

The 59th General Session of the Japanese Society for Dental Materials and Devices(JSDMD)

April 14 (Saturday) - 15 (Sunday), 2012
Tokushima Arts Foundation for Culture
2-14 Aiba-chou, Tokushima-shi, Tokushima-ken, 770-0835 Japan

(Second Version -April 4)

April 14 (Saturday)

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

9:30 - 11:08 **General Presentation (Oral Session)**

Hall A

A-1 Porosity of dental phosphate bonded investments in setting and heating process

○Asaoka Kenzo, Bae JiYoung
The University of Tokushima

A-2 Effects of Mo and N content of dental-cast Co-Cr-Mo alloys on the microstructures and mechanical properties

○Suyalatu¹, Nomura Naoyuki¹, Yamada Yuta², Doi Hisashi¹, Tsutsumi Yusuke¹, Kurosu Shingo³,
Shimojo Masayuki², Chiba Akihiko³, Hanawa Takao¹

¹Tokyo Medical and Dental University, ²Shibaura Institute of Technology, ³Tohoku University

A-3 Fabrication of Zr / Ag composites to prevent artifacts in MRI for dental applications

○Sakai Takahiro, Kondo Ryota, Suyalatu, Tsutsumi Yusuke, Doi Hisashi, Nomura Naoyuki, Hanawa Takao
Tokyo Medical and Dental University

A-4 Formation mechanism of β' phase in as-solutionized Ag-20Pd-12Au-14.5Cu alloy

○Kim YongHwan¹, Niinomi Mitsuo², Hieda Junko², Nakai Masaaki², Fukui Hisao³

¹Graduate Student of Tohoku University, ²Tohoku University, ³Aichi-Gakuin University

A-5 The development of the small home isotonic ozone water generation equipment

○Arai Koichi^{1,2,3}, Sakakibara Shigehiro², Miyanaga Kouichi², Takiguti Yuichi³, Ando Nobuo⁴
¹Nippon Makisen Kogyo, ²Nihon University, ³Showa University, ⁴Nippon Dental University at Tokyo

A-6 Quantification of occlusal contacts via the occlusal analyzing device

○Kihara Takuya¹, Kasama Shintaro², Shigeta Yuko², Hirabayashi Rio², Ikawa Tomoko², Ando Eriko², Hirai Shinya², Nikawa Hiroki¹, Ogawa Takumi²
¹Hiroshima University, ²Tsurumi University

A-7 Biomechanical investigation for a full-arch immediate loaded implant treatment planning

○Yamaguchi Kikue, Ishiura Yuichi, Higuchi Daisuke, Mabuchi Azusa, Ozeki Masahiko, Baba Kazuyoshi
Showa University

A-8 Capability evaluation of orthodontic intrusion spring by numerical simulation

○Kawamura Jun¹, Kojima Yukio², Fukui Hisao¹
¹Aichi Gakuin University, ²Nagoya Institute of Technology

Hall A

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

15:20 - 17:25 **General Presentation (Oral Session)**

A-9 Development of Temporary Luting Agent consisting of PEMA

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

A-10 Development of FGF-2-releasing poly HEMA hydrogel - Evaluation of long term release of FGF-2 and in vitro effectiveness ?

Takeda Kahoru, Kitagawa Haruaki, Imazato Satoshi
Osaka University

A-11 Vinyl esters/polymer mixture system (Part 11) - Influence of multi-functional vinyl esters (MFVE) on the water absorbing properties of thermo-polymerized MFVE/PMMA mixtures -

Tanaka Jiro, Irie Masao, Matsumoto Takuya
Okayama University

A-12 Development of polyHEMA hydrogel suitable for release and recharge of antibacterial agents

Kitagawa Haruaki, Takeda Kahoru, Kitagawa Ranna, Imazato Satoshi
Osaka University

A-13 Improvement of bond strengths between experimental fiber-reinforced composite posts and composite resin by ultraviolet irradiation

Asakawa Yuya¹, Takahashi Hidekazu¹, Iwasaki Naohiko¹, Kobayashi Masahiro², Uo Motohiro¹
¹Tokyo Medical and Dental University, ²Chiba Institute of Technology

A-14 Effect of High-pressure polymerization on mechanical properties of denture base resin

Murakami Natsuko, Wakabayashi Noriyuki, Kishida Akio, Igarashi Yoshimasa
Tokyo Medical and Dental University

A-15 Influence of firing temperature on bond strength between veneering porcelain and zirconia ceramics

