

## The 70<sup>th</sup> General Session of the Japanese Society for Dental Materials and Devices (JSDMD)

October 14 (Saturday) - 15 (Sunday), 2017

Toki Messe (URL: <http://www.tokimesse.com>)

6-1 Bandaijima, Chuo-ku, Niigata, 950-0078

### October 14 (Saturday)

#### ▪ Hall A

9:40 - 9:45 **Opening Remark**

9:45 - 11:00 **Young Investigator Award Challenge (Oral Session)**

A - 1 Evaluation of ability of a 4-META/MMA adhesive resin incorporating FGF-2-loaded polymer particles to promote tissue regeneration

○Tsuboi Ririko, Kitagawa Haruaki, Sasaki Jun-Ichi, Imazato Satoshi  
Osaka University

A - 2 **Development of zirconia adhesive system Part 2**

○Murakami Takahiro<sup>1</sup>, Takemoto Shinji<sup>2</sup>, Iwasaki Taro<sup>1</sup>, Nishiyama Norihiro<sup>1</sup>, Aida Masahiro<sup>1</sup>  
<sup>1</sup>Nihon University at Matsudo, <sup>2</sup>Iwate Medical University

A - 3 Optimum design of non-metal-clasp denture made of GFRTTP

○Nagakura Manamu, Tanimoto Yasuhiro, Nishiyama Norihiro  
Nihon University at Matsudo

A - 4 Development of image analysis program by using Python - Relationship between a ratio of composite resin matrix and curing temperature -

○Hori Miki<sup>1</sup>, Fujimoto Kotaro<sup>1</sup>, Tomino Masafumi<sup>1</sup>, Hori Tadasuke<sup>1,2</sup>  
Sekine Hironao<sup>2</sup>, Kawai Tatsushi<sup>1</sup>  
<sup>1</sup>Aichi Gakuin University, <sup>2</sup>Alid Inc.

A - 5 Bone response toward nanosecond-pulsed laser-treated zirconia implant

○Hirota Masatsugu, Hayakawa Tohruo  
Tsurumi University

#### ▪ Hall A

13:10 - 14:10 **Special Lecture**

“A novel strategy collaborating with device science and technology in dental materials and devices”

Mizuno Jun  
Waseda University

15:15 - 17:15 **General Presentation (Oral Session)**

A - 6 Development of composite material with comparable hardness to human-enamel

○Ikeda Hiroshi, Nagamatsu Yuki, Shimizu Hiroshi

A - 7 Synthesis of supermolecule-based photocleavable crosslinkers for smart dental materials

○Arisaka Yoshinori, Tamura Atsushi, Takagaki Tomohiro, Tagami Junji, Yui Nobuhiko

Tokyo Medical and Dental University

A - 8 In vitro wear behavior of indirect resin composites against bovine enamel

○Tanaka Kensuke<sup>1</sup>, Someya Tomoko<sup>1</sup>, Kasahara Masaaki<sup>1</sup>, Ohyama Takashi<sup>1</sup>, Takemoto Shinji<sup>2</sup>

Yoshinari Masao<sup>1</sup>, Hattori Masayuki<sup>1</sup>

<sup>1</sup>Tokyo Dental College, <sup>2</sup>Iwate Medical University

A - 9 Evaluation of fracture strength and longevity of CAD/CAM composite crowns

○Yamaguchi Satoshi, Kani Renshirou, Kawakami Kazuma, Inoue Sayuri, Kiba Wakako, Imazato Satoshi

Osaka University

A - 10 Effect of grinding load on machinabilities of resin blocks for CAD/CAM

○Yamamoto Yusuke, Iwasaki Naohiko, Chaiaornsup Patcharanun, Suzuki Tetsuya, Takahashi Hidekazu

Tokyo Medical and Dental University

A - 11 Influence of bosmin treatment on the bond strength of resin cement to tooth surface

○Saito Ryuichi, Ohki Tatsuya, Moriue Taisuke, Igarashi Kazuaki, Ishida Yoshinori, Okada Hidetoshi

Ohu University

A - 12 **Improvement of bonding strength between conventional glass polyalkenoate cements and zirconia ceramics**

○Fujii Yoshirou, Okada Masahiro, Irie Masao, Matsumoto Takuya

Okayama University

A - 13 Influence of composition and P/L ratio of powder-type denture adhesives on adhesive strength and initial viscosity

○Okazaki Hitomi, Yoshida Kazuhiro, Murata Hiroshi

Nagasaki University

**October 14 (Saturday)**

**▪ Hall B**

**9:45 - 16:30 General Presentation (Poster Session)**

**(Odd numbers: 11:10 - 11:55, Even numbers: 14:20 - 15:05 Discussion)**

P - 1 Dynamic mechanical properties and behavior of radical generation for newly developed quick self-curing acrylic resin

