

The 54th General Session of the Japanese Society for Dental Materials and Devices(JSDMD)

October 1 (Thursday) - 2 (Friday), 2009

Kagoshima Public Access Center (Kagoshima Prefectural Citizen's Exchange Center)
14-50 Yamashita-cho, Kagoshima 892-0816, JAPAN

October 1 (Thursday)

Hall A

8:55-9:00 Opening Remark

9:00-11:00 General Presentation (Oral Session)

[Metal and Corrosion]

A-1 Microstructure change in commercial dental Ag-Pd-Cu-Au alloy induced via re melting

○Fukui Hisao¹, Niinomi Mitsuo², Akahori Toshikazu², Tsuruta Shozo¹, Nakai Masaaki², Tsutsumi Harumi²

¹Aichi-Gakuin Univ., ²IMR, Tohoku Univ.

A-2 Microstructure and mechanical properties of high-Cr and high-N contained Ni-free Co-Cr-Mo alloys for dental casting

○Nomura Naoyuki¹, Doi Hisashi¹, Tutsumi Yusuke¹, Oya Kei¹, Hanawa Takao¹, Chia Akihiko²

¹Tokyo Medical and Dental Univ., ²Tohoku Univ.

A-3 Application to telescopic dentures of Co-Cr alloys -Evaluation of static frictional coefficients in dental alloys

○Ohida Masahito, Yoda Keita, Nomura Naoyuki, Hanawa Takao, Igarashi Yoshimasa
Tokyo Medical and Dental Univ.

A-4 Galvanic corrosion of orthodontic wires brazed with silver solder

○Takada Yukyo, Takahashi Masatoshi, Kikuchi Masafumi
Tohoku Univ.

A-5 Corrosion behavior of Zr-based bulk glassy alloy in simulated body fluid

○Tsutsumi Yusuke, Doi Hisashi, Nomura Naoyuki, Hanawa Takao
Tokyo Medical and Dental Univ.

[Titanium and Titanium Alloy]

A-6 Evaluation of titanium fabricated by electron beam melting system for dental applications

○Koike Marie, Okabe Toru
Baylor College of Dentistry

A-7 Corrosion behaviors of titanium in the hydrogen peroxide containing solution under acidic or alkaline conditions

○Takemoto Shinji, Hattori Masayuki, Ichikawa Hiromichi, Igarashi Toshio, Noguchi Tatsumi,
Yoshida Hidetaka, Yoshinari Masao, Kawada Eiji, Oda Yutaka
Tokyo Dental College

A-8 Mechanical properties of Ni-Ti alloy wires after direct electric heat treatment

○Ebihara Yasuhiro, Otsubo Kunihiro
Otsubo Orthodontic Clinic

A-9 Fabrication of osteoconductive titanium by ozone treatment

○Sakaguchi Mami¹, Kawachi Giichiro¹, Maruta Michito¹, Tsuru Kanji¹, Matsuya Shigeki², Koyano Kiyoshi¹, Ishikawa Kunio¹

¹Kyushu Univ., ²Fukuoka Dental College

A-10 Direct synthesis and biocompatibility of titania nanotube layers on metal substrates for implant biomaterial

○Nishida Hisataka¹, Egusa Hiroshi², Nakamura Takashi², Yamamoto Kazuyo¹, Yatani Hirofumi²

October 1 (Thursday)

Hall A

13:00-14:12 General Presentation (Oral Session)

[Adhesion]

A-11 New adhesion theory -Curing behaviour and fracture mechanism-

○Wakasa Kunio¹, Uno Shigeru², Okazaki Masayuki¹
¹Hiroshima Univ., ²Toranomon Hospital

A-12 Effect of heat air-blowing of adhesives on dentin bond strengths of single-step self etch adhesive systems

○Tsuchiya Hiroaki¹, Tsujimoto Akimasa¹, Uekusa Satoshi¹, Yoshida Takeshi¹, Ando Susumu¹,
Hirohata Naoshi², Miyazaki Masashi¹
¹Nihon Univ. Sch. of Dentistry, ²Tanaka Dental Clinic

A-13 The relationship between water sorption and mechanical property of self-etch adhesives

○Hosaka Keiichi, Nakajima Masatoshi, Takahashi Masahiro, Komada Wataru, Otake Shiho, Miura Hiroyuki, Ikeda Masaomi, Sakano Wakae, Tagami Junji
Tokyo Medical and Dental Univ.,

A-14 Dentin microtensile bond strengths and acid-base resistant zone observation in three MMA-based resin cements

○Hamid Nurrohman¹, Takagaki Tomohiro¹, Kanchana Waidyasekera¹, Nikaido Toru¹, Tagami Junji^{1,2}

¹Tokyo Medical and Dental Univ., ²Global Center for Excellence Program; International Research Center for Molecular Science in Tooth and Bone Diseases, at TMDU

A-15 Effect of curing modes of dual-cured core systems on microtensile bond strength to dentin and formation of acid-base resistant zone

○Li Na¹, Takagaki Tomohiro¹, Kanchana Waidyasekera¹, Ikeda Masaomi¹, Nikaido Toru¹, Tagami Junji²

¹Tokyo Medical and Dental Univ., ²Global Center for Excellence Program; International Research Center for Molecular Science in Tooth and Bone Diseases, at TMDU

A-16 A research of the technique-sensitivity of recent adhesive systems and the improvement of operators' bond performance

○Kakuda Shinichi, Fu J, Tanaka T, Sano H
Hokkaido Univ.

Hall A

14:20-15:50 [An Open Symposium and Special Seminar 1 for Dental Materials Adviser / Senior Adviser]

Specification for dental materials and devices -Point of ISO standards-

1. Current status and change of ISO/TC106

Ogura Hideo

Department of Dental Materials Science, Sch. of Life Dentistry at Niigata, The Nippon Dental Univ.

2. Dentistry -Metallic materials-

Oda Yutaka

Department of Dental Material Science, Tokyo Dental College

3. Standards for ceramics, composite resins, and denture-base polymers

Takahashi Hidekazu

Advanced Biomaterials, Graduate Sch. of Medical and Dental Sciences, Tokyo Medical and Dental Univ.

4. ISO standards of dental implant systems and biological evaluation for dental materials

Kawai Tatsushi

Hall A

16:00-17:00 [Special Lecture]

From Tatewaki KOMATSU to Ryoma SAKAMOTO ~World of NHK history drama~

Haraguchi Izumi

Department of Law and Literature, Kagoshima Univ.