Matsumoto Naoya, Yoshinari Masao, Takemoto Shinji, Hattori Masayuki, Kawada Eiji, Oda Yutaka
Tokyo Dental College

A-16 Bonding strength between zirconia and dental porcelain (Part 6) Effect of kinds of zirconia substrate

Tsuruki Jiro¹, Noda Makoto¹, Okuda Yuji¹, Miyamoto Motoharu¹, Ban Seiji²
¹Kagoshima University, ²Aichi Gakuin University

A-17 withdrawn

A-18 Effect of hydrothermal treatment and fracture toughness on a newly developed Y-TZP

Harada Kosuke¹, Yamada Yosihisa², Shinya Akiyoshi¹
¹The Nippon Dental University, ²Kuraray Noritake Dental Inc.

April 14 (Saturday)

Hall B

9:30 - 16:00 **General Presentation (Poster Session) (11:00 - 12:00 Discussion)**

[Award Challenge Posters P-1 - P-6]

P-1 Evaluation on material properties of and in vivo reaction against nano-apatite

Hatakeyama Wataru, Kihara Hidemichi, Kondo Hisatomo, Taira Masayuki
Iwate Medical University

P-2 The effect of different setting conditions on the MTA-GIC interface

Eid Ashraf, Shiraishi Takanobu, Watanabe Ikuya
Nagasaki University

P-3 Development of composite resins utilizing meso-porous silica

Aoyagi Yusuke, Miyasaka Taira, Ohtake Yasunari, Suda Yuuki
Nippon Dental Univ. at Tokyo

P-4 An application of fluorescent matter to bonding materials

Hamba Yusuke¹, Yamagata Shuichi¹, Akasaka Tsukasa¹, Uo Motohiro², Iida Junichiro¹, Watari Fumio¹

¹Hokkaido University, ²Tokyo Medical and Dental University

P-5 Porosity of gypsum-bonded and phosphate-bonded investments in setting and heating process

Bae JiYoung¹, Lee HaeHyung², Asaoka Kenzo¹

¹Tokushima University, ²Dankook University

P-6 Multiwall carbon nanotube coating on anodized titanium for improvement of osteoconductivity

○Inoue Saori¹, Uo Motohiro², Hirata Eri¹, Lee Min-Ho³, Watari Fumio¹, Yokoyama Atsuro¹
¹Hokkaido Univ., ²Tokyo Medical and Dental Univ., ³Chonbuk National Univ.

P-7 The inhibition of bacterial adhesion on lactoferrin-coated dental abutment

○Nagano Futami, Ida Yusuke, Hashimoto Masanori, Endo Kazuhiko
Health Sciences University of Hokkaido

P-8 Influence of TiN film coating onto Ti on the behavior of human mesenchymal stem cells

○Akanuma Masayoshi, Naganuma Hiroko, Kado Takashi, Furuichi Yasushi, Endo Kazuhiko, Ochi Morio
Health Sciences University of Hokkaido

P-9 Effect of functionalized silver nanoparticles with water-soluble monomer of cells

○Hashimoto Masanori¹, Toshima Hirokazu¹, Yozezawa Tetsu², Kawai Koji^{2,3}, Kaga Masayuki¹,
Endo Kazuhiko¹

¹Health Sciences University of Hokkaido, ²Hokkaido University, ³Miyoshi Oil & Fat

P-10 Cell culture with carbon nanotube films and cell manipulation

○Akasaka Tsukasa, Abe Shigeaki, Watari Fumio
Hokkaido University

P-11 Age related changes to alveolar bone and teeth in rats

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

P-12 Bone formation by Carbonate Apatite and Low-Intensity Pulsed Ultra Sound

○Mochizuki Hisako¹, Kajimoto Tadamori², Doi Yutaka¹, Hotta Masato¹
¹Asahi University, ²Chubu Implant Academy

P-13 Effect of introduction of amorphous calcium phosphate on osteoconductivity of octacalcium phosphate bone substitute material

○Kobayashi Kazuhito, Anada Takahisa, Honda Yoshitomo, Handa Takuto, Kamakura Sinji, Echigo Seisi, Suzuki Osamu
Tohoku University

P-14 Anti-bacterial effect of Protamine adsorbed on Silica -Part2-

○Narusawa Hideaki, Cho Hantetu, Kataoka Yu, Tamaki Yukimichi, Miyazaki Takashi
Showa university

P-15 in vitro Evaluation of Sr-containing carbonate apatite

○Sakai Akiko¹, Valanezahad Alireza², Ozaki Masao¹, Maruta Michito¹, Ishikawa Kunio², Matsuya Shigeki¹

