiko, Nakakura Hideo
(11:20~12:00)(Chair Kawasaki K.)
- F208 Fractionation properties of binary colloidal particles by nanofiber membrane (Nagoya U.) ○Takahashi A., Mukai Y.
- F209 Consideration of Membrane Morphology in Modeling of Microfiltration Kinetics of Dilute Colloids (Nagoya U.) ○Yamashita Y., Iritani E.

--- Room G ---

--- Day 2 ---

Symposium <CVD & Dry Processes - Reaction Engineering for Controlling Microstructure and Functions>

(9:00~10:00)(Chair Mori S.)

- G201 Hot-wire-assisted Atomic Layer Deposition of Ru Thin Films: Growth Characteristics, Composition, and Structural Property (U. Tokyo) ○Yuan Guangjie, Hideharu Shimizu, Takeshi Momose, Yukihiro Shimogaki
- G202 Fabrication of ferroelectric capacitor with conductive oxide electrodes and investigation of degradation mechanism (Osaka. pref. U.) ○Takada Y., Amano T., Okamoto N., Saito T., Kondo K., Yoshimura T., Fujimura N., (Inst. Sci. and Ind. Res.) Higuchi K., Kitajima A.
- G203 Preparation of SiOC anodes for Li-ion batteries by atmospheric chemical vapor deposition with ozone. (Osaka Pref. U.) ○Tsujiyama Yuichi, Okamoto N., Saito T., Kondo K., (Igneite) Ide isami, Nishikawa Masanobu, Onishi yoshikazu
(10:00~11:00)(Chair Saito T.)
- G204 Non-catalytic synthesis of carbon nanofibers by hollow cathode discharge (Tokyo Tech) ○Mori Shinsuke, Tanaka Eichi, Suzuki Masaaki
- G205 Uniform deposition of silicon thin film with high deposition rate in plasma CVD (Gifu U.) ○Nishida Satoshi, Yamamoto Shota, Matsunaga Takuma, Muta Hiroshi, Kuribayashi Shizuma
- G206 Carrier gas effects on morphology of silica film prepared by plasma CVD (Kyoto U.) ○Takeda E., Deguchi T., Kawase M.
(11:00~12:00)(Chair Miura Y.)

- G207 Synthesis control of nanocomposite thin films by vapor/solid-precursor PECVD and evaluation of their photocatalytic activity (Hiroshima U.) ○Taguchi Tomoya, Kubo Masaru, Shimada Manabu
- G208 Coating of MPC Polymer by Surface Modification of Titan using 172 nm VUV (Gifu U.) ○Yamaguchi Kyohei, Kambara Shinji
- G209 Cancelled
(13:00~14:00)(Chair Miura Y.)
- G213 [Keynote lecture] Current status and future prospect of CIS-based thin-film PV technology as a heterojunction device (Showa Shell Sekiyu/Solar Frontier) ○Kushiya K.
- G215 Structural characterization of $\text{Cu}_2\text{ZnSn}(\text{S,Se})_4$ thin films for solar cells fabricated by supercritical fluid reaction (IMRAM) ○Nakayasu Y, Oka N, Tomai Takaaki, Honma Itaru
(14:00~15:00)(Chair Kawase M.)
- G216 Stoichiometric $\text{Bi}_4\text{Ti}_3\text{O}_{12}$ film formation using supercritical fluid deposition (U. Tokyo) ○Zhao Yu, Jung Kyubong, Momose Takeshi, Shimogaki Yukihiro
- G217 Orientation control and electrical property of ferroelectric thin films by PLD (Osaka Pref. U.) ○Amano T., Takada Y., Okamoto N., Saito T., Kondo K., Yoshimura T., Fujimura N., (Osaka U.) Higuchi K., Kitajima A.
- G218 [Invited lecture] Heat and mass transfer analysis for coating process of TiN thin film in a tubular reactor by a thermal CVD method (Yamaguchi U.) ○Tanoue K., (Ube Ind.) Hatori Y., (Yamaguchi U.) Nishimura T.
(15:00~16:00)(Chair Noda S.)
- G219 Study on the Sticking Probability of SiC-CVD Species Using Methyltrichlorosilane (2) (U. Tokyo) ○Shima Kohei, Sato Noboru, Funato Yuichi, Sugiura Hidetoshi, (IHI) Fukushima Yasuyuki, (U. Tokyo) Momose Takeshi, Shimogaki Yukihiro
- G220 Comparative study of organosilane precursors in SiC-CVD (U. Tokyo) ○Sugiura Hidetoshi, Shima Kohei, Sato Noboru, Funato Yuichi, (IHI) Fukushima Yasuyuki, (U. Tokyo) Momose Takeshi, Shimogaki Yukihiro
- G221 Construction of reaction mechanism of methyltrichlorosilane considering pressure dependence for SiC-CVD process (U. Tokyo) ○Sato Noboru, Funato Yuichi, Shima Kohei, Sugiura Hidetoshi, Fukushima Yasuyuki, Momose Takeshi, Koshi Mituo, Shimogaki Yukihiro
(16:00~17:00)(Chair Nishida T.)
- G222 Reactor scale simulation for optimizing SiC-CVI process using methyltrichlorosilane

(U.Tokyo) ○Funato Yuichi, Sato Noboru, (IHI) Fukushima Yasuyuki, (U.Tokyo) Shima Kohei, Sugiura Hidetoshi, Momose Takeshi, Shimogaki Yukihiro
 G223 [Keynote lecture] Design of Advanced Nanomaterials Using Soluble Carbon Nanotubes (Kyushu U.) ○Nakashima N.

 --- Room H ---

--- Day 1 ---

Symposium <Development of Intensified Reaction & Separation Systems and Computer-Aided Process Engineering>

(9:40~10:40)(Chair Matsumoto H.)
 H103 Efficient determination of steady-state reactant concentrations in the highly-accurate calculation of sensitivities in reaction networks (Kyushu U. Graduate School) ○Yoshida Erika, Shiraishi Fumihide
 H104 *****
 (Kobe-U.) ○Okemoto Atsushi, Inoue Yoshiki, Taniya Keita, Ichihashi Yuichi, Nishiyama Satoru
 H105 Numerical flow analysis for a Taylor Vortex bioreactor system (Muroran Inst.Tech.) Kawai Hideki, ○Akazawa Yuta, (Kobe U.) Yamaji Hideki, (Muroran Inst.Tech.) Yamada Takehiro
 (10:40~11:20)(Chair Taniya K.)
 H106 Development of the liquid-liquid-extraction process stabilization technology in a bioplant (Kaneka) ○Kanaya Kento, Suzuki Yasuyuki, (kaneka) Kanda Akihisa
 H107 Segment Modeling and Simulation for Prediction of Behavior of Layer Formation in Aqueous Two-Phase Flow (Tokyo Tech) ○Matsumoto H, Yasui K, Kuroda C
 (11:20~12:00)(Chair Horie T.)
 H108 [Keynote Lecture] Computer-Aided Technology for design of battery electrode (Kyoto U.) ○Inoue Gen
 (13:00~13:40)(Chair Sakurai M.)
 H113 [Keynote lecture] Membrane Reformer System for Hydrogen Production from Natural Gas (Tokyo Gas Co., Ltd.) ○Iseki Takaya
 (13:40~15:00)(Chair Kanaya K.)
 H115 Simulation of a power system combined binary-heat pump cycle for using hot spring heat (Yamagata U.) ○Dohmori Yuki, Yamaki Takehiro, Matsuda Keigo
 H116 A Method for Adaptation of Mirror Plant Models to Dynamic Change in Tray Efficiency of Distillation Column (Yokogawa Elec) ○Yamada A, (Tokyo Tech) Matsumoto H, (Mitsui Chem) Takagaki J, (Omega Sim) Kawamura T, Yokoyama K

H117 The knowledge management approach for process integration of distillation - reaction system (Yamagata U.) ○Yamaki Takehiro, Matsuda Keigo
 H118 Intensification of Hollow Fiber Separation Process by Oscillatory Baffled Membrane Module (Kobe U.) ○Horie Takafumi, Akagi Takaaki, Shiota Saori, Ohmura Naoto, (Osaka U.) Hirata Yushi
 (15:00~15:40)(Chair Matsuda K.)
 H119 [Keynote lecture] Measurement of physical properties for gas adsorption process using ionic liquid (Nihon U.) ○Kodama D.
 (15:40~17:00)(Chair Kawai H.)
 H121 Fast pyrolysis of oil palm residue using a fluidized bed reactor with six successive condensers for fractional collection of bio-oil (UTP) Ali Norizan, ○Uemura Yoshimitsu, Afif Hafizah, Omar Wissam, (Kagoshima U.) Tsutsui Toshio, (UTP) Osman Noridah, Abdullah Bawadi
 H122 Periodic Operation for Hydrogenation of Alpha-methylstyrene in a Trickle Bed Reactor (Kobe U.) ○Hiraishi Kazuhiro, Hirai Kenta, Kumagai Norihisa, Horie Takafumi, Ohmura Naoto
 H123 Periodic Temperature Cycling Operation Using a Microreactor (TUAT) ○oku hiroki, sakurai makoto, kameyama hideo
 H124 Instability phenomena of Taylor-Couette Flow in Inhomogeneous Temperature Field (Kobe U.) ○Yoshida Saho, Masuda Hayato, Horie Takafumi, Ohmura Naoto

--- Day 2 ---

Symposium <Micro Chemical Process Technology - Opening Next Generation ->

(10:00~10:40)(Chair Nakaya H.)
 H204 Direct synthesis of hydrogen peroxide from hydrogen and oxygen (Santoku Chemical Industries Co. Ltd.) ○Suzuki K., Shibata K., (AIST) Kawasaki S., Suzuki T., (Tohoku U.) Suzuki A.
 H205 Oxidative decomposition of toluene by use of an atmospheric pressure plasma reactor (Kyoto U.) ○Kato Atsushi, Nakagawa Hiroyuki
 (10:40~11:20)(Chair Yamaguchi T.)
 H206 Anionic Polymerization Using Flow Microreactors and Its Applications to Synthesis of Structurally Well-defined Fluorine-Containing Polymers (Graduate School of Eng., Kyoto U.) ○Nagaki Aiichiro, Akahori Kana, Takahashi Yusuke, Yoshida Jun-ichi
 H207 Infrared Microspectroscopic Observation of Cyclic Hydrocarbons Dehydrogenation in Micro-Catalyticreactor (Nagoya U.) ○Hayashi R, Tagawa T, Yamada H
 (11:20~12:00)(Chair Inoue T.)
 H208 Development of tubular immobilized enzyme microreactor using anodized aluminum carrier

- (TUAT) ○Seki Shunta, Sakurai Makoto, Kameyama Hideo
- H209 Development of microreactor with etched aluminium wires
(TUAT) ○Sakai Yuhei, Hiramatsu Hiromi, Sakurai Makoto, Kameyama Hideo
(13:00~13:40)(Chair Maki D.)
- H213 [Keynote lecture] Necessary condition of micro reactor plant introduction in API manufacturing
(Eisai CO., LTD.) ○Kuroda Hirofumi
(13:40~14:20)(Chair Miyazaki M.)
- H215 The control of indomethacin polymorph via mixing process of poor solvent
(Kyoto U.) ○Oya Tomokazu, Hyryta Masashi, Katayama Jumpei, Maki Taisuke, Mae Kazuhiro
- H216 Nucleation kinetics in microfluidic crystallization
(Okayama U.) ○Ono Tsutomu, Yamamoto Emi, Maki Saori, Yagiura Kumiko
(14:20~15:00)(Chair Kawanami H.)
- H217 Influence of supersaturation on the control of polymorphysm of organic crystals in microdroplet
(Hokkaido U.) Maeki Masatoshi, (Kyushu U.) ○Hirao Shifumi, Teshima Yuki, (MSRC, AIST) Yamashita Kenichi, Miyazaki Masaya
- H218 The industrialization of electrical bicolored particles using a micro-channel network
(Soken chemical & Eng. Co. Ltd) ○Akita Hiroya, Tarumoto Atsushi, Awatsu Yasuhiro, Takizawa Yoichi
(15:00~15:40)(Chair Sotokawa I.)
- H219 Increase in Specific Surface Area of BaSO₄ and Fe₃O₄ by Double Tube-type Impinging Reactor
(Kogakuin U.) ○Iida Hajime, Takei Jun, Tanabe Daiki, Ui Hiromu, Igarashi Akira
- H220 Fabrication of metal nanoparticles-dispersed polyimide microparticles using microreactors and their catalytic properties
(AIST) ○Ishizaka T, Ishigaki A, Chatterjee M, Suzuki A., Suzuki T., Kawanami H
(15:40~16:40)(Chair Aoki N.)
- H221 Flow regime observation of a microreactor for gas-liquid- solid reactions
(AIST) ○Inoue Tomoya, Adachi Jiro, Murakami Sunao, (Ibaraki U.) Sun Xu, Wang Dongfang, (AIST) Ohtaki Kenichiro, Lu Ming
- H222 Effects of gas-liquid contacting patterns on formation of hollow calcium carbonate particles
(Doshisha U.) ○Atarashi T., Mori Yasushige, Tsuchiya Katsumi
- H223 Evaluation of Mixing State by Synthesis of Pt Nanoparticles and Computational Fluid Dynamics
(Kyoto U. Graduate School of Eng.) ○Asano S., Oya Tomokazu, Maki Taisuke, Mae Kazuhiro
--- Day 3 ---
(9:00~9:40)(Chair Nakayama K.)
- H301 [Keynote lecture] Application of a microreactor to liquid - liquid chemical processing. - extraction and demulsification -
(Osaka Pre. U.) ○Muto Akinori
(9:40~10:20)(Chair Tonomura O.)
- H303 Improvement of extraction efficiency using a microdevice
(Hitachi, Ltd.) ○Asano Y., Matsuzawa M., Morita M., Kato H.
- H304 Autonomous extraction of rare-earth metals using active soft matters with chemotactic functions
(Osaka U.) ○Ban Takahiko, Tani Kentaro, Nakata Hiroki
(10:20~11:00)(Chair Matsuoka A.)
- H305 Development of metal extraction system with calixarene derivatives by droplet-based microfluidics
(Hokkaido U.) ○Maeki Masatoshi, (Saga U.) Kim ee-Young, Ueda Yuki, Ohto Keisuke, (MSRC AIST) Miyazaki Masaya
- H306 Continuous demulsification of cyclohexane - water emulsion for extraction in a micro tube by voltage application.
(Osaka Pref. U.) ○Muto Akinori, Iwakura Shunsuke, Tokumoto Hayato
(11:00~11:40)(Chair Ban T.)
- H307 Liquid-liquid extraction of lithium ion by the slug flow -Effect of volumetric flow ratio-
(Osaka Pre. U.) ○Hirayama Y, Muto Akinori, (Kobe Steel, Ltd.) Matsuoka A., Noishiki K
- H308 Effect of channel and operating conditions on mass transfer and specific contact area for liquid-liquid extraction in small channel
(Kobe Steel, Ltd.) ○Hangai Hiroo, Fujisawa Akitoshi, Matsuoka A., Noishiki K
(11:40~12:20)(Chair Asano Y.)
- H309 Gas absorption operation using gas-liquid Slug flow for downsizing
(Kyoto U.) ○Fukuda Takashi, Shimomura Haruka, Maki Taisuke, Mae Kazuhiro, (KOBELCO, LTD.) Matsuoka A., Fujisawa Akitoshi, Noishiki K
- H310 Estimation of slug length in gas-liquid microreactors by using pressure measurements
(Kyoto U.) ○Keisuke M., Osamu T., Shinji H.
-
- Room I ---
--- Day 1 ---
- Symposium <Integration Engineering for Supporting Creation of Superior Scenarios>**
(13:00~14:20)(Chair Aoyama A., Bito K.)
- I113 [Keynote lecture] A Scenario Analysis of Energy System Based on Integration Engineering
(U. Tokyo/Kyushu Univ.) ○Kikuchi Y.
- I115 [Keynote lecture] Challenges in the Pharmaceutical Industry and Creating Countermeasure Scenarios Using Integration Engineering

- (Kyowa Hakko Kirin) ○Kawai H
 (14:20~15:40)(Chair Shimada Y., Yamaguchi H.)
 I117 [Keynote lecture] Integration Engineering for the
 Pharmaceutical Industry: Efficient Maintenance
 System of NIR Calibration Model Using IDEFO
 (Daiichi-Sankyo) ○Miyano T
 I119 [Keynote lecture] Requirements Specification of
 Process Chemistry for Batch Processes
 (Tokyo Tech) ○Fuchino T.
 (15:40~16:20)(Chair Sugiyama H.)
 General Discussion

--- Day 2 ---

**Symposium <The Subjects and Approaches to Process
 Safety Management>**

- (9:00~11:40)(Chair Iuchi K., Aoyama A.)
 I201 Approach to Metrics for Management of Safety
 (RitsmeikanUniv) ○Aoyama Atsushi
 I202 Principles and Procedures of Metrics Development
 from Incident Investigation
 (Mitsubishi Chmical Corp.) ○Takahashi Kazunari,
 (RitsumeikanUniv.) Aoyama Atsushi, (GPLS Inc.)
 Iuchi Kensuke
 I204 Application of Metrics to Chemical Process Plant's
 Accidents
 (MitsubishiChemicalCorp.) Takahashi Kazunari,
 (RitsmeikanUniv.) Aoyama Atsushi, (GPLSInc.)
 ○Iuchi Kensuke
 I205 Process Safety Leading Metrics based on Incident
 Investigation by applying Business Process Model
 (Tokyo Tech) ○Fuchino T., (JNIOH) Shimada Y.,
 (Shizuoka U.) Takeda K, (Osaka System Planning)
 Osaka H, (SCEJ Safety) Iuchi Kensuke
 I207 Incident Investigation for Process Safety Metrics based
 on Business Process Model
 (Tokyo Tech) ○Fuchino T., (JNIOH) Shimada Y.,
 (Shizuoka U.) Takeda K, (Systems PlanningOsaka
 System Planning) Osaka H, (MCC) Nakagawa Masaki
 (13:20~14:20)(Chair Shimada Y.)
 I214 Development of Business Process Model for Plant
 Maintenance
 (Tokyo Tech) ○Fuchino T., (JNIOH) Shimada Y.,
 (Shizuoka U.) Takeda K, (FOC) Hosoda K, (MCC)
 Miyazawa M
 I215 Application of Plant Maintenance Supporting
 Environment
 (Tokyo Tech) Fuchino T., (JNIOH) Shimada Y.,
 (Shizuoka U.) Takeda K, (Tokuyama) ○Shinohara H,
 (AsahiKasei) Miyazawa M, (Toray-BFS) Takehara T,
 (Croda) Hanabusa T
 I216 Engineering Activity Model Based Requirements
 Specification of Process Chemistry
 (JNIOH) ○Otsuka T., (Mitsui Chemicals) Iwakabe K.,
 (TUAT) Kitajima T., (JNIOH) Shimada Y.,
 (TITECH) Fuchino T.
 (14:20~15:40)(Chair Minagawa T.)

- I217 Application of Chemical Process Plant's Accidents
 (GPLSInc.) ○Iuchi Kensuke, (National Institute of
 Advanced Industrial Science and Technology) Wada
 Yuji, (Kyushu University) Tsuge Yoshifumi
 I218 Disemmination of risk management methodologies for
 the small-and-medium-sized enterprises in the
 chemical process industries
 (JNIOH) ○Shimada Y.
 I219 Safety Culture in Process Safety
 (Keio SDM) ○Uno Kenichi
 I220 A study on the consequence evaluation of the flammable
 liquid spills on the sea
 (Nat. Maritime Res. Inst.) ○Kimura Arata, Oka
 Hideyuki

 --- Room J ---

--- Day 1 ---

**Symposium <The Cost Enginnering for Progress of the
 Globalization and Dcrease in Domestic Demands>**

- (13:00~14:00)(Chair Kanaya M.)
 J113 Chemicalengineering and Costengineering: Viewpoint
 of Tecnical succession
 (Kankentchno) ○Kagoshima T
 J114 Cost and Risk of Chemical Plant Construction in USA
 (MES) ○Terasawa S.
 J115 The advance to Asian markets of domestic incineration
 plant makers
 (Hitachizosen Co.) ○Fujii M.
 (14:00~15:00)(Chair Terasawa S.)
 J116 Cost management in project execution
 (KAWASAKI HEAVY INDUSTRIES, LTD.)
 ○kanaya masao
 J117 On the economic evaluation in process design
 (Oishi Consultant) ○Oishi Tetsuo
 J118 Manufacture for global business
 (pcm kansai) ○okamoto masayoshi

--- Day 2 ---

**Symposium <Recent Research and Development of Process
 Systems Engineering>**

- (9:00~10:00)(Chair Baba K.)
 J201 [JCEJ Outstanding Paper Award] Development of
 Simulator for Bio-Propylene Synthesis Process
 (KyotoU.) ○Taniguchi Satoshi, (AIST) Ohmori Takao,
 Kawamura Mitsutaka, Kataoka Sho, (U. Hyogo)
 Yamamoto Takuj, (AIST) Nakaiwa Masaru, Takahashi
 Atsushi, Fujitani Tadahiro
 J202 Non-linear data visualization and networks combined
 approach for monitoring of process data
 (Tokyo U.) ○Escobar Matheus, Kaneko Hiromasa,
 Funatsu Kimito
 J203 Adaptive soft sensor method based on moving window
 model and ensemble learning
 (U. Tokyo) ○Kaneko Hiromasa, Funatsu Kimito
 (10:00~11:00)(Chair Hamaguchi T.)
 J204 Regression model for the monitoring of a process plant

- (TUAT) Yamashita Y., ◯Tohma T.
- J205 Database management method based on distance and non-linearity for locally weighted linear regression model
(Kyoto U.) Mishima Kazuki, ◯Kim Sanghong, Kano Manabu, Shinji H.
- J206 Efficient wavenumber selection method for NIR calibration modeling and its application to pharmaceutical processes
(Kyoto U.) ◯Uchimaru Taku, (Daiichi Sankyo) Miyano T, (Kyoto U.) Fujiwara Koichi, Kano Manabu, (Daiichi Sankyo) Tanabe Hideaki, Nakagawa Hiroshi, Watanabe Tomoyuki, Wakiyama Naoki
(11:00~11:40)(Chair Kaneko H.)
- J207 Improving Lead Time of Pharmaceutical Production Processes Using Monte-Carlo Simulation
(UTokyo/Roche) ◯Sugiyama H, (Roche/ETH Zurich) Eberle L, (Roche) Schmidt R
- J208 Robust Optimal Intermediate Temperature Control for Seeded Batch Crystallization
(Tokyo Tech) ◯Su Ye, Seki H.
(13:20~13:40)(Chair Kaneko H.)
- J214 A study on a BPM for an alarm system design process based on a plant and an alarm management lifecycle
(Shizuoka U.) ◯Takeda K, (Nagoya Inst. Tech.) Hamaguchi Takashi, (Kyushu U.) Kimura Naoki, (Fukuoka U.) Noda Masaru
(13:40~14:40)(Chair Tonomura O.)
- J215 Grouping of Sequential Alarms in Plant Operation Data based on Dot Matrix Analysis
(Fukuoka U.) ◯Wang Zhexing, Noda Masaru
- J216 Estimation of processing completion time and critical path in manufacturing systems under consideration of interaction between parallel process paths
(Nagoya U.) ◯Goto Y., Hashizume S., Yajima T., Onogi K.
- J217 Improvement of the diversity of Pareto solutions in multi-objective ACO
(Nagoya U.) ◯Kawai T., Tanabashi Y., Yajima T., Hashizume S., Onogi K.
(14:40~15:40)(Chair Noda M.)
- J218 Modeling and control of abnormal behaviors of discrete event system
(Nagoya U.) ◯Imaizumi Y., Yamakawa T., Hashizume S., Hashizume S., Yajima T., Onogi K.
- J219 Study of the automatic R&D system using bio-inspired algorithms for chemical vapor deposition processes
(Shizuoka U.) ◯Takahashi T., Abe H., (Ube Nat. Col. Tech.) Arakawa M., (Shizuoka U.) Ema Y.
- J220 Development and evaluation of the algorithms to estimate deposition profiles of CVD using GAs (3)
(Shizuoka U.) ◯Takahashi T., Hasebe T., Inagaki T., Nariiai S., Ema Y.