○Takase Kazuma, Kurogi Tadafumi, Yamada Mao, Yoshida Kazuhiro, Murata Hiroshi

Nagasaki University

P - 2 **Effect of polymerization temperature on the properties of autopolymerizing resin**

○Morita Koji, Tsuka Hiroki, Doi Kazuya, Abekura Hitoshi, Tsuga Kazuhiro  
Hiroshima University

P - 3 Study of polymer material for denture with self cleaning

○Kumasaka Tomonari, Sakakibara Jun, Hoshi Noriyuki, Kimoto Katsuhiko  
Kanagawa Dental University

P - 4 Development of hybrid composite resin for CAD/CAM processing (Part 6): High filler-filling and strengthening

○Mizobuchi Shingo, Kato Takahiro, Yamazoe Masatoshi, Anraku Teruo  
YAMAKIN Co., Ltd.

P - 5 Study on hybrid ceramics using CAD/CAM (Part 5) -Evaluation of mechanical properties hybrid ceramics by three-point bending test-

○Kameyama Yuka<sup>1</sup>, Ohashi Katsura<sup>1</sup>, Yamaguchi Hiroaki<sup>1</sup>, Miyake Kaori<sup>1</sup>, Oshikawa Akihiro<sup>1</sup>,  
Shimoyama Kazuo<sup>1</sup>, Wada Yuuki<sup>1</sup>, Tanimoto Yasuhiro<sup>2</sup>, Hirayama Satoshi<sup>2</sup>, Nihei Tomotarou<sup>1</sup>  
<sup>1</sup>Kanagawa Dental University, <sup>2</sup>Nihon University

P - 6 Mechanical properties of recent new composite resins for CAD/CAM

○Iwasaki Naohiko, Yasue Toru, Shiozawa Maho, Yamamoto Yusuke, Tanaka Shinji  
Suzuki Tetsuya, Takahashi Hidekazu  
Tokyo Medical and Dental University

P - 7 Flexural strength of experimental resin composite block for CAD/CAM crowns

○Hibino Yasushi, Nagasawa Yuko, Shigeta Hirotaka, Eda Yoshikazu, Matsumoto Shigeki, Omatsu Jun,  
Awata Satoru, Wada Ken-ichi, Nakajima Hiroshi  
Meikai University

P - 8 *In silico* analysis of influence of different silane coupling ratios on compressive strength of CAD/CAM composite resin blocks

○Kashima Kana, Yamaguchi Satoshi, Imazato Satoshi  
Osaka University

P - 9 The effects of glass fiber reinforcement with buffering space toward high functionality of mouth guard

○Churei Hiroshi, Wada Takahiro, Yoshida Yuriko, Tanabe Gen, Wada Takahiro, Fukasawa Shintaro,  
Shirako Takahiro, Uo Motohiro, Takahashi Hidekazu, Ueno Toshiki  
Tokyo Medical and Dental University

P - 10 Mechanical properties of experimental SiC fiber reinforced composite resin

○Taka Norimasa<sup>1</sup>, Aoyagi Yujin<sup>1</sup>, Kimura Tatsuya<sup>2</sup>, Okawa Seigo<sup>1</sup>  
<sup>1</sup>Niigata University, <sup>2</sup>Medical Corporation Tokushinkai Group

P - 11 Mechanical property of SiC fiber reinforced acrylic resin

○Aoyagi Yujin<sup>1</sup>, Taka Norimasa<sup>1</sup>, Kimura Tatsuya<sup>2</sup>, Okawa Seigo<sup>1</sup>  
<sup>1</sup>Niigata University, <sup>2</sup>Medical Corporation Tokushinkai Group

P - 12 Study on water resistance of light-cured glazing agents applied on resin composites

○Aoki Harumi, Miyasaka Taira, Aoyagi Yusuke, Ishida Yoshiki, Miura Daisuke, Harada Yuu, Watanabe Satoru  
Nippon Dental University at Tokyo