¹Fukuoka Dental College, ²Kyushu University

P-16 Influence of micro/nano particles on osteoblast-like cell and hepatic cell

○Iwadera Nobuki¹, Abe Shigeaki¹, Ishikawa Kosuke¹, Akasaka Tsukasa¹, Uo Motohiro², Yawaka Yasutaka¹, Watari Fumio¹

¹Hokkaido University, ²Tokyo Medical and Dental University

P-17 Influence of dental base metal combinations on cytotoxicity

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

P-18 Interaction between carbon nanotubes and biomolecules: An in vitro and in silico study

○Abe Shigeaki, Komine Rika, Ishikawa Kosuke, Watari Fumio, Tachikawa Hiroto
Hokkaido University

P-19 Effect of amalgam fillings on gene expression profile of rat cerebrum, cerebellum and liver

○Takahashi Yoshifumi, Tsuruta Shozo, Hasegawa Akihito, Tomino Masashi
Aichi-Gakuin University

- P-20** An attempt of the cell recovery technique for *in vitro* embryotoxicity test protocol
○Imai Koichi, Takeda Shoji
Osaka Dental University
- P-21** Cytotoxic effects of pulp capping materials containing calcium hydroxide on dental pulp stem cells
○Lee Hyo-Jin, Kwon Tae-Yub, Kim Kyo-Han
Kyungpook National University
- P-22** Effects of eluted components of Portland cement on the viability of osteoblast-like cells
○Toshima Hirokazu, Hasimoto Masanori, Nagano Hutami, Ida Yusuke, Endo Kazuhiko
Health Science University of Hokkaido
- P-23** Antibacterial Effects of 4-META/MMA-TBB Resin Containing BSA Nanoparticles Loaded with Vancomycin
○Kim Hyun-Jin, Son Jun-Sik, Kwon Tae-Yub, Kim Kyo-Han
Kyungpook National University
- P-24** Macro/micro-porous bioactive nanocomposite scaffolds produced by robotic dispensing
○Lee H-Y, Dorj B, Choi S-J, Lee H-H, Kim H-W,
Dankook University
- P-25** Effect of dehydration on osteoconductive capacity of octacalcium phosphate bone substitute material
○Shintani Satoshi, Anada Takahisa, Honda Yoshitomo, Kawai Tadashi, Shimauchi Hidetoshi, Suzuki Osamu
Tohoku University
- P-26** Fabrication of hybrid microsphere by Pickering emulsion method and its application for cell carrier
○Okada Masahiro¹, Fujii Shuji², Furuzono Tsutomu³, Takeda Shoji¹
¹Osaka Dental University, ²Osaka Institute Technology, ³Kinki University
- P-27** Promotion of Apatite-forming ability of three-dimensional porous poly(lactic acid) scaffold in simulated body fluid -Effect of alkaline hydrolysis-
○Fuse Megumi¹, Hayakawa Tohru², Tsuzukibashi Osamu¹, Ichimura Mana¹, Fukatsu Akira¹,
Fukumoto Masahiko¹, Makimura Masaharu¹
¹Nihon University, ²Tsurumi University
- P-28** Effects of bioactive sol-gel glass nanoparticle addition to conventional glass-ionomer cement
○Kim D-A, Eltohamy M, Kim K-R, Kim H-W, Lee H-H
Dankook University
- P-29** Effect of steam autoclaving on the mechanical properties of PLLA-TCP composite biomaterials
○Kim K-R, Kim D-A, Kim N-S, Kim H-W, Lee H-H
Dankook University
- P-30** Fibrous scaffolds created from alginate-based beads for use in cell culture
○Won J-E, Park J-H, Hong S-J, Shin U-S, Kim T-H, Lee H-H, Kim H-W
Dankook University
- P-31** Examination of enamel repairing method using the ultrathin apatite sheet (Part1)
○Hontsu Shigeki¹, Yoshikawa Kazushi², Matsuda Taiyo¹, Kato Nobuhiro¹, Nishikawa Hiroaki¹,
Kusunoki Masanobu¹, Hashimoto Yoshiya², Yamamoto Kazuyo²
¹Kinki University, ²Osaka Dental University
- P-32** Hydroxyapatite nanocrystal-coated titanium implant containing biodegradable particles as drug delivery carriers
○Son Jun-Sik, Kwon Tae-Yub, Kim Kyo-Han
Kyungpook National University
- P-33** Study on understanding parameters for controlling degree of biological apatite in mandible
○Nakano Takayoshi, Fujitani Wataru, Aramaki Chieko
Osaka University
- P-34** Dimensional changes of stone models with alginate impression materials stored following wash

with disinfectant solutions

○Hiraguchi Hisako¹, Arai Koichi^{1,2}, Yui Masashi¹, Yagihara Kenji¹, Kikuchi Hisaji¹, Yoneyama Takayuki¹

