

## The 65<sup>th</sup> General Session of the Japanese Society for Dental Materials and Devices (JSDMD)

April 11 (Saturday) - 12 (Sunday), 2015

### ▪ Sendai City Information & Industry Plaza

5th-8th floor of AER, 3-1, Chuo 1-chome, Aoba-ku, Sendai, Miyagi, Japan

April 11 (Saturday)

### ▪ Hall A

9:25 - 9:30 **Opening Remark**

9:30 - 11:15 **General Presentation (Oral Session)**

A - 1 Effect of mechanical stress on osteoblast-like cells seeded on the OCP/gelatin composites

○ Yamada Masakazu, Anada Takahisa, Masuda Taisuke, Yamamoto Teruko, Suzuki Osamu  
Tohoku University

A - 2 Behavior of cell adhesion on micro/nano-patterned materials

○ Akasaka Tsukasa, Kaga Naoyuki, Abe Shigeaki, Yoshida Yasuhiro  
Hokkaido University

A - 3 Preparation of bone morphogenetic complex using sulfonated polyrotaxanes for osteoinduction

○ Terauchi Masahiko, Tamura Atsushi, Harada Kiyoshi, Yui Nobuhiko  
Tokyo Medical and Dental University

A - 4 Fabrication of rod-shaped 3D cell construct composed of human dental pulp-derived stem cells

○ Ito Yoshihiro<sup>1</sup>, Sasaki Jyunichi<sup>1</sup>, Hayashi Mikako<sup>1</sup>, Matsumoto Takuya<sup>2</sup>, Imazato Satoshi<sup>1</sup>  
<sup>1</sup>Osaka University, <sup>2</sup>Okayama University

A - 5 Bone tissue regeneration using SDF-1-loaded scaffolds

○ Date Tomomi, Nakano Ayana, Yamakado Nao, Hirata Isao, Tanimoto Kotaro, Kato Koichi  
Hiroshima University

A - 6 The effects of growth factors and collagen on the differentiation of mesenchymal stem cells into hyaline and fibrous cartilage

○ Sugino Hirotaka, Kanawa Masami, Tanimoto Kotaro, Kato Koichi  
Hiroshima University

A - 7 Spatially-controlled co-culture for analyzing epithelial-mesenchymal interactions

○ Nishikiori Ryo, Kubota Chiharu, Sakakitani Shintaro, Kato Koichi  
Hiroshima University

### ▪ Hall A

14:00 - 15:00 **Special Lecture**

Ultrastructural findings on cells, mineralized matrix and regeneration in bone

Amizuka Norio  
Hokkaido University

15:45 - 16:45 **General Presentation (Oral Session)**

A - 8 Bone regenerative property of a spongy form of octacalcium phosphate/gelatin composite in rabbit tibia bone defects

○Saito Keisuke, Anada Takahisa, Chiba Shinpei, Itoi Eiji, Suzuki Osamu  
Tohoku University

A - 9 Chondrocytic behaviors on polarized hydroxyapatite

○Ebe Noriko, Nagai Akiko, Nozaki Kousuke, Horiuchi Naohiro, Nakamura Miho, Yamashita Kimihiro  
Tokyo Medical and Dental University

A-10 Study on antibacterial activity by silver doped yttria-stabilized zirconia

○Yamada Risa, Nozaki Kosuke, Nemoto Reina Yamasita Kimihiro, Miura Hiroyuki, Nagai Akiko  
Tokyo Medical and Dental University

A-11 In vitro evaluation of tricalcium phosphate cement using different powder preparation

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

16:45 - 17:30 **General Presentation (Oral Session)**

A-12 Kinetic analysis of low temperature degradation of dental zirconia

○Ban Seiji, Suzuki Takayuki, Ando Masahiko, Kawai Tatsushi  
Aichi-Gakuin University

A-13 Hydrothermal apatite synthesis from calcium oxide and polyphosphate ( Part4 )

-Relation between the crystal minor axis and Refractive Index of polyphosphate -

○Narusawa Hideaki<sup>1</sup>, Shiba Toshikazu<sup>2</sup>, Owada Hiroyuki<sup>1</sup>, Kataoka Yu<sup>1</sup>, Miyazaki Takashi<sup>1</sup>  
<sup>1</sup>Showa University, <sup>2</sup>Regenetiss inc