- P - 1 3 Analysis of organic sulfur compounds detected from the interface between acrylic resin and noble metal alloys  
○Hiraba Haruto, Koizumi Hiroyasu, Yoneyama Takayuki, Matsumura Hideo  
Nihon University
- P - 1 4 Effect of surface treatment agent on lamination bonding strength of mouth guard sheet materials  
○Tanabe Gen, Churei Hiroshi, Yoshida Yuriko, Wada Takahiro, Uo Motohiro, Ueno Toshiaki  
Tokyo Medical and Dental University
- P - 1 5 Evaluation of laser pretreatment on bonding durability of adhesive resin cements to polyetheretherketone (PEEK)  
○Tsuka Hiroki, Morita Koji, Doi Kazuya, Kobatake Reiko, Abekura Hitosi, Tsuga Kazuhiro  
Hiroshima University
- P - 1 6 Adhesive properties of PEEK by UV irradiation  
○Okawa Seigo, Taka Norimasa, Aoyagi Yujin, Izumi Kenji  
Niigata University
- P - 1 7 Effect of sandblasting on surface roughness and flexural strength of zirconia ceramics  
○Okada Masahiro, Taketa Hiroaki, Torii Yasuhiro, Irie Masao, Matsumoto Takuya  
Okayama University
- P - 1 8 Wettability enhancement of dental zirconia by short annealing (Part 3) Comparison with tooth brushing  
○Tsuruta Shozo, Iwata Junji, Mizuno Masanori, Uematsu Yasuaki, Kawai Tatsushi, Yamamoto Iichiro  
Aichi Gakuin University
- P - 1 9 Effect of sintering conditions on properties of zirconia (Part 2)  
○Kono Hiroshi, Arikawa Hiroyuki, Kikuchi Masafumi  
Kagoshima University
- P - 2 0 Effect of hydrothermal treatment of TZ-3Y-E by yttrium nitrate on tetragonal-monoclinic transformation  
Valanezhad Alireza, Tashima Yumiko, ○Watanabe Ikuya  
Nagasaki University
- P - 2 1 Aesthetic effect of opaque white hydroxyapatite artificial enamel sheet  
○Hirai Mizuki<sup>1</sup>, Hontsu Shigeki<sup>1</sup>, Katayama Ichiro<sup>1</sup>, Kato Nobuhiro<sup>1</sup>, Hashimoto Yoshiya<sup>2</sup>,  
Yoshikawa Kazushi<sup>2</sup>, Yamamoto Kazuyo<sup>2</sup>  
<sup>1</sup>Kinki University, <sup>2</sup>Osaka Dental University
- P - 2 2 Characterization of calcium phosphate coated zirconia  
○Kodama Kouta, Valanezhad Alireza, Murata Hiroshi, Watanabe Ikuya  
Nagasaki University
- P - 2 3 *In vivo* evaluation of carbonate apatite granule: Comparison of bone substitutes in canine mandible defect model  
○Sugiura Yuki, Tsuru Kanji, Tsuchiya Akira, Ishikawa Kunio  
Kyushu University
- P - 2 4 *In vivo* evaluation of carbonate apatite granule in canine peri-implant model  
○Tsuru Kanji, Tsuchiya Akira, Sugiura Yuki, Ishikawa Kunio  
Kyushu University
- P - 2 5 Change in new bone strength of carbonate apatite granule implanted to rabbit femur

