

# The 62<sup>nd</sup> General Session of the Japanese Society for Dental Materials and Devices(JSDMD)

– Aug.2, Oct.3(Rev.) –

October 19 (Saturday) – 20 (Sunday), 2013

The Nippon Dental University, School of Life Dentistry at Niigata  
1–8 Hamaura-cho. Chuo-ku, Niigata 951–8580, Japan

October 19 (Saturday)

Hall A

9:55 – 10:00 Opening Remark

9:30 – 11:45 General Presentation (Oral Session)

**A-1 Vinyl ester/polymer mixture system (Part 14) Preparation of original powder-liquid mixed type low water absorption PMMA based resin**

○ Tanaka Jiro<sup>1</sup>, Irie Masao<sup>1</sup>, Hashimoto Yoshiya<sup>2</sup>, Takeda Shoji<sup>2</sup>, Matsumoto Takuya<sup>1</sup>  
<sup>1</sup>Okayama University, <sup>2</sup>Osaka Dental University

**A-2 Influence of chlorine dioxide on the physical properties of denture base materials**

○ Shinhara Takuya<sup>1</sup>, Maeda Takeshi<sup>1</sup>, Hong Guang<sup>2</sup>, Wang Wei-qi<sup>2</sup>, Nishizaki Hiroshi<sup>1</sup>, Okazaki Joji<sup>1</sup>

<sup>1</sup>Osaka Dental University, <sup>2</sup>Tohoku University

**A-3 Capability evaluation of orthodontic Gummetal springs by finite element method**

○ Kawamura Jun<sup>1</sup>, Kojima Yukio<sup>2</sup>, Fukui Hisao<sup>1</sup>

<sup>1</sup>Aichi Gakuin University, <sup>2</sup>Nagoya Institute of Technology

**A-4 Relevance of released ions to antibacterial activity of S-PRG filler**

○ Miki Saeki, Kiba Wakako, Kitagawa Ranna, Hayashi Mikako, Imazato Satoshi  
Osaka University

**A-5 Influence of electrically poling apatite to human periodontal ligament cells**

○ Arai Hiroshi, Nagai Akiko, Nozaki Kousuke, Nakamura Miho, Yamashita Kimihiro  
Tokyo Medical and Dental University

**A-6 Effect of surface modification on initial attachment of MG-63 on zirconia surface**

○ Ando Masahiko, Sasaki Keisuke, Kawase Mayu, Kawai Tatsushi, Murakami Hiroshi, Hattori Masami, Ban Seiji  
Aichi Gakuin University

**A-7 Application of a bioluminescence-based cytotoxicity assay to the development of resin monomers**

○ Egashira Miki, Orimoto Ai, Suzuki Takahiro, Mizuno Mitsumasa, Ueno Atsuko, Fujimoto Kohtarou, Kawai Tatsushi  
Aichi Gakuin University

Hall A

13:00 – 14:00 Special Lecture

Redefining tooth regeneration: a more practical road from basic research to therapeutic application

Nakahara Taka

Department of Developmental and Regenerative Dentistry, School of Life Dentistry at Tokyo, The Nippon Dental University

15:50 – 16:50 General Presentation (Oral Session)

**A-8 Mechanical properties of octacalcium phosphate compact formed from different crystals**

○ Iijima Mayumi, Wakamatsu Nobukazu, Komada Yuko, Kamemizu Hideo, Tamaki Yukimiti  
Asahi University

**A-9 Hydro thermal apatite synthesis from Calcium oxide and Polyphosphate**

○ Narusawa Hideaki<sup>1</sup>, Owada Hiroyuki<sup>1</sup>, Takiguchi Yuichi<sup>1</sup>, Kataoka Yu<sup>1</sup>, Tamaki ukimichi<sup>2</sup>, Miyazaki Takashi<sup>1</sup>

<sup>1</sup>Showa University, <sup>2</sup>Asahi University

A-10 Controlling porosity and composition in nanoporous calcium phosphates

○ Okada Masahiro, Uehira Mayo, Fujiwara Keiko, Matsumoto Naoyuki, Takeda Shoji  
Osaka Dental University

A-11 Preparation of tricalcium phosphate cement using  $\alpha$ - $\beta$  phase transition