A-14 Development of electrically-debondable dental cements (Part1) - Evaluation of debonding property -

○Kajimoto Noboru, Sekine Kazumitsu, Hamada Kenichi  
Tokushima University

**April 11 (Saturday)**

**• Hall B**

9:00 - 16:30 **General Presentation (Poster Session)**

[Award Challenge Posters P - 1 - P - 2]

(Odd numbers: 11:15 - 12:00, Even numbers: 15:00 - 15:45 Discussion)

P - 1 Application of low-magnetic Zr-14Nb alloy to fixed dental prostheses -Mechanical properties, castability, and bonding strength to porcelain-

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

P - 2 Evaluation of antibacterial effects and influences on bonding abilities of a cavity disinfectant containing MDPB

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

- P - 3 Silk fibroin modified by titanium binding peptide for cell adhesion studies  
 ○Uchida Ryoichiro, Yaguchi Takehiro, Nishiyama Norihiro  
 Nihon University
- P - 4 Inhibitory effects on MMP-8, 9 and cytotoxicity of gold and platinum nanoparticles-  
 ○Hashimoto Masanori<sup>1</sup>, Sasaki Jun-ichi<sup>1</sup>, Yamaguchi Satoshi<sup>1</sup>, Kawai Kouji<sup>2</sup>, Kawakami Hayato<sup>2</sup>,  
 Imazato Satoshi<sup>1</sup>  
<sup>1</sup>Osaka University, <sup>2</sup>Miyoshi Oil and Fat Co.Ltd., <sup>3</sup>Kansai University
- P - 5 Effect of three-dimensional culture on ameloblast differentiation of dental epithelial cells  
 ○Tadaki Mayu, Anada Takahisa, Fukumoto Satoshi, Suzuki Osamu  
 Tohoku University
- P - 6 Development of Culture Substrates for Mesenchymal Stem Cell Culture in Serum-Free Medium  
 ○Yamauchi Yuuka, Hirata Isao, Kanawa Masami, Kato Yukio, Kato Koichi  
 Hiroshima University
- P - 7 The formation of toroid multicellular aggregates by microfabrication technology  
 ○Masuda Taisuke<sup>1</sup>, Anada Takahisa<sup>2</sup>, Suzuki Osamu<sup>2</sup>, Arai Fumihito<sup>1</sup>  
<sup>1</sup>Nagoya University, <sup>2</sup>Tohoku University
- P - 8 Biomineralization of calcium silicate-based endodontics material –Effect of the extract solution on demineralized dentin surface-  
 ○Han Linrin, Yamamoto Shinichi, Okiji Takashi  
 Niigata University
- P - 9 Application of  $\alpha$ -TCP/Te-CP cement to Root Canal Sealer - Histopathological evaluation -  
 Kamiyama Chikako<sup>1</sup>, Takeda Shinpei<sup>1</sup>, Kawano Satoshi<sup>1</sup>, Horiguchi Takashi<sup>2</sup>, Tamaki Yukimichi<sup>1</sup>, Yoshida Takakazu<sup>1</sup>  
<sup>1</sup>Asahi University, <sup>2</sup>Medical Center, Soumagahara Station, Japan Ground Self-Defense Force
- P-10 Bond strength to tooth structure and flexural property of glass-ionomer cement for filling in initial stage:  
 Effect of coating agent  
 ○Irie Masao, Tanaka Jiro, Matsumoto Takuya, Takeda Hiroaki, Torii Yasuhiro,  
 Maruo Yukinori, Nishigawa Goro, Minagi Shogo, Nagaoka Noriyuki  
 Okayama University
- P-11 Consistency and Fracture Toughness Values of Experimental Resin-modified Glass Ionomer Cements for Filling  
 ○Shigeta Hirotaka, Matsumoto Ken-ichi, Awata Satoru, Omatsu Jun, Wada Ken-ichi, Nagasawa Yuko,  
 Hibino Yasushi, Nakajima Hiroshi  
 Meikai University
- P-12 Effects of powder/liquid ratio on strengths of mechano-chemically modified beta-TCP cement  
 ○Ida Yumika, Bae Ji-Young, Sekine Kazumitsu, Kawano Fumiaki, Hamada Kenichi  
 Tokushima University
- P-13 Growth inhibitory effect and cytotoxic effect of experimental dental cements containing phytic acid against bacteria  
 ○Sasamoto Yohei, Nezu Takashi, Hirose Yukito, Endo Kazuhiko, Ochi Morio  
 Health Sciences University of Hokkaido