- Tsuchiya Akira, Tsuru Kanji, Sugiura Yuki, Ishikawa Kunio  
Kyushu University
- P - 2 6 Novel bioactive porous hydroxyapatite developed using a phosphoric acid-etching treatment  
○Doi Kazuya, Abe Yasuhiko, Okazaki Yohei, Kobatake Reiko, Morita Koji, Tsuka Hiroki, Tsuga Kazuhiro  
Hiroshima University
- P - 2 7 Evaluation of vertical bone augmentation using octacalcium phosphate–gelatin composites  
○Iwama Ryosuke, Shiwaku Yukari, Anada Takahisa, Takahashi Tetsu, Suzuki Osamu  
Tohoku University
- P - 2 8 Effect of calcium phosphate materials on the differentiation of osteocyte cell line  
○Sai Yuko, Anada Takahisa, Shiwaku Yukari, Takahashi Tetsu, Suzuki Osamu  
Tohoku University
- P - 2 9 Fatigue Resistance of GUMMETAL Clasps  
○Shimamoto Kazuya, Tamaki Yukimichi, Wakamatsu Nobukazu, Iwahori Masatoshi, Miyao Mtonobu  
Asahi University
- P - 3 0 Influence of surface modification for structure of titanium thin membrane  
○Kobatake Reiko, Doi Kazuya, Morita Koji, Tsuka Hiroki, Kubo Takayasu, Tsuga Kazuhiro  
Hiroshima University
- P - 3 1 Dimensional accuracy of partial denture framework fabricated by electron beam melting system  
○Asakura Masaki, Hayashi Tatsuhide, Kobayashi Shuichiro, Aimu Koki, Kawai Tatsushi  
Aichi Gakuin University
- P - 3 2 Accuracy of titanium alloy fabricated selective laser sintering  
○Shiratori Sakura<sup>1</sup>, Kuroda Soichi<sup>1</sup>, Shinya Akikazu<sup>1,2</sup>, Niitsuma Akinori<sup>1</sup>, Fujishima Shin<sup>1</sup>,  
Gomi Harunori<sup>1</sup>  
<sup>1</sup>Nippon Dental University at Tokyo, <sup>2</sup>University of Turku
- P - 3 3 Mechanical properties of samples fabricated by selective laser sintering of titanium metal powder  
○Harada Yuu, Miyasaka, Taira, Ishida Yoshiki, Watanabe Satoru, Aoki Harumi, Aoyagi  
Yusuke, Miura Daisuke  
Nippon Dental University at Tokyo
- P - 3 4 Study on the effective condition of heat treatment on the anisotropy control of selective laser melted Co-Cr alloy  
○Kajima Yuka<sup>1,2</sup>, Takaichi Atsushi<sup>2</sup>, Nakamoto Takayuki<sup>3</sup>, Nuttaphon Kittikundecha<sup>2</sup>, Nomura Naoyuki<sup>1</sup>,  
Takahashi Hidekazu<sup>2</sup>, Hanawa Takao<sup>2</sup>, Wakabayashi Noriyuki<sup>2</sup>, Kawasaki Akira  
<sup>1</sup>Tohoku University, <sup>2</sup>Tokyo Medical and Dental University,  
<sup>3</sup>Technology Research Institute of Osaka Prefecture
- P - 3 5 Milling characteristics of CAD/CAM resin blocks and ceramic blocks  
○Hikita Kazuhiro, Maida Takeo, Nezu Takashi, Endo Kazuhiko, Saitoh Masato  
Health Sciences University of Hokkaido

P - 3 6 Study on 3D scanning accuracy of the bridge abutment model

○Ishida Yoshiki, Miyasaka Taira, Aoki Harumi, Aoyagi Yusuke, Miura Daisuke,  
Harada Yuu, Watanabe Satoru,  
Nippon Dental University at Tokyo

P - 3 7 Study for the dimensional accuracy of a 3D printed arch form model -Influence of design shape and build direction-

○Hori Tadasuke<sup>1,2</sup>, Hori Miki<sup>1</sup>, Sekine Hironao<sup>1</sup>, Kawai Tatsushi<sup>1</sup>  
<sup>1</sup>Aichi Gakuin University, <sup>2</sup>Alid Inc.

P - 3 8 Development of visible light-polymerized soft denture liners with 2-EHMA, i-BMA and ATBC - Biocompatibility -

○Mori Tomoyasu, Takase Kazuma, Egoshi Takafumi, Murata Hiroshi  
Nagasaki University

P - 3 9 Cell viability by 3D model with interaction between nano-zinc oxide and Bis-GMA

Shirai Tsubasa, ○Imai Koichi  
Osaka Dental University

P - 4 0 Study on photodynamic therapy with 8-MOP for oral mucosal disease

○Ishikawa Hiroki, Imai Koichi  
Osaka Dental University

P - 4 1 Micro/nano-patterning of gelatin by crosslinking with genipin

○Akasaka Tsukasa, Abe Shigeaki, Yoshida Yasuhiro  
Hokkaido University

P - 4 2 Mesenchymal stem like cells derived from human skin integration-free iPS cells for bone augmentation

○Ueda Mamoru, Hashimoto Yoshiya, Honda Yoshitomo, Imai Koichi  
Osaka Dental University

P - 4 3 Effects of the setting and removal times of telescopic zirconia crowns on retentive force and settling

○Yoshikawa Yusuke, Torii Katsunori, Fujiki Suguru, Shibata Shunsuke, Tanaka Junko, Tanaka Masahiro  
Osaka Dental University

P - 4 4 Proposal for fabrication of models by development of next generation material -Physical properties of super fast setting and fluidity dental stone-

○Kojima Kenji, Mori Daizaburo, Kumagai Tomohiro  
GC Corporation

P - 4 5 Application of neutral electrolyzed water to prevention of infection during gypsum model trimming

○Nagamatsu Yuki, Nagamatsu Hiroshi, Ikeda Hiroshi, Shimizu Hiroshi  
Kyushu Dental University

**October 14 (Saturday)**

▪ **Foyer**

9:45 - 17:15 **Companies Exhibition**

**October 15 (Sunday)**

▪ **Hall A**

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

A - 14 Controlled release property of drug models on glass ionomer cement containing nanoporous materials

