The 69th General Session of the Japanese Society for Dental Materials and Devices (JSDMD)

April 15 (Saturday) - 16 (Sunday), 2017 Nippon Dental University School of Life Dentistry at Tokyo 1-9-20 Fujimi, Chiyoda-ku, Tokyo 102-8159, Japan April 15 (Saturday) • Hall A 9:25 - 9:30 **Opening Remark** 9:30 - 10:15 Young Investigator Award Challenge (Oral Session) 10:15 - 11:00 General Presentation (Oral Session) Calcification of periodontal ligament by collagen type III-coated hydroxyapatite OKosuke Nozaki, Kazuhisa Fujita, Kimihiro Yamashita, Hiroyuki Miura, Akiko Nagai Tokyo Medical and Dental University A - 2Surface modification of orthodontic stainless steel with bioactive glass -Obtaining aesthetic surface and enamel remineralization ability-OKyotaro Kawaguchi, Masahiro Iijima, Takeshi Muguruma, Naohiko Kawamura, Kazuhiko Endo Health Sciences University of Hokkaido Luminescence properties of Tm-Er co-doped ZrO₂ phosphor OHisataka Nishida, Tohru Sekino, Takashi Nakamura, Hirofumi Yatani Osaka University A - 4 Surface treatment for glass-ceramics by using corona discharge OHiroshi Ikeda, Yuki Nagamatsu, Hiroshi Shimizu Kyushu Dental University A - 5 Effect of surface treatment on bending strength of zirconia ceramics OMasahiro Okada, Hiroaki Taketa, Yasuhiro Torii, Takuya Matsumoto Okayama University A - 6 Biaxial flexural strengths of pressed lithium disilicate OSeiji Ban, Jyunji Iwata, Masanori Asakura, Tatsushi Kawai Aichi Gakuin University Hall A 14:00 - 15:00 **Special Lecture** 「Micro natural art - Diatom world -」 Tamotsu Nagumo Nippon Dental University at Tokyo 15:45 - 17:00 General Presentation (Oral Session)

A - /	Characteristics of translucent dental zirconia doped with 1 m
	OShinya Okamura, Hisataka Nishida, Yoshiro Nakano, Kazumichi Wakabayashi, Takahi Nakamura,
	Tohru Sekino, Hirohumi Yatani
	Osaka University
A - 8	Hydrothermal apatite synthesis from calcium oxide and polyphosphate(Part7)-Heat of Reaction
	○Hideaki Narusawa¹, Toshikazu Shiba², Hiroyuki Owada¹, Yu Kataoka¹, Takashi Miyazaki¹
	¹ Showa University, ² RigeneTiss
A - 9	Study of bone formation of apataite paste derived from Ca-amino acid complexesInfluence of amino acid
	ligand-
	○Takuya Waki¹, Toshitsugu Sakurai¹, Chihiro Mochizuki², Mitsunobu Sato², Tohru Hayakawa¹,
	Chikahiro Ohkubo ¹
	¹ Tsurumi University, ² Kogakuin University
A-10	Calcium fluoride deposition on hydroxyapatite materials in the presence of polyol molecules
	○Sei Tsutsui, Yukari Shiwaku, Takahisa Anada, Osamu Suzuki
	Tohoku University
A - 11	Hydration structure of water on ion-substituted hydroxyapatite
	ODaisuke Kobayashi, Shoki Kai, Masahiro Okada, Takuya Matsumoto
	Okayama University
April 15	5 (Saturday)
• Hall B	
9:40 - 16	5:30 General Presentation (Poster Session)
	(Odd numbers: 11:15 - 12:00, Even numbers: 15:00 - 15:45 Discussion)
P - 1	Hydrothermal treatment of the zinc phosphate coated zirconia dental implants to formation of calcium
	phosphate coating
	OKouta Kodama, Alireza Valanezhad, Hiroshi Murata, IkuyaWatanabe
	Nagasaki University
P-2	Effect of application techniques on shrinkage stress of different composite resin materials
	OShebl Shahenda ¹ , Alireza Valanezhad ² , Abdel-Karim Usama ¹ , Abdalla Ali ¹ , Elkafrawy Hend ¹ ,
	IkuyaWatanabe ²
	¹ Tanta University, ² Nagasaki University
P - 3	Study of apatite deposition in a simulated body fluid immersion experiments
	ORyo Yagi, Hajime Suzuki, Takuya Waki, Masatsugu Hirota, Tohru Hayakawa, Chikahiro Ohkubo
	Tsurumi University
P - 4	Development of novel porous titanium/implant complex
	OReiko Kobatake, Kazuya Doi, Koji Morita, Hiroki Tsuka, Takayasu Kubo, Kazuhiro Tsuga
	Hiroshima University