October 1 (Thursday)

Hall B

9:30-15:00 General Presentation (Poster Session) (11:00-12:00 Discussion)

[Award Challenge Posters P-1 - P-12]

P-1 Immobilization of antimicrobial agent on the surface of denture acrylics

○Takayama Yukihiro, Takamoto Yuko, Ishii Hitomi, Okura Emi, Nikawa Hiroki, Makihira Seicho
Hiroshima Univ.

P-2 Experimental study of long term observation of the ectopic bone induced By Part-purified BMP

○Sato Yamato, Hamazima Soichiro, Asakura Masaki, Abe Akiko, Hayashi Tatsuhide, Kawai
Tatsushi
Aichi-Gakuin Univ.

P-3 Application of gel material for controlling the branching morphogenesis of mouse submandibular gland

○Miyajima Hiroyuki, Matsumoto Takuya, Sohmura Taiji
Osaka Univ.

P-4 The effects of colloidal platinum nanoparticles and colloidal gold nanoparticles on resin dentin adhesion using 4-META MMA-TBB

○Nagano Futami, Endo Kazuhiko, Hashimoto Masanori, Sano Hidehiko, Hoshuka Shuhei, Ohno
Hiroki
Hokkaido Univ.

P-5 Development of the methacryl amide self-etching primer with greater dentin bond durability

○Ma Shen, Fujita Kou, Tanimoto Yasuhiro, Takahashi Haruyoshi, Ikemi Takuji, Nishiyama Norihiro
Nihon Univ. Sch. of Dentistry at Matsudo

P-6 Application of flake shaped glass filler containing polycarbonate for non-clasp partial denture

○Sasaki Akiko¹, Uo Motohiro¹, Iwasaki Keiji², Abe Shigeaki¹, Akasaka Tsukasa¹, Watari Fumio¹
¹Hokkaido Univ., ²Hokkaido dental technical college

P-7 Effects of surface textures for adhesion of Candida species on PMMA resin

○Yamaguchi Nobuaki, Mayahara Mitsuori, Kataoka Ryuta, Tamaki Yukimichi, Fujishima Akihiro,
Miyazaki Takashi
Sch. of Dentistry, Showa Univ.

P-8 Corrosion resistance evaluation of Pd-free precious dental alloys by potentiodynamic polarization measurements and microstructure observation

○Fujita Takeshi, Shiraishi Takanobu, Takuma Yasuko, Hisatsune Kunihiro
Nagasaki Univ.

P-9 Difference in gene expression in bone differentiation of MC3T3-E1 cells on metals

○Oya Kei, Tsutsumi Yusuke, Doi Hisashi, Nomura Naoyuki, Hanawa Takao
Tokyo Medical and Dental Univ.

P-10 Spontaneous formation of calcium phosphate on experimental Ti-Ag alloy surfaces in simulated body fluid

○Takahashi Masatoshi, Kikuchi Masafumi, Hatori Kouki, Sasaki Keiichi, Takada Yukyo
Tohoku Univ.

P-11 Natural decrease of chemical property and biological response of titanium over time

○Hori Norio, Kimoto Katsuhiko

P-12 Effect of amino acids on Zn release from Zn-incorporated octacalcium phosphate and hydroxyapatite

○Honda Yoshitomo, Anada Takahisa, Suzuki Osamu
Tohoku Univ.

[Impression Material]

P-13 Wettability of hydrophilic vinyl polysiloxane impression materials on bovine dentine

○Yamaga Taniichirou, Awata Satoshi, Nagasawa Yuuko, Hibino Yasushi, Nakajima Hiroshi
Meikai Univ.

[Composite Resin and Resin 1]

P-14 Influence of various factor on fatigue strength of resin composite composed of three types of filler

○Toyama Tatsuya¹, Nishikawa Izuru², Takahashi Hidekazu³

¹Graduate Sch. of Osaka Institute of Tecnology, ²Osaka Institute of Tecnology, ³Tokyo Medical and Dental Univ.

P-15 Mechanical properties of various latest resin composites

○Yamase Masaru, Maseki Toshio, Nitta Toshihiko, Kimishima Tetsu, Nara Yoichiro, Katsuumi Ichiroh
The Nippon Dental Univ.

P-16 Development of denture coating materials including S-PRG filler

○Uematsu Shinsuke, Miyao Motonobu
Asahi Univ.

P-17 Effect of water immersion on bending strength of fiber reinforced hybrid composite resin using the stationary and dynamic test

○Kuroda Soichi¹, Shimizu Kenichi², Kishida Sachie¹, Lin Jie¹, Hasegawa Aki¹, Hatta Minoru¹,
Yokoyama Daiichiro¹, Shinya Akikazu¹, Gomi Harunori¹, Shinya Aiyoshi¹

¹The Nippon Dental Univ. at Tokyo, ²Shinjyuku Sumitomo Clinic center

P-18 Development of new hybrid resin for crown (Part1) Fundamental properties

○Kato Takahiro, Hoshikawa Takeshi
Yamamoto Precious Metal Co., Ltd.

P-19 Development of new hybrid resin for crown (Part2) Fatigue strength

○Sato Yuji, Kato Takahiro, Hoshikawa Takeshi
Yamamoto Precious Metal Co., Ltd.

P-20 Development of new hybrid resin for crown (Part3) Properties of opaque resin

○Sumida Masashi, Kato Takahiro, Hoshikawa Takeshi
Yamamoto Precious Metal Co., Ltd.

P-21 Effect of coating agent for color change of resin-modified glass ionomer cements

○Ando Susumu¹, Oto Tatsuki¹, Oooka Satoshi¹, Kurokawa Hiroyasu¹, Hosoya Yumiko², Miyazaki Masashi¹

¹Nihon Univ. Sch. of Dentistry, ²Nagasaki Univ.

P-22 Evaluation of a resin cement using newly developed PMMA powder

○Tanoue Naomi¹, Yanagida Hiroaki², Sawase Takashi²
¹Nagasaki Univ. Hospital, ²Nagasaki Univ.

P-23 Glass transition point of commercial denture base resins determined by dynamic viscoelastic properties

○Fujii Koichi¹, Minami Hiroyuki², Arikawa Hiroyuki¹, Kanie Takahito¹, Ban Seiji¹
¹Kagoshima Univ., ²Kagoshima Univ. Med. & Dent. Hospital

P-23 Glass transition point of commercial denture base resins determined by dynamic viscoelastic properties

○Fujii Koichi¹, Minami Hiroyuki², Arikawa Hiroyuki¹, Kanie Takahito¹, Ban Seiji¹
¹Kagoshima Univ., ²Kagoshima Univ. Med. & Dent. Hospital

[Adhesion 1]

P-24 Bond strength of self-adhesive resin cement to restorative dental metal materials

○Lin Jie¹, Kuroda Souichi¹, Kishida Sachie¹, Sinnya Akihiro¹, Ootaki Erika¹, Harada Kosuke¹, Hasegawa Aki¹, Hatta Minoru¹, Yokoyama Daiichiro¹, Shinya Akikazu^{1,2}, Gomi Harunori¹, Shinya Akiyoshi¹

¹The Nippon Dental Univ. at Tokyo, ²Univ. of Turku

P-25 Evaluation of bonding durability of self-adhesive luting cement, G-Luting, to Zirconia and Alumina

○Minamisawa Hiroto, Sakuma Tetsuro
GC corporation Research & Development

P-26 Effect of firing temperature on properties of zirconia

○Kono Hiroshi, Okuda Yuji, Noda Makoto, Tsuruki Jiro, Arikawa Hiroyuki, Ban Seiji
Kagoshima Univ.