--- Day 3 ---

Symposium <13th Process Design Contest for Students>

- (9:00~12:00)(Chair Yamashita Y., Yokoyama K.)
- J301 13th Process Design Contest for Students
(TUAT) ◯Yamashita Y., (Tokyo Tech) Fuchino T., Sekiguchi H, (Kyushu U.) Kimura Naoki, (Shizuoka U.) Takeda K, (Omega Simulation) Yokoyama K, (TEC) Suzuki G
(14:00~15:40)(Chair Fuchino T., Suzuki G.)
General Discussion

--- Room K ---

--- Day 1 ---

- Symposium <Biofilm Engineering: Carving Out a New Era>**
(13:00~15:00)(Chair Terada A.)
- K113 [Keynote lecture] Study on bacterionanofibers opening a door from biofilm engineering to biointerface engineering
(Nagoya U.) ◯Hori K.
- K116 [Invited lecture] Biofilm and its visualization
(U. Tsukuba) ◯Nomura Nobuhiko, Inaba Tomohiro, Kiyokawa Tatsunori, (MIT Dep. Civil & Environ. Eng.) Yawata Yutaka, (U. Tsukuba) Obana Nozomu, Toyofuku Masanori
(15:20~17:00)(Chair Hori K.)
- K120 [Invited lecture] The development of biofouling control techniques based on quorum quenching methods
(Utsunomiya U.) ◯Ikeda Tsukasa
- K123 [Invited lecture] Control of biofilm structure and activity by surface modification of materials
(Tokyo U. Agr. & Tech.) ◯Terada Akihiko, Suzuki Kaori, Mizuma Shohei, Takahashi Erika, Higuchi Ryo, Hosomi Masaaki

--- Day 2 ---

- Symposium <Development of Global Standard Technologies for Production of Next-Generation Antibody Drugs>**
(13:00~15:00)(Chair Kumada Y.)
- K213 [Keynote lecture] Production of Biologics - next generation platform technology
(Inst. Tech. and Sci., U. Tokushima) ◯Omasa Takeshi
- K215 [Invited lecture] Construction of producer cell lines using accumulative gene integration system
(Department of Chemical Eng., Faculty of Eng., Kyushu U.) ◯Kamihira Masamichi
- K216 [Invited lecture] Stable expression of antibody genes in CHO cells by homologous recombination on hprt locus
(Biotechnology Group, Resarch Inst., TOTO LTD.) ◯Yamana Yoshimasa
- K217 [Invited lecture] The development of cell culture system for screening
(SUMITOMO BAKELITE Co. Ltd.) ◯Arai Susumu, (ABEL) Ishikawa Shutaro, (SUMITOMO BAKELITE Co. Ltd. Bio-Medicine Fundamental Tech. Development Project Team) Hayashi Daisuke

- K218 [Invited lecture] Application of metabolic flux information to bioprocess design for manufacturing biopharmaceuticals (Hitachi Res. Laboratory, Hitachi, Ltd.) ○Shibuya Keisuke, Oka Kenichiro, Sugita Yui, (Infrastructure Systems Company, Hitachi, Ltd.) Murakami Sei (15:00~16:20)(Chair Yoshimoto N.)
- K219 [Keynote lecture] Advanced downstream technology for biologics (Yamaguchi U.) ○Yamamoto Shuichi
- K221 [Invited lecture] The cellulose ion-exchange resin for the purification of the proteins (JNC) ○Matsumoto Yoshihiro, Umeda Yasuto, Aoyama Shigeyuki
- K222 [Invited lecture] Development of analytical technologies for the quality assurance of novel biopharmaceuticals (Biomedica, AIST-Frontier Sciences, Tokyo U) ○Honda Shinya (16:20~16:40)(Chair Kumada Y., Yoshimoto N.)
General Discussion

--- Room M ---

--- Day 1 ---

Symposium <Materials and Process in Electronics>

(9:00~10:40)(Chair Okamoto N., Kondo K.)

- M101 Analysis of Cu(I) Complexes in Copper Sulfate Electroplating Solution by Using Reaction Kinetics with a Chelate Reagent (AIST) ○Noma H., Koga T., Hirakawa C., Nonaka K.
- M102 Kinetic Monte Carlo simulation of TSV filling (Kyoto U.) ○Kaneko Y., (Osaka P.U.) Hayashi T., Kondo K., (C.Uyemura & Co., Ltd.) Ohara K., Asa F.
- M103 Copper(I) ion concentration's distributions of the inside of through holes while electrodepositing (Osaka Pref. U.) ○Matsuura S., Hayashi T., Kondo K., Yokoi M., Okamoto N., Saito T.
- M104 [Invited lecture] Via filling electrodeposition- reaction and additives (OsakaPrefectureUniversity) ○Yokoi M. (10:40~12:00)(Chair Ohtsuka K., Yokoi M.)
- M106 Diallylamine additive's effect on copper via filling (Osaka Pref. U.) ○Yamada Y., Takeuchi M., Okamoto N., Saito T., (Nittobo Medical) Bunya M., (Osaka Pref. U.) Yokoi M., Kondo K.
- M107 High Speed TSV Filling by Using Cornic Via (Osaka Pref.U.) ○Funahashi C., Okamoto N., Saito T., Yokoi M., Kondo K.
- M108 Effect of via bottom cuprous ion concentration on via filling electrodeposition current (Osaka Pref. U.) ○Hayashi T., Yokoi M., Okamoto N., Saito T., Kondo K.
- M109 Influence on the deposit reaction by monovalent copper and the additive in copper plating (Osaka Pref. U.) ○Nishimura K., Okamoto N., Saito T., Yokoi M., Kondo K. (12:40~14:20)(Chair Kimizuka R., Ohnuki J.)
- M112 [Invited lecture] Resistivity Reduction in Nano-Scale Cu Wires Using High-Purity Electrolyte (Graduate School, Sci. and Tech., Ibaraki U.) ○Onuki Jin, Tamahashi Kunihiro, (Department of Materials Sci., Ibaraki U.) Sasajima Yasushi, Nagano Takatoshi
- M114 Acceleration of the copper electrodeposition reaction by small amount of Cl- Ions (OsakaPref.U.) ○Kataoka K., Okamoto N., Saito T., Yokoi M., Kondo K.
- M115 Reduction of thermal expansion coefficient of electrodeposited copper for TSV (Osaka Pref. U.) ○Mukahara S., Kondo K., Fukui K., Yokoi M., Takeuchi M., (Nittobo) Bunya M., (Osaka Pref. U.) Saito T., Okamoto N.
- M116 Copper Wire Transparent Conductive Film (OPU) ○Kondo K., Ikeda Yuichi, Maki Yoshirou, Yokoi M., Okamoto N., Saito T. (14:20~16:00)(Chair Saito T., Sudo M.)
- M117 Polyimide film for electroless plating corresponding to desmear processing (UBE Inds. Ltd.) ○Miura Toru, Kohda Masahumi, Yokozawa Tadahiro
- M118 Energy analysis and efficiency of the fuel cell (Kyoto U.) ○Ogino F.
- M119 Sn film prepared by electrodeposition as negative electrode for Na-ion secondary batteries (Osaka Pref.U.) ○Morita K., Okamoto N., Saito T., Kondo K.
- M120 Mechanism of hydrogen peroxide formation in PEMFC under operating condition (Shizuoka U.) ○Ohmura K., Okamoto Y., Itoh C., Sudoh M.
- M121 Unsaturated and non-uniformly distributed water transport in the membrane for polymer electrolyte fuel cell. (Shizuoka U.) ○Sugesawa Y., Shimokawa R., (Ryukyuu U.) Minakuchi H., (Shizuoka U.) Sudoh M. (16:00~17:20)(Chair Takeuchi M., Marunaka M.)
- M122 Solubility behavior and crystal growth of GaN in super critical ammonia with doping metal (Tohoku U. IMRAM) ○Ito M., Sato F., Tomida D., (The Japan Steel Works) Kurimoto K., Bao Q., (Mitsubishi Chemical) Saito M., (Tohoku U. IMRAM) Qiao K., (Tohoku U. IMRAM) Ishiguro T., (Tohoku U. IMRAM) Yokoyama C.
- M123 Optimal design of FPC made of porous PI (Yamagata U.) ○Taki Kentaro, (SEI) Mizoguchi Akira, (Yamagata U.) Ito Hiroshi
- M124 Discussion about the improvement plan for discharge characteristics of electric double layer capacitor (Shizuoka U.) ○Nagasawa Y., Yasue T., Nakamura S., Sudoh M.

M125 Effective factors on discharge capacity of rechargeable alkaline zinc-air battery
(Shizuoka U.) ○Ida T, Suematsu N, Akutagawa S, Sudoh M.

--- Day 2 ---

Symposium <Biochemical and Thermochemical Conversion of Biomass and their Collaboration>

(15:40~17:00)(Chair Norinaga K.)

M221 Cancelled

M222 Development of Waste Plastics Gasification Technology 2 Review of Waste Plastic's behavior in Fluidized-Bed Gasifier
(JFESteel) ○Momono Kouichi, Ishii Jun, Takagi Katsuhiko, Asanuma Minoru, Matsuno Hidetoshi

M223 Steam gasification of iron-loaded biochar and subbituminous coal mixture
(Akita U.) ○Shen Lingbo, Murakami K.

M224 Factors controlling the chain reaction growth probability in the FT-slurry bed reactor.
(Tokyo Col. Eng. graduate school) ○okuyama yuta, saiki hiroshi

--- Day 3 ---

(9:00~10:00)(Chair Kumagai S.)

M301 Elucidation of factors affecting fermentation rate in aerobic fermentation of woody biomass
(Shinshu U.) ○Mochizuki Shun, Takahashi Nobuhide, Shimada Iori, Fukunaga Hiroshi

M302 Effect of Grinding Aid Addition on grindability of Woody Biomass
(Department of Chemical Eng., Nagoya U.)
○Murayama Yuka, (Department of Mechanical Eng., Gifu U.) Kobayashi Nobusuke, (Department of Chemical Eng., Nagoya U.) Tanabe Yasuhiro

M303 Production of levulinic acid from cellulose through two-step treatments
(Kyoto U.) ○Hasegawa I., Sawanishi H., Muranaka Y., Mae Kazuhiro

(10:00~11:00)(Chair Matsumura Y.)

M304 [Invited lecture] Development of simultaneous saccharification and co-fermentation (SSCF) process for woody bioethanol production using fast fermentation microorganism
(Tottori U.) ○Yanase Hideshi

M306 The efficient and stable methan fermentation disposal method of the kitchen garbage using subcritical water
(Toyo Tire & Rubber Co.,Ltd) ○koyama A, watanabe M, (Rematec) tadokoro S, yoshimi M

(11:00~12:00)(Chair Hasegawa I.)

M307 Hydrothermal decomposition of xylose
(Hiroshima U.) ○Paksung Nattacha, Matsumura Yukihiro, Kato Junichihi, Nakashimada Yutaka

M308 Comparative analysis of enzymatic hydrolysis using hydrothermally dissolved cellulose and crystalline cellulose

(HiroshimaU.) ○Fukutomi Yuta, Kanna Machi, Matsumura Yukihiro

M309 Enzymatic saccharification of hydrothermal treated moso-bamboo

(Saga U.) ○Kumagai Satoshi, Hayashi Nobuyuki

(13:00~14:00)(Chair Nakashimada Y.)

M313 Comparison of Ethanol Production of Simultaneous Saccharification and fermentation (SSF) and Separate Hydrolysis and Fermentation using Cellulose
(Hiroshima U.) ○Sakimoto Kouki, Kanna Machi, Matsumura Yukihiro

M314 Optimization of biomass saccharification and efficient production of biosurfactants
(Kitami Inst. Tech.) ○Konishi M., Yoshida Yuka, Horiuchi J.

M315 Characteristics of Enzymatic Hydrolysis of Biomass (JGC) ○Taneda D, Ikeo M, Okino S

(14:00~15:00)(Chair Takahashi N.)

M316 Conversion into lignin-derived resin material from biomass by combining fomic acid saccharification and acetone treatment
(Kyoto U.) ○Muranaka Y., Hosokawa J., Hasegawa I., Mae Kazuhiro

M317 Calorific Value Change during Carbonization of Bio-drying Sludge
(Gifu U.) ○Suami A., (Obu unity) Hamabe H., (Gifu U.) Kobayashi Nobusuke, Itaya Y.

M318 Preparation of porous char by ionothermal carbonization of cellulose
(Kyushu U.) ○Kudo S., Yamasaki K., Norinaga K., Hayashi J.-i.

(15:00~16:00)(Chair Kanna M.)

M319 [Invited lecture] Development of simultaneous saccharification and co-fermentation (SSCF) process for woody bioethanol production using fast fermentation microorganism
(Hiroshima U.) ○Nakashimada Yutaka, Nishio Naomichi, Aki Tsunehiro, Okamura Yoshiko, Tajima Takahisa, Matsumura Yukihiro

M321 Variations in biomass and lipid yields of fresh water microalgae *Scenedesmus quadricauda* in column photobioreactor
(UTP) Nguyen Tien Thanh, ○Uemura Yoshimitsu, Ismail Lukman, Osman Noridah

(16:00~17:00)(Chair Uemura Y.)

M322 Improvement of biodiesel solidification at low temperature
(Sojo U.) ○Kusakabe Katsuki, Michida Wataru

M323 Biodiesel production under supercritical fluids using a novel spiral reactor: a comparative study between methanol and ethanol
(Hiroshima U.) ○Farobie Obie, Matsumura Yukihiro

M324 Bio-oil upgrading using Iron-loaded catalysts
(Akita U.) ○Oga Takahiro, Murakami K., (Niigata U.) Kojima Yasuo

--- Room N ---
--- Day 1 ---

Symposium <Advanced Technologies on Energy Conversion, Storage, and Utilization for Sustainable Society>

(13:00~14:00)(Chair Kansha Y.)

N113 Development of Oxygen Carrier and Process Design for Chemical Looping Process
(Nagoya U. School of Eng.) ○Sugie Ryosuke, (Gifu U. Faculty of Eng.) Kobayashi Nobusuke, (Nagoya U. School of Eng.) Tanabe Yasuhiro

N114 Reduction kinetics and stability of CuO and NiO on perovskite supports in chemical looping systems
(U. Tokyo) ○Ochieng J. O, Kosaka F., (Cambridge U.) Azadi P., (Chuo U.) Hatano H., (U. Tokyo) Oshima Y., Otomo J.

N115 Redox reaction mechanism of metal oxide for hydrogen storage systems
(U. Tokyo) ○Kosaka Fumihiko, (Chuo. U.) Hatano Hiroyuki, (U. Tokyo) Oshima Yoshito, Otomo Junichiro

(14:00~15:20)(Chair Ohtomo J.)

N116 Thermochemical recuperation of methane using high purity alumina tube -Increase in heating value and inhibit on of coke formation by CO₂ reforming-
(Waseda U.) ○Kuwako Y., Nakagaki T., Katou T., Yamaguchi A.

N117 Thermochemical recuperation of methane using high purity alumina tube ~Reforming reaction scheme combined gas phase and surface reactions~
(Waseda U.) ○Yamaguchi A., Nakagaki T., Katou T., Kuwako Y.

N118 Effect of LED irradiation on the oxidative degradation of 1,4-dioxane utilizing Fenton reaction
(Kyoto U.) ○Maekawa J, Mae Kazuhiro, Nakagawa Hiroyuki

N119 Energy integration for industrial symbiosis in isolated island
(U. Tokyo) ○Kanematsu Y., (U. Tokyo / Kyushu U.) Kikuchi Y., (Waseda U.) Nakagaki T., (U. Tokyo) Okubo T.

(15:20~16:40)(Chair Nakagaki T.)

N120 Self-heat recuperation system by electrocaloric effect
(U. Tokyo) ○Kaseda Toshihiro, Kansha Yasuki, Ishizuka Masanori, Kotani Yui, Renaldo Rasfuldi, Tsutsumi Atsushi

N121 [JCEJ Outstanding Paper Award] Evaluation of a Self-Heat Recuperative Thermal Process Based on Thermodynamic Irreversibility
(U.,Tokyo,IIS) ○Kansha Yasuki, (U.,Tokyo) Kotani Yui, (TIT) Aziz Muhammad, (Kobelco) Kishimoto Akira, (U.,Tokyo,IIS) Tsutsumi Atsushi

N122 [Invited lecture] New regulatory requirements and technical countermeasures for safety improvement for commercial nuclear power plants

(Hokkaido U.) ○Narabayashi Tadashi

--- Day 2 ---

(9:00~10:00)(Chair Yoshiie R.)

N201 Ethanol reforming by use of novel carbon-supported metal catalysts under hydrothermal conditions
(Kyo U.) ○Shibata Y., Nakagawa Hiroyuki

N202 Steam Reforming of Ethanol over Electrically-Heated Anodic Alumina Catalysts for Hydrogen Production
(TUAT) ○Yao Takami, kameyama hideo, Sakurai Makoto

N203 Impacts of trace impurities contained in coal syngas on the performance of SOFC
(Nat. Inst. Adv. Ind. Sci. and Tech.) ○Kuramoto Koji, Fukushima Toshiyo, Hosokai Sou, Matsuoka Koichi, Suzuki Yoshizo, Kishimoto Haruo, Yamaji Katsuhiko, (Nagoya U.) Ueki Yasuaki, (nagoya U.) Yoshiie Ryo, (Nagoya U.) Naruse ichiro

(10:00~11:00)(Chair Kuramoto K.)

N204 Reduction technology of ash deposition in the waste combustion boilers
(Nagoya U.) ○Shimizu T., Ueki Yasuaki, Yoshiie Ryo, Naruse ichiro

N205 Trace elements in particles with their size distributions during coal gasification
(Nagoya U.) ○Mashita Hajime, Yoshiie ryo, (Nagoya U. EcoTopia) Ueki Yasuaki, Naruse Ichiro

N206 Effect of operating condition on char-volatile interaction during coal gasification
(Chiba U.) ○Kawabata Y., Wajima T., Nakagome H., (AIST) Hosokai Sou, Suzuki Yoshizo, Matsuoka Koichi

(11:00~12:00)(Chair Nakagawa H.)

N207 Modeling of Char Gasification in a Bubbling Fluidized Bed Reactor
(AIST) ○Hosokai Sou, Matsuoka Koichi, Kuramoto Koji, Suzuki Yoshizo

N208 [Keynote lecture] System for the utilization of low rank coal and biomass
(Kyushu U.) ○Hayashi J.-i.

(13:00~14:00)(Chair Hosokai S.)

N213 Reduction behavior of hematite/carbon composites produced from limonite and COG tar
(Hokkaido U.) ○Mochizuki Y., Mikawa Y., Tsubouchi N.

N214 Development of energy saving separation method of solvent and extract obtained by degradative solvent extraction of low-grade carbonaceous resources.
(Kyoto U.) ○Takahashi R., Ashida R., Kawase M., Miura K.

N215 Kinetic analysis of low temperature oxidation of low rank coals for the prediction of their self-ignition behavior
(Kyoto U.) ○Fujitsuka H., Ashida R., Kawase M., Miura K.

(14:00~15:00)(Chair Kumita M.)

- N216 [Keynote lecture] Research and development of low GWP refrigerants suitable for heat pump systems (Kyushu U.) ◦Koyama Shigeru
- N218 [JCEJ Outstanding Paper Award] Enhancement of LiBr-Water Absorption Heat Pump Performance by Supersaturated Fine Crystal Slurry (Gifu U.) ◦Itaya Y., (Nagoya U.) Ichihashi Nobuhisa, (Gifu U.) Kobayashi Nobusuke, (Gifu.U.) Marumo Kenji, Masu Tatsuya
(15:00~16:00)(Chair Ryu J.)
- N219 Preparation of LiOH/Mesoporous Silica Composite toward Low-temperature Heat Utilization (Nagoya U.) ◦Matsumoto S., Kubota M., Matsuda H.
- N220 Characteristics evaluation of chemical thermal storage with with Na₂S hydration reaction (SIT) ◦Tanaka Kotaro, Masujima Kiyotaka, Ariyama Yuuki
- N221 Preparation of metal salt/anodized alumina composites and their water vapor sorption characteristics (Kanazawa.U.) ◦Noki R., Kamiya K., Hatanaka T., Suwa Y., Kumita M., Otani Y.
(16:00~17:00)(Chair Tanaka K.)
- N222 Global Design of Solar Chemical Heat Pump (Chiba U.) ◦Akiya Naoki, Ogura Hironao
- N223 The development of materials for ammonia storage (Tokyo Tech) ◦Tsunoda Hiroki, Ryu Junichi, Kato Yukitaka
- N224 Cancelled
- Day 3 ---**
- (9:40~11:00)(Chair Kubota M.)
- N303 Performances of Mg(OH)₂-Expanded Graphite-LiBr Composite for Thermal Energy Storage (Tokyo Inst. Tech.) ◦Myagmarjav O., Ryu J., Kato Y.
- N304 Dehydration and hydration behavior of Metalsalt-PCP composite (Tokyo Tech) ◦Yamamoto Kaoruko, Ryu Junichi, Kato Yukitaka
- N305 Development of Heat storage producing high temperature heat output with gas-solid reaction (Nagoya U.) ◦Esaki Takehiro, Inagaki Atsunori, Kobayashi Noriyuki
- N306 Development of micro-encapsulated metallic phase change material (Hokkaido U.) ◦Nomura Takahiro, Zhu Chunyu, Sheng Nan, Okinaka Noriyuki, Akiyama Tomohiro
(11:00~12:00)(Chair Nomura T.)
- N307 Dehumidification behaviors of desiccant system using cross-flow type adsorber coated with adsorbent regenerable at low temperature (Nagoya U.) ◦Hanaoka N., Kubota M., Matsuda H., (Kanazawa U.) Kodama A.
- N308 Temperature dependence of water adsorption in porous carbons (Tokushima U.) ◦Horikawa T., Takenouchi M., (Queensland U.) Do D. D., (Tokushima U.) Sotowa K., Alcantara A. J. R.
- N309 Preparation of high-density KOH activated carbon for methanol vapor adsorption (Kanazawa U.) ◦Suwa Y., Kawakami S., Kurachi H., Kumita M., Otani Y.
- **--- Room O ---**
--- Day 1 ---
- Symposium <Symposium on Thermal Engineering>**
(9:20~11:00)(Chair Kobayashi T., Marumo K.)
- O102 Study of a Form at the Steam Generator in the Adsorption Steam Generation System Using Zeolite (Okayama.P.U.) ◦Nishi T, Notoji Y, Nakagawa T
- O103 Enhancement of efficiency of adsorption heat pump steam generation by reducing blower power (Kyushu U.) ◦Kobayashi Shunsuke, Tanaka Yuuki, Eshima S., Nakaso K., Fukai J.
- O104 Study of growth behavior of carbon nano particle by sampling in furnace (Tohoku U.) ◦Watanabe A., Ono K., Dewa K., Matsukawa Y., Saito Y., Matsushita Y., Aoki H., (Asahicarbon Co.) Era K., Aoki T., Yamaguchi T.
- O105 Effect of Kalium Addition in Continuous Regeneration Type PM Removal Device Using Fluidized Bed (Kyushu U.) ◦Kusu Akitaka, Yamamoto Tsuyoshi, Fukai J., (Adv. Tech. Inst.) Tatebayashi June
- O106 A Numerical Simulation of PM Collection Characteristics in Fluidized Bed Type PM Removal Device (Kyushu U.) ◦Tsuboi Takahiro, Yamamoto Tsuyoshi, Fukai J., (Adv. Tech. Inst.) Tatebayashi June
(11:00~12:00)(Chair Nakaso K.)
- O107 [Keynote lecture] Combustion and Material Synthesis (Hokkaido U.) ◦Akiyama Tomohiro
- O109 [JCEJ Outstanding Paper Award] Radiation Properties of Coal Char Particle Cloud (GifuU.) ◦Itaya Y., (Nagoya U.) Kosaka Fumiya, (Gifu U.) Kobayashi Nobusuke
(13:00~13:40)(Chair Saito Y.)
- O113 [Keynote lecture] ***** (Okayama U. Sci.) ◦Hirano Hiroyuki
(13:40~15:20)(Chair Hidema R., Aoki H.)
- O115 Numerical investigation of optimal conditions for growing compositionally homogeneous SiGe crystals by TLZ method under microgravity environment (Tohoku U.) ◦Sumioka S., Abe K., Sugioka K., Kubo M., Tsukada T., (JAXA) Kinoshita K., Arai Y., Inatomi Y.
- O116 Normal spectral emissivity measurement of molten CuCo using an electromagnetic levitator superimposed with a static magnetic field

- (Tohoku U.) ○Ueno S., Kurosawa R., Kitahata T., Sugioka K., Kubo M., Tsukada T., Uchikosi M., Fukuyama H.
- O117 Numerical investigation for the effect of the relation between vortex and film shape on the direction of Marangoni convection in a thin film (Osaka U.) ○Yamamoto T., Takagi Y., Okano Y.
- O118 Performance analysis of heat transfer in a compact-size plate-fin heat exchanger (AIST) ○Nagaosa Ryuichi
- O119 Heat Transfer Evaluation of Insulators in Outdoor for Henhouse Temperature Control (Gifu U.) ○Ito T., Kobayashi Nobusuke, Itaya Y., (HYTEM CO., LTD) Tsubai Y.
- (15:20~17:00)(Chair Nagaosa R., Sugioka K.)
- O120 Kinematic viscosity of the new working liquid of the absorption refrigerator manufacturing the cold heat below zero degree C (H.I.T) ○Yamada N., Noda H., Takahashi S., Odashima S.
- O121 Investigation of Marangoni Convection in a Lithium Bromide Solution with Surfactants (Kobe U.) ○Sawa N., Hidema Ruri, Suzuki Hiroshi, Komoda Yoshiyuki
- O122 Size Effect Model on Flow and Heat Transfer Characteristics of Latent Heat Slurries Treated with Surfactants (Kobe U.) ○Suzuki Hiroshi, Tanaka Koji, Hidema Ruri, Komoda Yoshiyuki
- O123 Practical use technology of the absorption heat pump to a productive process using waste hot water (Morimatsu Ind.) ○Marumo Kenji, (Gifu U.) Kobayashi Nobusuke, Itaya Y.
- O124 Observation of nanoparticle behavior in water during microwave irradiation by DLS (U. Hyogo) Nakata Ryosuke, Munenaga Takuya, Matsumura Shungo, ○Asakuma Yusuke
- (Tokyo Tech) ○Asai Tadashi, Mori Shinsuke, Suzuki Masaaki
- (11:00~12:00)(Chair Watanabe T.)
- O207 Reaction of bio-related compounds induced by discharge plasma at gas/liquid interface (Nagoya U.) ○Goto M., Hayashi Y., Takada N., (Hokkaido U.) Sasaki K., (Nagoya U.) Diono Wahyu, (ITS) Machmudah S., (Nagoya U.) Kanda H.
- O208 [Keynote lecture] Plasma Chemistry Drives New World: from Semiconductors to Biotechnology (Kyushu U.) ○Shiratani Masaharu
- (13:00~13:40)(Chair Onoe K.)
- O213 [Keynote lecture] RF Instruction Thermal Plasma System for Research of The Powdery Reforming (JEOL) ○Komaki Hisashi
- (13:40~14:20)(Chair Tanaka R.)
- O215 Investigation of Growth Mechanism of Titanium Boride Nanoparticles by Thermal Plasmas (Kyushu U.) ○Tanaka M., (Tokyo Tech) Cheng Y., (Kyushu U.) Okamoto D, (Tokyo Tech) Choi S, (Kyushu U.) Watanabe T.
- O216 Decomposition of Modeled Tar and Coproduction of Functional Carbon Byproducts in Microwave Plasma Induced by Char (Gifu U.) ○Sugiura Kazuhiro, Kobayashi Nobusuke, Itaya Y.
- (14:20~15:20)(Chair Tanaka M.)
- O217 Development of Waste Oil Recycle System Using Plasma-assisted Combustion (Aichi Electric Co.,Ltd.) ○Tanaka R, (Kyushu U.) Yamamoto Tsuyoshi, (Gifu U.) Itaya Y.
- O218 Conversion of organic compounds in liquid phase using atmospheric inductively coupled plasma jet (Chiba Inst. Tech.) ○Abe H., Wada Y., Onoe K.
- O219 Characterization of atmospheric low-frequency plasma and its application on surface treatment (Chiba Inst. Tech.) ○Nishiyama H., Wada Y., Onoe K.