○ Arahira Takaaki, Maruta Michito, Matsuya Shigeki  
Fukuoka Dental College

October 19 (Saturday)

Hall B

10:00 – 16:30 General Presentation (Poster Session) (14:15 – 15:45 Discussion)

P-1 Evaluation method of hard direct denture relines resins –Biocompatibility & dynamic mechanical properties–

○ Takase Kazuma<sup>1</sup>, Suehiro Fumio<sup>1</sup>, Watanabe Ikuya<sup>1</sup>, Nishimura Masahiro<sup>2</sup>, Murata Hiroshi<sup>1</sup>  
<sup>1</sup>Nagasaki University, <sup>2</sup>Kagoshima University

P-2 Regulation of salivary gland morphogenesis using peptide modified hydrogel

○ Taketa Hiroaki, Sathi Glusan Ara, Farahat Mahmoud, Torii Yasuhiro, Matsumoto Takuya  
Okayama University

P-3 Evaluation of surface treatments on bond strength between polyamide resins and chemical-cured resin

○ Asakawa Yuya<sup>1</sup>, Takahashi Hidekazu<sup>1</sup>, Iwasaki Naohiko<sup>1</sup>, Kobayashi Masahiro<sup>2</sup>  
<sup>1</sup>Tokyo Medical and Dental University, <sup>2</sup>Chiba Institute of Technology

P-4 Mechanical properties of polymers made from polymer/monomer mixtures of methacrylic ester

○ Kanie Takahito, Arikawa Hiroyuki, Kikuchi Masafumi, Kadokawa Akihiko  
Kagoshima University

P-5 Mechanical properties of flowable hard resin for crowns and bridges

○ Izumida Akio, Ishibashi Minoru, Kasahara Shin  
Tohoku University

P-6 Toothbrush abrasion of resin Luna-Wing for crown and bridge

○ Tsuneishi Mari, Kato Takahiro, Anraku Teruo  
Yamamoto Precious Metal Co., Ltd.

P-7 Grinding of dental zirconia –Grinding efficiency with dental abrasive points –

○ Tsuruta Shozo, Mizuno Masanobu, Uematsu Yasuaki, Fujimoto Kotaro, Kawai Tatsushi,  
Yamamoto Iitiro  
Aichi Gakuin University

P-8 Bond strength between zirconia and porcelain veneer

○ Goto Shin-ichi, Kakuta Kiyoshi, Miyagawa Yukio  
Nippon Dental University at Niigata

P-9 Characteristics of reflected light from Transpa Dentine porcelain for veneering zirconium dioxide substructure

○ Shiraishi Takanobu<sup>1</sup>, Ikeda Kahori<sup>2</sup>, Shinozaki Nobuya<sup>3</sup>, Watanabe Ikuya<sup>1</sup>  
<sup>1</sup>Nagasaki University, <sup>2</sup>Iruka Dental Clinic, <sup>3</sup>Kyushu Institute of Technology

P-10 Cell adhesion on micro/nano-patterned apatite scaffold

○ Akasaka Tsukasa, Watari Fumio  
Hokkaido University

P-11 Effect of laser irradiation angle on the penetration depth of titanium

○ Kikuchi Hisaji, Kaketani Masahiro, Hiraguchi Hisako, Kurotani Tomoko, Hirose Hideharu,  
Yoneyama Takayuki  
Nihon University

P-12 Development of hybrid composite resins for CAD/CAM processing (Part1): A detection method of air bubbles inside the resin materials

○ Kato Takahiro<sup>1, 2</sup>, Saigo Kazuhiko<sup>2</sup>, Anraku Teruo<sup>1</sup>  
<sup>1</sup>Yamamoto Precious Metal Co., Ltd., <sup>2</sup>Kochi University of Technology

P-13 Electrical welding of titanium alloy wires for orthodontics

○ Nakao Noriko, Matsunaga Junko, Watanabe Etsuko, Yoshida Noriaki, Watanabe Ikuya  
Nagasaki University

P-14 Dental restorations created by 3D printer Part 1 Dimensional accuracy of the fixture created by stereo lithography

○ Ishida Yoshiki, Miyasaka Taira, Aoki Harumi, Aoyagi Yusuke, Miura Daisuke, Shinya Akiyoshi, Shimizu Sakura  
Nippon Dental University at Tokyo