P-27 Adhesive properties of newly bonding resin Absolute 3

○Morimoto Sayako, Nishitani Yoshihiro, Hoshika Tomohiro, Yamaji Kozo, Yoshiyama Masahiro
Okayama Univ.

P-28 Adhesion to pure gold using a fluorinated adhesive resin

○Kadoma Yoshinori
Tokyo Medical and Dental Univ.

P-29 Viscoelasticity of the polysaccharide adlayer similar to biofilms: Solidness of exopolysaccharides

○Nezu Takashi, Sasaki Kaori, Saitoh Setsuo, Taira Masayuki, Araki Yoshima
Iwate Medical Univ.

P-30 Effect of demineralization on enamel bond strength of single-step self-etch systems

○Rikuta Akitomo, Tsuchiya Hiroaki, Chiba Yasushi, Tsubota Keishi, Irokawa Atsushi, Miyazaki Masashi
Nihon Univ. Sch. of Dentistry

[Dental Alloy and Titanium Alloy]

P-31 Creep of 12%Au-Ag-Pd alloy at high temperature

○Tsuruta Shozo, Mori Shintaro, Morimoto Keita, Uematsu Yasuaki, Mizuno Masanobu, Tomino Masashi, Tsukawaki Atsuya, Fujimoto Koutaro, Kawai Tatsushi
Aichi-Gakuin Univ.

P-32 MRI-artifact-free alloy for biomedical application (Part 2) -mechanical properties of Au-Pt based alloy-

○Uyama Emi, Hamada Kenichi, Asaoka Kenzo
The Univ. of Tokushima

P-33 Influence of surface roughness of dental alloys for color difference with different immersion waters

○Aoki Harumi
The Nippon Dental Univ. at Tokyo

P-34 The Practical-dental-application of the eutectic mixture alloy containing the Ag-Si (compound) - the evaluation for the properties about the color change and the mechanical durability, caused by the not exceeding 20% addition of the (each) Au,Pt,Pd to the dental alloy-

○Aoyagi, Yuusuke, Yoshida Takaichi
The Nippon Dental Univ.

P-35 Behavior of human periodontal ligament cells on chemical modified Ti surface with cell adhesive protein

○Kado Takashi, Hidaka Tatsuhiro, Aita Hideki, Endo Kazuhiko, Furuichi Yasushi
Univ. of Hokkaido

P-36 Evaluating bond strength between Ti-20Cr-X alloys and porcelain

○Hsu Hsueh-Chuan¹, Kikuchi Hisaji², Kurotani Tomoko², Wu Shih-Ching¹, Ho Wen-Fu³
¹Central Taiwan Univ. of Science and Technology, ²Nihon Univ., ³Dayeh Univ.

P-37 Effects of omega phase on properties of dental Ti alloys

○Ho Wen-Fu¹, Wu Shih-Ching², Hsu Hsueh-Chuan²

¹Dayeh Univ., ²Central Taiwan Univ. of Science and Technology,

[Bioceramics 1]

P-38 Fractographic analyses of zirconia-based all ceramic bridge

○Okuda Yuji, Noda Makoto, Tsuruki Jirou, Ban Seiji
Kagoshima Univ.

P-39 Synthesis of biomimetic macromolecules with an active reaction center analogue of carbonic anhydrase and its application for controlled calcification

Yamatoya Emi¹, Ishida Tomoki¹, ○Abe Shigeaki¹, Ohguchi Ikuko¹, Akasaka Tsukasa¹, Uo Motohiro¹, Watari Fumio¹, Hayashi Daisuke², Takada Tomoya²
¹Hokkaido Univ., ²Asahikawa National College of Technology

P-40 Induction of remineralization by resin containing bioglass

○Hashimoto Masanori, Nagano Futami, Iijima Masahiro, Endo Kazuhiko, Ohno Hiroki
Health Sciences Univ. of Hokkaido

P-41 Properties of synthesized oxapatite

○Kamemizu Hideo, Komada Yuko, Kanayama Keiichi, Yamaguchi Yusuke, Iijima Mayumi, Wakamatsu Nobukazu, Adachi Masanori, Doi Yutaka
Asahi Univ.

P-42 Characteristics of HAp ZrO₂ composite material

○Matsumoto Takuya, Matsumoto Takuya, Sohmura Taiji
Osaka Univ.

P-43 Characterization of apatite collagen composites with different apatite content

○Kawano Satoshi, Iijima Mayumi, Ito Akihiro, Takenaka Yoshihiro, Takeda Shinpei, Doi Yutaka, Yoshida Takatada
Asahi Univ.

P-44 Study on retraction of initial carious lesion employed diopside ceramics

○Yamamoto Shou, Kawasaki Ai, Mashita Akio, Nonami Toru, Hase Hiroko
Chukyo Univ.

P-45 Apatite-like precipitation upon carbon nanotubes with calcifying solutions under various conditions

○Koshikawa Takamitsu¹, Kuboki Yoshinori², Abe Shigeaki¹, Akasaka Tsukasa¹, Uo Motohiro¹, Watari Fumio¹
¹Hokkaido Univ., ²Professor Emeritus, Hokkaido Univ.

[Implant]

P-46 Adhesion of hollow calcium-deficient hydroxyapatite microspheres onto a titanium screw

○Kimura Isao, Kanatani Mitsugu
Niigata Univ.

P-47 Bone regeneration using interconnected porous material fabricated from hydroxyapatite collagen membranes

○Koyama Yoshihisa¹, Kikuchi Masanori², Takakuda Kazuo¹

¹Tokyo Medical and Dental Univ., ²National Institute for Materials Science

P-48 Characterization of porous alginates scaffolds with various ratio of octacalcium phosphate (OCP) crystal

○Shiraishi Naru, Anada Takahisa, Honda Yoshitomo, Masuda Taisuke, Sasaki Keiichi, Suzuki Osamu
Tohoku Univ.