- P-14 Crystal growth by glass-ionomer cement elutes on tooth structure and inhibitory effects of demineralization  
 ○Toshima Hirokazu, Kaga Masayuki, Nagano-Takebe Futami, Nezu Takashi, Endo Kazuhiko  
 Health Sciences University of Hokkaido
- P-15 Antibacterial effect and color change of the experimental dental cements blended with silver-supported fillers  
 ○Fujishima Akihiro, Morisaki Hirobumi, Kobayashi Mikihiro, Miyazaki Takashi  
 Showa University
- P-16 Characterisation of modified glass ionomer cement by addition of bioactive glass  
 ○Valanezhad Alireza, Shiraishi Takanobu, Watanabe Ikuya  
 Nagasaki University
- P-17 Precision polishing of pure titanium and Ti-Ag alloys by use of newly developed polyurea resin bonded mounted wheels  
 ○Kasahara Hiroaki<sup>1</sup>, SatoHideaki<sup>1</sup>, Takahashi Masatoshi<sup>2</sup>  
<sup>1</sup>Tokyo City University, <sup>2</sup>Tohoku University
- P-18 Surface properties of gold-deposited titanium treated with alkanethiol  
 ○Saitoh Setsuo, Sasaki Kaori, Taira Masayuki, Hattori Masayuki  
 Iwate Medical University
- P-19 Porous pure titanium prepared by sponge replication method and its bioactivity  
 ○Wen-Fu Ho<sup>1</sup>, Peng-Hsiang Wang<sup>2</sup>, Hsueh-Chuan Hsu<sup>3</sup>, Shih-Ching Wu<sup>3</sup>, Shih-Kuang Hsu<sup>3</sup>  
<sup>1</sup>National Univ. of Kaohsiung, <sup>2</sup>Da-Yeh Univ., <sup>3</sup>Central Taiwan Univ. of Sci. and Tech.
- P-20 A study on the porous structure and mechanical properties of a biomedical Ti-Nb-Mo alloy  
 Hsueh-Chuan Hsu<sup>1</sup>, ○Wen-Yu Hsiao<sup>1</sup>, Wen-Fu Ho<sup>2</sup>, Shih-Ching Wu<sup>1</sup>, Shih-Kuang Hsu<sup>1</sup>  
<sup>1</sup>Central Taiwan Univ. of Sci. and Tech., <sup>2</sup>National Univ. of Kaohsiung
- P-21 Corrosion resistance of ternary Ti-Nb-Mo alloys in Hank's solution  
 Hsueh-Chuan Hsu<sup>1</sup>, ○Ching-Min Liang<sup>1</sup>, Cheng-Feng Wang<sup>2</sup>, Wen-Fu Ho<sup>3</sup>, Shih-Kuang Hsu<sup>1</sup>,  
 Shih-Ching Wu<sup>1</sup>, Hsi-Chen Lin<sup>1</sup>  
<sup>1</sup>Central Taiwan Univ. of Sci. and Tech., <sup>2</sup>Min-Hwei College of Health Care Management,  
<sup>3</sup>National Univ. of Kaohsiung
- P-22 Frictional properties of diamond-like carbon coating formed on orthodontic stainless steels by plasma-based ion implantation/deposition  
 ○Iijima Masahiro, Muguruma Takeshi, Nagano-Takebe Futami, Kawaguchi Kyotaro, Endo Kazuhiko  
 Health Sciences University of Hokkaido
- P-23 Effect on mechanical properties by Cr of Co-Cr-Mo-N alloy for dental casting  
 ○Doi Hisashi<sup>1</sup>, Ashida Maki<sup>1</sup>, Tsutsumi Yusuke<sup>1</sup>, Nomura Naoyuki<sup>2</sup>, Hanawa Takao<sup>1</sup>  
<sup>1</sup>Tokyo Medical and Dental University, <sup>2</sup>Tohoku University
- P-24 Collection of grinding dust with stainless steel mesh filter during amalgam removal  
 ○Aoyagi Yusuke, Miyasaka Taira, Aoki Harumi, Soma Hiroko, Ishida Yoshiki, Miura Daisuke  
 The Nippon Dental University