P-15 Antibacterial activity of apatite photocatalyst(La-OAP)/HAP complex

○ Komada Yuko, Kamemizu Hideo, Noda Yoko, Iijima Mayumi, Hotta Masato, Tamaki Yukimichi  
Asahi University

P-16 Model studies on bleaching with toothpaste containing apatite photocatalyst

○ Kamemizu Hideo, Komada Yuko, Noda Yoko, Horiguchi Takashi, Iijima Mayumi, Wakamatsu Nobukazu, Hotta Masato, Tamaki Yukimichi  
Asahi University

P-17 The application limit of the bending test

○ Nagasawa Sakae, Kawase Yuji, Takeuchi Ken  
Matsumoto Dental University

P-18 Comparative study of osteogenic differentiation induced by BMP-2-contained osteogenic media for mouse and human mesenchymal stem cells

○ Honda Yoshitomo, Hashimoto Yoshiya, Imai Koichi, Takeda Shoji  
Osaka Dental University

P-19 A study of strategy beneficial for patients by utilizing title system of Japanese society for dental materials and devices

○ Kanatani Mitsugu, Okawa Seigo, Yamaga Yoshio, Kaneko Hiromi, Izumi Kenji  
Niigata University

October 19 (Saturday)

Hall C

10:00 – 16:30 General Presentation (Poster Session) (14:15 – 15:45 Discussion)

P-20 Analysis of the zirconia surface treated with phosphoric acid monomers

○ Nagaoka Noriyuki, Tamada Yoshiyuki, Irie Masao, Yoshihara Kumiko, Yoshida Yasuhiro, Nishigawa Goro, Maruo Yukinori, Matsumoto Takuya, Minagi Shogo, Hayakawa Satoshi  
Okayama University

P-21 Effect of acid treatment on bond strength of resin composite to Er,Cr:YSGG Laser prepared dentin

○ Kato Chikage, Suzuki Masaya, Arita Shoko, Kawashima Satoki, Takada Mayo, Nagai Yuta, Shinkai Koichi  
Nippon Dental University at Niigata

P-22 Dentin bond strengths of a dual-cured adhesive system –Shear bond strengths without light irradiation–

○ Suzuki Masaya, Takada Mayo, Kawashima Satoki, Arita Shoko, Nagai Yuta, Kato Chikage, Shinkai Koichi  
Nippon Dental University at Niigata

P-23 Evaluation of the adhesive strength of resins with a newly developed primer against precious metals, non-precious metals and ceramics

○ Kimura Hiroaki<sup>1</sup>, Kato Takahiro<sup>1,2</sup>, Saigou Kazuhiko<sup>2</sup>, Anraku Teruo<sup>1</sup>  
<sup>1</sup>Yamamoto Precious Metal Co., Ltd., <sup>2</sup>Kochi University of Technology

P-24 Bond strength of opaque porcelain materials to Co-Cr alloys frame using laser-sintering method

○ Shinya Akihiro<sup>1</sup>, Atarashi Mitsuhiro<sup>2</sup>, Mori Machiko<sup>2</sup>, Shinya Akikazu<sup>1, 3</sup>, Hatta Minori<sup>1</sup>, Kuroda Soichi<sup>1</sup>, Harada Kosuke<sup>1</sup>, Aoki Harumi<sup>1</sup>, Sukanuma Kaichiro<sup>2</sup>, Miyasaka Taira<sup>1</sup>, Shinya Akiyoshi<sup>1</sup>  
<sup>1</sup>Nippon Dental University at Tokyo, <sup>2</sup>SANWA Dental, <sup>3</sup>University of Turku

P-25 Effect of long term immersion in disinfectant of silicone rubber impressions with multiple-mix-technique on the dimensional accuracy of stone models

○ Hiraguchi Hisako, Kaketani Masahiro, Kikuchi Hisaji, Hirose Hideharu, Yoneyama Takayuki  
Nihon University

P-26 Methods to obtain suitable bonding of silicone rubber to mouth guard sheet

○ Fukasawa Shintaro, Churei Hiroshi, Wada Takahiro, Uo Motohiro, Takahashi Hidekazu, Ueno Toshiaki  
Tokyo Medical and Dental University

P-27 Surface modification effect of teeth and dental materials –Antimicrobial effect of a novel silane coupling agent–