P - 5	Evaluation of antibacterial ability of peptide immobilized dental zirconia implant using L-Dopa as cross-linker
	Shih-Ching Wu¹, ○Yi-Chen Ye¹, Shih-Kuang Hsu¹, Hsueh-Chuan Hsu¹, Wen-Fu Ho²
	¹ Central Taiwan University of Science and Technology, ² National University of Koahsiung
P - 6	Wettability enhancement of dental zirconia by short annealing (Part2) Cell proliferation ability
	OShozo Tsuruta, Mayu Kawase, Masanobu Mizuno, Yasuaki Uematsu, Tatsushi Kawai,
	Iichiro Yamamoto
	Aichi Gakuin University
P - 7	Evaluation of tissue regenerative potential of experimental bilayered PLGA membranes for GTR
	OItsumi Yoshimoto, Ririko Tsuboi, Haruaki Kitagawa, Jun-ichi Sasaki, Satoshi Imazato
	Osaka University
P - 8	Micro/nano-patterning of curable dental materials
	○Tsukasa Akasaka, Naoyuki Kaga, Atsuro Yokoyama, Shigeaki Abe, Yasuhiro Yoshida
	Hokkaido University
P - 9	Tensile strength of the transparent dentin region in the tooth root
	○Toshiko Inoue, Makoto Saito, Fumio Nishimura, Takashi Miyazaki
	Showa University
P-10	Evaluation of electrospun hydroxyapatite/gelatin/poly(vinyl)alcohol nanofibrous scaffold for bone regeneration
	Shih-Ching Wu¹, ○Yi-Ru Zhang¹, Wen-Fu Ho², Shih-Kuang Hsu¹, Hsueh-Chuan Hsu¹
	¹ Central Taiwan University of Science and Technology, ² National University of Koahsiung
P - 11	Application of neutral electrolyzed water to prevention of infection through gypsum model
	○Yuki Nagamatsu¹, Hiroshi Nagamatsu¹, Kyozo Yoshida¹, Keiko Nakamura², Hiroshi Ikeda¹,
	Hiroshi Shimizu ¹
	¹ Kyushu Dental University, ² Fukuoka Dental College
P - 12	Influence of inhibitory effect of coating material containing S-PRG filler on enamel demineralization
	OHirokazu Toshima, Masayuki Kaga, Kazuhiko Endo, Masato Saitoh
	Health Sciences University of Hokkaido
P - 13	New method to prevent tetragonal-monoclinic transformation in zirconia implants
	OAlireza Valanezhad, Yumiko Tashima, Ikuya Watanabe
	Nagasaki University
P - 14	Antibacterial activity and mineral induction ability of proprietary MTA cements
	OMasayoshi Morita, Katsuya Nakayama, Satoshi Yamaguchi, Haruaki Kitagawa, Satoshi Imazato
	Osaka University
P - 15	Determination of setting behavior of self-adhesive resin cement utilizing tooth primer for reinforced of
	adhesion
	OHiroyasu Kurokawa, Koji Shiratsuchi, Sho Shibasaki, Chiaki Yabuki, Shunichi Suda, Masashi Miyazaki
	Nihon University