¹Nihon University, ²Nippon Makisen

P-35 Evaluation of an experimental desensitizing agent by means of ultrasonic device

○Endo Hajime, Kawamoto Ryo, Irokawa Atsushi, Takamizawa Toshiki, Ando Susumu, Miyazaki Masashi

Nihon University

P-36 Effectiveness of workshop in postgraduate education on dental materials and devices - Investigation based on questionnaire survey ?

○Kanatani Mitsugu, Okawa Seigo, Watanabe Kouichi, Ito Kyosuke, Kaneko Hiromi, Yamaga Yoshio

Niigata University

P-37 The influence of loading condition in Aramany class IV obturator prostheses with different clasp designs

○Hase Hideaki^{1,2}, Shinya Akikazu^{2,3}, Yokoyama Daiichiro², Shinya Akiyoshi², Takahashi Yutaka¹

¹Fukuoka Dental College, ²Nippon Dental University, ³Turku University

P-38 Influence of hypochlorous-acid electrolyzed water on dental unit components

○Aoki Harumi, Miyasaka Taira, Ando Nobuo, Takagi Kuniaki, Ohyori Noriko

Nippon Dental University

P-39 Effect of fluoride-containing sealing material on acid resistibility of dentin

○Mukai Yoshiharu, Tomiyama Kiyoshi, Teranaka Toshio

Kanagawa Dental College

P-40 Geometric design method for complex inlay cavities

○Kikuchi Masafumi, Takahashi Masatoshi, Takada Yukyo

Tohoku University

P-41 Influence of coating thickness of the titanium oxide powder on optical impression accuracy (Part 1) Spraying conditions and coating thickness

○Itou Takayoshi, Kurachi Masakazu, Ishigami Hajime, Uno Mitsunori, Nonogaki Ryugo, Adachi Masanori, Doi Yutaka

Asahi University

P-42 Development of real-time three-dimensional Oral Scanner

○Hotta Yasuhiro, Nakano Haruhisa, Terui Yuichi, Fujiwara Toshihisa, Miyazaki Takashi

Showa University

P-43 Adherence of Carbonate apatite to a titanium substrate using the Er:YAG laser

○Okazaki Ai¹, Yamaguchi Yusuke¹, Kotake Hiroto¹, Kajimoto Tadamori^{1,2}, Doi Yutaka¹, Hotta Masato¹

¹Asahi University, ²Chubu Implant Academy

P-44 Application of optical coherence tomography for monitoring residual tooth thickness

○Iino Masayoshi¹, Shimamura Yutaka¹, Murayama Ryosuke¹, Kurokawa Hiroyasu^{1,2}, Ando Susumu^{1,2}, Miyazaki Masashi^{1,2}

¹Nihon University, ²Dental Research Center

P-45 The system comparison between a pressure image analysis and a motion analysis to study the shock absorption and repulsion of mouth guard materials

○Churei Hiroshi, Chowdhury Ruman Uddin, Abe Keisuke, Takahashi Hidekazu, Ueno Toshiaki

Tokyo Medical and Dental University

P-46 Development of Ag-Cu phase diagram software based on cloud computing

○Kawai Tatsushi¹, Asakura Masaki¹, Uematsu Yasuaki¹, Aimu Kouki¹, Matsumoto Takanori², Jincho Makoto²

¹Aichi-Gakuin University, ²Eden Co.LTD

P-47 Effects of materials of superstructure and antagonistic tooth on distortion of the implant - Strain analysis using gages for bolt axial measurement -

○Teraoka Fumio¹, Nakagawa Masafumi^{1,2}, Tanaka Daiki¹, Inaba Yoji¹, Imazato Satoshi¹
¹Osaka University, ²Shinosaka College

P-48 Development of a phantom containing the high density calcium for dental cone beam CT

○Aoyagi Yujin¹, Yoshida Midori², Takahashi Hidekazu³, Umemoto Kozo¹

¹Kanagawa Dental College, ²Tokushima University, ³Tokyo Medical and Dental University

P-49 Monitoring of adsorption behaviors of pellicle components to dental biomaterials by using QCM