○ Miyake Kaori<sup>1</sup>, Nihei Tomotaro<sup>1</sup>, Tomiyama Kiyoshi<sup>1</sup>, Mukai Yoshiharu<sup>1</sup>, Ohashi Katsura<sup>1</sup>,

Oshikawa Akihiro<sup>1</sup>, Yoshino Norio<sup>2</sup>, Teranaka Toshio<sup>1</sup>  
<sup>1</sup>Kanagawa Dental University, <sup>2</sup>Tokyo University of Science

P-28 Effect of low-temperature softening type gutta-percha added with Cetylpyridinium chloride on Dental bacteria

○ Tomino Masafumi, Nagano Keiji, Kuroki Kenjiro, Takahashi Yoshifumi, Hayashi Tatsuhide, Kawai Tatsushi  
Aichi Gakuin University

P-29 In-vitro biocompatibility of an expandable root canal filling material in wet condition

○ Eid Ashraf, Watanabe Ikuya  
Nagasaki University

P-30 Development of an antibacterial conditioner containing MDPB –Evaluation of antibacterial effects against oral bacteria–

○ Tatsumi Nanako, Kitagawa Ranna, Kitagawa Haruaki Hayashi Mikako, Imazato Satoshi  
Osaka University

P-31 Study on some properties of a newly developed self-cured acrylic resin with low curing temperature

○ Komada Wataru, Matsukawa Kyoushi, Omori Satoshi, Nemoto Reina, Kumagae Naosuke, Shin Chiharu, Otake Shiho, Matsui Hideto, Kubo Mariko, Miura Hiroyuki  
Tokyo Medical and Dental University

P-32 All-ceramic crown prepared by a new method – the influence of glass infiltration condition –

○ Masuda Takayuki, Komasa Yutaka, Kakimoto Kazutosi, Inoue Tarou, Takahashi Kazuya  
Osaka Dental University

P-33 Test production of temporary luting agent consisting of PMMA (2) –Pressure Displacement–

○ Ryukata Ichiro, Okada Hidetoshi, Ishida Yoshinori, Kawashima Isao  
Ohu University

P-34 Comparison of dentin tubule occluding ability of four dentin desensitizers

○ Han Rinrin, Okiji Takashi  
Niigata University

P-35 Detection and chemical state analysis of trace metallic elements contained in the oral lichenoid lesion using quantum beams

○ Sugiyama Tomoko<sup>1, 2</sup>, Wada Takahiro<sup>2</sup>, Hongo Toshio<sup>2</sup>, Uo Motohiro<sup>2</sup>  
<sup>1</sup>Jichi Medical University, <sup>2</sup>Tokyo Medical and Dental University

P-36 The development of the new functional water rectified of isotonic property closely to the physiological saline solution's (Part1) –In case of the acidic water–

○ Yoshida Takaichi<sup>1</sup>, Yoshida Koichi<sup>1</sup>, Yoshida Mari<sup>2</sup>  
<sup>1</sup>Toho Dental College, <sup>2</sup>Yoshida Dental Clinic

P-37 Bond strength of orthodontic bracket to enamel with two adhesive systems and additional fiber-reinforced composite intermediate layer

○ Shinya Makiha<sup>1, 2</sup>, Shinya Akikazu<sup>1, 3</sup>

<sup>1</sup>University of Turku, <sup>2</sup>Hioki orthodontic clinic, <sup>3</sup>Nippon Dental University at Tokyo

P-38 Preparation of a poly lactic acid/layered silicate nanocomposite for using as a dental material

○ Nakanishi Ko, Yamagata Shuichi, Hamba Yusuke, Akasaka Tsukasa, Watari Fumio, Iida Junichiro  
Hokkaido University

P-39 Influence of micro/nano materials on osteoblast-like cell

○ Abe Shigeaki, Iwadera Nobuki, Hamba Yusuke, Yamagata Shuichi Akasaka Tsukasa, Yawaka Yasutaka, Watari Fumio  
Hokkaido University

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October 20 (Sunday)

Hall A

9:30 – 11:30 General Presentation (Oral Session)

A-12 Evaluation of mechanical properties of dental composites by multiscale in silico analysis