P-16	Bond strength to tooth structure and flexural properties of glass-ionomer cement for filling: Effect of coating agent
	OMasao Irie, Yukinori Maruo, Goro Nishigawa, Shogo Minagi, Kumiko Yoshihara, Yukinori Nagaoka,
	Takuya Matsumoto
	Okayama University
P - 17	Evaluation of clinical powder-liquid ratio in temporary luting carboxylate type cement
	OKazuaki Igarashi, Taisuke Moriue, Tatsuya Ohki, Ryuichi Saito, Yoshinori Ishida, Hidetoshi Okada,
	Yoshihiro Terada
	Ohu University
P - 18	Effect of ambient water on change in compressive strength of resin-modified glass ionomer cements with time
	○Hirotaka Shigeta, Yuko Nagasawa, Satoru Awata, Jun Omatsu, Ken-ichi Wada, Yasushi Hibino,
	Hiroshi Nakajima
	Meikai University
P - 19	Study of vertical bone augmentation by subperiosteal onlay graft of octacalcium phosphate/gelatin composites onto rat calvaria -
	ORyosuke Iwama, Yukari Shiwaku, Takahisa Anada, Osamu Suzuki
	Tohoku University Graduate School of Dentistry
P - 20	Experimental study of osteogenesis with non-sintered porous carbonate apatite -
	○Tadakatsu Kasai, Kazuhiro Watanabe, Shinichirou Sumitomo, Takashi Horiguchi, Yutaka Doi
	Asahi University
P - 2 1	Development of carbonate apatite bone graft material -Comparison of bone substitutes in canine extraction sites-
	○Hijiri Masuda, Yusuke Shigemitsu, Tomohiro Kumagai
	GC Corporation
P - 22	Effect of sintering conditions on mechanical properties of zirconia
	○Hiroshi Kono, Hiroyuki Arikawa, Masafumi Kikuchi
	Kagoshima University
P - 23	Study on characteristics of lithium disilicate ceramics
	OKatsura Ohashi, Kaori Miyake, Hiroaki Yamaguchi, Yuka Kameyama, Yuuki Wada, Akihiro Oshikawa,
	Kazuo Shimoyama, Tomotaro Nihei
	Kanagawa Dental University
P - 24	Effects of silicon sputter deposition on the bond strength between zirconia and resin core materials
	Mitsunori Uno ¹ , Harumi Kawaki ¹ , Ayumu Honda ¹ , Ryugo Nonogaki ¹ , Toshiko Sawada ¹ , Motonori Nishikawa ¹ ,
	Masakazu Kurachi ¹ , Hajime Ishigami ¹ , Yoshiyuki Yokogawa ² , Yutaka Doi ¹
	¹ Asahi University, ² Osaka City University
P - 25	Toothbrush abrasion resistance of the stain porcelain for zirconia
	OYuta Endo, Hidekazu Tanaka, Masatoshi Yamazoe, Takahiro Kato
	Yamamoto Precious Metal Co.,Ltd.

P - 26	Antibacterial activity and surface roughness of high-strength dental stone added photocatalyst
	OKyouzou Yoshida, Yuki Nagamatsu, Hiroshi Ikeda, Hiroshi Shimizu
	Kyushu Dental University
P - 27	Preparation of emulsion-colored hydroxyapatite sheet with enamel restoration and aesthetic appreciation
	○Shigeki Hontsu ¹ , Yoshiya Hashimoto ² , Kazushi Yoshikawa ² , Kazuyo Yamamoto ²
	¹ Kinki University, ² Osaka Dental University
P - 28	Effect of thermal oxidation on the properties of porous titanium scaffold
	OAlireza Valanezhad ¹ , Mohammad Khodaei ² , Ikuya Watanabe ¹
	¹ Nagasaki University, ² Majlesi Islamic Azad University
P - 29	Mechanical strength of dental Ag-Pd-Cu-Au system alloy subjected to simple solution treatment
	○Tsubasa Mizuno¹, Toshikazu Akahori¹, Mitsuo Niinomi¹, Hisao Fukui²
	¹ Meijo University, ² Aichi-Gakuin University
P - 3 0	A study on corrosion resistance and bioactivity of calcium phosphate coated Magnesium by electrodeposition
	Shih-Kuang Hsu¹, ○Hsiao-Mei Huang¹, Hsueh-Chuan Hsu¹, Wen-Fu Ho², Shih-Ching Wu¹
	¹ Central Taiwan University of Science and Technology, ² National University of Koahsiung
P - 3 1	Microstructures and mechanical properties of new beta Ti alloy by thermomechanical processing
	Wen-Fu Ho ¹ , OJin-Sian Chen ¹ , Hsueh-Chuan Hsu ² , Shih-Ching Wu ² , Shih-Kuang Hsu ²
	¹ National University of Koahsiung, ² Central Taiwan University of Science and Technology
P - 3 2	Evaluation of experimental investments for dental titanium casting
	Wen-Fu Ho¹, ○Shu-Wen Li¹, Hsueh-Chuan Hsu², Shih-Ching Wu², Shih-Kuang Hsu²
	¹ National University of Koahsiung, ² Central Taiwan University of Science and Technology
P - 33	Synthesis and characterization of titania nanotubes prepared by anodization and ultrasound assistance
	Wen-Fu Ho¹, ○Chun-Yu Lin¹, Hsueh-Chuan Hsu², Shih-Ching Wu², Shih-Kuang Hsu²
	¹ National University of Koahsiung, ² Central Taiwan University of Science and Technology
P - 34	Mechanical properties and microstructure of as-cast Ti-Nb-Sn-Mo alloys for biomedical applications
	Wen-Fu Ho ¹ , OChao-Yong Jheng ¹ , Hsueh-Chuan Hsu ² , Shih-Ching Wu ² , Shih-Kuang Hsu ²
	¹ National University of Koahsiung, ² Central Taiwan University of Science and Technology
P - 3 5	Optical properties and corrosion resistance of colored Ti-Nb-Mo alloy for dental applications
	Hsueh-Chuan Hsu¹, ○Pei-Chi Li¹, Cheng-Feng Wang², Wen-Fu Ho³, Shih-Kuang Hsu¹, Shih-Ching Wu¹
	¹ Central Taiwan University of Science and Technology, ² Min-Hwei College of Health Care Management,
	³ National University of Koahsiung
P - 36	A study on structure and characteristics hydroxyapatite-coated porous Ti-Nb-Mo alloy
	Hsueh-Chuan Hsu¹, ○Min-Hung Shih¹, Wen-Fu Ho², Shih-Ching Wu¹, Shih-Kuang Hsu¹
	¹ Central Taiwan University of Science and Technology, ² National University of Koahsiung
P - 37	Comparison of corrosion damages caused by cleaning solutions on stainless steel used for fabrication of
	surgical instruments
	OMary Kanyi, Masatoshi Takahashi, Hanako Sakatsume, Yukyo Takada
	Tohoku University