- P-25 Relationship between solution treatment and mechanical properties of newly developed Ag-Pd-Cu-Au system alloy  
 ○Hoshiya Yushi<sup>1</sup>, Akahori Toshikazu<sup>1</sup>, Fukui Hisao<sup>2</sup>, Niinomi Mistuo<sup>3</sup>  
<sup>1</sup>Meijo University, <sup>2</sup>Aichi Gakuin University, <sup>3</sup>Tohoku University
- P-26 Effects of Au<sub>2</sub>Nb precipitation on magnetic susceptibility of Au-Nb alloy for biomedical application  
 ○Inui Shihoko, Uyama Emi, Hamada Kenichi  
 Tokushima University
- P-27 Application of Hexagonal Boron Nitride for Gold Alloy Casting in Air  
 ○Kanatani Mitugu, Okawa Seigo, Izumi Kenji, Kimura Isao  
 Niigata University
- P-28 In vitro Assessment of some dental noble metal alloy in tincture of iodine by immersion tests  
 ○Ishida Yoshinori, Okada Hidetoshi, Hayashi Mikita, Kawashima Isao  
 Ohu University
- P-29 SEM observation on the insurance-applied CAD/CAM blocks  
 ○Uno Shigeru<sup>1</sup>, Abo Tomoko<sup>2</sup>, Yamada Toshimoto<sup>1</sup>  
<sup>1</sup>Toranomon Hospital, <sup>2</sup>Tsurumi University
- P-30 EPMA analysis of the bonding interface between primer-treated zirconia and veneering porcelain (Part 2)  
 ○Kazama-Koide Miku, Miyagawa Yukio  
 Nippon Dental University
- P-31 Evaluation of marginal reproducibility of zirconia blank for CAD/CAM  
 ○Iwasaki Naohiko, Takahashi Hidekazu, Suzuki Tetsuya  
 Tokyo Medical and Dental University
- P-32 Accuracy of the crown with the digital impression using cara TRIOS®  
 ○Shimizu Sakura<sup>1</sup>, Shinya Akikazu<sup>1,2</sup>, Nitsuma Akinori<sup>1</sup>, Kuroda Soichi<sup>1</sup>,  
 Gomi Harunori<sup>1</sup>, Shinya Akiyosi<sup>1</sup>  
<sup>1</sup>Nippon Dental University, <sup>2</sup> University of Turku
- P-33 Development of hybrid composite resin for CAD/CAM processing (Part3): Polishability and wear resistance  
 ○Kato Takahiro, Yamada Bunichiro, Anraku Teruo  
 Yamamoto Precious Metal Co., Ltd.
- P-34 Fabrication of biodegradable scaffolds with fused deposition modeling: optimization of condition for precision 3D printing  
 ○Try Ky, Fukuda Hiroyuki, Li Zhao, Hirata Isao, Kato Koichi  
 Hiroshima University
- P-35 Change of dentin wettability by Xe excimer lamp irradiation  
 ○Tonami Kenichi, Sano Kazunobu, Iwasaki Naohiko, Takahashi Hidekazu, Araki Kouji  
 Tokyo Medical and Dental University