--- Day 2 ---

Symposium <New Development of Chemical Engineering by Plasma Processing>

- (9:40~11:00)(Chair Ohkawara S.)
- O203 Electrode Erosion Mechanism of Multi-Phase AC Arc during Nanomaterial Processing (Kyushu U.) ○Hashidume T, Tanaka M., (Tokyo Tech) Liu Y, (Kyushu U.) Watanabe T.
- O204 Electrode Temperature Measurement in Long DC Arc Plasma (Kyushu U.) ○Inaba Y., Ochi Y., Tanaka M., Watanabe T., (Clean Tech.) Sakurai H., Otsuka K.
- O205 Spectroscopic temperature measurement of activated coke induced microwave plasma (Gifu U.) ○matsubara kazune, Kobayashi Nobusuke, Itaya Y.
- O206 Selective etching of decalcified dentin by atmospheric pressure plasma jet

--- Room P ---

--- Day 1 ---

Symposium <Trend of Extraction, Ion-Exchange and Adsorption>

- (10:00~11:00)(Chair Shiomori K.)
- P104 Virus sensor materials using sugar cluster effect and ion exchange mechanism (U. Kitakyushu) ○Matsumasa Hirotaka, Uezu Kazuya
- P105 Functional materials for trimethylsilanol removal (Grad.Sch.U.Kitakyushu) ○Yamaguchi Yutaka, Uezu Kazuya
- P106 preparation of glyco-monomer and continuous flow adsorption of protein (Kyushu U.) ○Shibuya Makoto, Seto Hirokazu, Hoshino Y., Miura Yoshiko
- (11:00~12:00)(Chair Seto H.)

- P107 Development of molding method of activated carbon by using phenol-folmaldehyde carbon cryogels (Kyoto U.) ◯Moriya Ryoichi, Tamon H., Sano N.
- P108 Solid phase selective separation of Cu(II) by a surface Cu-imprinted adsorbent (Toshiba) ◯Suzuki Akiko, Imada Toshihiro, Ide Tomohito
- P109 Effect of uptake method on adsorption of organic acids and amino acids with layered double hydroxide (Kansai U.) ◯Hayashi Takumi, Yoshida Shou, Inoue Akira, Murayama Norihiro, Shibata Junji
- (13:00~14:00)(Chair Inaba Y.)
- P113 [JCEJ Outstanding Paper Award] Development of New Hybrid VOCs Treatment Process using Activated Carbon and Electrically Heated Alumite Catalyst (U.Agriculture and Technology) ◯Yamaguchi Toshio, Kameyama Hideo, Sakurai Makoto, (U.Agriculture and) Aoki Kazuya
- P114 Electrochemical approach for separation of vanadium and tungsten extracted from DeNOx catalysts (Hitachi) ◯Hatano Ayumi, Yamamoto Hiroki, (BHK) Yamada Akihiro, Nagai Yoshinori, (Ibaraki U.) Kohzuma Takamitsu
- P115 Preparation of Ion-imprinted ESIX Film for the Removal of Metal Ions (NJRISE, Hirosaki U.) ◯Guan Guoqing, (Taiyuan UT) Du Xiao, Hao Xiaogang, (NJRISE, Hirosaki U.) Abudula Abuliti
- (14:00~15:20)(Chair Ohto K.)
- P116 Heavy Metals Removal from Model Acid Mine Drainage by Adsorption Using Indonesian Natural Zeolite (Tokyo Tech) ◯Fernando, Habaki H, Egashira R
- P117 Synthesis of chitosan derivative immobilized citric acid and its selective adsorption for rare metals. (U. Miyazaki) ◯Hidaka S, Ohe Kaoru, Oshima Tatsuya, Baba Yoshinari
- P118 Development of strontium sorbents as column packings made of crown ether-NIPA gel (Tokyo Tech) ◯Inaba Yusuke, Yang Hongrui, Yamauchi Akihiko, Takeshita Kenji
- P119 Practical aspects of continuous counter-current foam separation of gallium (Nagoya U.) ◯Hirayama Mikiro, Nii Susumu, (NMIRI) Kinoshita Takehiko, Ishigaki Yuzo, Shibata nobuyuli, (Nagoya Inst. Tech.) Kitagawa Shinya, (Osaka U.) Okano Y.
- (15:20~16:20)(Chair Uezu K.)
- P120 Extraction of succinic acid with aqueous two-phase system using ionic liquids (Doshisha U.) Pratiwi A. I., Yokouchi T., ◯Matsumoto M., Kondo K.
- P121 Solvent extraction behavior of platinum group metal ions with methylamide type of trident molecule (Saga U.) ◯Ueda Yuki, Morisada Shintaro, Kawakita Hidetaka, Ohto Keisuke
- P122 Selective solid phase extraction of lithium on trialkyl-monoacetic acid type calix[4]arene impregnated resin (Saga U.) ◯Ohto Keisuke, Sadamatsu Hirotochi, Biswas Biplobkumar, Morisada Shintaro, Kawakita Hidetaka
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- Room Q ---
--- Day 1 ---
- Symposium <Recent Progress of Membrane Technologies and Processes**
- (9:00~10:00)(Chair Kamio E.)
- Q101 Development of novel water vapor permselective membrane via pore-filling technique (Tokyo Tech.) ◯Okuda Ryutarou, Ohashi Hidenori, (KAST, Tokyo Tech.) Kuroki Hidenori, (Tokyo Tech., KAST) Yamaguchi Takeo
- Q102 Evaluation of ion adsorption membrane prepared by using nanofiber as a matrix (Nagoya U.) ◯Mizuno A., Mukai Y.
- Q103 Permeation properties of cellulose acetate composite membranes containing cyclodextrins (yamaguchidairikou) ◯masuda tomoya, (UNCT) yamamoto yuma, yamasaki hirohito, (yamaguchidairikou) kumakiri izumi, tanaka hirokazu, kita hidetosi
- (10:00~11:00)(Chair Yoshioka T.)
- Q104 Fabrication of a tough ion-gel film with excellent CO₂ permeability (Grad. Sch. of Eng. Kobe U./MaF Tech. Ctr.) ◯Yasui Tomoki, Kamio Eiji, Matsuyama Hideto
- Q105 Effect of HI-I₂-H₂O mixture concentration on H⁺ permeability of ion-exchange membrane (JAEA) ◯Tanaka Nobuyuki, Yamaki Tetsuya, Asano Masaharu, (Tokyo U.) Terai Takayuki
- Q106 Molecular modeling of transport mechanism of negative ion in hydrocarbon type polymer electrolyte (Kogakuin U.) ◯Hisabe Tomoya, Shimizu Nobuaki, Takaba Hiromitsu
- (11:00~12:00)(Chair Ohashi H.)
- Q107 Effects of the structure of inorganic porous hollow fiber membrane on CO₂ desorption rate in a membrane flash process (Shinshu U.) ◯Yokomichi Ayaka, Takahashi Nobuhide, Shimada Iori, Fukunaga Hiroshi
- Q108 Alternative CO₂ capture by an electrochemical method (International Inst. Carbon-Neutral Energy Res. (I2CNER), Kyushu U.) ◯Taniguchi Ikuo, (Graduate School of Eng., Kyushu U.) Ioh Daichi, (International Inst. Carbon-Neutral Energy Res. (I2CNER), Kyushu U.) Fujikawa Shigenori, (Graduate School of Eng., Kyushu U.) Watanabe T., (Faculty of Eng., Fukuoka U.) Matsukuma Y.

- Q109 Development of high porosity porous polyimide production process
(Yamagata U.) ○Taki Kentaro, (SEI) Mizoguchi Akira, (Yamagata U.) Sato Takuya, Hariu Akira, Ito Hiroshi
(13:00~14:00)(Chair Takaba H.)
- Q113 [JCEJ Outstanding Paper Award] Micropore Filling Phase Permeation of a Condensable Vapor in Silica Membranes: A Molecular Dynamics Study
(Hiroshima U.) ○Yoshioka T., Nagasawa H., Kanezashi M., Tsuru T.
- Q114 Effect of pore surface properties on liquid phase permeation characteristics in nano-pores : Molecular dynamics study
(Hiroshima U.) ○Kunimori Rina, Yoshioka T., Nagasawa H., Kanezashi Masakoto, Tsuru T.
- Q115 Development of hydrogen-selective silica membrane and its application for ethane dehydrogenation reaction (U. Tokyo) ○Aono Haruki, Oyama S. Ted, Kikuchi Ryuji, Sugawara Takashi, Takagaki Atsushi
(14:00~15:00)(Chair Akamatsu K.)
- Q116 Effects of carbon precursors on gas permeations characteristics of reactive thermal CVD Carbon-SiO₂ membranes
(Hiroshima U.) ○Yamamoto Masaki, Yoshioka T., Nagasawa H., Kanezashi Masakoto, Tsuru T.
- Q117 Hydrogen separation from organic chemical hydrides using carbon hollow fiber membranes
(AIST) ○Yoshimune Miki, Haraya Kenji, (JXE) Furuta Satoshi, Hirano Yuichiro, Iki Hideshi
- Q118 Amorphous carbon molecular sieve membranes prepared by plasma-enhanced CVD
(Hiroshima U.) ○Nagasawa H., Kanezashi Masakoto, Yoshioka T., Tsuru T.
(15:00~16:00)(Chair Yoshimune M.)
- Q119 Preparation and characterization of thermally stable SiOC membranes derived by hydrosilylation
(Hiroshima U.) ○Sazaki H., Kanezashi Masakoto, Nagasawa H., Yoshioka T., Tsuru T.
- Q120 Influence of hydrophobic functional groups for separation performance of hydrophobic silica membranes
(Kansai U.) ○Gondoh D, Araki S, Yamamoto Hideki
- Q121 Preparation of metal doped organic-inorganic hybrid membranes for C₃H₆/C₃H₈ separation
(Hiroshima U.) ○Miyachi S., Kanezashi Masakoto, Nagasawa H., Yoshioka T., Tsuru T.
(16:00~17:00)(Chair Seshimo M.)
- Q122 Cancelled
- Q123 Organosilica membranes derived from bridged alkoxides with different organic linking units: permeation properties and new type coating fabrication.
(Hiroshima U.) ○nishimoto kanji, Nagasawa H., kanezashi masakoto, Yoshioka T., Tsuru T.
- Q124 Mass transfer characteristic in forward osmosis membrane for concentration of latex particles
(Kobe U., MaF Tech Center) ○Takahashi Tomoki, Yasukawa Masahiro, Matsuyama Hideto
--- Day 2 ---
(9:00~10:00)(Chair Nakamura K.)
- Q201 Suppression of particles deposition onto membrane surfaces in cross-flow microfiltration under high flow rate and low pressure conditions
(Kogakuin U.) ○Makabe Ryo, Akamatsu Kazuki, Nakao Shin-ichi
- Q202 Development of filtration performance simulation technology for MF/UF hollow fiber membrane module
(Toray Industries Inc.) ○Shintani M., Maeda T., Okubo K., Taniguchi M.
- Q203 Effects of pore structure on membrane separation process of particle dispersions
(Kobe U. / MaF Tech Center) ○Mino Y., Fuse H., (Nihon U.) Ishigami T., (Kobe U. / MaF Tech Center) Matsuyama Hideto
--- Day 3 ---
(9:00~10:00)(Chair Kanezashi M.)
- Q301 Methanol separation through Na-ZSM-5 membrane under pressurized conditions
(Waseda U./JST-CREST) Matsukata Masahiko, (Waseda U.) ○Yoshida Daiki, Seshimo Masahiro
- Q302 Development of zeolite filtration membranes by using carbon fibers
(Shibaura Inst. Tech.) ○Nomura Mikihiro, Iida Koji, Takahashi Yuki, Ikeda Ayumi, Matsuyama Emi, (Takagi) Tanaka Shotaro, Matsuo You
- Q303 Development of Hybrid System of High-temperature Ethanol Fermentation and Zeolite Membrane Separation
(Yamaguchi U.) ○Kita Hidetosi, Yoshino Kosuke, Kumakiri Izumi, Tanaka Kazuhiro, Yamada Mamoru, Kosaka Tomoyuki, Murata Masayuki
(10:00~11:00)(Chair Nomura M.)
- Q304 Xylene isomer separation properties of silicalite-1 membrane under pressurized conditions
(Waseda U.) Sakai M., ○Kaneko T., (Waseda U./JST-CREST) Matsukata Masahiko
- Q305 Effect of seed crystals on the separation properties of MFI zeolite membranes
(Yamaguchi U.) ○Yamashita Yuta, Kumakiri Izumi, Tanaka Kazuhiro, Kita Hidetosi
- Q306 Preparation of *BEA-type zeolite membrane without using organic structure directing agent.
(Waseda U.) ○Sakai M., Oshima Y., (Waseda U./JST-CREST) Matsukata Masahiko
(11:00~12:00)(Chair Kumakiri I.)
- Q307 Propylene/propane separation properties of the zeolitic imidazolate framework-8 membranes
(Nat. Inst. Adv. Ind. Sci. and Tech.(AIST)) ○Hara Nobuo, Yoshimune Miki, Negishi Hideyuki, Haraya

- Kenji, Hara Shigeki, (Tokyo Inst. Tech.) Yamaguchi Takeo
- Q308 Development of non-destructive measurement technique for adsorption on zeolite membrane (Waseda U./JST-CREST) Matsukata Masahiko, (Waseda U.) ○Iijima Y., Seshimo Masahiro
- Q309 Fabrication of defect-free Pd-Cu alloy membrane supported on sintered metal and its hydrogen permeability (AIST) ○Matsumura Yasuyuki

--- Room R ---

--- Day 1 ---

Symposium <Elemental Technologies in the Energy-Saving Distillation Process>

(9:20~10:00)(Chair Mori H.)

- R102 [Invited lecture] Process performances of modified Petlyuk distillation Column (Daicel) ○Kamei Noboru
- (10:00~11:00)(Chair Matsuda K.)
- R104 Selection and Optimum Design for Petlyuk-type Distillation Processes (NITech) ○Mori H, Nishioka Takanori, Kawamura Takanori, Iwata S, Nagumo R, (Yeungnam Col. Sci. & Tech.) Lee Jun-Man
- R105 [Invited lecture] Development of method and device for optimum scheme of Heat Integrated Distillation Column (Toyo Eng. Co.) ○Nakao Takato, Wakabayashi Toshihiro, (Kyoto-U.) Shinji H.
- (11:00~12:00)(Chair Mori H.)
- R107 Dehydration of bioethanol by means of HIDIc and azeotropic distillation (Kansai Chem. Eng.) ○Kataoka Kunio, Noda Hideo, Mukaida Tadahiyo, Nishimura Goro, Yamaji Hiroshi
- R108 [Invited lecture] Design of Energy Saving Separation Process Based on Exergy (Todai) ○Kansha Yasuki

--- Day 2 ---

Symposium <The session of the Membrane Technologies in the Industrial Application 2014>

(10:20~12:00)(Chair Matsuyama H.)

- R205 Development of Hollow Fiber Reverse Osmosis Membrane for Seawater Desalination and Actual Operating Plants (Desalination Membrane Department, TOYOBO Co., Ltd) ○Ito Yuji, (Res. Center, TOYOBO Co., Ltd) Miura Yuki, (Desalination Membrane Department, TOYOBO Co., Ltd) Arijii Akihiro, (Iwakuni Membrane Plant, TOYOBO Co., Ltd) Shigekiyo Masahiko, (Desalination Membrane Department, TOYOBO Co., Ltd) Kumano Atsuo
- R206 Evolution of RO membrane technology for seawater desalination and municipal sewage reclamation (Nitto Denko) ○Koumoto Atsuhito, Shintani Takuji

- R207 Demonstration of Energy Saving Desalination System Using Advanced Membrane (Water Plaza) (Toray) ○Sugawara Yuichi, Takabatake Hiroo, Uemura Tadahiyo, (Hitachi) Aso Shinji, (Suidokiko) Amemiya Junji, (GWSTA) Shinoda Takeshi
- R208 RO system improvement by low sterilizable slimecontrol agent treatment (KURITA WATER INDUSTRIES LTD.) ○Endo Y
- R209 Development of UF Membrane Cleaning Process for Seawater Desalination Pre-treatment (Swing) ○Shimamura Kazuaki, Hata Ryosuke, (Water Reuse Promotion Center) Hirai Mitsuyoshi, Kanno Takeo, Sugimoto Kazuaki

(13:00~14:40)(Chair Matsukata M.)

- R213 Application of membrane separation technology in water treatment (KOBELCO ECO-SOLUTIONS) ○Toyohisa S.
- R214 Operation characteristics of New Ultrafiltration Membrane (Sekisui.CO) ○animura saki, tamai toshihiro, oosugi takashi
- R215 Hollow Fiber Membrane Products with hydrophilic PVDF (Kuraray co., ltd.) ○Sakaguchi Kazuya
- R216 Braid Reinforced PVDF Hollow Fiber Membrane (NOK) ○ikawa yusuke, saito masaharu, watanabe kensuke
- R217 Virus Removal Filter (Aasahi Kasei M) ○Ide S.

(14:40~16:00)(Chair Tsuru T.)

- R218 An idea of how to develop the business of zeolite membrane (SEPINO Co., Ltd.) ○Gonoji Koji, Izumi Ko, Ikeda Shiro, Inoue Soshi
- R219 Application of membrane separation process as commercialized zeolite membrane (MZM) ○Maekawa Kazuya, Yamamura Tadafumi, Abe Jun, Matsuo Yasuo
- R220 Development of porous ceramic supports for inorganic separation membranes (Noritake) ○Eda Tomokazu, Watanabe Hirokazu, Miyajima Keita
- R221 Application study of carbon hollow fiber membranes by molecular sieving (AIST) ○Yoshimune Miki, Haraya Kenji

--- Room S ---

--- Day 1 ---

Symposium <Innovative Challenges of Chemical Reaction Engineering Contributing to Resources, Energy and Environmental>

(9:40~11:00)(Chair Nii S.)

- S103 Preparation of emulsion using sequential sonication

- (Tokyo U. Sci.) ○Hiwatashi R, Kobayashi D., Shimada Y., Otake K., Shono A., (Honda Electronics) Asakura Y., (Tokyo Tech.) Matsumoto H
- S104 Ultrasonic effect on preparation of iron oxide
(Okayama U. Graduate school of environmental and life Sci.) ○Koizumi H., Kato Y., Uddin M. A.
- S105 Effect of Ultrasonic Irradiation on Behavior of Silica Polymerization in Geothermal Water
(Nagoya U.) ○Takahashi Y., Yasuda K., (Honda Electronics Co.) Asakura Y.
- S106 Sonochemical reactor with high efficiency using asymmetric transducers
(Nagoya U.) ○Yasuda K., Kato D., Kojima Y., (Honda el.) Asakura Y., (Nagoya U.) Koda S.

Symposium <Poster Session for Chemical Reaction Engineering (Flash Presentation)>

Poster Presentation will be held at Room ZB during 13:00 to 15:00.

(11:00~12:00)(Chair Oumi Y.)

From ZB1P01 to ZB1P22

Symposium <Innovative Challenges of Chemical Reaction Engineering Contributing to Resources, Energy and Environmental>

(15:00~15:40)(Chair Nishiyama S.)

- S119 [Keynote lecture] Application of Computational Chemistry to Hydrogen and Fuel Cell Related Technologies
(Kyushu U.) ○Koyama M.

(15:40~16:20)(Chair Sato K.)

- S121 [Keynote lecture] Introduction of AIST Fukushima Renewable Energy Institute and renewable energy technologies for the future
(AIST) ○Furutani Hirohide

(16:20~17:00)(Chair Higashi E.)

- S123 [Keynote lecture] Simulation Technology for Clinker Burning Process
(UBE Industries, LTD) ○Suemasu T., Yokota M., Fujimoto M., Takahashi T.

--- Day 2 ---

(9:00~10:00)(Chair Watanabe R.)

- S201 Cancelled
- S202 Synergy of CO₂ and H₂O on the selective hydrogenation of benzyl cyanide
(Hokkaido U.) ○Bhosale A., (Kumamoto U.) Yoshida H., (Hokkaido U.) Fujita S., Arai M.
- S203 Conversion of Glycerol into Allyl Compound over Iron Oxide-based Catalyst
(Hokkaido U.) ○Shitara H., Terai K., Nakasaka Y., Tago T., Masuda T.

(10:00~11:00)(Chair Miyamoto M.)

- S204 Highly selective acetaldehyde production using electrode reaction

(Kyoto U.) ○Watanabe Ryutaro, Kimura Masashi, Kawase M.

- S205 Analyses and reduction of detailed reaction mechanism for steam methane reforming
(Kwansei Gakuin U.) ○Ogura T, Tsushima D, (Kyushu U.) Nishibayashi H, Tajima M

- S206 Methane dry reforming and carbon capture system over honeycomb-type Ni-based structured catalyst
(Shizuoka U.) ○Kato H., Masuda K., Watanabe Ryo, Fukuhara Choji

(11:00~12:00)(Chair Ogura T.)