April 16	(Sunday)
■ Hall A	
9:30 - 11	:00 General Presentation (Oral Session)
A - 12	Modification with magnesium ions on a titanium surface given by an alkaline heat treatment so as to aim
	advance of bone compatibility -Establishment of modification conditions-
	○Hanako Sakatsume, Masatoshi Takahashi, Mary Kanyi, Yukyou Takada
	Tohoku University
A - 13	Evaluation of antibacterial property on copper-introduced surface layer formed by electrochemical treatment
	OMasaya Shimabukuro, Yusuke Tsutsumi, Risa Yamada, Kosuke Nozaki, Maki Ashida, Peng Chen,
	Hisashi Doi, Akiko Nagai, Takao Hanawa
	Tokyo Medical and Dental University
A - 14	Investigation of accelerated corrosion reaction of titanium under drying thin electrolyte layer simulating oral
	cavity environment
	○Yusuke Tsutsumi, Maki Ashida, Hisashi Doi, Takao Hanawa
	Tokyo Medical and Dental University
A - 15	Development of electrically-debondable dental cements (Part4) - Observation of failure mechanism -
	ONoboru Kajimoto, Emi Uyama, Kazumitsu Sekine, Kenichi Hamada
	Tokushima University
A - 16	Preparation of magnesium-containing β -tricalcium phosphate cement using different powder preparation
	○Takaaki Arahira, Michito Maruta, Shigeki Matsuya
	Fukuoka Dental College
A - 17	Analysis of arsenic in MTA cement and effect of glutathione on arsenic-induced toxicity on pulpal-like cells
	○Noriko Hiraishi ¹ , Yukihiko Tamura ² , Yusuke Tsutsumi ³ , Takao Hanawa, Junji Tagami ¹
	Tokyo Medical and Dental University
• Hall D	
12:00 - 13	3:00 Luncheon Seminar
A	dhesive System in Tokuyama Dental Corporation
	Yasuhiro Ogawa

14:15 - 15:30 General Presentation (Oral Session)

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

OSatoshi Emilio Hara, Masahiro Okada, Noriyuki Nagaoka, Takuo Kuboki, Takuya Matsumoto

Okayama University

Tokuyama Dental Corporation

A - 19 Characterization of the first minerals formed during secondary ossification