P-49 Chemical deposition of carbonate apatite coatings on Ti substrate with sulfonated SAM

○Adachi Masanori, Yamaguchi Yusuke, Wakamatsu Nobukazu, Kamemizu Hideo, Iijima Yutaka, Horiguchi Takashi, Doi Yutaka
Asahi Univ.

P-50 Survival Rate of oral microorganisms on implant materials

○Murakami Asuka, Shibata Yo, Miyazaki Takashi

[Biological Tissue and Toxicity]

P-51 Development of novel titanium-dextrin composite bone filling material

○Asai Takafumi, Hayashi Tatsuhide, Hamajima Soichiro, Asakura Masaki, Mieki Akimichi, Kataoka Hiroyasu, Kawai Tatsushi
Aichi-Gakuin Univ.

P-52 In vivo evaluation of ZrO₂ HAp composite scaffold

○An Sanghyun¹, Matsumoto Takuya¹, Miyajima Hiroyuki¹, Nakahira Astushi², Sohmura Taiji¹
¹Osaka Univ., ²Osaka prefecture Univ.

P-53 Proteome analysis of rat serum proteins accumulated onto octacalcium phosphate (OCP) crystals

○Kaneko Hirofumi¹, Kamiie Junichi², Anada Takahisa¹, Honda Yoshitomo¹, Kamakura Shinji³,
Terasaki Tetsuya⁴, Shimauchi Hidetoshi¹, Suzuki Osamu¹
Tohoku Univ. Graduate Sch. of Dentistry, ²Sch. of Veterinary Medicine, Azabu Univ., ³Tohoku Univ.,
Graduate Sch. of Biomedical Engineering, ⁴Graduate Sch. of Pharmaceutical Sciences, Tohoku Univ.

P-54 Preparation of CNT avidin complex for molecular heating device

Irie Akihito^{1,2}, ○Kawaguchi Minoru^{1,2}, Fukushima Tadao^{1,2}, Ohno Jun^{1,2}, Matsuura Masarou¹
¹Fukuoka Dental College, ²JST, CREST

P-55 Mobility and biocompatibility of DNA-protamine complexes with carbonate apatite

○Fukushima Tadao¹, Ohno Jun¹, Inoue Yusuke², Kawaguchi Minoru¹, Hayakawa Tohru³, Mitarai Makoto⁴, Doi Yutaka⁵
¹Fukuoka Dental College, ²Fukuoka College of Health Sciences, ³Nihon Univ. at Matsudo, ⁴Maruha Nichiro Holdings, Inc., ⁵Asahi Univ.

P-56 Morphological observation by TEM and copper ion concentration measurements by EDX of macrophage cultured in IC10% copper ions

○Taira Masayuki, Sasaki Kaori, Saitoh Setsuo, Nezu Takashi, Araki Yoshima
Iwate Medical Univ.

[CAD/CAM]

P-57 Development of ceramic bonded to zirconia bridge -Fracture strength of the clinical form-

○Kuriyama Soichi, Kunii Jun, Higuchi Daisuke, Goto Daisuke, Tsuda Motoi, Hotta Yasuhiro,
Manabe Atsufumi, Miyazaki Takashi
Showa Univ.

P-58 The influence of shrinkage correction and calcination temperature on the adaptability of zirconia crown

○Kishida Sachie¹, Ootaki Erika¹, Shinya Akihiro¹, Lin Jie¹, Kuroda Soichi¹, Hasegawa Aki¹, Hatta Minori¹,
Yokoyama Daiichirou¹, Shinya Akikazu^{1,2}, Gomi Harunori¹, Shinya Akiyoshi¹
¹The Nippon Dental Univ., ²Univ. of Turku

P-59 Surgical navigation system for dental implant using retinal projection head mounted display (Part 1) Development of real-time overlay system

○Yamaguchi Satoshi, Ohtani Takafumi, Yatani Hirofumi, Sohmura Taiji
Osaka Univ.

P-60 Dental haptic simulator to train hand skill of student (Part 9) Development of cavity preparation training system and automatic evaluation system

○Yoshida Yoshinori¹, Yamaguchi Satoshi¹, Wakabayashi Kazumichi¹, Nagashima Tadashi¹,
Takeshige Fumio¹, Kawamoto Yuusuke², Noborio Hiroshi³, Sohmura Taiji¹
¹Osaka Univ., ²TGL Inc., ³Osaka Elec-Com Univ.

P-61 Dental haptic simulator to train hand skill of student (Part 11) Development and implementation of face model

○Yamada Yuya¹, Yoshida Yoshinori¹, Yamaguchi Satoshi¹, Wakabayashi Kazumichi¹, Kawamoto

Yusuke², Nagashima Tadashi¹, Takeshige Fumio¹, Noborio Hiroshi³, Sohmura Taiji¹
¹Osaka Univ., ²TGL Inc., ³Osaka Elec-Com Univ.

P-62 Preparation for ceramic inlay using CAD/CAM system

○Ohkuma Kazuo, Goto Shin-ichi, Ogura Hideo
Nippon Dental Univ. Niigata

P-63 Position and pose measurement method of inserted implants using optical tracker (Part 2)

Development of reconstruction software for implants relationship

○Ono Shinji, Yamaguchi Satoshi, Kusumoto Naoki, Yamada Shinichi, Sohmura Taiji, Yatani Hirofumi
Osaka Univ.

[Clinical Application 1]

P-64 Evaluation of soft lining materials on function with a questionnaire

○Kadokawa Akihiko¹, Kanie Takahito¹, Takenouchi Yasumi², Minesaki Yoshito¹, Ban Seiji¹,
Onizuka Tadashi¹, Tanaka Takuo¹
¹Kagoshima Univ., ²A dental labo.

P-65 Influence of humidity environments on the shear bond strength of self adhesive cements

○Okawa Takahisa, Komasa Satoshi, Fujii Takamasa, Torii Katunori, Takao Tomonori,
Tanaka asahiro, Kawazoe Takayoshi
Osaka Dental Univ.

P-66 Evaluation of physical properties of commercially available artificial saliva

○Okura Emi, Ishii Hitomi, Takamoto Yuko, Takayama Yukihiko, Nikawa Hiroki, Makihira Seicho
Hiroshima Univ.

P-67 Evaluation of antifungal activity of commercial artificial saliva

○Ishii Hitomi, Okura Emi, Takamoto Yuko, Takayama Yukihiko, Nikawa Hiroki, Makihira Seicho
Hiroshima Univ.

P-68 Biofilm formation of dual or ternary species of *Candida*

○Takamoto Yuko, Takayama Yukihiko, Ishii Hitomi, Okura Emi, Nikawa Hiroki, Makihira Seicho
Hiroshima Univ.