○ Yamaguchi Satoshi, Imazato Satoshi  
Osaka University

A-13 Evaluation of reference model reproduction using by 3Shape and 3D-Printer

○ Shimizu Sakura<sup>1</sup>, Shinya Akikazu<sup>1, 2</sup>, Kuroda Soichi<sup>1</sup>, Shinya Akihiro<sup>1</sup>, Harada Kosuke<sup>1</sup>, Yamaguchi Yoshio<sup>1</sup>, Kawakami Toru<sup>3</sup>, Aso Toshimasa<sup>3</sup>, Ishida Yoshiki<sup>1</sup>, Miyasaka Taira<sup>1</sup>, Shinya Akiyoshi<sup>1</sup>

<sup>1</sup>Nippon Dental University, <sup>2</sup>University of Turku, <sup>3</sup>ASO International

**A-14** A new method to fabricate zirconia copings using Nd:YVO<sub>4</sub> laser –surface Raman analysis of machined surface–

○ Kazama–Koide Miku, Ohkuma Kazuo, Ogura Hideo, Miyoshi Ai, Miyagawa Yukio  
Nippon Dental University

**A-15** Low temperature degradation and flexural strength change of high translucent zirconia

○ Suzuki Takayuki, Yoshihara Kentaro, Kawai Tatsushi, Murakami Hiroshi, Hattori Masami, Ban Seiji  
Aichi Gakuin University

**A-16** Staining and discoloration of high translucent zirconia

○ Ban Seiji, Okada Yuji, Suzuki Takayuki, Kawai Tatsushi  
Aichi Gakuin University

**A-17** Static and fatigue strength of surface–roughened zirconia

○ Yoshinari Masao, Harada Rino, Soejima Hirotaka, Takemoto Shinji, Hattori Masayuki, Kawada Eiji, Oda Yutaka  
Tokyo Dental College

**A-18** Histological evaluations of bone re–generation in rat calvarial bone defects by nano–apatite/collagen composites

Hatekeyama Wataru, ○Taira Masayuki, Kihara Hidemichi, Kondo Hisatomo  
Iwate Medical University

**A-19** Osteoinduction of recombinant human Bone Morphogenetic Protein–2(rhBMP–2) with the metallic three–dimensional scaffold

○ Fuyamada Hironari, Miyamae Shin, Matsumura Akiko, Ueno Atsuko, Hayashi Tatsuhide, Kawai Tatsushi, Hattori Masami  
Aichi Gakuin University

## Hall A

13:00 – 13:45 General Presentation (Oral Session)

**A-20** Bone adaptation of thin apatite coated zirconia implant

○ Hirota Masatsugu<sup>1</sup>, Hayakawa Tohru<sup>1</sup>, Ohkubo Chikahiro<sup>1</sup>, Sato Mitsunobu<sup>2</sup>, Hara Hiroki<sup>2</sup>, Toyama Takeshi<sup>3</sup>, Tanaka Yasuhiro<sup>4</sup>, Yoshinari Masao<sup>5</sup>

<sup>1</sup>Tsurumi University, <sup>2</sup>Kogakuin University, <sup>3</sup>Nihon University, <sup>4</sup>Kagawa University, <sup>5</sup>Tokyo Dental College

**A-21** Effect of estrogen deficiency on bone formation around surface charged titanium implant

○ Nozaki Kosuke, Yamashita Kimihiro, Nagai Akiko  
Tokyo Medical and Dental University

**A-22** Photofunctionalization of titanium compensates for age–related compromised osteoblastic response

○ Aita Hideki, Kono Mai, Endo Kazuhiko, Koshino Hisashi  
Health Science University of Hokkaido

## Hall A

15:25 – 16:40 General Presentation (Oral Session)

**A-23** Castability and mechanical properties of Zr–14Nb alloys for dental casting

○ Kajima Yuka, Takaichi Atsushi, Doi Hisashi, Tsutsumi Yuusuke, Hanawa Takao, Wakabayashi Noriyuki  
Tokyo Medical and Dental University

**A-24** Evaluation of microstructures of biomedical Co–Cr–Mo alloys through high–pressure torsion

○ Cho Ken<sup>1</sup>, Niinomi Mitsuo<sup>1</sup>, Nakai Masaaki<sup>1</sup>, Hieda Junko<sup>1</sup>, Isik Murat<sup>1</sup>, Horita Zenji<sup>2</sup>  
<sup>1</sup>Tohoku University, <sup>2</sup>Kyusyu University