Era Yuko, Nakanishi Ko, ○Abe Shigeaki, Tamai Miho, Akasaka Tsukasa, Yoshida Yasuhiro  
Hokkaido University

A - 15 Biofilm formation via oral bacterial power generation by a microbial fuel cell

○Kameda Takashi, Oka Shunya, Ohkuma Kazuo  
Nippon Dental University at Niigata

A - 16 In vivo evaluation of carbonate apatite granule.: Comparison of bone substitutes in canine mandible defect model

○Ishikawa Kunio, Tsuchiya Akira, Sugiura Yuki, Tsuru Kanji  
Kyushu University

A - 17 Effect of mixing ratio of OCP and gelatin on bone regeneration of rat calvaria defects

○Sakai Susumu, Shiwa Yukari, Anada Takahisa, Suzuki Osamu  
Tohoku University

A - 18 Identification of the first minerals formed during endochondral ossification

○Hara Emilio Satoshi, Okada Masahiro, Nagaoka Noriyuki, Matsumoto Takuya  
Okayama University

A - 19 Masking effect of highly translucent multi-layer monolithic zirconia crown

○Okamura Mitsunobu<sup>1</sup>, Yokosuka Masato<sup>2</sup>, Shimizu Hiroshi<sup>3</sup>, Masumi Shiniti<sup>3</sup>, Ban Seiji<sup>4</sup>

<sup>1</sup>Okamura Dental Clinic, <sup>2</sup>Yokosuka Dental Clinic, <sup>3</sup>Kyushu Dental University, <sup>4</sup>Aichi Gakuin University

A - 20 Development of translucent modifier for dental zirconia

○Ban Seiji, Okuda Yuji, Kawai Tatsushi  
Aichi Gakuin University

A - 21 Fluorescence properties of Tm<sup>3+</sup>/Er<sup>3+</sup> co-doped dental translucent zirconia

○Okamura Shinya, Nishida Hisataka, Nakano Yoshiro, Wakabayashi Kazumichi, Nakamura Takashi,  
Sekino Tohru, Yatani Hirohumi  
Osaka University

▪ **Conference Room**

12:00 - 13:00 **Luncheon Seminar**

Dental Materials Adviser/Senior Adviser

Uruda Eiichi

GlaxoSmithKline Consumer Healthcare Japan K.K.

▪Hall A

14:25 - 16:25 General Presentation (Oral Session)

- A - 22 Electrical and structural evaluation of  $\beta$ -tricalcium phosphate electret with highly dense charges  
○Nozaki Kosuke, Yamashita Kimihiro, Nagai Akiko  
Tokyo Medical and Dental University
- A - 23 Preparation of various calcium phosphates loaded with protamine and its anti-bacterial property  
○Abe Kodai<sup>1</sup>, Honda Michiyo<sup>1</sup>, Iohara Keishi<sup>2</sup>, Yamamoto Takatsugu<sup>3</sup>, Hayakawa Tohru<sup>3</sup>,  
Aizawa Mamoru<sup>1</sup>  
<sup>1</sup>Meiji University, <sup>2</sup>Maruha Nichiro Corporation, <sup>3</sup>Tsurumi University
- A - 24 Apatite thin film deposition by Ca-CO<sub>3</sub>-PO<sub>4</sub> complex aqueous solution spray coating method  
○Yagi Ryo<sup>1</sup>, Hirota Masatsugu<sup>1</sup>, Toyama Takesi<sup>2</sup>, Mochizuki Chihiro<sup>3</sup>, Sato Mitsunobu<sup>3</sup>,  
Hayakawa Tohru<sup>1</sup>, Ohkubo Chikahiro<sup>1</sup>  
<sup>1</sup>Tsurumi University, <sup>2</sup>Nihon University, <sup>3</sup>Kogakuin University
- A - 25 Hydrothermal apatite synthesis from calcium oxide and polyphosphate (Part 8) -Commercial strong phosphate as phosphate source  
○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>Regentiss Inc.
- A - 26 Modification with magnesium ions on an alkaline heat treated titanium surface to advance bone compatibility  
-Sustained-release environment of ions-  
○Satsume Hanako, Takahashi Masatoshi, Kanyi Mary, Takada Yukyou  
Tohoku University
- A - 27 Evaluation of machinability and surface texture on the MDF titanium  
○Anzai Masateru<sup>1</sup>, Hosni Noriyuki<sup>1</sup>, Kumasaka Tomonari<sup>1</sup>  
Maruo Katsuichirou<sup>1</sup>, Hayakawa Tohru<sup>2</sup>, Okubo Chikahiro<sup>2</sup>, Miura Hiromi<sup>3</sup>, Kimoto Katsuhiko<sup>1</sup>  
<sup>1</sup>Kanagawa Dental University, <sup>2</sup>Tsurumi University,  
<sup>3</sup>Toyohashi University of Technology
- A - 28 Evaluation of antibacterial property of zinc or gallium-introduced titanium surface layer formed by electrochemical treatment  
○Shimabukuro Masaya, Tsutsumi Yusuke, Yamada Risa, Nozaki Kosuke, Ashida Maki, Doi Hisashi,  
Nagai Akiko, Hanawa Takao  
Tokyo Medical and Dental University
- A - 29 Effect of adding support structures for overhanging part on fatigue strength in selective laser melting  
○Takaichi Atsushi<sup>1</sup>, Kajima Yuka<sup>2</sup>, Nakamoto Takayuki<sup>3</sup>, Tsutsumi Yusuke<sup>1</sup>, Nomura Naoyuki<sup>1</sup>  
Takahashi Hidekazu<sup>1</sup>, Hanawa Takao<sup>1</sup>, Wakabayashi Noriyuki<sup>1</sup>  
<sup>1</sup>Tokyo Medical and Dental University, <sup>2</sup>Tohoku University,  
<sup>3</sup>Technology Research Institute of Osaka Prefecture