- S207 Effect of Cu/Zn Ratio of Cu-Zn-Al Catalysts for Water-Gas Shift Reaction during Catalyst Preparation
(Kobe U.) ○Fujita R., (Kobe U.) Furumoto N., (Kobe U.) Okemoto Atsushi, Taniya Keita, Ichihashi Yuichi, Nishiyama Satoru

- S208 Surface morphology and water-gas shift property of structured iron oxide catalyst
(Shizuoka U.) ○Watanabe Ryo, Watanabe S., Fukuhara Choji

- S209 Effect of silicalite-1 coating on product selectivity over GaAlMFI in alkene aromatization
(Gifu U.) ○Miyamoto M., Kamada J., Oumi Yasunori, Uemiya Shigeyuki

(13:00~14:00)(Chair Tago T.)

- S213 Fabrication of copper-cobalt oxides catalyst for complete benzen oxidation under low temperature
(Okayama U.) ○Kiso T., Uddin M. A., Kato Y.
- S214 Effect of the ion-exchange behavior of Cr cation into FSM-16 on the oxidative dehydrogenation of isobutane
(U. Tokushima) ○Itagaki A, Nakagawa K, Katoh M, Sugiyama S, (Mitsubishi Rayon) Katou Y, Ninomiya W

- S215 Effect of Aluminium Addition to Cu/HZSM-5 catalysts on Gas-Phase Oxidation of Benzene
(Kobe U.) ○Watanabe S., Okemoto Atsushi, Taniya Keita, Ichihashi Yuichi, Nishiyama Satoru

(14:00~15:00)(Chair Uemura Y.)

- S216 Development of flexible film type immobilized enzyme catalyst
(Graduate school of Eng. Hokkaido U.) ○Yamazaki S., Mori T., Masuda T., Iwamura S., Ogino I., Mukai S.

- S217 The mechanism of bagasse lignin degradation by UCT-solvent pretreatment
(Osaka City U.) ○Nakahira Taisuke, Mori Yuya, Igarashi Koichi, Ooshima Hiroshi

- S218 Hydrolysis and catalytic cracking of woody biomass for liquid fuel production
(Shinshu U.) ○Kobayashi Yutaka, Shimada Iori, Fukunaga Hiroshi, Takahashi Nobuhide, Takatsuka Toru

(15:00~16:00)(Chair Kitagawa N.)

- S219 Production of glycerol free biodiesel fuel using alkali catalysts

- (Kagoshima U.) ○Kai T., Mak G., Wada S., Nakazato T., Takanashi H., (UTP) Uemura Yoshimitsu
- S220 In situ transesterification of rubber seeds (*Hevea brasiliensis*) with methanol for biodiesel production (UTP) Abubakar Bashir, ○Uemura Yoshimitsu, Ramlil Anita, Osman Noridah, (Sojo U.) Kusakabe Katsuki, (Kagoshima U.) Kai T.
- S221 Characterization of palm kernel shell torrefied under inert and non-inert atmospheres (UTP) Saadon Shazleen, ○Uemura Yoshimitsu, Osman Noridah, Mansor Nurlidia, (Yamaguchi U.) Tanoue K.
- (16:00~17:00)(Chair Nakazato T.)
- S222 Continuous Production of Biodiesel Using Adjustable-Volume Packed-Bed Reactor (Tohoku U.) ○Yamazaki K., Shibasaki-Kitakawa N., Nakashima K., Yonemoto T.
- S223 Study of promoter doping effect conditions of Hastelloy alloy pre-oxidized catalyst for reforming of biomass gasification products (Nagoya U.) ○Watanabe K., Tagawa T., Yamada H
- S224 Hydrodeoxygenation of pyrolysis bio-oil by using nickel phosphide catalysts (U. Tokyo) ○Koike Natsume, (AIST) Hosokai Sou, (U. Tokyo) Takagaki Atsushi, (JAIST) Nishimura Shun, (U. Tokyo) Kikuchi Ryuji, (JAIST) Ebitani Koki, (AIST) Suzuki Yoshizo, (U. Tokyo) Oyama Shigeo

--- Day 3 ---

- (9:40~10:40)(Chair Kawase M.)
- S303 Development of numerical simulator for cokes production process (Yamagata U.) ○Taki Kentaro, (NSSMC) Hayashizaki Hideyuki, (JFE Steel) Fukada Kiyoshi
- S304 Measurement of diffusivity of naphtha related chemical compounds in coked MFI-type zeolite pores (Hokkaido U.) ○Nishimura J., Ohnaka R., Nakasaka Y., Tago T., Masuda T.
- S305 Effects of temperature of preceding carbonization in production of activated carbon from bamboo using a gas activation method (Shinshu U.) ○Ohara Takashi, Takahashi Nobuhide, Shimada Iori, Fukunaga Hiroshi
- (10:40~12:00)(Chair Shiraishi F.)
- S306 Promoting Effect of Inorganic Salts on the Pyrolysis of Epoxy Resin (Fukuoka U.) ○Katoh Katsumi, Higashi Eiko, (Asahi Kasei Chemicals) Tokita Junya, (YNU) Matsunaga Hiroki, Miyake Atsumi, (Fukuoka U.) Nakano Katsuyuki
- S307 Characteristics of Methane Hydrate Formation from a Bubbly Flow of Methane-Water in a Vertical Flow Loop (AIST) ○Shimizu Tsutomu, Yamamoto Y., Narita Hideo

- S308 Reaction concerning steam for after-treatment reaction of automotive exhaust gas (Kyoto U.) ○Sogo S., Oka H., (ICT) Yoshikawa T., (Kyoto U.) Kawase M.
- S309 Reaction Mechanism of Mixed Droplet of CaCO₃ and NaCl with NO₂ (Gunma U.) Itoi Keisuke, ○Harano Azuchi
- (13:00~14:00)(Chair Matsune H.)
- S313 Development of Photochemical DeNO_x Processes using Vacuum Ultraviolet (Gifu U.) ○Hayakawa Yukio, Nomura Syunsuke, Kambara Shinji, (Usio Inc.) Hishinuma Nobuyuki
- S314 Evaluation of five CSTRs in series as a photocatalytic reactor (Kyushu U. Graduate School) ○Miyawaki Atsuko, Shiraishi Fumihide
- S315 Photocatalytic Hydrogen Peroxide Synthesis from Water and Molecular Oxygen Driven by Sunlight (Osaka U.) ○Shiraishi Y., Kanazawa S., Kofuji Y., Hirai T.
- (14:00~15:00)(Chair Kato K.)
- S316 Evaluation on Surface Characteristics and CO₂ Reforming Performance of Visible-driven Metal Supported TiO₂ Photocatalyst (Mie U.) ○Hayakawa Takuya, Nishimura Akira, Zhao Xuyan, Kitazumi Taiga, Hirota Masafumi
- S317 Effect of water evaporation on photocatalytic reaction in an aqueous TiO₂ suspension (Kyushu U.) ○Kido Katsuya, (Kyushu U. Graduate School) Shiraishi Fumihide
- S318 As(III) oxidation in aqueous solution over supported Pt catalysts (Kyushu U.) ○Weng B, Matsune H., Takenaka S., Kishida M.

--- Room T ---

--- Day 1 ---

Symposium <Developments toward the Technological Innovation in Sub- and Supercritical Fluids>

- (9:40~11:00)(Chair Aizawa T.)
- T103 Formation of "vespula-like" structure by the foaming of Polymer/Carbon Dioxide/silicon alkoxide Ternary System (TUS) ○Yamaji Y., Shimada Y., Kobayashi D., Shono A., Otake K., (AIST) Yoda S., Furuya T., Takebayashi Y., (Shouwa Jyushi Co.) Okawa Y.
- T104 Investigation of the foaming structure of the polymer with high pressure nitrogen (Hiroshima U. Eng) ○ueda yumi, suganaga hiroyuki, son ei, haruki masashi, kihara shinichi, takishima shigeki
- T105 Preparation of conductive cotton fibers using supercritical carbon dioxide (Kyu U.) ○Sameshima S., (Marusan) Katayama S., (Kyu U.) Yonezawa S., Iwai Y.

- T106 Development of coating technique of nano particle using supercritical carbon dioxide (Shizuoka U.) ○Yamamoto D., Okajima I., Sako T. (11:00~11:20)(Chair Nakamura S.)
- T107 Effects of crystallizer types on the particle production of theophylline by the supercritical antisolvent (SAS) crystallization in micro-space (Shinshu U.) ○Hirota T., Nakamura S., Uchida H. (13:00~14:00)(Chair Nakamura S.)
- T113 [Invited lecture] Development of reduced cholesterol foods using supercritical carbon dioxide extraction (Kewpie) ○Handa A
- T115 A combined supercritical drying/heating method for one-pot synthesis of TiO₂ photocatalyst (Hachinohe Nat. Col. Tech.) ○Nara Mitsunobu, Hasegawa Akira, Honma Tetsuo (14:00~15:00)(Chair Yoda S.)
- T116 Study on deposition of fluorinated polyimide inside of microscopic space using supercritical carbon dioxide (Hiroshima U. Eng.) ○Oda Asuka, Hasegawa Yumi, Haruki Masashi, kihara shinichi, Takishima Shigeki
- T117 Synthesis of fluorinated polymer particles in supercritical carbon dioxide (Shizuoka U.) ○Gomyo M., Okajima I., Sako T.
- T118 Oxidation Reaction of Limonene in Supercritical Carbon Dioxide (Kumamoto U.) ○Aomatsu Miki, Quitain Armando, Sasaki Mitsuru, (Kumamoto U./MAFT) Iwai Hideo, (MAFT) Tanaka Masahiro, Hoshino Munehiro, (Kumamoto U./MAFT) Matsubara Teruaki (15:00~16:00)(Chair Fujii T.)
- T119 Supercritical extraction of functionality component from buttermilk using carbon dioxide (Tohoku. U.) ○Kataoka Shunsuke, Ota Masaki, Sato Yoshiyuki, Inomata Hiroshi, (Tohoku. Pharm. U.) Inokuchi Jinichi, Go Shinji
- T120 Extraction of cesium using supercritical carbon dioxide and chelating agent (Shizuoka U.) ○Aoki R., Okajima I., Sako T.
- T121 Enantiomeric separation of trans-stilbeneoxide using supercritical fluid chromatography (Chuo U.) ○Sugihara T., Taguchi M., Funazukuri T. (16:00~17:00)(Chair Tsuji T.)
- T122 Kinetic Analysis of Continuous Hydrothermal Synthesis of Metal Oxide nanoparticles (Thoku U.) ○Sato Ayato, Aoki Nobuaki, aida tutomu, houjou daisuke, Takami Seiichi, Adschiri Tadahumi
- T123 Fabrication of Nanocomposite Thermal Insulating Materials via Foam Extrusion of Poly(lactic acid)-Silicon Alkoxide-CO₂ ternary system (AIST-NRI) ○Yoda S., Oohara Motohiro, (Plasteco) Hayashi Ryutaro, Toyota Kohei, Yamamoto Masaki, (AIST-HRI) Nakayama Atsuyoshi
- T124 Effectiveness of solid co-solvents effects on the production of theophylline nanoparticles using the rapid expansion of supercritical solutions (RESS) technique (Shinshu U.) ○Uchida H., Nishijima M., Sano K., (Tokyo Inst. Tech.) Sakabe J., Shimoyama Y.
- Day 2 ---
- (10:00~11:00)(Chair Osada M.)
- T204 Kinetic analysis of hydrothermal solubilization of Lignin-rich wood biomass at hydrothermal condition (Tohoku U.) ○Kanaguri Yukihiro, Watanabe Masaru, (ITEC) Miyamoto Norihiko, (Tohoku U.) Inomata Hiroshi, Smith Richard
- T205 Dissolution rates on depolymerization of cellulose in a dilute aqueous acid solution (Chuo U.) ○Hirajima K., Takemura W., Taguchi M., Funazukuri T.
- T206 Reaction kinetics of raffinose conversion in high temperature high pressure water (Hachinohe Nat. Col. Tech.) ○Mori Tadaaki, Honma Tetsuo (11:00~12:00)(Chair Honma T.)
- T207 Gasification of marine biomass using high pressure superheated steam (Shizuoka U.) ○Hayashi K., Okajima I., Sako T.
- T208 Multi-stage injection of methanol and oxygen in supercritical water oxidation of ammonia (U. Tokyo) ○Shimoda Eriko, (AIST) Fujii Tatsuya, (U. Tokyo) Hayashi Rumiko, Oshima Yoshito
- T209 Effect of hydrothermal treatment on the wood-derived charcoal. (Tohoku U.) ○takeuchi rui, watanabe masaru, inomata hiroshi, Smith Richard, (Sendai kankyō) takaya toshihiko (13:00~14:00)(Chair Akizuki M.)
- T213 [Invited lecture] One-pot Synthesis of Spherical Mesoporous Metal Oxide Nanoparticles in Supercritical Alcohols (Kochi U. Tech.) ○Kobiro Kazuya
- T215 Chemical recycling of silicone rubber by supercritical and subcritical methanol (Shizuoka U.) ○Mitsui K., Okajima I., Sako T. (14:00~15:00)(Chair Ohta M.)
- T216 Reduction of Polyasenequinone in Supercritical Alcohol (Nihon U.) ○Matsumoto S., Nakayama S., Sato T., Okada M., Hiaki T., Iwamura H.
- T217 Development of recycling technique of carbon fiber reinforced plastics using supercritical and subcritical fluids (Shizuoka U.) ○Nakamura M., Okajima I., Sako T.
- T218 Reduction of graphene oxide using high temperature and high pressure ethanol (Shizuoka U.) ○Shiratori Yuuki, Kong Chang Yi, Iwata Futoshi, Sako T. (15:00~16:00)(Chair Sasaki M.)

- T219 Wet extraction of lipids and valuable components from wet microalgae by liquefied dimethyl ether (Nagoya U./JST-PRESTO) ○Kanda H., (Nagoya U.) Ogawa M, Kamo Y, Kurita Y, (Naresuan U.) Boonnoun P, (Sepuluh Nopember Inst. Tech.) Machmudah S., (Nagoya U.) Diono Wahyu, Goto M.
- T220 Refined oil recovery process from algae with supercritical propane (Nagoya U.) ○Machida H., Horizoe H.
- T221 Supercritical carbon dioxide-assisted drug loading and release from metal-organic frameworks (Kurume Nat. Col. tech.) ○Matsuyama Kiyoshi, Yokomizo Misaki, Hayashi Nobukatsu, Okuyama Tetsuya
(16:00~17:00)(Chair Sato Y.)
- T222 Hydrogenolysis/hydrogenation of diphenyl ether in supercritical carbon dioxide/water medium: A mechanistic considerations (AIST, Tohoku) ○Chatterjee M., Ishizaka T., Kawanami H.
- T223 Supercritical-Fluid Synthesis of Olivine-type Nanocrystals and Their Cathode Performance (Tohoku U.) ○Truong Quangduc, Devaraju M. K., Honma Itaru
- T224 Enhancement of dispersibility and change of particle morphology by organic surface modification of boehmite and alumina nanoparticles in supercritical water (AIST, CCS) ○Fujii Tatsuya, Kawasaki S., (Tohoku U., NICHe) Suzuki A., (Tohoku U., WPI) Adschiri Tadahumi
(17:00~17:20)
Student Award Ceremony
--- Day 3 ---
(10:00~10:40)(Chair Akizuki M.)
- T304 HMF preparation from woody biomass by using high-pressure and high-temperature water (AIST, CCS) ○Kawanami H, Ogawa Kayoko, Ishizaka T
- T305 Beta-chitin production from squid pens by high-temperature liquid water treatment (Shinshu U.) ○Osada Mitsumasa, (Marutatsukamasui Co. Ltd.) Koseki Kenichi, (Ichinoseki N. C. T.) Koseki Kenichi, Nakagawa Yuko, Watanabe Takashi, Nikaido Mitsuru, Totani Kazuhide
(10:40~12:00)(Chair Kawanami H.)
- T306 Effect of solid catalyst on degradation of amide pharmaceuticals in hot compressed water (U. Tokyo) ○Akizuki M, Oshima Yoshito
- T307 Oxidative treatment of organochlorine compounds by Fenton-type reaction in subcritical water (Osaka City U.) ○Kometani N, Takami R, Minamitani N, Nakao K, Honda H
- T308 [Invited lecture] Transient Spectroscopic Investigation of Intermediates Involved in CO₂ Reduction under Supercritical CO₂ Conditions (Brookhaven Nat. Laboratory, Chemistry Department) ○D Grills
- --- Room U ---
--- Day 1 ---
Symposium <Frontier of Physical Properties in Sub- and Supercritical Fluid>
(10:00~10:40)(Chair Machida H.)
- U104 Measurement and correlation of diffusion coefficients for metal complexes in supercritical and in liquid conditions (Shizuoka U.) ○Yakumaru Yoshiki, Kong Chang Yi, (Chuo U.) Funazukuri T.
- U105 Coacervation Microencapsulation with pH-Switchable Polymer by Pressure-Induced Phase Separation of CO₂ Solutions (Fukuoka U.) ○Itou Shouta, Mishima Kenji, Harada Takunori, Irie Keiichi, Kawakami Ryo, Mishima Kenichi
(10:40~11:20)(Chair Takishima S.)
- U106 Phase Behavior of CO₂/Silicon alkoxide/Polymer systems (Tokyo U. Sci.) ○Matsukawa Hiroaki, Shimada Y., Kobayashi D., Shono A., Otake K., (AIST) Yoda S., Furuya T., Takebayashi Y., (Syowa Jyushi Co.) Okawa Y.
- U107 Effects of the Solid co-Solvent on the Melting Point Depression of Organic Substances (Tokyo U. Sci.) ○Nakamura Y., Kobayashi M., Shimada Y., Kobayashi D., Shono A., Otake K.
(11:20~12:00)(Chair Matsuda H.)
- U108 [Invited lecture] Search and Thermophysical Property Measurements of Clathrate Hydrates Suitable for Carbon Capture (Keio U., Graduate School of Sci. and Tech.) ○Ohmura Ryo
(13:40~14:40)(Chair Ko S.)
- U115 Glass Transition Temperatures of CO₂+Pharmaceutical excipient Systems (Tokyo U. Sci.) ○Tanaka K., Kobayashi M., Shimada Y., Kobayashi D., Shono A., Otake K.
- U116 Effects of polymorph on solubility of theophylline in supercritical carbon dioxide (Shinshu U.) ○Sano K., Nishijima M., Sakabe J., (Tokyo Inst. Tech.) Shimoyama Y., (Shinshu U.) Uchida H.
- U117 Measurement and prediction of multicomponent adsorption equilibria of VOCs under supercritical carbon dioxide conditions (Tohoku U.) ○Ushiki I., Ota Masaki, Sato Yoshiyuki, Inomata Hiroshi
(15:00~15:20)

--- Day 2 ---

Symposium <The Physical Properties Research for Latest Development of Industrial Process - Measurement and Simulation ->

(10:00~11:00)(Chair Haruki M.)

- U204 Prediction of Vapor-Liquid Equilibria of Multi-Component Systems by Using GC-Wilson Equation
(Yamaguchi U.) ◯Kamiryō Tsuyoshi, Kobuchi Shigetoshi, (Kyushu U.) Yonezawa S.
- U205 Calculation of Vapor-Liquid Equilibria for Binary Systems Using SRK EOS + Modified Conventional Mixing Rule
(Nihon U.) ◯Tochigi Katsumi, Matsuda Hiroyuki, Kurihara Kiyofumi
- U206 Prediction of the consistency of VLE Data
(Tokyo Metro. U., TC Lines Co., Ltd.) ◯Kato Satoru, (TC Lines Co., Ltd.) Yagi Hiroshi

(11:00~12:00)(Chair Mishima K.)

- U207 Correlation of gas solubility in organic solvents by using Hansen solubility parameter
(Kansai U.) ◯Sato Takashi, Araki S, Yamamoto Hideki
- U208 [Keynote lecture] Significance of the physical properties for the process design
(Applied Thermodynamics and Physical Properties, Co., Ltd) ◯Oba S.

(13:00~14:00)(Chair Matsuda H.)

- U213 CO₂ absorption properties and dissolution enthalpy of imidazolium-based ionic liquids
(Nihon U.) ◯Sugawara T., (Muroran Tech.) Shimomura T., (Nihon U.) Kodama D., (AIST) Makino Takashi, Kanakubo Mitsuhiro
- U214 Density, viscosity and CO₂ solubility of imidazolium-based ionic liquids + alcohol mixtures
(Nihon U.) ◯Yama T., Endo Y., (Muroran Tech.) Shimomura T., (Nihon U.) Kodama D., (AIST) Makino Takashi, Kanakubo Mitsuhiro
- U215 CO₂ solubility and solution model of imidazolium based ionic liquids-methanol solution
(Hosei U.) ◯Nishiumi H., (Nihon U.) Endo Y., Arai H., (Muroran Tech.) Shimomura T., (Nihon U.) Kodama D.

(14:00~15:00)(Chair Kurihara K.)

- U216 The rheological properties of branched polymer melts under high pressure
(Hiroshima U.Eng) ◯Tawara Kuniaki, Zhang Xinyang, Haruki Masashi, kihara shinichi, Takishima Shigeki
- U217 [Keynote lecture] Phase equilibria and viscosity of polymer + supercritical fluid solutions
(Tohoku U. Eng.) ◯Sato Yoshiyuki

(15:00~16:00)(Chair Shigemoto N.)

- U219 Anion effect for CO₂ solubility of ionic liquids using a magnetic suspension balance
(Nihon U.) ◯Watanabe M., Kimura T., (Muroran Tech.) Shimomura T., (Nihon U.) Kodama D., (AIST) Makino Takashi, Kanakubo Mitsuhiro
- U220 Measurement of isobaric vapor-liquid equilibria for the double azeotropy system of Benzene (1) + Hexafluorobenzene (2)
(Nihon U.) ◯Shiaishi Y., Sato T., Okada M., Hiaki T.
- U221 Determination and correlation of heats of mixing for binary carbon dioxide + ester system
(Nihon U.) ◯Okamoto Takafumi, Itazu Yuta, Kurihara Kiyofumi, Matsuda Hiroyuki, Tochigi Katsumi

--- Day 3 ---

(9:40~11:00)(Chair Shimoyama Y.)

- U303 Characteristics of Vapor-liquid Equilibrium of Non-ideal System
(Tokyo U. Sci.) ◯Ohe Shuzo
- U304 Analysis of concentration dependent surface area parameter for CDSAP model by molecular dynamics simulation.
(Kyu U.) ◯Taniguchi Issei, Iwai Y.
- U305 Development of density, viscosity and gas solubility measurement apparatus at high pressures
(Nihon U.) ◯Nakamura A., Endo Y., Kodama D., (Kobe U.) Sotani T., Matsuo S., (AIST) Makino Takashi, Kanakubo Mitsuhiro
- U306 Extraction of Luteolin and Apigenin from Alfalfa (Medicago sativa L.) Leaves with Liquid Carbon Dioxide and Ethanol
(SaneigenFFI) ◯Kawamura Hirofumi, (Fukuoka U.) Mishima Kenji, Harada Takunori, Irie Keiichi, Kawakami Ryo, Mishima Kenichi

(11:00~12:00)(Chair Iwai Y.)

- U307 Effect of water on carbon dioxide permeability through ionic liquid membrane
(Tokyo Tech) ◯Shimoyama Y., Kinoshita M
- U308 Structure analysis of heavy hydrocarbon components for physical property estimation of heavy oils (JPEC) ◯Teratani S, Katano K, Suzuki T, Tanaka R
- U309 Estimation of steam-reforming behavior of hydrocarbons by equilibrium calculation
(Shikoku Res. Inst., Inc.) ◯Shigemoto Naoya

--- Room V ---

--- Day 1 ---

Symposium <Frontiers of Fuel Cells, Solar Cells, Batteries and Other Device Technologies for Future Energy Systems - Materials, Processing and Systems Approach ->

(9:40~11:00)(Chair Matsuzaki Y.)