○Yoshida Eiji, Hayakawa Tohru
Tsurumi University

P-50 Development of titanium QCM nanosheet sensor

○Komasa Satoshi, Hashimoto Yoshiya, Taguchi Yoiciro, Nishida Hisataka, Fujino Tomoko,
Kusumoto Tetsuji, Takeda Shoji, Yamamoto Kazuyo, Umeda Makoto, Tanaka Masahiro, Kawazoe
Takayoshi
Osaka Dental University

April 15 (Sunday)

Hall A

9:30 - 11:08 **General Presentation (Oral Session)**

A-19 Functionalization of carbon nanotubes by basic-Fibroblast Growth Factor

○ Hirata Eri, Yokoyama Atsuro, Watari Fumio
Hokkaido University

A-20 Preference of adsorbed protein on carbon nanotubes

○Morikawa Mai, Kuboki Yoshinori, Akasaka Tsukasa, Abe Shigeaki, Watari Fumio
Hokkaido University

A-21 Preparation of 3-dimensional collagen nanofiber by using electrospray deposition

○Hayakawa Tohru¹, Yoshinari Masao²

¹Tsurumi University, ²Tokyo Dental College

A-22 Tissue response of newly experimental GBR membranes consisting of DNA/protamine complex and DNA/chitosan complex

○Shinozaki Yosuke¹, Irie Akihito¹, Mori Nana¹, Ohno Jun¹, Kido Hirofumi¹, Hayakawa Toru²,
Fukushima Tadao¹

¹Fukuoka Dental College, ²Tsurumi University

A-23 Cellular behavior on nano-scaled hydroxyapatite composite materials

○Furuhashi Kazunori, Akasaka Tsukasa, Kitagawa Yoshimasa, Watari Fumio
Hokkaido University

A-24 Initial adhesion behavior of osteoblast-like cell on PEG electrodeposited Ti surface-

○Migita Satoshi, Tsutsumi Yusuke, Doi Hisashi, Nomura Naoyuki, Hanawa Takao
Tokyo Medical and Dental University

A-25 Development of endochondral ossification analysis tool using 3D cell constructs

○Sasaki Jun-Ichi¹, Matsumoto Takuya², Egusa Hiroshi¹, Yatani Hirofumi¹, Imazato Satoshi¹

¹Osaka University, ²Okayama University

A-26 Development of a new *in vitro* embryotoxicity test system using the hybrid culture of mouse embryonic stem cell and human hepatocyte

○Imai Koichi¹, Takeda Shoji¹, Nakamura Kazuaki², Tanoue Akito²

¹Osaka Dental University, ²National Res. Inst. for Child Health and Development

Hall A

13:00 - 13:48 **General Presentation (Oral Session)**

A-27 Properties of Dental Polishing Materials and Devices

○Sakakibara Toru, Yoshihara Kentaro, Takeuchi Masami, Ban Seiji, Kawai Tatsushi, Murakami
Hiroschi

Aichi Gakuin University

A-28 Effect of immersion in calcium chloride solution on surface hardness of restorative glass

ionomer cements

○Shiozawa Maho, Takahashi Hidekazu, Uo Motohiro, Iwasaki Naohiko
Tokyo Medical and Dental University

A-29 Effect of different ceramics surface treatments on composite resin cement bond strength

○Hata Utako¹, Sakurai Yasuyuki², Yamamura Osamu¹, Fujiwara Shuu¹, Doi Youtaka¹
¹Asahi University, ²Fine. Co., Inc

A-30 Effect of self-adhesive resin cement, conventional resin cement and immersion temperature on bond strength to nanozirconia

○Shinya Akihiro, Lin Jie, Shinya Akiyoshi
Nippon Dental University

14:00 - 15:10 **Special Lecture**

15:15 - 16:27 **General Presentation (Oral Session)**

A-31 Flexural behavior of octacalcium phosphate (OCP)/apatite-type I collagen composite consolidated by various methods

○Iijima Mayumi, Wakamastu Nobukazu, Kamemizu Hideo, Adati Masamori, Doi Yutaka
Asahi University

A-32 Acceleration of new bone formation by the electrically polarized hydroxyapatite micro-granules/platelet-rich plasma composite

○Ohba Seiko, Nagai Akiko, Yamashita Kimihiro
Tokyo Medical and Dental University

A-33 Effect of Mg on enhancement of calcium phosphate formation on Zr by MAO treatment

○Tsutsumi Yusuke, Suyalatu, Migita Satoshi, Doi Hisashi, Nomura Naoyuki, Hanawa Takao
Tokyo Medical and Dental University