**A-25** Relationship among Cu contents, microstructures and mechanical properties in as–solutionized Ag–Pd–Au–Cu alloys

○ Hieda Junko<sup>1</sup>, Niinomi Mitsuo<sup>1</sup>, Nakai Masaaki<sup>1</sup>, Cho Ken<sup>1</sup>, Kim Yonghwan<sup>1</sup>, Fukui Hisao<sup>2</sup>

<sup>1</sup>Tohoku University, <sup>2</sup>Aichi Gakuin University

A-26 Corrosion resistance of the magnetic shielding stainless steel composed of solid solution of nitrogen

○ Takada Yukyo<sup>1</sup>, Takahashi Masatoshi<sup>1</sup>, Kikuchi Akira<sup>2</sup>, Tenkumo Taichi<sup>1</sup>

<sup>1</sup>Tohoku University, <sup>2</sup>NEOMAX ENGINEERING

A-27 Evaluation of long-term corrosion rates of metallic dental materials by EIS technique

○ Tsutsumi Yusuke, Doi Hisashi, Hanawa Takao  
Tokyo Medical and Dental University

16:40 – 16:45 Closing Remark

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October 20 (Sunday)

Hall B

9:30 – 16:00 General Presentation (Poster Session) (13:50 – 15:20 Discussion)

P-40 The effect of octacalcium phosphate (OCP) on differentiation of dental epithelial cell

○ Tadaki Mayu, Anada Takahisa, Fukumoto Satoshi, Suzuki Osamu  
Tohoku University

P-41 Cytotoxicity and genotoxicity of oxide nanoparticles in cells

○ Hashimoto Masanori, Toshima Hirokazu, Ida Yusuke, Takebe Futami, Endo Kazuhiko  
Health Sciences University of Hokkaido

P-42 Influence of titanium tetrachloride on cytotoxicity of metal salt

○ Matsuura Ritaro<sup>1</sup>, Mikagi Mikagi<sup>1</sup>, Anraku Teruo<sup>1</sup>, Yamamoto Tetsuya<sup>2</sup>  
<sup>1</sup>Yamamoto precious metal Co., Ltd., <sup>2</sup>Kochi University

P-43 Development of the embryotoxicity test using the hybrid 3D cultivation technique of human hepatocytes and a mouse ES cells – Use of novel feeder layer

○ Imai Koichi<sup>1</sup>, Takeda Shoji<sup>1</sup>, Nakamura Kazuaki<sup>2</sup>, Tanoue Akito<sup>2</sup>  
<sup>1</sup>Osaka Dental University, <sup>2</sup>National Res. Inst. for Child Health and Development

P-44 Development of a cytotoxicity assay based on bioluminescence

○ Orimoto Ai, Suzuki Takahiro, Ueno Atsuko, Kawai Tatsushi, Nakamura Hiroshi, Kanamori Takao  
Aichi Gakuin University

P-45 Improvement in oral environment of elderly requiring long-term care by neutral electrolyzed water –Sterilization effect on denture–

○ Nagamatsu Yuki<sup>1</sup>, Nagamatsu Hiroshi<sup>1</sup>, Murakami Shigeki<sup>2</sup>, Tajima Kiyoshi<sup>1</sup>, Kakigawa Hiroshi<sup>1</sup>,  
Kozono Yoshio<sup>1</sup>

<sup>1</sup>Kyushu Dental University, <sup>2</sup>Kyushu University of Nursing and Social Welfare

P-46 Reaction with aromatic amines and benzoyl peroxide in methanol

○ Hongo Toshio, Wada Takahiro, Uo Motohiro  
Tokyo Medical and Dental University

P-47 Influence of tissue conditioner on angiogenesis in oral mucosa in vitro

○ Wang Wei-qi, Hong Guang, Shimizu Yoshinaka, Sasaki Keiichi  
Tohoku University

P-48 Fracture behavior of dentin-enamel junction region

○ Inoue Toshiko, Saito Makoto, Yamamoto Masato, Nishimura Fumio, Miyazaki Takashi  
Showa University

P-49 The coefficient of friction of titanium and a titanium alloy – Part II Mirror polishing surface –