- V103 Citation Network Analysis of Literature of Fuel Cell, Battery and Related Technologies
(Kyushu U.) ◯Koyama M., Lin Keido, (U. Tokyo) Miyazaki Kenya, Otomo Junichiro

- V104 Effect of particle size of $\text{La}_{0.85}\text{Sr}_{0.15}\text{Cr}_{1-x}\text{Ni}_x\text{O}_3\text{-CeO}_2$ anode for SOFC (Shinshu U.) ○Saito M., Hamasaki Shogo, Shimada Iori, Takahashi Nobuhide, Fukunaga Hiroshi
- V105 Improvement of thermal durability and power density of SOFCs by preparing nano particles fabricated by pulsed laser deposition methods. (Osaka Pref. U.) ○Mukai Takehito, Fujita Takahiro, (TMCIT) Yoshida Kenichi, (Osaka Pref. U.) Tsukui Shigeki, Adachi Motoaki, (Noritake Company Limited) Iwai Hiroyuki, Takahashi Yosuke
- V106 Conductive Characteristics and Power Generation of Electrolyte Material $\text{Pr}_{2-x}\text{Ba}_{1+x}\text{Sc}_2\text{O}_7$ with Ruddlesden-Popper Structure for Solid Oxide Full Cells (Tokyo Tech) ○X. Li, H. Shimada, H. Tanaka, M. Ihara
(11:00~12:00)(Chair Tsukui S.)
- V107 Power generation characteristics of a small DCFC (Gifu U.) ○Yokoyama N., (Gifu U.) Goto K., (Gifu U.) Moritomi H.
- V108 Evaluation of dependency of fuel supply frequency and temperature characteristic in Pulse Jet-Rechargeable Direct Carbon Fuel Cell (Tokyo Tech) ○Sugiyama S, Hattori S, Chen Y, X. Li, M. Ihara
- V109 Relationship between electrode degradation by sulfur compounds and the fuel supply interval time in Pulse Jet - Rechargeable Direct Carbon Fuel Cell (Tokyo Tech) ○Hattori S, Sugiyama S, Chen Y, M. Ihara
(13:00~14:20)(Chair Kikuchi R.)
- V113 The influence of mass transfer in fuel column and reactivity to power generation characteristic of Rechargeable solid carbon fuel cell (RSCFC) (Tokyo Tokyo Tech) ○Chen Y, Sugiyama S, Hattori S, Izumi Takaaki, M. Ihara
- V114 Evaluation of system configurations for light integration of gasification and fuel cell (Kyushu U.) ○Nur T. B., (U. Tokyo) Kikuchi Y., (Kyushu U.) Ishimoto T., Honda K., Koyama M.
- V115 Process simulation of multistage fuel supply module applied SOFC for improving system efficiency (WPI-I2CNER, Kyushu U.) ○Tachikawa Yuya, (Tokyo Gas) Somekawa Takaaki, Matsuzaki Yoshio, (Kyushu U.) Taniguchi Shunsuke, Sasaki Kazunari
- V116 Chemical reaction coupled with surface diffusion near triple phase boundaries of solid oxide fuel cell (Kyushu U. / JST-CREST) ○Mihara K., Ishimoto T., Koyama M.
(14:20~15:20)(Chair Fukunaga H.)
- V117 High speed deposition of YSZ electrolyte thin film by pulsed laser deposition method (Osaka Pre.U.) ○Fujita Takahiro, Mukai Takehito, Tsukui Shigeki, (TMCIT) Yoshida Kenichi, (Osaka Pre.U.) Adachi Motoaki
- V118 Geometrically and chemically microstructural control and power generation characteristics in semiconductor-sensitized solar cell ($\text{TiO}_2/\text{Sb}_2\text{S}_3/\text{CuSCN}$) (Tokyo tech) ○Zhang Qian, Yoshioka Shohei, Akita Hiroshi, Yamada Kairi, Murakami Kazuki, M. Ihara
- V119 Influence of Localized Surface Plasmons on the Light Absorbance of the Photo-Active Layer of Organic Solar Cells and the Cell Performance (Tokyo Tech) ○Akita Hiroshi, Loew N, Yamada Kairi, (Tokyo Tech/JST) Zhang X, (formerly Tokyo Tech) Komatsu S, (Tokyo Tech) M. Ihara
(15:20~16:20)(Chair Sugiyama M.)
- V120 [Invited lecture] Printable solar cells for next generation - Perovskite solar cells with controlled passivation interfaces for enhancing efficiency - (Kyushu Inst. Tech.) ○Hayase Shuzi
(16:20~17:00)(Chair Ohtomo J.)
- V123 Nanoparticles Seeded Single-Crystal Si nanowires Growth with Diameter Control Mechanism (Tokyo Tech) ○Zhang Xiaomei, Yamada Kairi, Akita Hiroshi, M. Ihara
- V124 Optical Properties of Porous Si / Metal Nanoparticle Composites and their Performance as Solar Cells (Tokyo Tech) ○Yamada Kairi, Murakami Kazuki, Akita Hiroshi, (Tokyo Tech/JST) Zhang X, Lukianov A, (INSA de Lyon) Fave A, (Tokyo Tech) M. Ihara
--- Day 2 ---
- (9:00~10:00)(Chair Inasawa S.)
- V201 Efficient Preparation of Carbon Nanoparticles Using the Liquid Pulse Injection Technique (Graduate School of Eng., Hokkaido U.) ○Iwamura S., Iwashiro R., Oginio I., Mukai S.
- V202 Synthesis of porous LaMnO_3 and its electrode catalysis performance (Tokyo Inst. Tech.) ○Kida Wataru, Taniguchi Izumi
- V203 Thermal Behavior of 18650 Lithium-ion Batteries During Discharge Cycles (Gifu U.) ○Nakamura Syota, Kambara Shinji, (Kojima Press Co.) Osakabe Tomotaka
(10:00~11:00)(Chair Essaki K.)
- V204 Influence of Impurities of Carbon Black Conductors on Electrode Performance of Li-ion Batteries (Asahi Carbon Co. Ltd.) ○Yamaguchi T., Arimitsu Nozomi, Nishikawa Shogo
- V205 Relationship between the structure of contact interface and electron conductivity in electrode layer (Kyoto U. / JST PRESTO) ○Inoue Gen, (Kyoto U.) Kawase M.
- V206 The Effect of Mixing and Kneading Process to the Silicon Particle Anode Performance for Li-ion Batteries

- (U. Tokyo) ○Miura Takahiro, (Tokyo U. Agriculture and Tech.) Inasawa Susumu, (U. Tokyo) Tsuji Yoshiko, Yamaguchi Y.
 (11:00~12:00)(Chair Tsukui S.)
 V207 [Invited lecture] Local Structure and Ionic Conduction of Interfaces of Oxide-type All Solid-State Batteries (Nagasaki U.) ○Yamada Hiroto, Isomichi Gakuho, Tsunoe Daisuke, Shiraishi Shodai
 (13:00~14:20)(Chair Tamaki T.)
 V213 Performance analysis of the solid oxide electrolysis system for hydrogen production (Kyushu U.) ○Saputra A., Ishimoto T., Koyama M.
 V214 Interfacial conduction mechanism of cesium phosphate and silicon pyrophosphate composite electrolytes for intermediate-temperature fuel cells (U. Tokyo) ○Kikuchi Ryuji, Ogawa Akari, Matsuoka Takuya, Takagaki Atsushi, Sugawara Takashi, Oyama S. Ted
 V215 Theoretical Approach for Hydrogen Absorbing Properties in Pd-based Alloy (JST-CREST) ○Binti Zulkifli N., Yayama T., Ishimoto T., Koyama M.
 V216 Low-temperature preparation of high efficiency Bi₂Te₃ thermoelectric thin film and enlargement of deposition area (Osaka Pref. U.) ○Kawano Kouki, Tsukui Shigeki, Adachi Motoaki

--- Day 3 ---

- (9:40~11:00)(Chair Nishimura A.)
 V303 Long term operation of a direct methanol fuel cell stack using neat methanol (Gunma U.) ○Tanaka A., Ishitobi H., Nakagawa N.
 V304 Development of the stable and active Pd catalyst supported by particle-embedded carbon nanofiber for direct formic acid fuel cell (Kanazawa U.) ○Onishi Ryo, Tsujiguchi T., (Gunma U.) Nakagawa N., (Kanazawa U.) Osaka Y., Kodama A.
 V305 Direct formic acid fuel cell using Pd nanoparticles catalyst supported on TiO₂ embedded carbon nanofiber (Gunma U.) ○Aoyama T., Nishio Y., Ishitobi H., Nakagawa N.
 V306 Extremely low-platinum alloy nanoparticle catalyst for Solid-state alkaline fuel cell (SAFC) (Tokyo Tech) ○Yamada Yusuke, (Tokyo Tech/JST-CREST) Tamaki Takanori, Yamaguchi Takeo
 (11:00~12:00)(Chair Koyama M.)
 V307 [Invited lecture] Low Platinum Cathode for Intermediate Temperature Fuel Cell without External Humidification (Kyushu U.) ○Fujigaya Tsuyohiko
 (13:00~14:00)(Chair Tsujiguchi T.)
 V313 Development of new nanofiber material for cathode electrode in PEFCs

- (Tokyo Inst. Tech.) ○Ohmae Yuki, (KAST, Tokyo Inst. Tech.) Kuroki Hidenori, (Tokyo Inst. Tech., KAST) Tamaki Takanori, Yamaguchi Takeo
 V314 Clarification on Coupling Transport Phenomena in Single Cell of PEFC with Separator Temperature Data Obtained by Thermograph (Mie U.) ○Baba Masashi, Nishimura Akira, Fukuoka Takenori, Osada Kotaro, Hirota Masafumi
 V315 Kinetic analysis on a direct ethanol fuel cell by using composite fiber catalysts (Gunma U.) ○Ishitobi H., Yajima Masaya, Nakagawa N.
 (14:00~15:20)(Chair Inoue G.)
 V316 Evaluation of microstructure and proton conductivity in titanium phosphate glass-ceramics (Graduate School of Frontier Sciences) ○Kadota Minoru, Otomo Junichiro
 V317 Structure and Properties of Polymer Electrolyte Membrane with Heterocyclic Ring Systems for PEFCs (Tokyo Inst. Tech.) ○Amari Shuntaro, (KAST, Tokyo Institute of Technology) Ando Shinji, (Tokyo Institute of Technology, KAST) Yamaguchi Takeo
 V318 Observation of local ion conduction in inorganic ion conductors (Graduate School of Frontier Sciences, U. Tokyo) ○Iwanaga Aki, Otomo Junichiro
 V319 Development of New Anion Exchange Membranes using Polymer of Intrinsic Microporosity (Tokyo Inst. Tech.) ○Tomoharu Inoue, (Tokyo Inst. Tech., JST-CREST) Fumitaka Ishiwari, Shoji Miyanishi, Takanori Fukushima, Takeo Yamaguchi
 (15:20~16:20)(Chair Ohashi H.)
 V320 Effect of the electrode structure of the DFAFC on the concentration overvoltage profiles. (Kanazawa U.) ○Matsuoka F., Hokari Y., Tsujiguchi T., Osaka Y., Kodama A.
 V321 Improvement in the durability of Pt commercial cathode catalysts available by coverage with silica layers (Kyushu U.) ○Emura S., Takenaka S., (Kyoto U.) Inoue Gen, (Kyushu U.) Matsune H., Kishida M.
 V322 Influence of relative humidity on oxygen reduction reaction kinetics in cathode layer in PEFC (Kyoto U.) ○Asonuma H., Nagayoshi M., Kageyama M., Inoue Gen, Kawase M.

 --- Room W ---

--- Day 1 ---

- Symposium <Symposium of the Division of Materials Engineering and Interfacial Phenomena: Cutting-edge Research of Materials Processing and Interfacial Study>**
 (9:00~10:00)(Chair Kobayashi Y.)
 W101 Syntheses of luminescent, mesoporous silica particles using monodisperse cores

- (Tohoku U.) ○Kawai Shunsuke, Ishii Haruyuki, Nagao Daisuke, Konno Mikio
- W102 Development of single nano-sized metal particle manufacturing technology using gas-phase evaporation method.
(MHI) ○Fukunaga Koichi, Nagai Masahiko, Kitamura tsuyoshi, (JAEA) Ara Kuniaki, Jun-ichi Saito
- W103 A One-Pot Synthesis of Hollow Mesoporous Organosilica Nanoparticles
(UTokyo) ○Chaikittisilp Watcharop, Fukada Yuko, Koike Natsume, (Waseda U.) Shimojima Atsushi, (UTokyo) Okubo T.
(10:00~11:00)(Chair Watanabe S.)
- W104 Control over porous silica particles incorporating Au nanoparticles for highly catalytic activities.
(Tohoku U.) ○Hirota Ayumi, Ishii Haruyuki, Nagao Daisuke, Konno Mikio
- W105 Spontaneous formation of nanometer-thick coating of organic silica on the surface of nano-sized magnetite particles in stable dispersion in amphiphilic amine
(Fukushima N.C.T.) ○Yamauchi N., Igarashi T., Konishi Yasuhiro, Niitsuma Y., Kurumada Keinichi
- W106 Development of Au/SiO₂ Composite Nanoparticles for Imaging of Medical Diagnosis
(Ibaraki, U.) ○Shibuya Kyosuke, Nagasu Ryo, Kobayashi Yoshio, (Tohoku, U.) Kubota Yohsuke, Nakagawa Tomohiko, Gonda Kohsuke, Ohuchi Noriaki
(11:00~12:00)(Chair Yamauchi N.)
- W107 Control over assemblies of anisotropic composite particles using nanoparticle fluid
(Tohoku U.) ○Takahashi Hayato, Ishii Haruyuki, Nagao Daisuke, Konno Mikio
- W108 Formation of Conductive Network Structures of Gold Nanoparticles by Convective Self-Assembly with Liquid-Level Manipulation
(Kyoto U.) ○Watanabe Satoshi, Matsui Kizuku, Miyahara Minoru
- W109 Decrease in metal-metal bonding temperature using copper oxide nanoparticles
(Ibaraki, U.) ○Maeda Takafumi, Kobayashi Yoshio, (Hitachi, Ltd.) Yasuda Yusuke, Morita Toshiaki
(13:00~14:00)(Chair Nakagawa K.)
- W113 Preparation of metal oxide nanosheets from metal alkoxides by use of graphene oxide templates
(Kyushu U.) ○Uwai Shunsuke, Miyake Shuhei, Takenaka S., Matsune H., Kishida M.
- W114 Laser synthesis of transparent conductive Carbon thin film
(Kanazawa U.) ○sawada kazuya, osone saho, higashi hidenori, seto takafumi, Otani Y., (AIST) hirasawa makoto
- W115 Fabrication of highly refractive, thermal resistive nanocomposite films
(Tohoku U.) ○Kamezawa Nao, Ishii Haruyuki, Nagao Daisuke, Konno Mikio
(14:00~15:00)(Chair Inasawa S.)
- W116 Effect of oxygen inhibition on 3D UV printing process
(Yamagata U.) ○Taki Kentaro, (Kyoto U.) Watanabe Yoshito, (Yamagata U.) Ito Hiroshi, (Kyoto U.) Ohshima Masahiro
- W117 Electric Generation Characteristics of Dye-Sensitized Solar Cells Using Layered Titanate Nanosheets with A Lamellar Structure
(U. Tokushima) ○Motoki N, Nakagawa K, Katoh M, Sugiyama S, (Fuji Chemical Co.) Adachi M, Uchida F
- W118 Preparation of ZnO semiconductor thin films by wet process
(U. Tokyo) ○Sone R., Tsuji Yoshiko, Yamaguchi Y.
(15:00~16:00)(Chair Tsuji Y.)
- W119 Unidirectional migration of two-dimensionally embedded nanoparticles in polymer nanocomposite film by thermal annealing
(School of Eng., Tohoku U.) ○Yang Liu, Kato Takumi, Kubo M., Sugioka K., Tsukada T., (Inst. Multidisciplinary Res. For Adv. Materials, Tohoku U.) Takami Seiichi, (Adv. Inst. Materials Res., Tohoku U.) Adschiri Tadahumi
- W120 Construction of a particle-solvent-solute coupled model for drying and concentration process of particle dispersed solution
(U. Tokyo) ○Tatsumi R., Koike O., Yamaguchi Y.
- W121 Appearance of Hyper Swollen Lamellar Phase by Addition of the Hydrophobic Organic Molecule
(Osaka U.) ○Nishizawa Takuma, Mitome Takahito, Uchida Yoshiaki, Nishiyama Norikazu
(16:00~17:00)(Chair Shinto H.)
- W122 Molecular patterning on substrate through microsphere templating and formation of ordered porous structure
(Okayama U.) ○Nishihara R., Imanaka Hiroyuki, Imamura Koreyoshi, Ishida N.
- W123 Creation of Functional Materials by using Crystalline SupraMolecule Interaction of Side Chain Crystalline Bullock Copolymer
(Fukuoka U.) ○Yao Shigeru, (FukuokaUniv.) Okuma Toru, Sano Yusuke, (Fukuoka U.) Nakano Ryoko, Sekiguchi Hiroshi
- W124 The Mechanism for the Generation of Micron Fibers from a Colloidal Suspension under Reduced-Pressure Drying
(U. Tokyo) ○Katayama T., (Tokyo U. Agriculture and Tech.) Inasawa Susumu, (U. Tokyo) Yamaguchi Y.
--- Day 2 ---
(9:00~9:40)(Chair Sakohara S.)
- W201 [Invited lecture] Future perspective of division of materials & interfaces in the society of chemical engineers, Japan
(U. Tokyo) ○Okubo T.
(9:40~10:20)(Chair Yamamura M.)

- W203 [Invited lecture] Preparation, Coating and Drying of particle dispersions (Kobe U.) ◦komoda yoshiyuki (10:20~11:00)(Chair Yoshida M.)
- W205 [Invited lecture] Development of functional microcapsules using W/O/W emulsion (Miyazaki U.) ◦Shiomori K. (11:00~12:00)(Chair Oshitani J.)
- W207 Surface modification of biomaterials and their cell adhesion studied by AFM (Fukuoka U.) ◦Shinto H., (Kyoto U.) Orita M., Fukasawa T.
- W208 Fabrication of a novel *in situ* gelatin-polysaccharide crosslinked hydrogel (U. Tokyo) ◦Hozumi Takuro, Ohta S., (YOKOHAMA Nat. U.) Fukuda Junji, (U. Tokyo) Ito T.
- W209 Reaction control of Protein PEGylation in the Solid-liquid interface of the Ion-exchange chromatography media (Yamaguchi U.) ◦Isakari Yu, Yoshimoto Noriko, Yamamoto shuichi
- Day 3 ---
- (9:00~10:00)(Chair Wakihara T.)
- W301 Study on breakup mechanism of nanoparticle aggregates under simple shear field (U. Tokyo) ◦Koike O., Tatsumi R., Yamaguchi Y.
- W302 Effect of powder surface structure on tensile strength and collapsed behavior of pharmaceutical tablets (Lion corp.) ◦Ito T., (Tokyo U. Agri. and Tech.) Kamiya H.
- W303 Acceleration Effect of Multivalent Cation on Nucleation of Sodium Acetate Trihydrate Melt (Waseda U.) ◦Watanabe Yasuyuki (10:00~11:00)(Chair Koike O.)
- W304 Timing of Fines Dissolution by Heating for the Control of Crystal Size Distribution on Batch Crystallization (Osaka City U.) ◦Oshita Katsuhiro, Kishida Muneki, Igarashi Koichi, Ooshima Hiroshi
- W305 Ultra-fast Synthesis of Crystalline Microporous Aluminophosphate by Combining Fast Heating with Seed-Assisted Method (U. Tokyo) ◦Liu Zhendong, Wakihara Toru, (Mitsubishi Chemical Group) Takewaki Takahiko, Oshima Kazunori, Nishioka Daisuke, (U. Tokyo) Okubo T.
- W306 Carbonate reaction crystallization in the polyelectrolyte reaction field (Waseda U. ASE) ◦Watanabe Hiroto, Sonobe Yuko, Hirasawa Izumi (11:00~12:00)(Chair Sano N.)
- W307 Formation and size control of silicon microparticles with a radial crystal structure (Tokyo U. Agr. & Tech. (TUAT)) ◦Inasawa Susumu, (U. Tokyo) Ono Y., (Aoyama Gakuin U.) Nakamura S., (U. Tokyo) Tsuji Yoshiko, Yamaguchi Y.
- W308 Salt effect on stability of surfactant-free O/W emulsion (Okayama U.) ◦Kohno S, Akiduki Y, Yoshida M., Gotoh K., Oshitani J.
- W309 Solvent Characterization: Key Parameters for Preparing Homogeneous Polyamic Acid (PAA) Solution (Tohoku U.) ◦Duereh A., Ota M., Sato Y., Inomata H. (13:00~14:20)(Chair Kubo M.)
- W313 Limited promotive effect of aqueous ammonia in polycondensation of highly hydrophobized organic silica (Fukushima NCT) ◦Kurumada Keinichi, Endo Yuya, Yamakawa Taka-aki, Suzuki Yuka, Harada Mutsumi, (Yokohama Nat. U.) Matsumoto Shinya
- W314 Analysis of degradation of titanium dioxide photocatalyst during reduction of Cr(VI) (ATRL Panasonic) ◦Hashimoto Yasuhiro, Maruo Yuko, Hara Kohei, Takaoka Tomoyasu, Ino Daisuke, Aizawa Masato
- W315 Synthesis of carbon nanotubes on inner surfaces of porous stainless blocks (Kyoto U.) ◦Nojima K, Kodama T, Sano N., Tamon H.
- W316 Synthesis of ferromagnetics-encapsulated solid base carbon nano material (Kyoto U.) ◦Yamada Kouhei, Sano N., Tamon H. (14:20~15:20)(Chair Tanaka H.)
- W317 Control of temperature-responsivity of thermo-responsive polymer / mesoporous silica adsorbent (Akita U.) ◦Murakami K., Sato Y.
- W318 Adsorption of rare-earth ions into mesoporous SiO₂-PVA nanocomposite and its photoluminescence (Kyushu U.) ◦Ikeda Hiroshi, Fujino Shigeru, Kajiwara Toshihisa
- W319 Estimation of microbial attachment and detachment at bio/solid interface under fluid flow condition (Sumitomo Bakelite/OPU) ◦Yoshihara A., (OPU) Konishi Yasuhiro, Nomura Toshiyuki (15:20~16:20)(Chair Takami S.)
- W320 In-flight Synthesis of Metal-Organic Framework HKUST-1 (Hiroshima U.) ◦Saito Teruaki, Kubo Masaru, Shimada Manabu
- W321 Molecular simulation for searching new zeolite-templated carbons (Kyoto U.) ◦Tanaka H., Seto T., (Tohoku U.) Nishihara H., Kyotani T., (Kyoto U.) Miyahara Minoru
- W322 Adsorption-induced structural transition in nanoscale ZIF-8: A combined experimental and simulation study

(Kyoto U.) ○Ohsaki Shuji, Takada Kento, Watanabe Satoshi, Tanaka H., Miyahara Minoru

--- Room X ---

--- Day 1 ---

Symposium <Symposium by Division of Environment>

(10:20~11:20)(Chair Murayama N.)

X105 Degradation of chlorinated organic compounds with mixed particles of iron/iron sulfide or iron disulfide in tubular flow reactor

(Okayama U.) ○Demiya M., Kato Y., Uddin M. A.

X106 Synthesis of alginic acid/PVA gel and its organic adsorption properties

(Kansai U.) ○Hasegawa S, Araki S, Yamamoto Hideki

X107 Examination of successive treatment of antibiotic-containing wastewaters using organoclay-packed columns

(Kitami Inst.) ○Saitoh T, (Nagoya U.) Shibayama T, Fujioka H

(11:20~12:00)(Chair Sagehashi M.)

X108 [Keynote lecture] Exploring chemical structure of trace unknowns by high resolution/accurate mass LC/MS

(Kagoshima U.) ○Takanashi H.

(13:00~14:00)(Chair Kubota M.)

X113 Examination of rate controlling factor on chemical etching of silicon solar cell

(Okayama U.) ○Takami K., Uddin M. A., Kato Y.

X114 Evaluation of energy balance in a plant factory with a freezing container

(Shinshu U.) ○Takahashi Nobuhide, Itoh Takashi, Nozue Hatsumi, Usami Hisanao, Nozue Masayuki

X115 Life cycle assessment of pig farming system incorporated with dry thermophilic anaerobic digestion and forage rice cultivation

(Tokyo U. Agric. Tech.) ○Riya Shohei, (KOBELCO ECO-SOLUTIONS Co., Ltd.) Suzuki K., (Shanghai Acad. Agric. Sci.) Zhou Sheng, (Tokyo U. Agric. Tech.) Terada Akihiko, Hosomi Masaaki

(14:00~15:00)(Chair Kato Y.)

X116 Effects of Fe₂O₃ on dissolution rate of CaO particle into CaO-Al₂O₃-SiO₂ molten slag

(Nagoya U.) ○Sato D., Nagano Y., Kubota M., Matsuda H.