16:25 Closing Remark



**October 15 (Sunday)**

**▪ Hall B**

**9:30 - 15:45 General Presentation (Poster Session)**

**(Odd numbers: 11:10 - 11:55, Even numbers: 13:30 - 14:15 Discussion)**

P - 4 6 Biofilm adhesion on denture based resin

○Miyake Kaori, Ohashi Katsura, Yamaguchi Hiroaki, Midono Tomoyasu, Kameyama Yuka,  
Wada Yuuki, Oshikawa Akihiro, Shimoyama Kazuo, Nihei Tomotaro  
Kanagawa Dental University

P - 4 7 Influence of the operating conditions on mechanical properties and fitting precision of self-cured resins

○Ohki Tatsuya, Saito Ryuichi, Moriue Taisuke, Igarashi Kazuaki, Ishida Yoshinori,  
Sekine Hideshi, Okada Hidetoshi  
Ohu University

P - 4 8 Polytetrafluoroethylene; possibility for the application to dental materials

○Kameda Takashi, Ohkuma Kazuo, Oka Shunya  
Nippon Dental University at Niigata

P - 4 9 Study on dental application of PEEK resin evaluated by bending behavior

○Miura Daisuke, Miyasaka Taira, Aoki Harumi, Aoyagi Yusuke, Harada Yuu,  
Watanabe Satoru, Ishida Yoshiki  
Nippon Dental University. at Tokyo

P - 5 0 Mechanical property of the composite resin using Tris(2-acryloxyethyl)isocyanurate resin

○Aoyagi Yusuke, Miyasaka Taira, Aoki Harumi, Ishida Yoshiki, Miura Daisuke, Harada Yuu, Watanabe Satoru  
Nippon Dental University at Tokyo

P - 5 1 Improvement of fatigue strength and wear resistance of hybrid resin composite with cluster filler

○Nishikawa Izuru<sup>1</sup>, Kato Takahiro<sup>2</sup>, Anraku Teruo<sup>2</sup>  
<sup>1</sup>Osaka Institute of Technology, <sup>2</sup>YAMAKIN CO., Ltd

P - 5 2 Evaluation of composite resin polishing performance of new ion implantable polishing paste

○Iino Masayoshi, Kurokawa Hiroyasu, Murayama Ryosuke, Kotaku Mayumi,  
Suda Syunichi, Miyazaki Masashi  
Nihon University

P - 5 3 Study on characteristics of indirect restorative hybrid composite resin

○Nihei Tomotaro<sup>1</sup>, Kameyama Yuka<sup>1</sup>, Wada Yuuki<sup>1</sup>, Yamaguchi Hiroaki<sup>1</sup>, Ohashi, Katsura<sup>1</sup>, Miyake Kaori<sup>1</sup>  
Oshikawa Akinori<sup>1</sup>, Shimoyama Kazuo<sup>1</sup>, Tanimoto Yasuhiro<sup>2</sup>, Hirayama Satoshi<sup>2</sup>  
<sup>1</sup>Kanagawa Dental University, <sup>2</sup>Nihon University at Matudo

P - 5 4 Discoloration resistance of novel flowable composite resins

○Miyagawa Azusa, Ueno Takayuki, Kumagai Tomohiro  
GC Corporation

P - 5 5 Effect of various calcium hydroxide reagents on the bond strength of adhesive resin cements to root canal dentin