P-69 Effect of ultraviolet exposure on dynamic viscosity and elasticity of maxillofacial materials

○Uehara Fumiko¹, Mizumachi Wataru², Nikawa Hiroki², Makihira Seicho², Murata Hiroshi³, Mine
Yuichi²
¹Hiroshima Univ., ²Hiroshima Univ., ³Nagasaki Univ.

October 1 (Thursday)

18:00-20:00

Banquet (Royal Garden in Castle Park Hotel)

October 2 (Friday)

Hall A

9:00-11:00 General Presentation (Oral Session)

[Resin and Prevention]

A-17 Sodium phosphorylated chitosan zinc oxide complexes formation and cytotoxicity evaluation for periodontal dressing approach

○Tachaboonyakiat Wanpen¹, Srakaew Veeranuch¹, Ruangsri Prapasri², Suthin Kanyarat³
¹Chulalongkorn Univ., ²Prince of Songkla Univ., ³Dentalsea Clinic

A-18 Effect of spherical filler on mechanical properties of composite resin

○Tamura Yoichi, Kakuta Kiyoshi, Ogura Hideo
The Nippon Dental Univ. Sch. of Dentistry at Niigata

A-19 Vinyl esters polymer mixture system (Part 8) Potentialities as denture base resin

○Tanaka Jiro¹, Hashimoto Yoshiya², Takada Shoji², Suzuki Kazuomi¹

¹Okayama Univ., ²Osaka Dental Univ.

A-20 Bactericide delivery system containing the phosphorylated polysaccharide as carrier material

○Yoshida Yasuhiro¹, Namba Naoko¹, Nagaoka Noriyuki¹, Nakamura Mariko², Takashiba Shogo¹,
Suzuki Kazuomi¹

¹Okayama Univ., ²Junsei Juco

A-21 The development of ozone disinfection utilization electric toothbrush for the dental caries prevention

○Arai Koichi¹, Ando Nobuo²

¹Meikai Univ., ²Nippon Dental Univ. at Tokyo

[Machine and Technology]

A-22 Fabrication of dental restorations by CAD/RP-CAM method

○Sohmura Taiji^{1,2}, Nishiyama Takahiro², Momohara Tokuo¹, Okano Kaori¹, Kitahara Kazuyoshi¹,
Yamaguchi Satoshi¹, Kumazawa Yoichi¹

¹Osaka Univ., ²Bionic Co.,Ltd,

A-23 Dental haptic simulator to train hand skill of student (Part 10) Realization of dual operation and speed control of dental point

○Yamaguchi Satoshi¹, Yoshida Yoshinori¹, Wakabayashi Kazumichi¹, Yamada Yuuya¹, Nagashima Tadashi¹, Takeshige Fumio¹, Kawamoto Yusuke², Noborio Hiroshi³, Sohmura Taiji¹

¹Osaka Univ., ²TGL Inc., ³Osaka Elec-Com Univ.

A-24 Dental haptic simulator to train hand skill of student (Part 8) Probing skill training for periodontal treatment

○Yoshida Yoshinori¹, Yamaguchi Satoshi¹, Wakabayashi Kazumichi¹, Nagashima Tadashi¹,
Kitamura Masahiro¹, Kawamoto Yuusuke², Noborio Hiroshi³, Takeshige Fumio¹, Murakami Shinya¹, Sohmura Taiji¹

¹Osaka Univ., ²TGL Inc., ³Osaka Elec-Com Univ.

A-25 Effects of voids around post on stress distribution to tooth root under loading

○Teraoka Fumio, Inaba Yoji, Yamaguchi Satoshi, Nakagawa Masafumi, Sohmura Taiji
Osaka Univ.

A-26 Development of QCM dental materials nano sensor by sputtering

○Hashimoto Yoshiya, Minoura Sae, Honda Ryo, Nishiura Aki, Matsumoto Naoyuki, Takeda Syoji
Osaka Dental Univ.

Hall A

13:10-14:40 [An Open Symposium and Special Seminar 2 for Dental Materials Adviser / Senior Adviser]

Metal-free restorations made of zirconia

1. Desirable characteristics of zirconia material in dentistry

Ban Kiyoko
Noritake Dental Supply Co., Limited

2. Applications for zirconia in CAD/CAM technologies

Ebihara Yoshinori
Advanced Technologies Development Center, GC Corporation

3. The porcelain system for zirconia frame and the adhesive resin cement

Takahashi Keiji, Teramae Mitsuji
Shofu Inc. Research & Development

4. Considering the metal-free restoration used to zirconia -From the standpoint of clinical side-

Shinya Akiyoshi
Department of Crown and Bridge, Sch. of Life Dentistry at Tokyo, The Nippon Dental Univ.

Hall A

14:50-16:38 General Presentation (Oral Session)

[Biological Reaction and Toxicity]

A-27 Control of osteoblast behaviors on polarized hydroxyapatite

○Nakamura Miho, Nagai Akiko, Tanaka Yumi, Yamashita Kimihiro
Tokyo Medical and Dental Univ.

A-28 Bone formation ability of newly developed biomimetic bone graft material

○Matsuura Ayumu, Kubo Takayasu, Doi Kazuya, Hirata Isao, Okazaki Masayuki, Akagawa Yasumasa
Hiroshima Univ.

A-29 Influence of carbon nanotubes on cell differentiation by mouse ES cells and iPS cells

○Imai Koichi¹, Takeda Shoji¹, Abe Shigeaki², Akasaka Tsukasa², Uo Motohiro², Watari Fumio²
¹Osaka Dental Univ., ²Hokkaido Univ.

A-30 Surface properties of dental implants (Part 5) The relationship between adsorbed biomolecules and surface texture

○Watanabe Kouichi, Okawa Seigo, Kanatani Mitsugu, Homma Kikuo
Niigatsa Univ.

[Ceramics]

A-31 Preparation of carbonate apatite monolith by hydrothermal treatment of calcium carbonate and dicalcium phosphate mixture (Part 3)

○Daitou Fumikazu¹, Maruta Michito¹, Kawachi Giichirou¹, Turu Kanji¹, Matuya Shigeki², Terada Yoshihiro¹, Ishikawa Kunio¹
¹Kyushu Univ., ²Fukuoka Dental College

A-32 Inhibition of low temperature degradation by small amount addition of HA to Al₂O₃ mixed Y-TZP

○Tanaka umi, Makamura Miho, Nagai Akiko, Yamashita Kimihiro
Tokyo Medical and Dental Univ.