- P-36 Antibacterial activity of apatite photocatalyst(La-OAP)/HAP complex/PartIII. Influence in an irradiation time.  
 ○Komada Yuko, Tamaki Yukimichi  
 Asahi Univesity
- P-37 Stress-strain response under spherical nanoindentation of tooth Enamel  
 ○Tanaka Reina, Shibata Yo, Miyazaki Takashi  
 Showa University
- P-38 Observation of gap formation of composite resin cavity by Optical Coherence Tomography (OCT)  
 ○Takahashi Hidekazu<sup>1</sup>, Iwasaki Naohiko<sup>1</sup>, Suzuki Tetsuya<sup>1</sup>, Sumi Yasumori<sup>2</sup>  
<sup>1</sup>Tokyo Medical and Dental University, <sup>2</sup>Nastional Center for Geriatric and Gerontology
- P-39 Characteristics of glass fiber-reinforced plastic orthodontic wire with glass fiber having high strength  
 ○Tanimoto Yasuhiro, Minami Naomi, Yao Eriko, Yamaguchi Masaru,  
 Nagakura Manamu, Nishiyama Naohiro, Kasai Kazutaka  
 Nihon University at Matsudo
- P-40 Evaluation on the effect of lap-strake perforated amorphous calcium phosphate sheets on the sealing  
 of dentinal tubules  
 ○Ido Yuuki<sup>1</sup>, Isai Arata<sup>1</sup>, Yamamoto Ei<sup>1</sup>, Kato Nobuhiro<sup>1</sup>, Nishikawa Hiroaki<sup>1</sup>, Yasuo Kenzo<sup>2</sup>,  
 Hashimoto Yoshiya<sup>2</sup>, Yoshikawa Kazushi<sup>2</sup>, Yamamoto Kazuyo<sup>2</sup>, Hontsu Shigeki<sup>1</sup>  
<sup>1</sup>Kinki University, <sup>2</sup>Osaka Dental University
- P-41 Retentive force of dental magnetic attachments applied to implant superstructures  
 ○Takahashi Masatoshi<sup>1</sup>, Mashio Go<sup>2</sup>, Kikuchi Akira<sup>3</sup>, Takada Yukyo<sup>1</sup>  
<sup>1</sup>Tohoku University, <sup>2</sup>GC Corporation, <sup>3</sup>NEOMAX ENGINEERING Co.,Ltd.
- P-42 Development of thermoplastic composite for application of clasp  
 ○Nagakura Manamu, Tanimoto Yasuhiro, Teshima Masahiro, Nishiyama Norihiro  
 Nihon University at Matsudo
- P-43 Influence of polishing with one-step PMTC pastes on surface roughness of enamel and restoratives  
 ○Kawamoto Ryo, Takamizawa Toshiki, Tsubota Keishi, Kurokawa Hiroyasu, Miyazaki Masashi  
 Nihon University
- P-44 Comparison among shock-absorbing capabilities of commercial mouthguard materials under the same condition  
 ○Fukasawa Shintaro, Churei Hiroshi, Shirako Takahiro, Abe Keisuke,  
 Wada Takahiro, Uo Motohiro, Takahashi Hidekazu, Ueno Toshiaki  
 Tokyo Medical and Dental University
- P-45 The effect of the paste containing functional TCP and sodium fluoride to enamel surface  
 ○Miyamoto Koji, Tajima Kenichi, Oritani Tadato  
 3M Health Care Limited
- P-46 Coating of stainless steel by alkali treatment method for orthodontic applications  
 ○He Xiaoxi, Valanezhad Alireza, Shiraishi Takanobu, Yoshida Noriaki, Watanabe Ikuya  
 Nagasaki University

**April 12 (Sunday)**

▪ **Hall A**

9:00 - 11:15 **General Presentation (Oral Session)**

A-15 Development of the nickel free dental magnetic attachment using a magnetic shield composed of a multilayered nitrogen solid-solution phase

○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 Co., Ltd.

A-16 Formation and hardening behavior of L1<sub>0</sub>-type ordered beta prime phase in as-solutionized dental Ag-Pd-Au-Cu alloys

○Liu Hui-Hong<sup>1</sup>, Niinomi Mitsuo<sup>1</sup>, Nakai Masaaki<sup>1</sup>, Cho Ken<sup>1</sup>, Fukui Hisao<sup>2</sup>  
<sup>1</sup>Tohoku University, <sup>2</sup>Aichi Gakuin University

A-17 Surface composition and corrosion resistance of cobalt alloys containing large amount of chromium

Tsutsumi Yusuke<sup>1</sup>, ○Hanawa Takao<sup>1</sup>, Doi Hisashi<sup>1</sup>, Ashida Maki<sup>1</sup>, Nomura Naoyuki<sup>2</sup>  
<sup>1</sup>Tokyo Medical and Dental University, <sup>2</sup>Tohoku University

A-18 Development of antibacterial surface layer on titanium by micro-arc oxidation treatment

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

A-19 Influence of sulfide concentration on the discoloration of titanium

○Harada Rino, Takemoto Shinji, Kinoshita Hideaki, Yoshinari Masao, Kawada Eiji  
Tokyo Dental College

A-20 Osteoblast attachment on nanostructured β-type titanium alloys subjected to severe plastic deformation