○Someya Tomoko, Kasahara Masaaki, Kyogoku Kei, Hasegawa Koji, Noguchi Tatsumi, Hattori Masayuki  
Tokyo Dental College

- P - 5 6 Interfacial gap-formation in Class I restoration and bond strength to tooth of glass-ionomer cement for filling:  
Effect of pretreating agent to tooth  
○Irie Masao, Maruo Yukinori, Nishigawa Goro, Minagi Shogo, Yoshihara Kumiko,  
Nagaoka Noriyuki, Matsumoto Takuya  
Okayama University
- P - 5 7 Influence of micro-level residual of temporary luting cement in composite resin for abutment on bond strength  
in luting cement  
○Igarashi Kazuaki, Moriue Taisuke, Ohki Tatsuya, Saito Ryuichi, Ishida Yoshinori,  
Okada Hidetoshi, Sekine Hideshi  
Ohu University
- P - 5 8 Influence of surface conditioning to CAD/CAM resin block on bond strength of MMA resin cement  
○Kurokawa Hiroyasu, Shibasaki Sho, Yabuki Chiaki, Shiratsuchi Koji,  
Takimoto Masayuki, Miyazaki Masashi  
Nihon University
- P - 5 9 Dentin bond strengths of universal adhesive systems to tooth erosive lesion models  
○Rikuta Akitomo, Suzuki Takayuki, Furuichi Tetsuya, Sai Keiichi,  
Suda Shunichi, Tsubota Keishi, Miyazaki Masashi  
Nihon University
- P - 6 0 Influence of different smear layers on dentin bond durability of self-etch adhesives  
○Takamizawa Toshiki, Tsujimoto Akimasa, Imai Arisa, Nojiri Kie, Suzuki Takayuki,  
Sai Keiichi, Miyazaki Masashi  
Nihon University
- P - 6 1 Development of titanium adhesive systems (Part 1)  
○Iwasaki Taro, Murakami Takahiro, Nagakura Manamu, Tanimoto Yasuhiro, Nishiyama Norihiro  
Nihon University at Matsudo
- P - 6 2 Influence of sand-blasting powder on bond strength to teeth and restorative materials  
○Tsubota Keishi, Ouchi Hajime, Shiratsuchi Koji, Ishii Ryo, Iino Masayoshi,  
Rikuta Akitomo, Miyazaki Masashi  
Nihon University
- P - 6 3 Study on self-adhesive resin-based luting cement as available with primer  
○Wada Yuuki, Midono Tomoyasu, Miyake Kaori, Kameyama Yuka, Ohashi Katsura,  
Oshikawa Akihiro, Shimoyama Kazuo, Nihei Tomotaro  
Kanagawa Dental University
- P - 6 4 New method for titanium oxide nano-structure formation on the zirconia implant  
○He Xiaoxi, Valanezhad Alireza, Watanabe Ikuya  
Nagasaki University
- P - 6 5 Hydroxyapatite preparation from oyster shell powders through ball milling and heat treatment  
○Ho Wen-Fu<sup>1</sup>, Hsu Hsueh-Chuan<sup>2</sup>, Wu Shih-Ching<sup>2</sup>, Hsu Shih-Kuang<sup>2</sup>  
<sup>1</sup>National University of Kaohsiung, <sup>2</sup>Central Taiwan University