A-33 Zirconia crown produced by layering technique and press-on technique

○Hata Utako, Uehara Yoshiki, Sakurai Yasuyuki, Wakamatsu Nobukazu, Yamamura Osamu, Doi Yutaka, Fujiwara Shu
Asahi Univ. Sch. of Dentistry

A-34 Bonding strengths of zirconia and resin cements with surface treatments

○Sato Hideo, Ban Seiji, Yamasaki Youichi
Kagoshima Univ.

A-35 Bond strength between the veneered porcelain and the zirconia frame

○Okamura Mitsunobu¹, Kusama Yukio², Kakigawa Hiroshi³, Ban Seiji⁴
¹Okamura Dental Clinic, ²Nishishinjyuku Dental Clinic, ³Kyushu Dental College, ⁴Kagashima Univ.

October 2 (Friday)

Hall B

9:30-15:00 General Presentation (Poster Session) (11:00-12:00 Discussion)

[Composite Resin and Resin 1]

P-70 Attractive force between experimental magnetic resin composite material and magnet (Part 1)

○Soma Hiroko, Miyagawa Yukio
The Nippon Dental Univ.

P-71 The evaluation for the changing of the transmittance and of the peak of the wavelength, as the dental-composite-resins are curing by the chemical and the light irradiation

○Murayama Daigo, Yoshida Takaichi
The Nippon Dental Univ.

P-72 Modification effect of benzene group silane coupling agent contained double bond (Part 6)

Water resistance of the experimental composites

○Nihei Tomotaro¹, Kunzelmann Karl-Heinz², Ohashi Katsura¹, Tanaka Takahiro¹, Suzuki Toshiyuki¹, Kondo Yukishige³, Yoshino Norio³, Teranaka Toshio¹

¹Kanagawa Dental College, ²Dental Sch. of LMU, ³Tokyo Univ. of Science

P-73 Effect of fiber post on photopolymerization of composite resin in root canal

○Takahashi Hidekazu¹, Iwasaki Naohiko¹, Nakano Fumio¹, Takahashi Hidenao¹, Tanaka Shinji¹, Asakawa Yuya²

¹Tokyo Medical and Dental Univ., ²Chiba Institute of Technology

P-74 Comparison of viscoelastic properties of tissue conditioners

○Saitoh Setsuo, Sasaki Kaori, Nezu Takashi, Taira Masayuki, Araki Yoshima
Iwate Medical Univ.

P-75 Evaluation of self-cured acrylic resin antibacterial compound

○Kiryama Takashi, Asakura Masanori, Sato Yamato, Hamajima Souichiro, Kuroki Kenjiro, Hasegawa Akihito, Takahashi Yoshifumi, Kawai Tatsushi
Aichi-Gakuin Univ.

P-76 Development of new denture resin -Evaluation on bending strength-

○Aoyagi Yujin, Kozo Umemoto, Kurata Shigeaki
Kanagawa Dental College

P-77 Microencapsulation of dibenzoyl peroxide and its application to dental materials

○Ito So, Fuchigami Kiyomi, Yoshimoto Ryuichi, Deguchi Mikito
Shofu Inc.

P-78 Microencapsulation of 1,3,5-trimethylbarbituric acid and its application on medical field

○Fuchigami Kiyomi, Ito So, Yoshimoto Ryuichi, Deguchi Mikito
Shofu Inc.

[Adhesion 1]

P-79 Influence of preprocessing to bovine dentin on shear bond strength of dentin adhesive systems

○Yamaguchi Kanako, Kawamoto Ryo, Yasuda Genta, Yoshida Takeshi, Ando Susumu, Miyazaki Masashi
Nihon Univ. Sch. of Dentistry

P-80 Effect of a bleaching agent to the pulp chamber dentin on the microtensile bond strength

○Haruyama Akiko, Takemoto Shinji, Hattori Masayuki, Kameyama Atsushi, Yoshinari Masao, Kawada Eiji, Oda Yutaka
Tokyo Dental College

P-81 Effect of remaining alumina particle for sandblasting on adhesive strength and bending properties of resin cement

○Nishigawa Goro, Maruo Yukinori, Oka Morihiko, Tamada Yoshiyuki, Minagi Shogo, Irie Masao, Suzuki Kazuomi
Okayama Univ.

P-82 Influence of bonding strength on surface roughness of metal core Part 2 Effect of luting agents

○Matsumoto Michihiko, Takemoto Shinji, Hattori Masayuki, Hasegawa Masao, Aichi Tetsuya, Yoshinari Masao, Kawada Eiji, Oda Yutaka
Tokyo Dental College

P-83 Adhesiveness of the mouthguard materials and the dental silicone materials

○Yokota Kayoko, Churei Hiroshi, Takahashi Hidekazu, Ueno Toshiaki
Tokyo Medical and Dental Univ.

P-84 Effects of metal primers for noble alloys on bonding of adhesive resin cement to noble alloys for PFM

○Minami Hiroyuki¹, Minesaki Yoshito¹, Onizuka Tadashi², Suzuki Shiro³, Tanaka Takuo²
¹Kagoshima Univ. Medical and Dental Hospital, ²Kagoshima Univ. Graduate Sch. of Medial and Dental Sciences, ³Univ. of Alabama at Birmingham

P-85 Effect of surface treatments on bonding durability between an indirect composite resin and two gold alloys

○Yanagida Hiroaki¹, Koizumi Hiroyasu², Sawase Takashi¹
¹Nagasaki Univ., ²Nihon Univ.

[Titanium, Casting and Corrosion]

P-86 Electrolysis of ionic solution -Organic film formed on titanium surface-

○Okawa Seigo, Homma Kikuo, Kanatani Mitsugu, Watanabe Kouichi
Niigata Univ.

P-87 Machinability of experimental Ti-Ag alloys in terms of cutting temperature

○Kikuchi Masafumi, Takahashi Masatoshi
Tohoku Univ.

P-88 Effect of Contact to Titanium Alloys on the Proliferation of Mouse Osteoblastic Cells in Culture

○Kobayashi Masahiko, Sakagami Hiroshi, Onuki Hiroyuki, Hibino Yasushi, Nakajima Hiroshi,
Shimada Jun
Meikai Univ.

P-89 Dental casting using a resin pattern fabricated by CAD RP-CAM method

○Sohmura Taiji, Kitahara Kazuyoshi, Ishikura Mari, Nakajima Yuka, Hoshino Shouhei, Machi
Hiroyuki
Osaka Univ.

P-90 Hardness and corrosion resistance for silver-base alloys with various copper contents

○Kawashima Isao, Koiso Kazuo, Ryuukata Ichirou, Ishida Yoshinori, Okada Hidetoshi
Ohu Univ.