○Yilmazer Hakan<sup>1</sup>, Niinomi Mitsuo<sup>1</sup>, Cho Ken<sup>1</sup>, Nakai Masaaki<sup>1</sup>, Liu Hui-Hong<sup>1</sup>,  
Todaka Yoshikazu<sup>2</sup>, Burak Dikici<sup>3</sup>, Şen Mustafa<sup>4</sup>, Shiku Hitoshi<sup>1</sup>, Matsue Tomokazu<sup>1</sup>  
<sup>1</sup>Tohoku University, <sup>2</sup>Toyohashi University of Technology, <sup>3</sup>Yuzuncu Yil University,  
<sup>4</sup>Izmir Katip Celebi University

A-21 Effects of chromium content on the microstructure of nitrogen added Co-Cr-Mo alloys for dental applications

○Nomura Naoyuki<sup>1</sup>, Doi Hisashi<sup>2</sup>, Tsutsumi Yusuke<sup>2</sup>, Hanawa Takao<sup>2</sup>  
<sup>1</sup>Tohoku University, <sup>2</sup>Tokyo Medical and Dental University

A-22 Evolution of microstructure and enhancement of mechanical properties of biomedical Co-Cr-Mo alloy by high-pressure torsion processing

○Isik Murat<sup>1</sup>, Niinomi Mitsuo<sup>1</sup>, Cho Ken<sup>1</sup>, Nakai Masaaki<sup>1</sup>, Liu Hui-Hong<sup>1</sup>, Horita Zenji<sup>2</sup>  
<sup>1</sup>Tohoku University, <sup>2</sup>Kyushu University

A-23 Effect of carbon addition on mechanical properties of Co-Cr-W-based dental alloys containing high concentrations of Cr and N

○Yamanaka Kenta<sup>1</sup>, Mori Manami<sup>1,2</sup>, Kuramoto Koji<sup>3</sup>, Chiba Akihiko<sup>1</sup>  
<sup>1</sup>Tohoku University, Univ., <sup>2</sup>Sendai National College of Technology, <sup>3</sup>Eiwa

▪ **Hall A**

13:00 - 14:00 **Special Lecture and Special Seminar for Dental Materials Adviser / Senior Adviser**

Surface and microstructure control of metallic biomaterials

Narushima Takayuki  
Tohoku University

14:45 - 16:30 **General Presentation (Oral Session)**

A-24 Development of original powder-liquid mixed type high performance PMMA/MMA based resin

○Tanaka Jiro, Irie Masao, Hara Tetsuya, Matsumoto Takuya  
Okayama University

A-25 Effect of remineralization of enamel subsurface lesions by toothpaste containing *f*TCP and NaF: a micro-CT analysis

○Hamba Hidenori, Nakamura Keiki, Nikaido Toru, Tagami Junji  
Tokyo Medical and Dental University

A-26 Fabrication of all-ceramic crowns by a new method

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

A-27 Development of a dental temporary luting agent by applying methacrylate-based polymers (4) –tensile strength and dissolution-

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

A-28 Accuracy of fit in titanium complete denture base plate fabricated from powder-based electron beam additive manufacturing

○Asakura Masaki, Ueno Atsuko, Tsuruta Shozo, Hayashi Tatsuhide,  
Uematsu Yasuaki, Tomino Masafumi, Kawai Tatsushi  
Aichi Gakuin University

A-29 Accelerated aging test for dental milling resin for CAD/CAM crown

○Okada Ryota, Ando Akihiro, Takeichi Takuro, Nakamura Yoshinori,  
Tanaka Yoshinobu, Kawai Tatsushi, Ban Seiji  
Aichi Gakuin University

A-30 Static friction properties of fluorine or silicon doped DLC-coated orthodontic brackets for controlling surface wettability

○Akaike Shun<sup>1</sup>, Hayakawa Tohru<sup>1</sup>, Hirata Atsushi<sup>2</sup>, Nakamura Yoshiki<sup>1</sup>  
<sup>1</sup>Tsurumi University, <sup>2</sup>Tokyo Institute of Technology

16:30 - 16:35 **Closing Remark**



**April 12 (Sunday)**

**▪ Hall B**

9:30 - 16:30 **General Presentation (Poster Session)**

**(Odd numbers: 11:15 - 12:00, Even numbers: 14:00 - 14:45 Discussion)**

P-47 Bone formation and epithelium attachment towards titanium surface with nano-scaled structure by laser irradiation

○Fukayo Yugo<sup>1</sup>, Amemiya Tuyoshi<sup>1</sup>, Mizutani Masayoshi<sup>2</sup>, Murakami Ryo<sup>3</sup>, Komotori Jun<sup>3</sup>, Hayakawa Tohru<sup>1</sup>