X117 Evaluation of chlorine in waste plastic behavior in CaCO₃ calcination process

(JFE Steel) ○Asanuma Minoru, Otonari Mitsuya, Takashima Nobuhiro, (JFE Mineral) Koda Naohiko, Sadahara Masahide

X118 Detection of particulate matter in air using metal mesh device

(Kyushu U.) ○Seto Hirokazu, (Murata Manufacturing Co.) Kamba S., Kondo T., (Kyushu U.) Hoshino Y., Miura Yoshiko

(15:00~16:00)(Chair Asanuma M.)

X119 Evaluation of the suspended particulate matter removal process with steam condensation and ultrasonic atomization

(Nagoya U.) ○Oshima K., Hirasawa M., Terakado O.

X120 Characteristics of decomposition and mineralization of malodorous substance with packed bed type non-thermal plasma reactor

(Nagoya U.) ○Kubo T., Kubota M., Matsuda H., (SINTOKOGIO, LTD.) Iijima S., Ushiroebisu K.

X121 Influence of the characteristics of the atmospheric pressure non-equilibrium plasma on the decomposition rate of CF₄

(Nitech) ○Kanazawa Y, Imai Y, Yasui S

(16:00~17:00)(Chair Takahashi N.)

X122 CO₂ recovery evaluation of novel amine absorbent (TOSHIBA) ○Muraoka D, Murai S, Fujita K, Saito S

X123 Oxidative degradation mechanisms of alkanolamine (Nagoya U.) ○Suzuki T., Hirasawa M., Terakado O., (Babcock-Hitachi K.K) Yokoyama K., Kobayashi K., Takamoto S.

X124 Arid land afforestation for CO₂ fixation - Evaluation of water harvesting methods using simulators - (Tokyo U. Tech.) ○Egashira Yasuyuki

--- Day 2 ---

(9:00~10:00)(Chair Takahashi S.)

X201 Solidification mechanisms of decarburization slag applied immersed in

(Grad.School.Eng.Hiroshima.Unv) ○Katayama Takahiro, Yano Hitomi, (Env.Manag. Res.Center) Okuda Tetsuji, (Grad.School.Eng.Hiroshima.Unv) Nakai Satoshi, (Env.Manag. Res.Center) Nishijima Wataru

X202 Effect of liquid-solid ratio for pressurized carbonation of steelmaking slag

(Nagoya U.) ○Shinooka Takuya, (NIPPON STEEL & SUMITOMO METAL CORP.) Matsui Shunsuke, (Nagoya U.) Kubota M., Matsuda H.

X203 Change of water quality with a focus on iron in Kesenuma Bay and Moun Bay after the Great East Japan Earthquake

(UTokyo) ○Yamamoto M., (ANCT) Liu D., (Tokyo Metro. U.) Nagasaka S., Yokoyama K., (IIAS) Tanaka M.

(10:00~11:00)(Chair Yamamoto M.)

X204 As removal from dilute solution with Fe type and Al type metal oxides.

(Kansai U.) ○Kotani Takuya, Yoshii Koji, Murayama Norihiro, Shibata Junji

X205 Clarification for As(V) removal mechanism by Fe(III)-supported resins and the effect of pH (Waseda U.) ○Futami Fumiya, Tokoro C.

X206 Quantitative modeling for co-precipitation treatment with aluminum hydroxide in wastewater containing zinc

- (Waseda U.) ○Sakakibara Taisuke, Tokoro C., Suzuki Shinya
(11:00~12:00)(Chair Tokoro C.)
- X207 Removal effect of geopolymer against lead ion in water
(Seikei U.) ○Inoue Motoki, Katsuro Yuki, Noguchi Miyuki, Hongo Teruhisa, (Nichikon) Honma Masato, (Seikei U.) Yamasaki Akihiro
- X208 Effect of electron donor on nitrogen removal ratio by predenitrification/nitrification system using immobilized anammox bacteria
(Toyo U.) ○Kitazawa T., Sumino T.
- X209 Purification treatment of acetic acid content wastewater by aerobic bacteria
(Graduate School of Eng., Hachinohe Inst. Tech.)
○Tatehana Shiho, Takahashi S.
- (13:00~14:00)(Chair Nakai S.)
- X213 [Keynote lecture] Development of ROBUST reverse osmosis (RO)/nanofiltration (NF) membranes for various types of water resources
(Hiroshima U.) ○Tsuru T.
- X215 Development of Cellulose Nanofiber Processing and Film-forming Technology
(ACIST) ○Morikawa Yutaka, Itou Masako, (Yoshida Kikai co., Ltd.) Umeda Shinichi
- (14:00~15:00)(Chair Narita H.)
- X216 Basis study on the removal of cesium from incinerated ash by chloride volatilization
(Nagoya U.) ○Nagano Y., Kubota M., Matsuda H.
- X217 Behavior of heavy metal in the phosphorus recovery process from sewage sludge ash
(Niigata U.) ○Kim H, hayashi Naoki, Kano Naoki, Shimizu T, Li Liyun, (Nagoya U.) Kamimoto Yuki
- X218 Optimization study of multi-stage extraction process for metal ion by using Stacked Multi Channel Reactor (SMCR)
(Kobe Steel, LTD.) ○Matsuoka A., (Akira) Noishiki K
- (15:00~16:00)(Chair Matsuoka A.)
- X219 Adsorption property of rare earth elements using silica gel adsorbent with immobilized tridentate amido ligands
(AIST) ○Ogata Takeshi, Narita Hirokazu, Tanaka Mikiya
- X220 Structural analysis of the Pd complexes extracted with sulfide-containing monoamide compounds
(AIST) ○Narita Hirokazu, Tanaka Mikiya, (JAEA) Shiwaku Hideaki, Yaita Tsuyoshi
- X221 Novel recycling process of precious metals from electrical and electronic equipments using "organic aqua regia"
(U. Tokyo) ○Yoshimura Akihiro, Umehara Kana, Matsuno Yasunari
- (16:00~17:00)(Chair Ogata T.)
- X222 Continuous recovering system of Palladium by use of the Shewanella bacteria

- (OPU) ○Tanaka Rie, Saito Norizo, Nomura Toshiyuki, Konishi Yasuhiro, (MRC) Ninomiya Yasuhiro, Anbo Takanori, Terazwa Kaoru
- X223 Bio wet recovery of platinum group metals from used metal honeycomb catalyst
(OPU) ○Maeda Shingo, Saito Norizo, (HFT) Nobori Misao, (OPU) Nomura toshiyuki, Konishi Yasuhiro
- X224 Microbial reduction and recovery of Platinum and Palladium dissolved solution
(OPU) ○Kinoshita Yutaro, Saito Norizo, Nomura toshiyuki, Konishi Yasuhiro, (HFT) Nobori Misao
- Day 3 ---**
- (9:00~10:00)(Chair Hiraga Y.)
- X301 The safe handling of biomass ash by using polyvinyl alcohol
(Fukushima U.) ○Kumagai Ami, Sato Ryo, Kanno Taiki, Shima Nagayoshi, Sato Michio
- X302 Preparation and catalytic using of Acidic Ionic Liquid - TEOS Polycondensates
(Tohoku U.) ○Noma S., Qiao K., Tomida D., (Niigata U.) Hagiwara hisahiro, (Tohoku U.) Yokoyama C.
- X303 Waste oil recycling system for eco-friendly firefighting foam
(U. Kitakyushu) ○Uezu Kazuya, Takasaki Ryoko
- (10:00~11:00)(Chair Uezu K.)
- X304 Enhancement of benzene adsorption capacity under an high-humidity atmosphere using activated carbon made from phenol resin
(Okayama U.) ○Hiwada A., Uddin M. A., kato Y.
- X305 Characteristics of phosphorus in pyrolysis char of sewage sludge and poultry manure
(Gunma U.) ○Watanabe T., Hasegawa H., Kobayashi H., Kubota K.
- X306 Solidification reaction of coal fry ash using calcined Ca-Al compound
(SRI) ○Hiraga Yuki, Shigemoto Naoya
- (11:00~11:20)
Student Award Ceremony

--- Room Y ---

--- Day 1 ---

Symposium <Cutting Edge of Biochemical Engineering (Flash Presentation)>

Poster Presentation will be held at Room ZA during 13:00 to 16:00.

(9:00~10:00)(Chair Kawabe Y.)

From ZA1P01 to ZA1P30

(10:00~11:00)(Chair Miyanaga K.)

From ZA1P31 to ZA1P60

(11:00~12:00)(Chair Okochi M.)

From ZA1P61 to ZA1P91

Symposium <Frontier of Climate Change Reserach with a Focus on IPCC Fifth Assessment Reports>

(13:00~15:00)(Chair Kurosawa A.)

- Y113 [Invited lecture] Overview of IPCC WG1 AR5
(Kyushu U.) ○Takemura Toshihiko
- Y115 [Invited lecture] Impacts and Adaptations of Climate Change
(NIES) ○Hijioka Yasuaki
- Y117 [Invited lecture] Greenhouse Gas Mitigation Strategy
(RITE) ○Akimoto Keigo
(15:00~16:20)(Chair Yamasaki A.)
- Y119 [Keynote lecture] Status of Climate Engineering Research (tentative)
(IAE) ○Kurosawa Atsushi
- Y121 [Invited lecture] Renewable Energy Development in Developing Countries: Technological Efficiency of Subsidy to Solar Pumping System in Nepal
(Hiroshima U.) ○Kaneko Shinji, Yoshida Yuichiro, Ito Yutaka, (Nagasaki U.) Komatsu Satoru

--- Day 2 ---

Symposium <Roles of Chemical Engineering for Widespread Application of Regenerative Medicine>

- (9:40~11:00)(Chair Fukuda J.)
- Y203 [Keynote lecture] Possible contributions of chemical engineering to cell culture process for regenerative medicine
(U. Tokyo) ○Sakai Yasuyuki
- Y205 Development of 3-dimensional tissues with perfusable capillary-like structures
(Osaka U.) ○Yang Liu, Sakai Shinji, Taya Masahito
- Y206 Size control of hemoglobin and albumin-based oxygen carriers by SPG membrane emulsification
(U. Tokyo) ○Lai Yao-Tong, Ohta S., (Kogakuin U.) Akamatsu Kazuki, Nakao Shin-ichi, (U. Tokyo) Sakai Yasuyuki, Ito T.
(11:00~12:00)(Chair Mizumoto H.)
- Y207 Construction of chimeric receptors directing for expansion of hematopoietic stem cells
(U. Tokyo) ○Kawahara M., Saka K, Teng J, Chen J, Otsu M, Nakauchi H, Nagamune T.
- Y208 Nervous biological assay device consist of GF-immobilizable matrix
(Kyushu U.) ○Mizumachi H., ijima hiroyuki
- Y209 Coalescence Thecnology of BNCT and Reorganization Therapies against cancer
(JAEA) ○Ishiyam Shintaro, (CICS Co.) Imahori Yoshio
(13:00~14:00)(Chair Sugiura S.)
- Y213 [Invited lecture] Development of scalable iPS cell culture system for fabricating regenerative human cardiac tissue
(Inst. Adv. Biomedical Eng. and Sci. (TWIns) / Department of Cardiology, Tokyo Women's Medical U.) ○Matsuura Katsuhisa
- Y215 Development of operation methods for efficient suspension culture of human iPS cells
(Dept. Biotech., Grad. Sch. Eng. Osaka U.)
○Nagamori Eiji, Kino-oka Masahiro

- (14:00~15:00)(Chair Ijima H.)
- Y216 Construction and evaluation of three-dimensional hepatic tissue by bottom-up approach using spheroids
(Kyushu U.) ○Okudaira Tatsuya, (Tohoku U.) Amimoto Naoki, (Kyushu U.) Mizumoto Hiroshi, Kajiwara Toshihisa
- Y217 Technique for formation and recovery of micro-tissues using NIR-responsive gel
(U. Kitakyushu) ○Koga H, (Kyushu U.) Sada T, Fujigaya Tsuyohiko, Nakashima N., (U. Kitakyushu) Nakazawa K.
- Y218 Fabrication of 3D Tissue Construct Using Photodegradable Hydrogel
(AIST) ○Sugiura Shinji, Yanagawa Fumiki, Takagi Toshiyuki, Sumaru Kimio, Kanamori Toshiyuki
(15:00~16:00)(Chair Nagamori E.)
- Y219 [Invited lecture] Development of automatic cell culture system aiming medical use
(Kawasaki Heavy Industries, Ltd.) ○Nakashima Katsumi
- Y221 Characterization of solubilized matrix derived from decellularized liver
(Dept. of Chem. Eng., Kyushu U.) ○Nakamura S., ijima hiroyuki
(16:00~17:00)(Chair Nakazawa K.)
- Y222 Construction procedure of liver substitute using decellularized liver based on whole organ engineering
(Kyushu U.) ○Shirakigawa nana, Sakamoto H, Ida R, ijima hiroyuki
- Y223 Rapid fabrication of 3D vascularized tissue using molding process
(Yokohama U.) ○Kageyama Tatsuto, (Tsukuba U.) Kakegawa Takahiro, Osaki Tatsuya, (Tokyo U.) Ito T., (Yokohama U.) Fukuda Junji
- Y224 Engineering three-dimensional vascularized liver tissues
(Yokohama Nat. U.) ○Fukuda Junji, (U. Tsukuba) Osaki Tatsuya, (Yokohama City U.) Takebe Takanori

--- Room ZA ---

--- Day 1 ---

Symposium <Cutting Edge of Biochemical Engineering (Poster Session with Flash Presentation)>

Flash Presentation will be held in Room Y during 9:00 to 12:00.

- (13:00~16:00)
- ZA1P01 A culture system using genetically engineered feeder cells for maintaining undifferentiated state of pluripotent stem cells
(Dept.Chem.Sys.andEng. Kyushu U.) ○Fujiwara Sho, Ito Akira, Kawabe Yoshinori, Kamihira Masamichi
- ZA1P02 Expansion of human iPS cells in a lumen of hollow fibers under various culture conditions.

- (Kyushu U.) ○Takasuka Yusuke, (Tohoku U.) Amimoto Naoki, (Kyushu U.) Mizumoto Hiroshi, Kajiwara Toshihisa
- ZA1P03 Transcriptome analysis of chicken blastodermal cells for establishment of pluripotent stem cells (Grad. Sch. Sys. Life Sci., Kyushu U.) ○Yamada Takuya, (Dep. Chem. Eng., Fac. Eng., Kyushu U.) Fukumaru Shiho, (Grad. Sch. Sys. Life Sci., Kyushu U.) Shiiba Nodoka, (Dep. Chem. Eng., Fac. Eng., Kyushu U.) Kawabe Yoshinori, Ito Akira, Kamihira Masamichi
- ZA1P04 Image-based analysis for screening of chemical compounds regulating the potentials of mesenchymal stem cells (nagoya U., pharmaceutical) ○fujitani masaya, (nagoya U., Eng.) sasaki hiroyuki, (nagoya U., pharmaceutical) kanie kei, (nagoya U., Eng.) honda hiroyuki, (nagoya U., pharmaceutical) kato ryuji
- ZA1P05 Development of growth factor-immobilizable tissue-engineered tubular scaffold (Dept. of Chem. Eng., Kyushu U.) ○Tokuyama Keitaro, Hirayama Takaaki, Gau Hiroaki, Shirakigawa Nana, (Dept. of Surg. Sci., Kyushu U.) Imai Daisuke, Yamashita yoichi, Shirabe Ken, Maehara Yoshihiko, (Dept. of Chem. Eng., Kyushu U.) Ijima Hiroyuki
- ZA1P06 Influence of elastic substrate on pluripotency in mesenchymal stem cells (Kobe U.) ○Ehashi Tomo, Taniguchi Nami, Yoshida Kensuke, Yamaji Hideki
- ZA1P07 Regulation of osteoclast differentiation using signalobody (U. Tokyo) ○Nakabayashi H., Aoyama S, Kawahara M., Nagamune T.
- ZA1P08 An approach for hepatic differentiation of human iPS cells in a three (Kyushu U.) ○Kuroda Masashi, (Tohoku U.) Amimoto Naoki, (Kyushu U.) Mizumoto Hiroshi, Kajiwara Toshihisa
- ZA1P09 Effect of low-molecular drugs on contractile force generation of artificial skeletal muscle constructs. (Dept. Chem. Eng., Fac. Eng., Kyushu U.) ○Imada Ryusuke, Ito Akira, (Grad.Sch.Sys.Life Sci., Kyushu U.) Ikeda Kazushi, (Dept. Chem. Eng., Fac. Eng., Kyushu U.) Sato Masanori, Kawabe Yoshinori, Kamihira Masamichi
- ZA1P10 The effect of inserted human mesenchymal stem cell on vascular endothelial cell behavior in multi-layered myoblast sheet (Osaka. U.) ○Nakamura Tadahisa, (Osaka.U.) Nagamori Eiji, Kino-oka Masahiro
- ZA1P11 Profiling of cell morphology for cell quality control using image analysis (Dept. Biotech., Grad. Sch. Eng., Nagoya U.) ○Sasaki Hiroto, (Dept. Basic Med. Sci., Grad. Sch. Pharm. Sci., Nagoya U.) Okada Norihiro, Kanie Kei, (Nikon Kiyota Yasujiro, (Dept. Biotech., Grad. Sch. Eng., Nagoya U.) Honda Hiroyuki, (Dept. Basic Med. Sci., Grad. Sch. Pharm. Sci., Nagoya U.) Kato Ryuji
- ZA1P12 Cell image analysis for effective nerve growth factor stimulating compound (Grad. Sch. Pharm. Sci., Nagoya U.) ○Kawai Shun, (Grad. Sch. Eng., Nagoya U.) Sasaki Hiroto, (Grad. Sch. Pharm. Sci., Nagoya U.) Okada Norihiro, Kanie Kei, Yokoshima Satoshi, Fukuyama Tohru, Kato Ryuji
- ZA1P13 Regulation of proliferation and differentiation of a myeloid cell line by antigen-responsive signalobodies (U. Tokyo) ○Shen Z., Nakabayashi H., Kawahara M., Nagamune T.
- ZA1P14 Decellularized brain-derived ECM aimed at neural tissue engineering (Kyushu U.) ○Harada Y., Mizumachi H., Nakamura S., Shirakigawa Nana, Ijima Hiroyuki
- ZA1P15 Physiological state recognition of fermentation process based on olfactory information processing system (Graduate School of Natural Sci. and Tech., Kanazawa U.) ○Tanaka Shunsuke, (Col. Sci. and Eng., Kanazawa U.) Takiguchi Noboru, (Graduate School of Eng., Hiroshima U.) Soh Zu, Tsuji Toshio
- ZA1P16 Analysis of neural response concerning taste preference in *Aplysia* central nervous system by voltage sensitive dye imaging (Shibaura Inst. Tech.) ○Miyake Yuki, Yoshimi Yasuo
- ZA1P17 Development of the system for selective concentration of red blood cells using microfluidics (Chiba U.) ○Ozawa R., Yamada M., Seki M.
- ZA1P18 Effect of internal filtration rate of high flux dialyzer in hemodialysis (Department of Clinical Eng. Tokyo Women's Medical U.) ○Sakiyama Ryoichi, Yamamoto Kenichiro, Ishimori Isamu, (Department of Blood Purification Tokyo Women's Medical U.) Okano Kazuhiro, Akiba Takashi, (Department of Clinical Eng. Tokyo Women's Medical U.) Mineshima Michio
- ZA1P19 Basic study of tissue-engineered in vitro peritoneal model (Hosei.U.) ○Ouchi Kei, Yamashita Akihiro, (Tokyo women's medical.U.) Mineshima Michio, (Tokyo women's medical.U.) Sakiyama Ryoichi
- ZA1P20 Efficacy of calcium salt of hyaluronic acid grafted with poly(acrylic acid) for preventing peritoneal adhesions (U. Tokyo) ○Nakagawa Y., Nishiyama T., Ohta S., (U. Tokyo Hospital) Shimizu A., Hasegawa K., Kokudo N., (U. Tokyo) Ito T.
- ZA1P21 Basic study on tissue-engineered vascular graft derived from heparin-conjugated material (Department of chemical Eng. Kyushu U.) ○Gau Hiroaki, Tokuyama Keitaro, Ye Jingjia, Shirakigawa Nana, Ijima Hiroyuki

- ZA1P22 Therapeutic Effects of Cationic Hybrid Liposomes for Human Colorectal Cancer (Div. of Applied Life Sciences, Sojo U.) ◦Motomura Muneaki, Hino Motoki, Ichihara Hideaki, Matsumoto Yoko
- ZA1P23 Glucose oxidation operation using liposome clusters with controlled dispersibility based on gas-liquid flow (Grad. Sch. Medicine, Yamaguchi U.) ◦Sakakida Yuki, Yoshimoto Makoto
- ZA1P24 Therapeutic Effects of Hybrid Liposomes with Anti-angiogenic Activity in Breast Tumors (Div. of Applied Life Sciences, Sojo U.) ◦Kikumoto Arisa, Hino Motoki, Ichihara Hideaki, Matsumoto Yoko
- ZA1P25 Development of transcutaneous cancer immunotherapy by using Solid-in-Oil nanodispersion (Kyushu U.) ◦Hirakawa Yuya, Wakabayashi Rie, Kamiya Noriho, Goto Masahiro
- ZA1P26 Trial of vascular network construct within HepG2 spheroids using microwell chip culture (Kitakyushu U.) ◦Morikyo T., Nakazawa K.
- ZA1P27 Study of vascular construction in the Organoid Culture by Fetal Mouse Kidney (U. Tsukuba) ◦Nishimura Yuusuke, Pi-Chao Wang
- ZA1P28 Liver tissue constructs with angiogenesis by hybrid organoid transplantation (Department of Chemical Eng., Kyushu U.) ◦Ye Jingjia, Shirakigawa nana, ijima hiroyuki
- ZA1P29 Circulation cell culture in decellularized liver (Kyushu U.) ◦Ida R, Sakamoto H, Shirakigawa nana, ijima hiroyuki
- ZA1P30 Basic study on the evaluation of liver substitute by blood extracorporeal circulation system with fulminant hepatic failure rat (Kyushu U.) ◦Sakamoto H, Ida R, Shirakigawa nana, ijima hiroyuki
- ZA1P31 Assembly of cell sheet tissue by spheroid fusion (Kitakyushu U.) ◦Shiramizu S., Morikyo T., Nakazawa K.
- ZA1P32 Effect of interactions between embryoid bodies on the properties of mouse ES cells (Kitakyushu U.) ◦Ohno Kyohei, Miyamoto Daisuke, Hara Takuya, Nakazawa K.
- ZA1P33 In vitro expansion of mouse ES cells using a hollow fiber bioreactor. (Kyushu U.) ◦Nagayama Hirofumi, (Tohoku U.) Amimoto Naoki, (Kyushu U.) Mizumoto Hiroshi, (Asahi KASEI) Toma Kazunori, (Kyushu U.) Kajiwara Toshihisa
- ZA1P34 Development of cell-based hypoxia responsive sensor (Dept.Chem.Sys.andEng.Kyushu U.) ◦Sato Tomonaga, Ito Akira, Kawabe Yoshinori, Kamihira Masamichi
- ZA1P35 Artificial activation of signaling molecules by heterodimerization of motif-modified artificial receptors (Tokyo U.) ◦Sumigama Y., Nagamune T., Kawahara M.
- ZA1P36 Artificial reconstitution of c-mpl signaling by using tyrosine motifs (Tokyo U.) ◦Ishizuka S., Nagamune T., Kawahara M.
- ZA1P37 Effects of oleic acid on murine macrophage dysfunction (Kobe Col.) ◦Shiomi N., Watanabe K.
- ZA1P38 Oral immunotherapy for Japanese cedar pollenosis using MHC-allergen epitope fusion protein produced by genetically manipulated chickens (Dep. Chem. Eng., Fac. Eng., Kyushu U.) ◦Obata Reina, Okuzono Kenta, Kawabe Yoshinori, Ito Akira, Kamihira Masamichi
- ZA1P39 Transdermal pollinosis immunotherapy by a solid-in-oil nanodispersion (Kyushu U.) ◦Shin Y., Kitaoka M., Wakabayashi Rie, Kawabe Yoshinori, Kamihira Masamichi, Kamiya Noriho, Goto Masahiro
- ZA1P40 Development of efficient transcutaneous vaccine by oil-based nanodispersion (Kyushu.U.) ◦Naritomi Ayaka, Hirakawa Yuya, Wakabayashi Rie, Kamiya Noriho, Goto Masahiro
- ZA1P41 Biocompatible solubilizer for hydrophobic substance in medium (Kyushu U.) ◦Motomura K, (NOF) Noda T, (Kyushu U.) Mizumachi H., Shirakigawa nana, ijima hiroyuki
- ZA1P42 Correlation of MS^n spectrum of sugar chain with deprotonation energy (Kogakuin U.) ◦Ishidou T., Takaba Hiromitsu
- ZA1P43 Quantitative determination of exopolysaccharides in microcolonies with GFP-labeled carbohydrate-binding module (Grad. Sch. Eng. Sci., Osaka U.) ◦Ojima Yoshihiro, Suparman Asep, (Grad. Sch. Eng. Sci. Osaka U.) Nguyen Minh Hong, (Grad. Sch. Bioresources, Mie U.) Sakka Makiko, Sakka Kazuo, (Grad. Sch. Eng. Sci., Osaka U.) Taya Masahito
- ZA1P44 Growth Inhibition by Novel Liposomes Including Trehalose Surfactants against Lymphoma Leading to Apoptosis (Div. of Applied Life Sciences, Sojo U.) ◦Kuwano Masataka, Ichihara Hideaki, Matsumoto Yoko
- ZA1P45 Site-specific integration of recombinant antibody genes into CHO cell genome using *Cre-loxP* (Grad. Sch. Sys. Life Sci., Kyushu U.) ◦Inao Takanori, (Dep. Chem. Eng., Fac. Eng., Kyushu U.) Kawabe Yoshinori, Ito Akira, Kamihira Masamichi
- ZA1P46 Transient expression of an antibody molecule in insect cells (Kobe U.) ◦Hamada H, Mori K, Ogawa T, Ohmuro Y, Katsuda T, Yamaji Hideki
- ZA1P47 Construction of ErbB2/receptor chimera responsive to ligand-dependent dimerized antibody (Tokyo U.) ◦Miura T, Nagamune T., Kawahara M.