P-91 XAFS analysis of the corrosion products of Ni-Ti alloy and stainless steel

○Uo Motohiro¹, Watari Fumio¹, Asaoka Kenzo²
¹Hokkaido Univ., ²Tokushima Univ.

P-92 Corrosion resistance of commercially pure Ti coated with TiN in acidic fluoride solution

○Naganuma Hiroko, Akanuma Masayoshi, Takasusuki Norio, Endo Kazuhiko, Hashimoto Masanori,
Nagano Futami, Ohno Hiroki, Ochi Morio
Health Sciences Univ. of Hokkaido

[Bioceramics 2]

P-93 Fabrication of coating glass for zirconia

○Noda Makoto, Okuda Yuji, Tsuruki Jiro, Ban Seiji
Kagoshima Univ.

P-94 Bonding strength between Zirconia and dental porcelain (Comparison with condense and press method)

○Tsuruki Jiro, Noda Makoto, Okuda Yuji, Ban Seiji
Kagoshima Univ.

P-95 Comparative study on biocompatibility of zirconia and titanium with osteoblast-like cells

○Yamashita Daisuke, Machigashira Miho, Miyamoto Motoharu, Takeuchi Hironobu, Takeuchi
Naoshi, Kono Hiroshi, Noguchi Kazuyuki, Ban Seiji
Kagoshima Univ.

P-96 Application of dental zirconia to major connector

○Sanaoka Satoshi, Iwahori Masatoshi, Goto Takayasu, Adachi Masanori, Takita Fumi, Nigauri
Akihiko, Miyao Motonobu
Asahi Univ.

[Porcelain, Investment, Cement and Model Material]

P-97 Mechanical strength of dental Y-TZP ceramics using glass as an additive

○Wu Shih-Ching¹, Ho Wen-Fu², Hsu Hsueh-Chuan¹

¹Central Taiwan Univ. of Science and Technology, ²Dayeh Univ.

P-98 Spectroscopic analysis of silver nanoparticles doped dental porcelain

○Uno Mitsunori, Nonogaki Ryugo, Fujieda Tokushi, Omori Toshikazu, Kurachi Masakazu,
Wakamatsu Nobukazu, Iijima Mayumi, Doi Yutaka

Asahi Univ. Sch. of Dentistry

P-99 Laboratory Operations for zirconia based nanocomposite -Examination of porcelain veneering procedure-

○Terui Yuichi, Narumi Yuko, Kuriyama Soichi, Kunii Jun, Hotta Yasuhiro, Goto Daisuke, Miyazaki Takashi
Showa Univ.

P-100 Influence of silver nano-particles on subcritical crack growth of dental porcelain

○Fujieda Tokushi, Uno Mitsunori, Nonogaki Ryugo, Omori Toshikazu, Kurachi Masakazu, Wakamatsu Nobukazu, Iijima Mayumi, Doi Yutaka
Asahi Univ. Sch. of Dentistry

P-101 Influence by the difference of the mixing of phosphate-bonded investment

○Yamamoto Ryoko, Kishii Jiro, Higashino Yoshifumi, Kakishita Fumi, Miyao Motonobu, Adachi Masanori, Doi Yutaka
Asahi Univ.

P-102 Refractory composition and expansion of rapid-burnout phosphate-bonded investment

○Hirose Hideharu¹, Sudo Fumishige¹, Sakakibara Shigehiro¹, Yagihara Kenji¹, Ogawa Toshio², Kodaki Tomokazu³, Yoneyama Takayuki¹

¹Nihon Univ., ²Sakura Building Dental Clinic, ³Dental Koushi Clinic

P-103 Dimensional change of dental cement using laser sensor

○Miyasaka Taira, Okamura Hiroyuki
Nippo Dental Univ., Sch. of Life Dentistry at Tokyo

P-104 Retention of crowns cemented on implant abutments with temporary cements after cycling loadings

○Nagasawa Yuko, Hibino Yasushi, Tawaragi Tsutomu, Ishida Kohei, Wada Ken-ichi, Takahashi Yoko, Yamaga Taniichiro, Nakajima Hiroshi
Meikai Univ.

P-105 Properties of plaster separating medium

○Sato Yuji, Kato Takahiro, Hoshikawa Takeshi
Yamamoto Precious Metal Co., Ltd.

[Cell and Dissolution]

P-106 Development of scaffolds for cell culture using an amino-silicate nanotubes, imogolite

○Ishikawa Kosuke, Akasaka Tsukasa, Abe Shigeaki, Uo Motohiro, Watari Fumio
Hokkaido Univ.

P-107 EF-TEM observation of H₂O₂ production from vanadium plate adherent human polymorphonuclear leukocytes

○Moriguchi Keiichi, Takahashi Yoshifumi, Kawai Tatsushi
Aichi-Gakuin Univ.

P-108 Involvement of base metal in dental precious metal alloys-induced cytotoxicity for THP.1 cell

○Matsuura Ritaro¹, Mikagi Eriko¹, Horiguchi Koji¹, Anraku Teruo¹, Yamamoto Tetsuya²
¹Yamamoto Precious Metal Co., Ltd., ²Kochi Univ.

P-109 The behavior of hepatic cells to carbon nanotubes

○Ito Sachiko, Akasaka Tsukasa, Yawaka Yasutaka, Watari Fumio
Hokkaido Univ.

P-110 Culture of osteoblast cells and marrow cells on carbon nanotube scaffold

○Kitahara Hiromi, Kuboki Yosinori, Akasaka Tsukasa, Watari Fumio, Inoue Nobuo
Hokkaido Univ.

P-111 Dissolution behavior of dental Ag-Pd-Cu-Au alloy in artificial saliva including protein

Honma Hiro, ○Okawa Seigo, Watanabe Kouichi, Kanatani Mitsugu
Niigata Univ.

P-112 Degradation of dental monomers in serum and human saliva

○Hongo Toshio¹, Hikage Sakari², Takahashi Hidekazu¹

¹Tokyo Medical and Dental Univ., ²Health Sciences Univ. of Hokkaido

P-113 Dissolution behavior and pH buffering action of HA thin film formed on Ti by liquid-phase deposition method

○Endo Kazuhiko, Hashimoto Masanori, Nagano Futami, Ohno Hiroki

[Disinfection and Sterilization]

P-114 Durability of bactericidal activity in re-improved type of electrolyzed neutral water gel by storage

○Nagamatsu Yuki¹, Kita Noriaki¹, Chen Ker-Kon¹, Tajima Kiyosi¹, Kakigawa Hiroshi¹, Watanabe Kenji², Kozono Yoshio¹
¹Kyushu Dental College, ²ASAHIPRETEC Corp.