- P - 66 Biocompatible evaluation of zirconia with antibacterial peptides (ABP) and osteopontin-motif peptide (OMP) co-grafted on surface  
 ○Wu Shih-Ching<sup>1</sup>, Hsu Shih-Kuang<sup>1</sup>, Hsu Hsueh-Chuan<sup>1</sup>, Ho Wen-Fu<sup>2</sup>  
<sup>1</sup>Central Taiwan University, <sup>2</sup>National University of Kaohsiung
- P - 67 Hydroxyapatite coating of novel porous titanium alloy for biomedical application  
 ○Hsu Hsueh-Chuan<sup>1</sup>, Ho Wen-Fu<sup>2</sup>, Hsu Shih-Kuang<sup>1</sup>, Wu Shih-Ching<sup>1</sup>  
<sup>1</sup>Central Taiwan University, <sup>2</sup>National University of Kaohsiung
- P - 68 Bone formation of DNA coating titanium implant with different steric structure  
 ○Miyamoto Nagahiro<sup>1</sup>, Yamachika Rina<sup>1</sup>, Sakurai Toshitsugu<sup>1</sup>, Iohara Keishi<sup>2</sup>,  
 Hosoya Noriyasu<sup>1</sup>, Hayakawa Tohru<sup>1</sup>  
<sup>1</sup>Tsurumi University, <sup>2</sup>Maruha Nichiro Corporation
- P - 69 Adsorption/desorption measurements of antibacterial proteins on titanium surface by twin-sensor type QCM  
 ○Nezu Takashi, Nagano-Takebe Futami, Endo Kazuhiko  
 Health Sciences University of Hokkaido
- P - 70 Adsorption analysis of lipoteichoic acid to titanium by using QCM  
 ○Yoshida Eiji, Hayakawa Tohru  
 Tsurumi University
- P - 71 Fluoride uptake from fluoride-containing luting materials to hydroxyapatite discs  
 ○Okuyama Katsushi, Komada Yuko, Abe Masayo, Horiguchi Keiji, Nishikawa Motonori,  
 Tamaki Yukimichi  
 Asahi University
- P - 72 Mechanical property and microstructural analysis of an ion-releasing S-PRG filler contained cement  
 ○Shimizubata Makoto, Inokoshi Masanao, Wada Takahiro, Takahashi Rena, Uo Motohiro,  
 Minakuchi Shunsuke  
 Tokyo Medical and Dental University
- P - 73 The study for the improvement of compressive strength and operability of the synthesized calcium silicate cement  
 ○Kang Donghoon, Wada Takahiro, Uo Motohiro, Okiji Takashi  
 Tokyo Medical and Dental University
- P - 74 Effect of coating on mechanical property of resin-modified glass ionomer cements  
 ○Shigeta Hirotaka, Nagasawa Yuko, Eda Yoshikazu, Matsumoto Shigeki, Awata Satoru,  
 Omatsu Jun, Wada Ken-ichi, Hibino Yasushi, Nakajima Hiroshi  
 Meikai University
- P - 75 Microstructure and fatigue properties of dental semiprecious alloy subjected to solution treatment  
 ○Mizuno Tsubasa<sup>1</sup>, Akahori Toshikazu<sup>1</sup>, Ninomi Mitsuo<sup>1</sup>, Fukui Hisao<sup>2</sup>  
<sup>1</sup>Meijo University, <sup>2</sup>Aichi Gakuin University
- P - 76 Corrosion behavior of stainless steel in antiseptics and disinfectants; chlorhexidine gluconate, povidone iodine and glutaraldehyde

○Kanyi Mary, Takahashi Masatoshi, Sakatsume Hanako, Takada Yukyo  
Tohoku University

P - 7 7 Dentin structure exposed to excimer UV irradiation

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

P - 7 8 Biological apatite crystallite alignment analysis of human maxillary cortical bone with microbeam X-ray diffraction

○Kasahara Masaaki, Someya Tomoko, Igarashi Toshio, Aichi Tetsuya, Ichikawa Hiromichi,  
Yoshinari Masao, Hattori Masayuki  
Tokyo Dental College

P - 7 9 Mechanical Properties of calcified tissue mimicking ageing processes caused by x-ray irradiation

○Tobe Takuma, Shibata Yo, Shimoura Naofumi, Zhou Jun, Wurihan, Tanaka Reina, Miyazaki Takashi  
Showa University

P - 8 0 Difference in the force between the ligation methods by edgewise appliance in the simulation of a lower incisor linguoversion

○Tochigi Keisuke, Arai Kazuhito, Saze Naomi, Koda Takashi  
Nippon Dental University at Tokyo

P - 8 1 Detection of dental alloy derived elements contained in tissues of oral lichen planus using synchrotron radiation fluorescence X-ray analysis

○Uo Motohiro<sup>1</sup>, Wada Takahiro<sup>1</sup>, Aoyagi Yujin<sup>2</sup>, Akiba Yosuke<sup>2</sup>  
<sup>1</sup>Tokyo Medical and Dental University, <sup>2</sup>Niigata University

P - 8 2 Study on the weight-drop impact test of dental composites and ceramics

○Watanabe Satoru, Miyasaka Taira, Ishida Yoshiki, Harada yuu, Aoki Harumi,  
Aoyagi Yusuke, Miura Daisuke  
Nippon Dental Univ. at Tokyo

P - 8 3 Spherical nanoindentation stress-strain response of human enamel

○Shimomura Naofumi, Tanaka Reina, Tobe Takuma, Zhou Jun,  
Wurihan, Shibata Yo, Shimada Yukie, Miyazaki Takashi  
Showa University

P - 8 4 Information system utilizing cavity of teeth or dentures

○Imai Koichi, Shirai Tsubasa, Ishikawa Hiroki, Nakanishi Tamaki  
Osaka Dental University

## October 15 (Sunday)

### ▪ Foyer

9:00 - 16:25 Companies Exhibition