- ZA1P48 Preparation scFv-immobilized latex beads for latex turbidimetric assay
(KIT) ◦Miyamura Y, (DENKA SEIKEN CO., LTD.) Gondaira F, (KIT) Kishimoto M, Kumada Y
- ZA1P49 Evaluation of non-specific adsorption and antigen-binding activity of immunodiagnostic reagents stored a plastic chip
(KIT) ◦Hasegawa Y, (ROHM) Niwa D, Momose S, (KIT) Kishimoto M, Kumada Y
- ZA1P50 Embryoid body culture of mouse iPS cells using microchips
(Kitakyushu U.) ◦Miyamoto Daisuke, Nakazawa K.
- ZA1P51 Label-free colorimetric detection of IgG using silver colloid and antibody recognition peptide probe
(TITECH) ◦Okochi Mina, (Nagoya U.) Kamiya Tomohiro, Honda Hiroyuki
- ZA1P52 Network formation control by the combination of enzymatic reaction and Ca²⁺
(Kyushu U.) ◦Koga M., Wakabayashi Rie, Kamiya Noriho, Goto Masahiro
- ZA1P53 Fabrication of Cell-embedding Hydrogel Structures Using Non-equilibrium Aqueous Two-phase Systems
(Chiba U.) ◦Nakajima N., Yamakoshi K., Yajima Y., Yamada M., Seki M.
- ZA1P54 Solubilized matrix derived from decellulized liver for the development of functional gel culture and the application to transplantable material
(Dept. of Chem. Eng., Kyushu U.) ◦nishimura souta, Nakamura S., Shirakigawa nana, ijima hiroyuki
- ZA1P55 Examination of factors regulating the peptide-protein interaction
(Grad. Sch. of Nat. Sci. & Tech., Okayama U.) ◦matsushita runa, Ishida N., imamura koreyoshi, imanaka hiroyuki
- ZA1P56 Construction of a huge supramolecular complex by using peptide-protein interaction
(UTokyo) ◦Haga Tomoaki, Hirakawa Hidehiko, Nagamune T.
- ZA1P57 Construct of P450 activation system using thermo-stable electron transfer proteins
(Graduate School of Eng., U. Tokyo) ◦Suzuki Risa, (School of Eng., U. Tokyo) Hirakawa Hidehiko, Nagamune T.
- ZA1P58 Basic study for the efficient conjugation of proteins on a synthetic polymer scaffold
(Kyushu U.) ◦Yahiro K., Wakabayashi Rie, Goto Masahiro, Kamiya Noriho
- ZA1P59 Development of Bead Display of Proteins fused with DNA binding tag.
(Grad.Sch.Bioagricultural Sci.) ◦Nakano Hideo, Kojima Takaaki, Zhu Bo, Murzabaev Marsel, Mizoguchi Takuro, Ota Eri
- ZA1P60 Size-selective extraction of nanoparticles by DNA-surfactant
(Kobe U.) ◦Kato T., Fujimoto Y., Shimomura A., Maruyama T.
- ZA1P61 Sex determination and mitochondria counting based on DNA abundance
(Kurume Nat. Col. Tech.) ◦Tomioka Kanji
- ZA1P62 The development of nucleic acid aptamer modified nanoparticle for precise cell recognition
(Inamori Frontier Res. Center, Kyushu U.) ◦Hoshika R., (Tokyo U.) Tsuchiya A., (Tokyo U.) Sando S.
- ZA1P63 Efficient tailing of an DNA aptamer with enzymes and its application
(Kyushu U.) ◦Takahara Mari, Hayashi Kounosuke, Goto Masahiro, Kamiya Noriho
- ZA1P64 Effect of pretreatment methods on bagasse composition, structure change and enzymatic hydrolysis
(Kyushu U.) ◦Jia L., Lopes Goncalves G. A., Takasugi Y., Mori Y., Hikino Y., Tanaka T., (Kobe U.) Ichinose H., (Kyushu U.) Kamiya N.
- ZA1P65 Construction of the new enzymatic reaction media using an optically active ionic liquid
(Kyushu U.) ◦Kawanami T, Baba Y, Goto Masahiro, Kamiya Noriho
- ZA1P66 Preparation of hyper-multivalent protein G polymer by enzymatic reaction of horseradish peroxidase
(U. Tokyo) ◦Minamihata Kosuke, Yamaguchi Sou, Nakajima Kei, Nagamune T.
- ZA1P67 Synergistic effect between xylanases in the enzymatic hydrolysis of a chemically pretreated bagasse.
(Kyushu U.) ◦Takasugi Y., Mori Y., Jia L., Lopes Goncalves G. A., Hikino Y., (Kobe U.) Tanaka Tsutomu, (Kyushu U.) Ichinose H., Kamiya Noriho
- ZA1P68 Diamine production using BGL-displaying *Corynebacterium glutamicum* from cellobiose
(Grad. Sch. Sci. Tech., Kobe U.) ◦Segawa Shota, Adachi Noriko, Tanaka Tsutomu, Kondo Akihiko
- ZA1P69 Tyramine biosynthesis from glucose using *Brachypodium distachyon* tyrosine decarboxylase expressing *Saccharomyces cerevisiae*
(RIKEN) ◦Noda Shuhei, Shirai Tomokazu, Mochida Keiichi, (Osaka U., RIKEN) Matsuda Fumio, (RIKEN, Kobe U.) Kondo Akihiko
- ZA1P70 Production of Styrene compounds from biomass resources using *Streptomyces lividans*
(Grad. Sch. Sci. Tech., Kobe U.) ◦Fujiwara Ryosuke, Noda Shuhei, Kawai Yoshihumi, Tanaka Tsutomu, Kondo Akihiko
- ZA1P71 2,3-Butanediol production from lignocellulosic biomass derived sugars using *bacillus subtilis*
(Kobe U.) ◦Tanimura K., Takashima S., Tanaka Tsutomu, Kondo Akihiko
- ZA1P72 The hydrolysis action of the crystalline cellulose by a new cellulase - polymer hybrid
(Kyushu U. Graduate School of Eng.) ◦Saeki Takafumi, Wakabayashi Rie, Mori Y., Yahiro K.,

- (Faculty of Agriculture, Kyushu U.) Ichinose H., (Dept. Chemical Sci. & Eng., Kobe U.) Tanaka Tsutomu, (Dept. Appl. Chem., Kyushu U., Center for Future Chem., Kyushu Univ) Kamiya Noriho
- ZA1P73 Synergy effect expression by clustering library-selected cellulose binding domains on nanohybrid cellulosome
(Grad. Sch. Eng., Tohoku U.) ◦Nakazawa Hikaru, Okada Izumi, Ishigaki Yuri, Kobayashi Eiko, Umetsu Mitsuo
- ZA1P74 Domain library approach for elucidating catalytic mechanism of modular cellulases
(Grad. Sch. Eng., Tohoku U.) ◦Okada Izumi, Nakazawa Hikaru, Ishigaki Yuri, Kobayashi Eiko, Umetsu Mitsuo
- ZA1P75 Characterization of multi-functional beta-glucosidase for enzymic saccharification
(Kobe U.) ◦Matsumoto Takuya, Hata Yuto, Tanaka Tsutomu, Kondo Akihiko
- ZA1P76 The time profile of adhesion of bacterial cells through the nanofiber protein AtaA
(Nagoya U.) ◦Furuichi Y., Izumitani K., Yoshimoto S., Hori K.
- ZA1P77 Bacterial immobilization and reutilization using a nanofiber protein AtaA
(Nagoya U.) ◦Yoshimoto S., Nakatani H., Hori K.
- ZA1P78 Uptake of polymer nanoparticles toward filamentous fungi
(Osaka Pref. U.) ◦Nakagawa Takumi, Tani Syuji, Konishi Yasuhiro, Nomura Toshiyuki
- ZA1P79 Mechanism identification of substrate inhibition of Sortase A mutants and improvement of mutations
(Tokyo U.) ◦Hatakeyama M., Hirakawa Hidehiko, Nagamune T.
- ZA1P80 Reactivity of molecular iodine produced by iodide-oxidizing bacteria (IOB)
(Tokyo Tech.) ◦Miyanaga Kazuhiko, Saito Yuki, Tanji Yasunori
- ZA1P81 Proteomics of microbial process by *Bacillus amyloliquefaciens*
(Kitami Inst. Tech.) ◦Tokumasu J., Konishi M., Kanno T., Horiuchi J.
- ZA1P82 Growth characteristics of genetically engineered *Synechococcus elongatus* for iso-propanol production by LED irradiation.
(Kitami U.) ◦Kidachi Y., Konishi M., Horiuchi J., (Kyushu U.) Tatuke T., Hirokawa Y., Hanai T., (Kobe U.) Murakami A.
- ZA1P83 Overexpression of lipase-specific chaperone and activation of lipase
(Osaka Pref. U.) ◦Murakami R., Kosugi S., Inoue S., Yamada R., Ogino H.
- ZA1P84 Stability of various mutant LST-03 lipases in the presence of organic solvents
(Osaka Pref. U.) ◦Kimura T., Kawata T., Yamada R., Ogino H.
- ZA1P85 BSA adsorption and immobilization on charged nanoparticle having graft chain
(Osaka Pref. U.) ◦Kusano Kazuma, Yasuda Masahiro, Ogino H.
- ZA1P86 Effect of Nitrogen Source Concentration on the Organic Acids Production through Alcoholic Fermentation of Honey
(Oita U.) ◦Ida Tsukasa, Kokubu Shuzo, Hirata M.
- ZA1P87 Recycling of Waste Drink by Mixed Culture Fermentation with Two Species of the Genus *Lactobacillus*
(Oita U.) ◦Tasaki G., Kai T., Kokubu Shuzo, Hirata M.
- ZA1P88 Investigation of peptides for enhancing dispersibility of curcumin
(U. Miyazaki) ◦Yamashita Risa, Oshima Tatsuya, Ohe Kaoru, Baba Yoshinari
- ZA1P89 Study on efficient method for phosphorus recycle from food waste
(Graduate School of Natural Sci. and Tech., Kanazawa U.) ◦Yamagiwa Marika, (Col. Sci. and Eng., Kanazawa U.) Takiguchi Noboru
- ZA1P90 Lactic Acid Fermentation utilizing Waste Beverage and Shochu Lees as Feed
(Oita U.) ◦Kai T., Kokubu Shuzo, Hirata M.
- ZA1P91 Recycling of Shochu lees by the lactic fermentation using powdered pH control agents
(OitaU) ◦Hirano R., Kokubu Shuzo, Hirata M.
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- Room ZB ---
--- Day 1 ---
- Symposium <Poster Session for Chemical Reaction Engineering>**
Flash Presentation will be held in Room S during 11:00 to 12:00.
(13:00~15:00)
- ZB1P01 Preparation of Lithium-doped zinc oxide thin films by low pressure CVD method
(Tokai U.) ◦Misawa Kyosuke, Nakamura Yusuke, Tazawa Takumi, Morita Masahito, Akiyama Yasunobu
- ZB1P02 Preparation of Li-doped ZnO thin film using the APCVD method
(Tokai U.) ◦Hayakawa Hisashi, Yamanashi Toshihiro, Kataoka Takahiro, Kanamori Mizuya, Akiyama Yasunobu
- ZB1P03 Different solvent effects on the hydrogenation of acetophenone over Rh catalysts
(HokkaidoU.) ◦Onodera Y., (Kumamoto U.) Yoshida H., (Hokkaido U.) Fujita S., Arai M.
- ZB1P04 Propane oxidative dehydrogenation over hydroxyapatite catalysts synthesized from biominerals
(Kagoshima U.) ◦Yoshinaga H., Nakazato T., Kai T.

- ZB1P05 Support of metals on hydroxyapatite for use as a catalyst for hydrogen generation (Kagoshima U.) ◦Murata Y., Nakazato T., Kai T.
- ZB1P06 Tolerance property to carbon deposition of Ni/YSZ anode catalyst for methane internal reforming SOFC (Shizuoka U.) ◦Kawasaki Wataru, Watanabe Ryo, Fukuhara Choji
- ZB1P07 Effect of preparation condition controlling of Ni-based structured catalyst on methane dry reforming property (Shizuoka U.) ◦Osuka T., Masuda K., Watanabe Ryo, Fukuhara Choji
- ZB1P08 Manufacturing lower olefin by catalytic conversion of vegetable oil (Kagoshima U.) ◦Nakamoto Kenta, Goshima Takashi, Mizuta K., Tsutsui Toshio
- ZB1P09 Investigation on hydrothermal conversion of molasses (Kagoshima U.) ◦Takehara Kazuki, Goshima Takashi, Mizuta K., Tsutsui Toshio
- ZB1P10 High efficiency fabrication of edge-controlled nanographene by catalytic oxidation in supercritical water (IMRAM) ◦Tamura N, Tomai Takaaki, Honma Itaru
- ZB1P11 The decomposition behavior and structure changes of microcrystalline cellulose in subcritical water (Okayama U.) ◦Yang Wei, Shimanouchi Toshinori, Kimura Yukitaka
- ZB1P12 Decomposition of Coffee Residue by Supercritical-Subcritical Methanol (Ariake NCT) ◦Noda H., Kondo M.
- ZB1P13 Decomposition of Lignin by Hot-Compressed Water (Ariake NCT) ◦Hirayama A., Kondo M.
- ZB1P14 Photocatalytic degradation of chlorophenols over titania (Fukuoka U.) ◦Takao Keigoh, Obuchi Eiko, Katoh Katsumi, Nakano Katsuyuki
- ZB1P15 Development of compact gas-liquid separator and evaporative concentrator with micro-channel (Kyoto U.) ◦Kubota Ryutarō, Inoue Kenichiro, Maki Taisuke, Mae Kazuhiro
- ZB1P16 Effects of ultrasonic stimulation on release of internal dyes from Pluronic micelles (Tokyo U. Sci.) ◦Takemi D, Kobayashi D., Shimada Y., Otake K., Shono A., (Tokyo Tech.) Matsumoto H
- ZB1P17 Ultrasound Process Development for Production of alpha-ZrP Nanofragments (Kobe U.) ◦Tanaka Koki, Horie Takafumi, (Kaneka) Akao Shinsuke, (Kobe U.) Suzuki Takayuki, Uenishi hironobu, Taniya Keita, Nishiyama Satoru, Ohmura Naoto
- ZB1P18 Conversion of CO₂ to nano carbon by plasma electrolysis (IMRAM) ◦Okamura Yusuke, Tomai Takaaki, Honma Itaru
- ZB1P19 Development of decomposition technology of model pharmaceutical compounds in water by advanced oxidation process (Kansai U.) ◦Yamauchi S, Araki S, Yamamoto Hideki
- ZB1P20 Development of microwave-irradiated crystallization utilizing minute bubbles (Chiba Inst. Tech.) ◦Kasukawa Y., Yoshida H., Wada Y., Onoe K.
- ZB1P21 Catalytic properties of nano-crystallized composite base metal oxide prepared by arc-plasma deposition (Kumamoto U./Kyoto U ESICB) ◦Yoshida H., (Kumamoto U.) Yamashita Noriko, Ijichi Shota, (Kumamoto U./Kyoto U ESICB/JST PRESTO) Hinokuma Satoshi, (MITSUI MINING & SMELTING) Nagao Yuki, Nakahara Yunosuke, (Kumamoto U./Kyoto U ESICB) Machida Masato
- ZB1P22 Electrochemical reduction of carbon dioxide to hydrocarbon at copper single crystal electrodes (Fukuoka U.) ◦Yoshihara Naoki, Arita Mai, Noda Masaru
- --- Room ZC ---
--- Day 2 ---
- Symposium <Poster Session of the Division of Materials Engineering and Interfacial Phenomena: Cutting-edge Research of Materials Processing and Interfacial Study>**
- (13:00~15:00)
- ZC2P01 Design and Synthesis of Nitroxide Radial Liquid Crystalline Materials (Osaka U.) ◦Akita T., Uchida Y., Nishiyama N.
- ZC2P02 Investigation of synthesis conditions for gold nanoparticles at liquid-liquid interface (Sojo U.) ◦Arai Taishi, Kusakabe Katsuki
- ZC2P03 Properties of self-assembly was controlled by molecular structure and temperature (Nara N.C.T.) ◦Iwai Hideka, Hayashi Keita, Nakamura Hidemi
- ZC2P04 Magnetic-field-induced reorientation of Cholesteric Liquid Crystalline microcapsules (Osaka U.) ◦Iwai Y., Uchida Y., Nishiyama N.
- ZC2P05 Recognition and Conversion at the Nano-Interface of Liposome Membrane (Osaka U.) ◦Iwasaki F., Suga K., Okamoto Y., Umakoshi H.
- ZC2P06 Relationship between chiral-selective gate effect and the crosslinker composition of molecularly imprinted membrane (Shibaura Inst. Tech.) ◦Iwami Kaori, (Shibaura Inst. Tech) Yoshimi Yasuo
- ZC2P07 Preparation of Conductive Polymer Microfibers with a Double Nozzle Electrospinning Method (TUS) ◦Uruma T., Shimada Y., Kobayashi D., Shono A., Otake K.
- ZC2P08 Formation of reverse micelles by interaction of

- di-(2-ethylhexyl)phosphoric acid and ethanolamines and application for extraction of cytochrome c (U. Miyazaki) ○Ejima Ken, (Sansei Giken Ltd.) Sana Takashi, (Miyakonojo NCT) Kiyoyama Shiro, (U. Miyazaki) Shiomori Koichiro
- ZC2P09 Low temperature synthesis of lithium titanate nanoparticles using amorphous titanium oxide with high specific surface area (Osaka U.) ○Ota M., Dwijaya B., Uchida Y., Nishiyama N.
- ZC2P10 Effect of Metal Ion Species on the Relationship between Ion Adsorption Properties by Sulfobetaine Gel and Its Swelling Behavior (Hiroshima U.) ○Ohfuka Yasuhiro, Eva Oktavia Ningrum, Sakohara Shuji
- ZC2P11 The effect of catecholamine-recognizing copolymer on phase transition behavior of temperature-responsive polymer (Okayama U.) ○Kohara R., Imanaka H., Imamura K., Ishida N.
- ZC2P12 Hybrid aqueous redox capacitor using molecular quinone-doped zeolite-templated carbon as an electrode (IMRAM, Tohoku U.) ○Nueangnoraj Khanin, Komatsu Daiki, Tomai Takaaki, Nishihara Hiroto, Kyotani Takashi, Honma Itaru
- ZC2P13 The effects of soluble surfactants on the permeation of oil-in-water emulsions through a membrane pore (Kobe U. / MAFTech Center) ○Kagawa Yusuke, Mino Yasusi, (Nihon U.) Ishigami Toru, (Kobe U. / MAFTech Center) Onuki Haruna, Matsuyama Hideto
- ZC2P14 Development of double-network ionogel consisted of supramolecular and polymer gels (Grad. Sch. of Eng., Kobe U.) ○Kataoka Toshikazu, Ishioka Yumi, Minami Hideto, Mizuhata Minoru, Maruyama Tatsuo
- ZC2P15 External electric and magnetic field induced self-assemblies of iron oxide-polymer particles with a single depression (Tohoku U.) ○Kadowaki K, Ishii H, Nagao D, Konno M
- ZC2P16 Development of new method for artificial tissue creation using animal cell-encapsulated hollow gel fibers (Kagoshima U.) ○Kitazono J., Takei T., Ozuno Y., Yoshida M.
- ZC2P17 Preparation of a hydrophilic functional surface by dip-coating an amphiphilic polymer with a low-molecular-weight surfactant (Grad. Sch. of Eng., Kobe.) ○Kitahata Shigeru, Yamamoto Shunsuke, Shimomura Ayane, Tokuda Kaya, Nishino Takashi, Maruyama Tatsuo
- ZC2P18 Au(III) ion sensing by QCM with polymeric gels (TUAT) ○Kitamura Eri, (TOYO U.) Seida Yoshimi, (TUAT) Tokuyama Hideaki
- ZC2P19 Study of a protein crystallization process by the ultrafiltration method (Waseda U.) Kimura R., Ishizaka S., Hirasawa I., Kohori F.
- ZC2P20 Reconstruction of water-dispersed Mg-Al hydroxide nanosheet via freeze drying (Graduate school of Hokkaido U.) ○Kudo Shuichiro, Mukai Shin, Ogino Isao, Iwamura Shinichiro
- ZC2P21 Synthesis of sub-50 nm monodisperse polymer nanoparticles (Tohoku U.) ○Kuwasaki N, Ishii H, Nagao D, Konno M
- ZC2P22 Effects of hydrophobic chain properties and charge of lipid membranes on the thermal stability of formate dehydrogenase in the presence of liposomes (Grad. Sch. Medicine, Yamaguchi U.) ○Kozono Ryohei, Yoshimoto Makoto
- ZC2P23 Hydrophilic Surface Modification of Inorganic and Organic Substrate by Using Silane-PGMA Hybrid Thin-Film Coating. (Utusunomia U.) ○Komura N, Sato Yu, Sato M, Furusawa T, Suzuki M
- ZC2P24 Evaluation of continuous denitrification ability of microcapsule with monolith structure immobilized denitrifying bacteria (Kagoshima U.) ○Saito R., Kuwaki T., Ohzuno Y., (Miyakonojo N.C.T.) Kiyoyama S., (Miyazaki U.) Shiomori K., (Kagoshima U.) Takei T., Yoshida M.
- ZC2P25 Development of a method for producing platinum-immobilized titania nanoparticles by electroless metal plating (Ibaraki, U.) ○sakai masataka, yamane hideyuki, ishii yuya, kobayashi yosio, (shinkou kagaku) kobayashi kenichi, kouda hidekazu, kunigami hiroshi
- ZC2P26 Study of wall materials and structure of gel capsules immobilized ammonium polyphosphate (Kagoshima U.) ○Sakaguchi M., (Miyakonojo N.C.T.) Kiyoyama S., (Miyazaki U.) Shiomori K., (MClabo Co.,Ltd.) Hatate Y., (Kagoshima U.) Takei T., Yoshida M.
- ZC2P27 Effect of gramicidin A on phospholipid bilayers immobilized on an inorganic porous substrate (Kobe U./MaF Tech Center) ○Sako F, Saeki D, Matsuyama H
- ZC2P28 Preparation of polymeric gels with enhanced activity of immobilized enzymes in organic media (TUAT) ○Sato Ayumi, Sato Ryuichi, Tokuyama Hideaki
- ZC2P29 Development of macroporous polymeric organogels for the immobilization of enzymes by W/O emulsion-gelation method (TUAT) ○Sato Ryuichi, Tokuyama Hideaki
- ZC2P30 Lysozyme crystallization method using centrifugal filtration (Waseda U.) Sanada S., Ishizaka S., Hirasawa I.,