A-34 Effect of apatite seed crystals addition methods on setting reaction of α -TCP based apatite cement

○Tsuru Kanji¹, Ruslin¹, Maruta Michito², Matsuya Shigeki², Ishikawa Kunio¹
¹Kyushu University, ²Fukuoka Dental College

A-35 Synthesis of β -TCP foam that uses α -TCP foam as precursor

○Nikaido Taro¹, Tsuru Kanji¹, Kawachi Giichiro¹, Matsuya Shigeki², Nakamura Seiji¹, Ishikawa Kunio¹
¹Kyushu University, ²Fukuoka Dental College

A-36 Development of metallic three-dimensional scaffold

○Fuyamada Hironari, Kobayashi Syuichiro, Okabe Eijiro, Ueno Atsuko, Miyamae Shin, Hattori Masami, Hayashi Tatsuhide, Kawai Tatsushi
Aichi-Gakuin University

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

April 15 (Sunday)

Hall B

9:30 - 16:00 **General Presentation (Poster Session) (11:00 - 12:00 Discussion)**

P-51 Electrochemical characteristics of nanotubes formed on Ti-5Cr-9Mo alloy

Hsu Hsueh-Chuan¹, ○Huang Hsiao-Yun¹, Kikuchi Hisaji², Kurotani Tomoko², Ho Wen-Fu³, Wu Shih-Chin¹, Hsu Shih-Kuang¹

¹Central Taiwan University of Science and Technology, ²Nihon University, ³Da-yeh University

P-52 Structure and bioactivity of TiO₂ nanotubes fabricated by anodization

Ho Wen-Fu¹, ○Chang Yu-Cheng¹, Hsu Hsueh-Chuan², Wu Shih-Ching², Hsu Shih-Kuang²
¹Da-Yeh University, ²Central Taiwan University of science and Technology

P-53 Formation of calcium phosphates and cell adhesion on biomedical porous titanium alloys

○Ho Wen-Fu¹, Tsai Ming-Shiun¹, Hsu Hsueh-Chuan², Wu Shih-Ching², Hsu Shih-Kuang²

¹Da-yeh University, ²Central Taiwan University of Science and Technology

P-54 Pore size control of biomedical porous titanium using space holder method

○Suito Hideki, Naito Yoshihito, Bae Ji-Young, Hamada Kenichi, Ichikawa Tetsuo
Tokushima University

P-55 Structure and properties of cast Ti-Si alloys for biomedical applications

Ho Wen-Fu¹, O Li Yu-Chi¹, Hsu Hsueh-Chuan², Wu Shih-Ching², Hsu Shih-Kuang²

¹Da-Yeh University, ²Central Taiwan University of Science and Technology

P-56 Microstructure and magnetic susceptibility of dental Zr-Sn alloys to prevent artifacts in MRI

○Kondo Ryota, Nomura Naoyuki, Suyalatu, Tsutsumi Yusuke, Doi Hisashi, Hanawa Takao
Tokyo Medical and Dental University

P-57 An application possibility of orthodontic magnets for bringing an impacted tooth

○Hata Yuki, Miyazawa Ken, Hida Mayu, Kanbara Ryo, Nakamura Yoshinori, Tanaka Yoshinobu,
Kawai Tatsushi, Goto Shigemi
Aichi-Gakuin University

P-58 Relation physical properties and microstructures on palladium containing Co-Cr and Ni-Cr alloys

○Kawashima Isao, Koiso Kazuo, Kamata Masayoshi, Ishida Yoshinori, Okada Hidetoshi, Ryukata Ichiro
Ohu University

P-59 Preparation of HA thin layer on the porous-surfaced 14K Gold alloy

○Ida Yusuke, Ohno Hiroki, Endo Kazuhiko
Health Sciences University of Hokkaido

P-60 Tarnish resistance of Ti-Ag alloys

○Takahashi Masatoshi, Kikuchi Masafumi, Takada Yukyo
Tohoku University

P-61 Effect of EDTA solution on corrosion fatigue of Ni-Ti files

○Hasegawa Yuki, Goto Shin-ichi, Ogura Hideo
Nippon Dental University

P-62 Influence of the casting crown on the casting ring storage conditions by a gypsum-bonded investment. -Possibility of Ideavest gypsum bonded investment-

○Fukushima Emiko, Sakuma Tetsuro, Horiuchi Haruhiko
GC Corporation

P-63 Light transmittance and reflectance characteristics for angle distribution of crown and bridge resins

○Arikawa Hiroyuki, Kanie Takahito
Kagoshima University

P-64 ESR study on the degree of conversion of double bonds in composite resin -Effect of curing mode and exposure time-

○Kamemizu Hideo, Komada Yuko, Iijima Mayumi, Wakamatsu Nobukazu, Adachi Masanori, Doi Yutaka
Asahi University

P-65 Effects of toothbrush hardness and RDA value of toothpaste on wear resistance of composite resin block materials.