○ Nagasawa Sakae, Kawase Yuji, Takeuchi Ken  
Matsumoto Dental University

P-50 Microstructure and mechanical properties of Ti-Mo-Cr alloys

○ Ho Wen-Fu<sup>1</sup>, Hsu Hsueh<sup>2</sup>, Kikuchi Hisaji<sup>3</sup>, Kurotani Tomoko<sup>3</sup>, Wu Shih-Ching<sup>2</sup>, Hsu Shih-Kuang<sup>2</sup>  
<sup>1</sup>Da-Yeh University, <sup>2</sup>Central Taiwan University of Sci and Technol, <sup>3</sup>Nihon University

P-51 Bond strengths between Ti-25Nb-xSn alloys and low-fusing porcelain

○ Hsu Hsueh-Chuan<sup>1</sup>, Lin Yi-Hsin<sup>1</sup>, Ho Wen-Fu<sup>2</sup>, Wu Shih-Ching<sup>1</sup>, Hsu Shih-Kuang<sup>1</sup>  
<sup>1</sup>Central Taiwan University of Sci and Technol, <sup>2</sup>Da-yeh University

P-52 Improvement of the photocatalyst ability by the heat treatment of titanium oxide nanotubes

○ Komatsu Obito<sup>1</sup>, Nishida Hisataka<sup>1</sup>, Sekino Tohru<sup>2</sup>, Yamamoto Kazuyo<sup>1</sup>

<sup>1</sup>Osaka Dental University, <sup>2</sup>Tohoku University

P-53 A new phase in the development of high strength pure titanium by Multi-Directional Forging  
○ Hoshi Noriyuki<sup>1</sup>, Saita Makiko<sup>1</sup>, Kumasaka Tomonari<sup>1</sup>, Banka Masako<sup>1,2</sup>, Miura Hiromi<sup>2</sup>, Kimoto Katsuhiko<sup>1</sup>

<sup>1</sup>Kanagawa Dental University, <sup>2</sup>The University of Electro-Communications

P-54 Surface characteristics and adhesion behavior of cobalt chromium alloy fabricated by selective laser melting process

○ Aoki Harumi, Miyasaka Taira, Ishida Yoshiki, Aoyagi Yusuke, Miura Daisuke, Shinya Akiyoshi  
Nippon Dental University at Tokyo

P-55 Effect of Cu content on mechanical strength and microstructure of commercial dental Au-Ag-Pd type alloy with different Cu content fabricated at various solidification temperatures

○ Yasuda Tomoya<sup>1</sup>, Akahori Toshikazu<sup>1</sup>, Sugimura Toyohiko<sup>2</sup>, Fukui Hisao<sup>2</sup>

<sup>1</sup>Meijo University, <sup>2</sup>Aichi Gakuin University

P-56 The EPMA observations of the cast joining area between the cast abutment for implant parts and several kinds of Au-based alloys

○ Kawashima Isao, Ishida Yoshinori, Hayashi Mikita, Kakumoto Yoshimi, Ryukata Ichirou, Okada Hidetoshi  
Ohu University

P-57 Contact corrosion of Ag-Pd-Cu-Au alloys with different Cu content -Analysis of corroded surface by XPS-

○ Kaneko Hiromi, Okawa Seigo, Kanatani Mitsugu, Ito Kyosuke, Yamaga Yoshio, Nomura Shuichi, Izumi Kenji  
Niigata University

P-58 Tendency for fitting accuracy of the casting crown with using general adjustment method for better fitting

○ Fukushima Emiko, Mori Daizaburo, Horiuchi Haruhiko, Kumagai Tomohiro  
GC Corporation

October 20 (Sunday)

Hall C

9:30 - 16:00 General Presentation (Poster Session) (13:50 - 15:20 Discussion)

P-59 Structural analysis of boron in human tooth of S-PRG filler eluate using <sup>11</sup>B-NMR

○ Wada Takahiro, Hongo Toshio, Uo Motohiro  
Tokyo Medical and Dental University

P-60 Water sorption, solubility and corrosion-resistance of trial magnetic resin composite materials

○ Soma Hiroko, Miyagawa Yukio  
Nippon Dental University at Niigata

P-61 Effect of temperature on the color of restorative composite resins

○ Arikawa Hiroyuki, Kanie Takahito, Kikuchi Takafumi  
Kagoshima University

P-62 Preparation and characterization of organo-mineral complex by electrolysis

○ Okawa seigo, Kaneko Hiromi, Yamaga Yoshio, Kanatani Mitsugu, Izumi Kenji  
Niigata University