<sup>1</sup>Tsurumi University, <sup>2</sup>Tohoku University, <sup>3</sup>Keio University

P-48 Clinical training questionnaire using a force sensing simulator in implant surgery

○Kinoshita Hideaki, Tanaka Kensuke, Takemoto Shinji, Aichi Tetsuya, Igarashi Toshio, Yoshinari Masao, Kawada Eiji  
Tokyo Dental College

P-49 Nanohardness of transparent dentin

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

P-50 Development of catechin-binding gelatin complex as bone substitute material

○Honda Yoshitomo, Hashimoto Yoshiya, Imai Koichi, Shimizutani Kimishige  
Osaka Dental University

P-51 Change in bone mass and bone quality of rat mandible induced by grinding of upper molar teeth

○Fujitani Wataru, Nakano Takayoshi  
Osaka University

P-52 Preparation of partially hydrolyzed octacalcium phosphate/gelatin composites and their cellular response

○Ezoe Yushi, Anada Takahisa, Kobayashi Kazuhito, Handa Takuto, Takahashi Tetsu, Suzuki Osamu  
Tohoku University

P-53 Cell viability by mixing conditions with nanomaterials - Zinc oxide and dental monomer -

○Shirai Tsubasa, Imai Koichi  
Osaka Dental University

P-54 Influence of multi-walled carbon nanotubes (MWCNTs) to the myocardium contraction rhythm by ES cell differentiation

○Imai Koichi, Shirai Tsubasa  
Osaka Dental University

P-55 Literature research regarding developmental and reproductive toxicity induced by di-n-butyl phthalate - Part 2: Human toxicity