○Kai Tomohiro, Teramae Mitsuji, Yoshimoto Ryuichi, Deguchi Mikito
Shofu

P-66 Effect of X-ray irradiation on composite resin for crown restoration and resin cement properties

○Aoyagi Yujin¹, Yoshida Midori², Takahashi Hidekazu³, Umemoto Kozo¹

¹Kanagawa Dental College, ²Tokushima University, ³Tokyo Medical and Dental University

P-67 Influence of loading made on fatigue strength of filler hybrid resin composite

○Yamanaka Keita¹, Nishikawa Izuru¹, Takahashi Hidekazu²

¹Osaka Institute of Technology, ²Tokyo Medical and Dental University

P-68 Effect of powder particle size and content of SUS444 alloy filler on setting property of magnetic

resin composite material

○Soma Hiroko, Miyagawa Yukio
The Nippon Dental University

P-69 Wear resistance of restorative composites by ACTA wear machine (Part 2) -Wear resistance of commercial restorative composites-

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

¹Kanagawa Dental College, ²Ludwig-Maximilians-Universität München

P-70 Effects of lactic acid and citric acid on occlusal wear of composite resin

○Kakuta Kiyoshi, Ohkuma Kazuo, Ogura Hideo
Nippon Dental University, Niigata

P-71 Ion release and buffering capacity of functional filler (S-PRG) containing sealant

○Kaga Masayuki^{1,2}, Ida Yusuke¹, Toshima Hirokazu², Hashimoto Masanori², Endo Kazuhiko²
¹Hokkaido University, ²Health Sciences University of Hokkaido

P-72 Toothbrush abrasion of a newly developed flowable resin “TWiNY Flow” for crown

○Kato Takahiro^{1,2}, Saigo Kazuhiko², Tsuneishi Mari¹, Yamada Bunichirou¹, Yamauchi Junichi¹,
Anraku Teruo¹

¹Yamamoto Precious Metal Co., Ltd, ²Kochi University of Technology

P-73 Influence of different monomer components of experimental fluorinated soft lining materials on their viscoelasticity, water sorption and solubility

○Inoue Minoru¹, Kasuga Yuta², Hoshino Yoshihito¹, Nagasawa Yuko², Hibino Yasushi², Takahashi Hidekazu¹, Sumi Yasunori³, Minakuchi Shunsuke¹, Nakajima Hiroshi²

¹Tokyo Medical and Dental University, ²Meikai University, ³National Center for Geriatrics and Gerontology

P-74 The effect of sericin powder on the absorption and solubility of trail tissue conditioner

○Hong Guang, Dilinuer Maimaiti Shawuti, Wang WeiQi, Kanetaka Hiroyasu, Sasaki Keiichi
Tohoku University

P-75 Effect of difference in monomers for experimental fluorinated soft lining materials on adhesion to denture base resin

○Hoshino Yoshihito¹, Kasuga Yuta², Inoue Minoru¹, Nagasawa Yuko², Hibino Yasushi², Takahashi Hidekazu¹, Sumi Yasunori³, Minakuchi Shunsuke¹, Nakajima Hiroshi²

¹Tokyo Medical and Dental University, ²Meikai University, ³National Center for Geriatrics and Gerontology

P-76 withdrawn

P-77 Effect of addition of fluorinated monomer to mechanical properties and durability of hard, direct denture relines resins

○Yoshida Kazuhiro, Kurogi Tadafumi, Watanabe Ikuya, Murata Hiroshi
Nagasaki University

P-78 Study of the dentin permeability of the dentin desensitizers

○Shimizu Hirohisa, Hoshika Tomohiro, Nishitani Yoshihiro, Yoshiyama Masahiro
Okayama University

P-79 Durability of the bond strength of various facing resin system to a silver-palladium-gold alloy

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

P-80 Bonding durability against water of fluorine-containing resin for non-precious metal alloys

○Kadoma Yoshinori
Tokyo Medical and Dental University

P-81 Effect of crosslinking agent incorporated to 4-META/MMA-TBB resin on bonding durability to titanium