P-63 Modification effect of novel silane containing double bond (Part 10) -Mechanical properties of experimental composites after water storage-

○ Nihei Tomotaro<sup>1</sup>, Kunzelmann Karl-Heinz<sup>2</sup>, Ohashi Katsura<sup>1</sup>, Miyake Kaori<sup>1</sup>, Oshikawa takaki<sup>1</sup>, Yamanaka Hideki<sup>1</sup>, Suzuki Toshiyuki<sup>1</sup>, Yoshino Norio<sup>3</sup>, Teranaka Toshio<sup>1</sup>

<sup>1</sup>Kanagawa Dental University, <sup>2</sup>Ludwig-Maximilians-Universität München, <sup>3</sup>Tokyo University of Science

P-64 Application of highly ethoxylated bis-phenol A dimethacrylates to the composite resin

○ Aoyagi Yusuke, miyasaka Taira, Aoki Harumi, Isida Yoshiki, Miura Daisuke  
Nippon Dental University at Tokyo

P-65 Bone formation of TGF- $\beta$ 2 immobilized implant in the bone defect of rat femur model

○ Suzuki Takuma, Hayakawa Tohru, Gomi Kazuhiro  
Tsurumi University

P-66 Effect of alendronate immobilization for immediate implantation to rat maxillary bone

○ Raita Yuki<sup>1</sup>, Sato Mitsunobu<sup>2</sup>, Hayakawa Tohru<sup>1</sup>

P-67 Evaluation of angiogenesis in bone regeneration by octacalcium phosphate/gelatin composites

○ Murakami Yoshitaka, Anada Takahisa, Shimauchi Hidetoshi, Suzuki Osamu  
Tohoku University

P-68 Pigment degradation ability of the titanium for implants which anodized the surface. When titanium oxide powder is suspended in a sulfuric acid electrolysis solution

○ Ito Yuki, Onoue Hideaki, Sugao Motoki, Shirachi Yuta, Nonami Toru  
Chukyo University

P-69 Pigment degradation ability of the titanium for implants which anodized the surface. When the titanium oxide powder of a crystal system which is different in an electrolysis solution is suspended –

○ Onoue Hideaki, Ito Yuki, Nonami Toru  
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P-70 The reaction of the tissues around titanium implant to LPS

○ Shuto Takahiro, Wachi Takanori, Makihiro Seicho  
Kyushu University

P-71 Surface modification of Ti-6Al-4V alloy by electron cyclotron resonance plasma oxidation

○ Oikawa Mayumi, Masumoto Hiroshi, Orii Yusuke, Anada Takahisa, Sasaki Keiichi, Suzuki Osamu  
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P-72 Characteristics of experimental resin provisional cement

○ Nagasawa Yuko, Hibino Yasushi, Shigeta Hirotaka, Nakajima Hiroshi  
Meikai University

P-73 Fracture toughness of experimental glass ionomer cement for filling containing resin components

○ Shigeta Hirotaka, Nagasawa Yuko, Hibino Yasushi, Nakajima Hiroshi  
Meikai University

P-74 Shear bond strengths of resin cement to high toughness zirconia

○ Sato Kotaro, Hotta Yasuhiro, Fujishima Akihiro, Miyazaki Takashi  
Showa University

P-75 Surface texture and antibacterial effect of the experimental glass ionomer cements blended with silver-supported zirconium phosphate fillers

○ Fujishima Akihiro, Morisaki Hirobumi, Miyazaki Takashi  
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P-76 Application of  $\alpha$ -TCP/Te-CP Cement to Pulp Capping Materials-Histopathological Evaluation-

○ Takeda Shinpei, Kawano Satoshi, Kamiyama Chikako, Doi Yutaka, Tamaki Yukimiti, Yoshida Takakazu  
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P-77 Application of  $\alpha$ -TCP/Te-CP Cement to Root Canal Sealer

○ Kamiyama Chikako, Takeda Shinpei, Kawano Satoshi, Adachi Masanori, Doi Yutaka, Tamaki Yukimiti, Yoshida Takakazu  
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