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

- P-56 Preparation and characteristics of nano-sized hydroxyapatite via aqueous precipitation method  
 Ho Wen-Fu<sup>1</sup>, ○Liu Mei-Yi<sup>2</sup>, Hsu Hsueh-Chuan<sup>3</sup>, Wu Shih-Ching<sup>3</sup>, Hsu Shih-Kuang<sup>3</sup>  
<sup>1</sup>National Univ. of Kaohsiung, <sup>2</sup>Da-Yeh Univ., <sup>3</sup>Central Taiwan Univ. of Sci. and Tech.
- P-57 A study of antibacterial peptides grafted onto nano-hydroxyapatite powders  
 Wu Shih-Ching<sup>1</sup>, ○Wu Ying-Ting<sup>1</sup>, Ho Wen-Fu<sup>2</sup>, Hsu Hsueh-Chuan<sup>1</sup>, Hsu Shih-Kuang<sup>1</sup>  
<sup>1</sup>Central Taiwan Univ. of Sci. and Tech., <sup>2</sup>National Univ. of Kaohsiung
- P-58 *In vitro* and *in vivo* evaluation of porous bioglass/3Y-TZP bioceramic scaffolds  
 Hsu Shih-Kuang<sup>1</sup>, ○Tsai Meng-Han<sup>1</sup>, Liao Huei-Jyuan<sup>1</sup>, Lin Hsi-Chen<sup>1</sup>, Wu Shih-Ching<sup>1</sup>,  
 Ho Wen-Fu<sup>2</sup>, Hsu Hsueh-Chuan<sup>1</sup>  
<sup>1</sup>Central Taiwan Univ. of Sci. and Tech., <sup>2</sup>National Univ. of Kaohsiung
- P-59 Evaluation of biomimetic coprecipitation with calcium phosphate and RGD peptide on magnesium  
 Hsu Shih-Kuang<sup>1</sup>, ○Yeh Tzu-Peng<sup>1</sup>, Hsu Hsueh-Chuan<sup>1</sup>, Ho Wen-Fu<sup>2</sup>, Wu Shih-Ching<sup>1</sup>  
<sup>1</sup>Central Taiwan Univ. of Sci. and Tech., <sup>2</sup>National Univ. of Kaohsiung.
- P-60 Fabrication of hydroxyapatite nanofibers with high aspect ratio via simple wet chemical method  
 ○Okada Masahiro, Rahman Kazi Anisur, Kawata Masahiro, Matsumoto Takuya  
 Okayama University
- P-61 Bonding strength of resin cement to zirconia-reinforced lithium silicate glass ceramic blanks for CAD/CAM  
 ○Hotta Yasuhiro<sup>1</sup>, Sasaki Kaori<sup>1</sup>, Sasaki Masakazu<sup>1</sup>, Sato Kotaro<sup>1</sup>,  
 Fujishima Akihiro<sup>1</sup>, Takanashi Tomohiro<sup>2</sup>, Miyazaki Takashi<sup>1</sup>  
<sup>1</sup>Showa University, <sup>2</sup>KaVo Dental Systems Japan
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 ○Miura Daisuke, Miyasaka Taira, Aoki Harumi, Soma Hiroko, Aoyagi Yusuke, Ishida Yoshiki  
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- P-64 Surface modification of titanium oxide nanotubes with polyethylene glycol  
 ○Nishida Hisataka<sup>1</sup>, Honda Yoshitomo<sup>2</sup>, Takeuchi Osamu<sup>2</sup>, Sekino Tohru<sup>1</sup>  
<sup>1</sup>Osaka University, <sup>2</sup>Osaka Dental University
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 ○Suzuki Takayuki, Ando Masahiko, Asakura Masaki, Kawai Tatsushi,  
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- P-66 Occlusal wear of resin blocks for CAD/CAM – Comparison with ceramics for CAD/CAM, dental porcelain and dental synthetic resin for crown and bridge -  
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 ○Takagi Nobuhito<sup>1</sup>, Nakayama Mizuki<sup>2</sup>, Ueno Takayuki<sup>1</sup>, Kumagai Tomohiro<sup>1</sup>  
<sup>1</sup>GC Corporation, <sup>2</sup>GC dental products
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 ○Nagasawa Sakae<sup>1</sup>, Kawase Yuji<sup>1</sup>, Takeuchi Ken<sup>1</sup>, Yoshida Takamitsu<sup>2</sup>  
<sup>1</sup>Matsumoto Dental University, <sup>2</sup>Indiana University
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 ○Matsumoto Naofumi, Kumagai Tomohiro  
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- P-71 Influence of hypochlorous-acid electrolyzed water on composite resins  
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- P-72 Modification effect of novel silane containing double bond (Part 12) –Change in interface between filler and resin matrix of experimental composites–  
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 Oshikawa Akihiro<sup>1</sup>, Tomiyama Kiyoshi<sup>1</sup>, Shimoyama Kazuo<sup>1</sup>, Suzuki Toshiyuki<sup>1</sup>, Mukai Yoshiharu<sup>1</sup>  
<sup>1</sup>Kanagawa Dental University, <sup>2</sup>Dental School of LMU
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 ○Ishida Yoshiki, Miyasaka Taira, Aoki Harumi, Soma Hiroko,  
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- P-74 Influence of various thickness on bonding of fiber reinforced composite resin  
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<sup>1</sup>Fukuoka Dental College, <sup>2</sup>Kyushu Dental University
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 ○Niitsuma Akinori<sup>1</sup>, Shinya Akikazu<sup>1,2</sup>, Kuroda Souiti<sup>1</sup>, Gomi Harunori<sup>1</sup>, Shinya Akiyoshi<sup>1</sup>  
<sup>1</sup>Nippon Dental University, <sup>2</sup>University of Turku
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 ○Egoshi Takafumi, Hayashi Taro, Kurogi Tadafumi, Watanabe Ikuya, Murata Hiroshi  
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 ○Kimura Hiroaki, Sakamoto Takeshi, Yamada Bunichiro, Anraku Teruo  
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 ○Shirako Takahiro, Churei Hiroshi, Fukasawa Shintaro, Wada Takahiro,  
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- P-80 Effect of cement film thickness on bonding durability of resin cement to CAD/CAM resin block  
 ○Fujimi Atsushi, Fukushima Shouichi, Kumagai Tomohiro  
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 ○Yoshihara Kumiko<sup>1</sup>, Nagaoka Noriyuki<sup>1</sup>, Yoshida Yasuhiro<sup>2</sup>  
<sup>1</sup>Okayama University, <sup>2</sup>Hokkaido University
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 ○Wang Weiqi, Hong Guang, Shimizu Yoshinaka, Sasaki Keiichi  
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○Nezu Takashi, Nagano-Takebe Futami, Toshima Hirokazu, Endo Kazuhiko  
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○Fujimura Hidefumi, Fuchigami Kiyomi, Teramae Mitsuji, Nakatsuka Toshiyuki  
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