○Im Jae-Seung, Kwon Tae-Yub, Kim Kyo-Han
Kyungpook National University

P-82 Effect of one-step bonding resin in eight-year artificial saliva on durability of dentin bonding

○Ito Shuichi, Hashimoto Masanori, Saito Takashi
Health Sciences University of Hokkaido

P-83 The generating behavior of polymer radicals and adhesiveness in one-step adhesive
- Effect of photoinitiator concentration -

○Taketa Hiroaki, Torii Yasuhiro, Matsumoto Takuya, Suzuki Kazuomi
Okayama University

P-84 Effect of the functional monomer on bond strength to bovine enamel

○Shiratsuchi Koji, Takimoto Masayuki, Tsubota Keishi, Takamizawa Toshiki, Ando Susumu,
Miyazaki Masashi
Nihon University

P-85 The stress relaxation property of temporally and permanent luting cements

○Kanie Takahito, Arikawa Hiroyuki, Tsuruki Jiro, Kadokawa Akihiko
Kagoshima University

P-86 Effect of resin component on mechanical strength of experimental resin-modified glass ionomer
for filling

○Hibino Yasushi, Nagasawa Yuko, Ibaraki Hidefumi, Omatsu Jun, Takahashi Yoko, Nakajima
Hiroshi
Meikai University

P-87 Determination of adhesion and setting behavior of self adhesive cements

○Kurokawa Hiroyasu, Yasuda Genta, Rikuta Akitomo, Ando Susumu, Miyazaki Masashi
Nihon University

P-88 Shear bond strengths of resin-based luting cement to lithium disilicate ceramics treated by
several surface modifications -

○Sato Kotaro, Fujishima Akihiro, Takeuchi Kenichiro, Miyazaki Takashi
Showa University

P-89 Wear resistance of resin cement and influence of filler particle size on wear

○Matsumoto Naofumi, Kumagai Tomohiro, Sakuma Tetsuro
GC Corporation

P-90 Organification of phosphoric acid ester monomer on zirconia surface

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

P-91 Creep of dental zirconium oxide at high temperature

○Tsuruta Shozo, Morimoto Keita, Mizuno Masanobu, Fujimoto Kotaro, Kawai Tatsushi, Yamamoto
Ichiro
Aichi-Gakuin University

P-92 Reaction between dental zirconia and phosphate bonded investment for press-on-technique

○Yoshihara Kentaro, Sakakibara Toru, Ban Seiji, Kawai Tatsushi, Nakamura Yoshinori, Tanaka
Yoshinobu
Aichi-Gakuin University

P-93 Optical properties of dental high toughness ceramic material P-nano ZR

○Shiraishi Takanobu, Ikeda Kahori, Watanabe Ikuya
Nagasaki University

P-94 Effects of colloidal silica treatment on the bond strength of zirconia and indirect composite
materials

○Hirose Hideharu, Sudo Fumishige, Akashi Yukio, Kurotani Tomoko, Kaketani Masahiro, Fukase
Yasumasa, Yoneyama Takayuki
Nihon University

P-95 Phase transformation of commercial dental zirconia with acetic acid immersing

Wu Shih-Ching¹, ○Liao Huei-Jyuan¹, Chang Pai-Ling³, Pai Chi³, Ho Wen-Fu², Hsu Hsueh-Chuan¹,
Hsu Shih-Kuang¹

¹Central Taiwan University of Science and Technology, ²Da-yeh University, ³Tao-Yuan General Hospital

P-96 Effect of surface treatment on shear bond strength of veneering porcelain to zirconia based nanocomposite

○Tamaki Yukimichi, Hotta Yasuhiro, Fujishima Akihiro, Kataoka Yu, Oguri Takuya, Terui Yuichi, Miyazaki Takashi
Showa University

P-97 Material properties of zirconia sheet prepared by tape-cast

○Tanimoto Yasuhiro¹, Yamaguchi Masaru¹, Shibata Yo², Miyazaki Takashi², Nishiyama Norihiro¹
¹Nihon University at Matsudo, ²Showa University

P-98 Mechanical properties of 2-piece-type zirconia implants

○Kawase Yuji¹, Yoshida Takamitsu², Nakajima Miharu¹, Takeuchi Ken¹, Nagasawa Sakae¹
¹Matsumoto Dental University, ²Indiana University

P-99 The effect of surface polishing/finishing process on the surface integrity of restorative ceramics

○Odatsu Tetsuro, Watanabe Ikuya, Sawase Takashi
Nagasaki University