- Kohori F.
- ZC2P31 Development of highly-sensitive method to quantitate amino groups on solid surfaces by fluorescent compounds (Grad. Sch. of Eng. Kobe U.) ◯Shiota S., Shimomura A., Nishino T., (Grad. Sch. of Pharm. Kyushu U.) Ojida A., (Grad. Sch. of Eng. Kobe U.) Maruyama T.
- ZC2P32 Fabrication of gadolinium complex-immobilized SiO₂ nanoparticles and their imaging ability (Ibaraki, U.) ◯shindo yuta, shibuya kyosuke, kobayashi yoshio, (Tohoku, U.) kubota yohsuke, gonda kohsuke, (Tohoku, U.) ohuchi noriaki
- ZC2P33 Synthesis of mesoporous silica using sodium deoxycholate (Osaka U.) ◯Sugiura Y., Uchida Y., Nishiyama N.
- ZC2P34 Heterocoagulation of inorganic nanoparticles chemically bound onto monodisperse polymeric spheres by two-step addition of polymerizable silane coupling agent (Tohoku U.) ◯Suwabe Chika, Ishii Haruyuki, Nagao Daisuke, Konno Mikio
- ZC2P35 Synthesis of asymmetry bilayer gels by masking method and their bending behavior (Hiroshima U.) ◯Sogabe Sho, Iizawa Takashi, Sakohara shuuji
- ZC2P36 Morphology control of hydrogel particles produced by microfluidics (Chiba U.) ◯Takahashi K, Sugaya S, Yamada M, Seki M
- ZC2P37 Two-step particle segregation in drying polymer films (KIT) ◯Tashima Tomonori, Mawatari Yoshihide, Kage Hiroyuki, Yamamura Masato
- ZC2P38 Selective cancer cell-death induced by self-assembly of a supramolecular gelator (Grad. Sch. of Eng., Kobe U.) ◯Tanaka A., (Fac. of Eng., Kobe U.) Fukuoka Y., (Grad. Sch. of Eng., Kobe U.) Honjo T., (Grad. Sch. of Eng., Kyushu U.) Koda D., Goto M., (Grad. Sch. of Eng., Kobe U.) Maruyama T.
- ZC2P39 Microrheological investigation of the drying process of polymer solutions (Kobe.U.) ◯Tanaka Yudai, Komoda Yoshiyuki, Suzuki Hiroshi, Hidema Ruri
- ZC2P40 Synthesis of thermosensitive microgel incorporating metal nanoparticles by modulating the gel surface potential (Tohoku U.) ◯Tsuruya T., Ishii H., Nagao D., Konno M.
- ZC2P41 Estimation of biocompatibility for nonionic biomaterials using molecular dynamics method (Nagoya Inst. Tech.) ◯Terao S., Nagumo R., Iwata S., Mori H.
- ZC2P42 Development of hollow gel fibers as template for tissue engineered-tubular structures (kagoshima.U.) ◯Terazono K., Takei T., Ozuno Y., Yoshida M.
- ZC2P43 The synthesis of the composite nano magnetic particles (AIST) Towata A, ◯Suzuki K, Kinemuchi Y, Yasuoka M
- ZC2P44 Clathrate Crystallization of Epigallocatechin gallate with Cyclodextrin (Fukuyama U.) Yamamoto Hideji, ◯Nakazaki Chihiro, Ichinose Kana, Masaki Akane, Takeda Saki, (Osaka City U.) Tanaka Rika, Igarashi Koichi, Ooshima Hiroshi
- ZC2P45 Evaluation of Surface Modification method for Polyethylene by Side Chain Crystalline Block Co-polymer (Fukuoka U.) ◯Nakano R, Yamasaki F, Sekiguchi H, Yao S
- ZC2P46 Preparation of the high hygroscopic microcapsules and evaluation of hygroscopic properties (Miyakonojo NCT) ◯Nakamura Asuka, Kiyoyama Shiro, (Miyazaki U.) Shiomori Kouichiro, (Kagoshima U.) Takei Takayuki, Yoshida Masahiro
- ZC2P47 UV-curing regime map for monomer films with surface topography (KIT) ◯Nagayama Tomohide, Mawatari Yoshihide, Kage Hiroyuki, Yamamura Masato
- ZC2P48 Evaluation of water permeability of porous materials using recycled FRP (Tokyo U. Sci.) ◯Nukui N, Kobayashi D, Shimada Y, Otake K, Shono A, (NANODAX) Fujita M
- ZC2P49 Effect of particle properties on particle size dependence of photoacoustic signal amplitude (Kyoto U.) ◯Noguchi S., Fukasawa T., (Fukuoka U.) Shinto H., (Kyoto U.) Aoki H., Nagamine S., Ito S, Ohshima M
- ZC2P50 Preparation of thermosensitive macroporous gels using a suspension-gelation method (TUAT) ◯Noma Ryoko, Sato Ryuichi, Tokuyama Hideaki
- ZC2P51 Study on immobilization of various organic compounds into silica capsules (Kyushu U.) ◯Hashizume J, Matsune H, Takenaka S, Kishida M
- ZC2P52 Non-close-packed colloidal array of polymer-grafted silica particles prepared by surface-initiated atom transfer radical polymerization (Saga U.) ◯Hara Nanami, Kawakita Hidetaka, Ohto Keisuke, Morisada Shintaro
- ZC2P53 investigation of the particle-size control by nucleation and growth rate in cooling crystallization (Waseda U. Adv. Sci. and Eng.) ◯Shinada Naohiro, Matsumura Takeshi, Hirasawa Izumi
- ZC2P54 Synthesis of anionic degradable polyelectrolyte (Grad. Sch. of Eng., Kobe. U.) ◯Hiraoka Ryuichi, Funasaki Yuichi, Maruyama Tatsuo
- ZC2P55 Molecular modeling of ordered mesoporous silica

- focused on its surface roughness
(Kyoto U.) ○Hiratsuka Tatsumasa, Tanaka Hideki, Miyahara Minoru
- ZC2P56 Synthesis and characterization of NIPAM/Pyrrrole based conductive polymer hydrogel.
(TUS) ○Hiranaka K., Shimada Y., Kobayashi D., Syono A., Otake K.
- ZC2P57 Effect of different types of interaction formed between metal ion and thermosensitive hydrogels on its adsorption and desorption properties
(Hiroshima.U.) ○Hirahara R, Goto T, Sakohara S
- ZC2P58 Effect of Liposome Membrane on L-Pro-Catalyzed Reaction
(Osaka U.) ○Hirose M., Ishigami T., Suga K., Okamoto Y., Umakoshi H.
- ZC2P59 Environmentally-friendly firefighting foam with surfactin
(U. Kitakyushu) ○Fukuda Naomi, Uezu Kazuya, Yin Qianjing
- ZC2P60 Extraction properties of metal ion by microcapsules containing ionic liquid and extractant.
(Miyakonojo NCT) ○Fukudome Hikaru, Kiyoyama Shirou, (Miyazaki U.) Shiomori Kouichirou, (Kagoshima U.) Takei Takayuki, Yoshida Masahiro
- ZC2P61 Fluorescence imaging of solvent localization and drying rates measurement
(KIT) ○Fujishita Ayaka, Mawatari Yoshihide, Kage Hiroyuki, Yamamura Masato
- ZC2P62 Solubilization of carbon nanomaterials into aqueous solvents using novel polymerizable surfactants
(Grad. Sch. of Eng., Kobe U.) ○Funasaki Yuichi, Honjo Takafumi, Houe Kazuki, Maruyama Tatsuo
- ZC2P63 Development of a novel method for the solubilization of poorly water - soluble drugs
(TUS) ○Hoyano Atsushi, Kobayashi Masanori, Shimada Yuichiro, Kobayashi Daisuke, Shono Atsushi, Otake Katsuto
- ZC2P64 Preparation of Pt nanocubes by liquid-phase reduction with temperature-responsive polymer and surfactant
(Saga U.) ○Maeda Y., Hirao S., Kawakita H., Ohto K., Morisada S.
- ZC2P65 Evaluation of thermal expansion for lead-free glasses composed for V_2O_5 -ZnO-TeO₂-(ZrO)₂(HPO₄)₂
(Kagoshima U.) ○Matsuo F., (YAMATO Electronic Co.,Ltd.) Kouhara Y., (Kagoshima U.) Takei T., Yoshida M.
- ZC2P66 Preparation and characterization of thermosensitive hydrogel containing magnetic nanoparticles
(Hiroshima U.) ○Miki S., Gotoh T., Sakohara S.
- ZC2P67 Evaluation of inclusion complex with g-cyclodextrin-type metal organic framework
(Sojo U.) ○Michida Wataru, Kusakabe Katsuki
- ZC2P68 Synthesis of Cu₂ZnSnS₄(CZTS) nanoparticles from solution
(Doshisha U.) ○Minakata Kensuke, Hirai Akito, Tsuchiya Katsumi, Mori Yasushige
- ZC2P69 Characterization of release from additive particles from toner powders
(Kogakuin U.) ○Munemura Daiki, Yamaguchi Yuki, Namiki Norikazu
- ZC2P70 Creation of non-closed-packed colloidal crystals with particle array in nanoparticle fluid
(tohoku U.) ○Yamada K, Ishii H, Nagao D, Konno M
- ZC2P71 Fabrication of alumina films crystallized at low-temperature
(Ibaraki, U.) ○Yamamura Katsumi, Kobayashi Yoshio, (Hitachi, Ltd.) Morita toshiaki, Yasuda Yusuke
- ZC2P72 Characterization of Lipid Membrane Modified on Au Nanoparticle by Using Surface Enhanced Raman Scattering
(Osaka U.) ○Yoshida Tomohiro, Suga Keishi, (Tohoku U.) Ishii Haruyuki, (Osaka U.) Okamoto Yukihiro, Umakoshi Hiroshi
- ZC2P73 Synthesis of submicron-sized yolk/shell particles with inner cores responsive to an electric field
(Tohoku U.) ○Watanabe Kanako, Ishii Haruyuki, Nagao Daisuke, Konno Mikio
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- Room ZD ---
--- Day 2 ---
- Symposium <Fundamentals and Applications of Separation Technology (Poster)>**
(13:00~16:00)
- ZD2P01 RO separation of sulfuric acid solution through the diphenyl-silica membranes
(Shibaura Inst. Tech.) ○Ikeda Ayumi, Sasaki Misa, Inabe Sayaka, Hatayama Shuzo, Nojima Yuto, Matsuyama Emi, Nomura Mikihiro
- ZD2P02 Development of CVD silica membranes by controlling ozone concentration
(Shibaura Inst. Tech.) ○Matsuyama Emi, Sasaki Misa, Inabe Sayaka, Hatayama Shuzo, Nojima Yuto, Ikeda Ayumi, Nomura Mikihiro
- ZD2P03 Effects of water quality and bubble size distribution on prevention of membrane fouling by fine bubbles
(Kobe U., MaF Tech Cente) ○Matsuyama Kazufumi, (Kobe U., MaF Tech Center) Takahashi Tomoki, Miyoshi Taro, Yasukawa Masahiro, Watabe Tomoichi, Matsuyama Hideto
- ZD2P04 Numerical simulation for understanding the formation mechanism of hollow fiber membrane
(Kobe U. / MAFTech Center) ○Onuki Haruna, Mino Yasushi, (Nihon U.) Ishigami Toru, (Kobe U. / MAFTech Center) Kagawa Yusuke, Matsuyama Hideto
- ZD2P05 Performance of forward osmosis membrane applied to post-treatment of anaerobic membrane bioreactor
(Kobe U./MaF Tech Center) ○Masumori Yuta, Miyoshi Taro, Onoda Sosuke, Yasukawa Masahiro, Takahashi Tomoki, Matsuyama Hideto

- ZD2P06 Prevention of bacterial adhesion of reverse osmosis membranes using phospholipid polymer immobilized via atom transfer radical polymerization (Kobe U./MaF Tech Center) ○Yonamine Genki, Saeki Daisuke, Tanimoto Tatsuya, Matsuyama Hideto
- ZD2P07 The influence of support layer structure on water permeation and pressure resistance in forward osmosis membrane (Kobe U., MaF Tech Center) ○Mishima Syoji, Yasukawa Masahiro, Shibuya Masafumi, Takahashi Tomoki, Miyoshi Tarou, Matsuyama Hideto
- ZD2P08 Application of temperature-responsive colloidal particles to reusable draw solution (Kobe U. / MaF Tech Center) ○Ogawa Daichi, Mino Yasushi, Takahashi Tomoki, Matsuyama Hideto
- ZD2P09 Effect of operating conditions on the FO performance in large-scale membrane module. (Kobe U. / MAFTech Center) ○Shibuya Masafumi, Yasukawa Masahiro, (Yamaguchi U.) Higa Mitsuru, (Kobe U. / MAFTech Cente) Matsuyama Hideto
- ZD2P10 Permeation properties of carbon membranes from wood tar materials (Yamaguchi U.) ○Emoto Yamato, Kumakiri Izumi, Tanaka Kazuhiro, Kita Hidetishi, (Kitami Inst.Technology) Suzuki Tsutomu
- ZD2P11 Preparation and permeation properties of mordenite membranes from F containing gel (Yamaguchi-U.) ○Yamamoto Takuya, Kumakiri Izumi, Tanaka Kazuhiro, Kita Hidetoshi, (Fine Ceramics Center) Sasaki Yukichi
- ZD2P12 Fabrication of thin photocrosslinked polyimide layer on porous ceramic support (Yamaguchi U.) ○Hayashi Kentaro, Kumakiri Izumi, Tanaka Kazuhiro, Kita Hidetoshi
- ZD2P13 CO₂ recovery from air with ionic liquid / ethylenediamine mixture liquid membranes supported by fine particle (Tokyo tech.) ○Kamiya Tomoki, Hirota Yuichiro, Ito Akira
- ZD2P14 SAPO-34 membrane synthesis from dilute solution (Grad. Sch. Sci. Eng., Tokyo Tech. Inst.) ○Tamura Shingo, Hirota Yuichiro, Ito Akira
- ZD2P15 Challenge to decreased thickness of dense Pd layer in fabrication of Pd composite membrane by photolithography (Gifu U.) ○Murase T., Harada S., Hirano Y., Miyamoto M., Omi Y., Uemiyama S., (Nagoya U.) Yamada H., Tagawa T.
- ZD2P16 Evaluation of the antifouling properties for zwitterionic materials by molecular simulations and application to water purification. (Nagoya Inst. Tech.) ○miyake takaaki, nagumo ryo, iwata syuuichi, mori hideki
- ZD2P17 Highly effective membrane separation of critical metals using a polymer inclusion membrane with a new amide acid-type carrier (Kyushu U.) ○Baba Y., Kubota F., Goto M., (U. Melbourne) Cattrall R. W., Kolev S. D.
- ZD2P18 Control of cake layer thickness in flat sheet type MF membrane (2) (OECU) ○Ikeda Naoki, Takaoka Daizo, Nakata Akinori, Soeda Haruo
- ZD2P19 Preparation of Liposome by Supercritical Carbon Dioxide and Characterization of Its Membrane Properties (Osaka U.) ○Taguchi Shogo, Suga Keishi, Okamoto Yukihiro, Umakoshi Hiroshi, (NNCT) Hayashi Keita, Nakamura Hidemi
- ZD2P20 Colloid separation using coiled tube in flowing polymer solution (Saga U.) ○Tanaka Haruki, Morisada Shintaro, Ohto Keisuke, Kawakita Hidetaka
- ZD2P21 Constant pressure expression of slurry involving sedimentation by use of consolidation cell (Osaka Pref. U.) ○Fukuyama R., Ishii T., Tanaka T., Iwata M.
- ZD2P22 Separation of Scandium using new acetoamide-type extractant (Kyushu U.) ○Fukami A., Baba Y., Kubota F., Kamiya N., Goto M.
- ZD2P23 Extraction of amino acid with aqueous two-phase system formed by water-soluble organic solvent and salts (Doshisha U.) ○Sato T., Matsumoto M., Kondo K.
- ZD2P24 Study on extraction separation of polyphenol from peanut seed coat using Hansen solubility parameters (Kansai U.) ○Miyatake K, Kishimoto Y, Araki S, Yamamoto H
- ZD2P25 Synthesis of new extractants with amino moiety and phosphoric acid and their extraction properties for gallium(III) and indium(III) (U.Miyazaki) ○Sasaki Yuji, Oshima Tatsuya, Baba Yoshinari
- ZD2P26 Selective extraction of indium(III) and gallium(III) from electronic wastes using alkylthiol extractants (U.Miyazaki) ○Tokumaru Megumi, Ohe Kaoru, Oshima Tatsuya, Baba Yoshinari
- ZD2P27 Preparation of Cross-linked Gel Microcapsules of Poly(vinyl alcohol)/ Alginate containing PC-88A for Co(II) extraction (U. Miyazaki) ○Komatsu Shunichi, (Miyakonojo NCT) Kiyoyama Shiro, (Kagoshima U.) Takei Takayuki, Yoshida Masahiro, (U. Miyazaki) Shiomori Koichiro
- ZD2P28 Preparation of Polyacrylamide Cryogel Containing Iron Oxide Particles by in situ Particle Preparation and Adsorption Characteristics of Arsenic (U. Miyazaki) ○Kurozumi Misa, (Niyakonojo NCT) Kiyoyama Shiro, (U. Miyazaki) ShioZD2P29 Synthesis of new chitosan derivative having Kojic

- acid moiety and its selective adsorption for In(III) and Ga(III)
(Faculty of Eng., U. Miyazaki) ○Yamashita Akihiro, Oshima Tatsuya, Baba Yoshinari
- ZD2P30 Synthesis of piperazine-cellulose derivatives and their selective adsorption for Se(VI) and Sb(III).
(U. Miyazaki) ○Tsunori M, Hidaka S, Ohe K, Oshima T, Baba Y
- ZD2P31 Adsorption of indole on chemical activated mesoporous carbon
(Osaka U.) ○Mitome T, Uchida Y, (Ono Pharmaceutical Co. Ltd.) Hayashi K, Nishiura A, (Osaka U.) Nishiyama N
- ZD2P32 Elucidation of adsorption properties and interactions of proteins in artificial dialysis membrane
(Nara N.C.T.) ○Chikayama Yuri, (Toray) Ueno Yoshiyuki, Takahashi Hiroshi, Fushieda Hiroaki, Tokuyama Miwa, (Nara N.C.T.) Hayashi Keita, Nakamura Hidemi
- ZD2P33 Study of the Adsorption Behavior on FAU Type High Silica Zeolite - Interpretation by MD Simulation -
(Meiji U.) Chihara Kazuyuki, ○Kume Shintaro
- ZD2P34 Adsorption experiment and numerical simulation of the volatile organic compounds system in super critical carbon dioxide
(Meiji U.) Chihara Kazuyuki, ○Yasuda Takaki, Shinsako Masashi
- ZD2P35 Prediction of the adsorptive behavior using the numerical simulation in the PSA method
(Meiji U.) Chihara Kazuyuki, ○Kato Teruhisa, Chiba Takashi
- ZD2P36 Trinary component PSA Experiments and influence of water vapor
(Meiji U.) ○Chihara Kazuyuki, Kawahara Katsuyuki, Kobayashi Jun
- ZD2P37 Adsorption experiment and simulation to MSC3A of the multicomponent system gas in the volumetric method
(Meiji U.) ○Chihara Kazuyuki, Koide Shohei, Nomoto Masasi
- ZD2P38 The CO₂ absorption performance of gel films consist of polyvinylamine derivatives
(Kyushu U.) ○Imai K., Yue M., Hoshino Y., Miura Y.
- ZD2P39 The development of a novel biosorbent for rare earth elements by recombinant of E. coli
(Kyushu U.) ○Hosomomi Yukiho, Kubota Fukiko, Kamiya Noriho, Goto Masahiro
- ZD2P40 Method of high efficiency bio-ethanol dehydration by an extractive-distillation process with LPG
(Nagoya U. Graduate School of Eng.) ○Miyoshi K., Machida H., Horioe H.
- ZD2P41 Variation of process dynamics by the number of stages of multistage pressure driven distillation system
(U. Tokushima) ○Hatano M, Sotowa K.-I., Horikawa T., Alcantara Avila J. R.
- ZD2P42 Research of carbon dioxide absorbent by liquid-liquid phase separation
(Nagoya U.) ○Tomikawa T., Machida H., Horioe H.
- ZD2P43 Synthesis of polyamine-anchored cellulose microspheres and its application to recovery of precious metals and to removal of harmful metals
(U. Miyazaki) ○Nakashima M, Oshima T, Baba Y
- ZD2P44 Recovery of ceria abrasive by continuous freezing - thawing processing.
(Fukushima U.) ○Masamoto Takahiro, Sugano Satoru, Nakazawa Tsubasa, Ueki Tomoya,
- ZD2P45 Gallium recovery from zinc refinery residues via continuous counter-current foam separation
(NMIRI) ○Kinoshita Takehiko, Shibata Nobuyuki, Ishigaki Yuuzou, (Nagoya U.) Nii Susumu, (Nagoya Inst. Tech.) Kitagawa Shinya, (Osaka U.) Okano Yasunori
- ZD2P46 The Effect of gamma-alumina Intermediate Layer on Separation Performance of the Counter Diffusion CVD Silica Membrane
(RITE) ○Saito Takashi, Urai Hiromi, Kai Teruhiko, Nakao Shinichi
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- Room ZF ---**
--- Day 1 ---
- Symposium <Poster session "Drying Technology">**
(15:00~19:30)
- ZF1P01 High efficiency drying technology at low temperature using vacuum drum dryer
(Katsuragi Ind. Co., Ltd.) ○Mukai T, Satake T, Miki H
- ZF1P02 Examples of drying technology of coated films and drying related defects
(Fujifilm Co.) ○Katagiri Y
- ZF1P03 The sublimation surface temperature measurement by the Calculation method of the TM by SR
(Kyowa Vacuum Eng., Co., Ltd.) ○Matsushita D, Hosomi H
- ZF1P04 The development examples of functional microcapsules by the liquid phase drying method
(Kaneka Co.) ○Kanaya K
- ZF1P05 Spray drying of Microcapsule
(Kagawa.U.) ○Yoshii Hidefumi
- ZF1P06 History of spray drying artifice of laundry powder detergent
(Kao Co.) ○Mitsuyoshi K, Miyazaki S
- ZF1P07 Drying of microorganisms and their inactivation behavior during drying
(Yamaguchi U.) ○Fujii S, Shimizu K, Yoshimoto N, Yamamoto S
- ZF1P08 Drying of Amino acid
(Kyowa Hakko Bio) ○Ikeda S
- ZF1P09 Spray drying of soluble coffee
(Ajinomoto General Foods, INC.) ○Hagino T
- ZF1P10 Manufacture of heavy granule from liquid materials
(Okawara MFG, Co., Ltd.) ○Hozaki Y

- ZF1P11 Effect of Drying Method to the Structure of Dried Cell Containing Astaxanthin used for the Coloration of Chicken Egg Yolk
(JX Nippon Oil & Energy) ◯Kawashima Y, Nagai H, (Yamaguchi U.) Yamamoto S
- ZF1P12 Scale-up of Spray Dryers
(Ohkawara Kakohki Co., Ltd.) ◯Nemoto G, Ohkawara T, Ohkawara M
- ZF1P13 Heating/Cooling/Dehumidifying System using Chemical Heat Pump Driven by Waste Heat
(Chiba U.) ◯Ogura H
- ZF1P14 The drying methods and problems of polymer micro particles
(Soken Chemical & Eng. Co., Ltd.) ◯Nakata Y
- ZF1P15 Pellet drying technology in polymer production process
(Ube Industries Ltd.) ◯Kobayashi Y
- ZF1P16 Thickness control of film at the time of drying by solvent species
(Sumitomo Bakelite Co., Ltd) ◯Imai H
- ZF1P17 Analysis of diffusion controlled drying process
(Yamaguchi U.) Fujii S, Suriha B. A., Yoshimoto N, (Yamaguchi) ◯Yamamoto S
- ZF1P18 Fundamentals and Applications of Infrared Drying
(Graduate School of Bioresources, Mie U.)
◯Hashimoto Atsushi
- ZF1P19 Mechanism and application of fluidized bed drying
(Shizuoka U.) ◯Tatemoto Yuji
- ZF1P20 Fundamentals and Application of Microwave Drying of Molded Materials
(Gifu U.) ◯Itaya Yoshinori
- ZF1P21 Principle and application of freeze-drying
(Kyoto U.) ◯Nakagawa Kyuya
- ZF1P22 Drying defects of thin liquid film coatings
(Kyutech) ◯Yamamura Masato