P-115 Sterilization effects of electrolyzed neutral water on root canal irrigation

○Kita Noriaki, Nagamatsu Yuki, Chen Ker-Kon, Tajima Kiyoshi, Kakigawa Hiroshi, Kozono Yoshio
Kyushu Dental College

P-116 Dimensional accuracy and deformation of stone models with alginate impression materials immersed in a hypochlorous acid water disinfectant

○Hiraguchi Hisako¹, Tsunekawa Masayoshi², Yokota Kazuyoshi², Wakashima Mitsuru¹, Yui Masashi¹, Yoneyama Takayuki¹
¹Nihon Univ., ²Nippon Shika Yakuhin

P-117 Capture of bacteria and the bactericidal effect by using carbon nanotubes

○Akasaka Tsukasa, Abe Shigeaki, Uo Motohiro, Watari Fumio
Hokkaido Univ.

[Numerical Analysis]

P-118 CT-based 3-D FE modeling of the dentulous mandible

○Tajima Kiyoshi, Nakamura Keiko, Chen K-K, Nagamatsu Yuki, Kakigawa Hiroshi
Kyushu Dental College

P-119 Influence of test methodology on strength of dental implant body -Examination with finite element method-

○Nagasawa Sakae¹, Yoshida Takamitsu¹, Mizoguchi Toshihide¹, Tamura Kaoru¹, Yamazoe Masatoshi^{1,2}, Ito Michio¹
¹Matsumoto Dental Univ., ²Yamamoto Precious Metal Co., Ltd

P-120 Development of non-contact three-dimensional scanner to combine the facial morphology and texture

○Hotta Yasuhiro, Kunii Jun, Kuriyama Soichi, Terui Yuichi, Nakano Haruhisa, Fujiwara Toshihisa, Miyazaki Takashi
Showa Univ.

[Laser, Polishing, Machine and Technology]

P-121 Adhesion of titanium and resin using Nd:YAG laser

○Kikuchi Hisaji, Miyanaga Kohichi, Akashi Yukio, Nakano Toshiaki, Yoneyama Takayuki
Nihon Univ.

P-122 Influence of laser welding on mechanical property of dental metals

Shimakura Michio, ○Takeuchi Misao, Ohta Mao, Sakai Yuma
Ohu Univ.

P-123 Properties of diamond polishing compounds

○Kato Takahiro, Hoshikawa Takeshi
Yamamoto Precious Metal Co., Ltd.

P-124 Effects of water drops on mechanical spatulator for vacuum mixing and hand spatula for water-powder ratio

○Kanatani Mitsugu, Okawa Seigo, Watanabe Kouichi, Kimura Isao
Niigata Univ.

[Clinical Application 2]

P-125 Effect of water immersion on the mechanical strengths of glass fiber posts

○Komada Wataru, Kumagae Naosuke, Fukui Yuji, Otake Shiho, Omori Satoshi, Miura Hiroyuki
Tokyo Medical and Dental Univ.

P-126 Influence of ultraviolet rays on dynamic mechanical properties of silicone maxillofacial prosthetic materials

○Murata Hiroshi¹, Hong Guang², Mizumachi Wataru³, Nikawa Hiroki³, Hamada Taizo²
¹Nagasaki Univ., ²Tohoku Univ., ³Hiroshima Univ.

P-127 Photoelastic stress analysis with simulated periodontal ligament in three-unit fixed partial denture

○Yusa Koichiro, Miura Hiroyuki, Okada Daizo, Kumagae Naosuke
Tokyo Medical and Dental Univ.

P-128 Dependence of dynamic viscoelastic properties on temperature of denture adhesives and mouth moisturizers

○Kano Hiroshi, Kurogi Tadafumi, Tanaka Rika, Yoshida Kazuhiro, Minato Teppei, Murata Hiroshi
Nagasaki Univ.

P-129 The fracture resistances of the post and cores with different lengths of glass fiber posts in core parts

○Fukui Yuji, Omori Satoshi, Komada Wataru, Miura Hiroyuki
Tokyo Medical and Dental Univ.

P-130 Antibacterial effects of HY contained dental cement

○Suzuki Hideaki, Tanimura Hideki, Fujita Kou, Aida Masahiro, Ikemi Takuji
Nihon Univ. Sch. Dent. Matsudo

P-131 Development of an antibacterial tissue conditioner with a biologically derived component

○Naito Yoshihito, Hamada Kenichi, Ichikawa Tetsuo
Univ. Tokushima

P-132 Development of adhesive root canal sealer containing Mineral Trioxide Aggregate (MTA)

○Watanabe Taizo¹, Wanibe Harumasa¹, Yamamoto Mitsunori¹, Nakata Kazuhiko¹, Hoshika Tomohiro², Nishitani Yoshihiro², Yoshiyama Masahiro², Kawai Tatsushi¹, Nakamura Hiroshi¹
¹Aichi-Gakuin Univ., ²Okayama Univ.

P-133 Recovery of contact point using various proximal restoration system

○Asakura Mitsufumi
Tokyo Medical and Dental Univ.

P-134 Development of adhesive root canal sealer inducing hard tissue formation

○Nishitani Yoshihiro¹, Hoshika Tomohiro¹, Morimoto Sayako¹, Watanabe Taizo², Wanibe Harumasa², Yamamoto Mitsunori², Nakata Kazuhiko², Takahashi Kei¹, Kawai Tatsushi², Nakamura Hiroshi², Yoshiyama Masahiro¹
¹Okayama Univ., ²Aichi-Gakuin Univ.

P-135 Effect of irrigation using EDTA on sealing ability of obturation by lateral condensation method with three kinds of sealers

○Okada Nobuo, Terata Rintaro, Masuyama, Tomoyuki, Yamamoto Makiko, Kubota Minoru
Iwate Medical Univ.

P-136 Trial application of immobilizing disinfectant to the laundry

○Yushita Kaori, Takamoto Yuko, Hiramatsu Minako, Ishii Hitomi, Takayama Yukihiro, Okura Emi, Nikawa Hiroki, Makihira Seityo
¹Hiroshima Univ., ²Hiroshima Univ., ³Hiroshima Univ.

P-137 Application of immobilizing disinfectant to the hydroxyapatite

○Hiramatsu Minako, Takamoto Yuko, Yushita Kaori, Tamura Tomoya, Ishii Hitomi, Takayama Yukihiro, Okura Emi, Nikawa Hiroki, Makihira Seityo
Hiroshima Univ.

P-138 Preparation and properties of thermoplastic resin based nanocomposites for the development of FRP orthodontic wires

○Yamagata Shuichi, Akasaka Tsukasa, Uo Motohiro, Iida Junichiro, Watari Fumio
Hokkaido Univ.