OTakuya Matsumoto, Satoshi Emilio Hara, Masahiro Okada

Okayama University

A - 20	Wear of various types of composite resin against bovine enamel
	OKensuke Tanaka, Rino Harada, Tomoko Someya, Hideaki Kinoshita, Masaaki Kasahara,
	Takashi Ohyama, Shinji Takemoto
	Tokyo Dental College
A - 21	Influence of phytic acid and EDTA as dentin chelating agents on bond strength and hardness of self-adhesive
	cements
	OMuana Hosea Lal Rin, Noriko Hiraishi, Masatoshi Nakajima, Junji Tagami
	Tokyo Medical and Dental University
A - 22	Influence of the operation on flexural strength and elastic modulus in self-cured resins
	OTatsuya Ohki, Ryuichi Saito, Kazuaki Igarashi, Yoshinori Ishida, Hidetoshi Okada
	Ohu University
15:30 (Closing Remark
April 16	o (Sunday)
• Hall B	
	5:00 General Presentation (Poster Session)
	(Odd numbers: 11:15 - 12:00, Even numbers: 13:15 - 14:00 Discussion)
P-38	Effect of Nd:YVO ₄ nanosecond laser machining on flexural strength of fully sintered zirconia
	○Miku Kazama-Koide, Kazuo Ohkuma, Yukio Miyagawa
	Nippon Dental University at Niigata
P-39	Tensile bond strength of adhesive resin cement for CAD/CAM resin block
	OKazuhiro Hikita, Hirokazu Toshima, Masato Saitoh, Takeo Maida, Takashi Nezu, Kazuhiko Endo
	Health Sciences University of Hokkaido
P - 4 0	A study of cutting parameter on dental zirconia for CAD/CAM application
	Shih-Ching Wu ¹ , OAn-Jie Lo ¹ , Hsueh-Chuan Hsu ¹ , Wen-Fu Ho ² , Shih-Kuang Hsu ¹
	¹ Central Taiwan University of Science and Technology, ² National University of Koahsiung
P - 4 1	Physical, mechanical and biological properties of short-fiber reinforced composite
	Jafarnia Shiva¹, ○Alireza Valanezhad², Shahabi Sima¹, Ikuya Watanabe¹,²
	¹ Tehran University of Medical sciences, ² Nagasaki University
P - 42	Toothpaste containing apatite photocatalyst - Whitening effect of sonic vibration using a new toothbrush with
	LED light (Part III) -
	OHideo Kamemizu, Yoko Noda, Takashi Horiguchi, Motonori Nishikawa, Masato Hotta
	Asahi University
P-43	Basic study for the dimensional accuracy between a 3D printed object and a digital data for production
	○Tadasuke Hori¹, Miki Hori², Tatsushi Kawai²
	¹ Alid inc., ² Aichi-Gakuin University

2 - 44 Effect of horizontal shift of center of magnetic assembly and that of keeper on retentive force of dental magnetic attachments
○Masatoshi Takahashi, Hanako Sakatsume, Mary Kanyi, Yukyo Taka
Tohoku Universi
P-45 Cutting properties of fiber reinforced PEEK (polyetheretherketone) with carbide bur
OSeigo Okawa, Norimasa Taka, Mitsugu Kanatani, Kenji Izur
Niigata Universi
P-46 Thermochromism of restorative composite resins. (Part 4) Thermal dependence of refractive indices composite resins
OHiroyuki Arikawa, Yoshito Minesaki, Hiroshi Kono, Masafumi Kikuchi
Kagoshima Universi
P - 47 Bonding properties of fiberglass reinforced composite resin blocks for CAD/CAM - Effect of arrangement fiberglass -
○Tohru Yasue, Naohiko Iwasaki, Hidekazu Takahashi, Tetsuya Suzu
Tokyo Medical and Dental University
P - 48 Study on hybrid ceramics using CAD/CAM (Part 3)-Characteristics of novel hybrid ceramic blocks-
○Yuka Kameyama¹, Hiroaki Yamaguchi¹, Katsura Ohashi¹, Kaori Miyake¹, Akihiro Oshikawa
Kazuo Shimoyama ¹ , Yuuki Wada ¹ , Yasuhiro Tanimoto ² , Satoshi Hirayama ² , Tomotarou Nihei
¹ Kanagawa Dental University, ² Nihon University School of Dentistry at Matsuc
P-49 The effect of isolated silanol groups present on the filler surface on the mechanical strength of indire
composite resin
○Shuhei Takahashi, Hidefumi Fujimura, Mitsuji Teramae, Toshiyuki Nakatsu Sho
P - 5 0 Study on hybrid ceramics using CAD/CAM (Part 4) -Adhesion effect of MMA-type luting cement-
○Tomotaro Nihei¹, Yuka Kameyama¹, Hiroaki Ymaguchi¹, Katsura Ohashi¹, Kaori Miyake¹, Akihiro Oshikawa Kazuo Shimoyama¹, Yuuki Wada¹, Yasuhiro Tanimoto², Satoshi Hirayam
¹ Kanagawa Dental Universuty, ² Nihon University School of Dentistry at Matsuc
2 - 5 1 Properties of bulk fill flowable composite resins
○Keiko Nitta¹, Rie Nomoto¹, Yuji Tsubota¹,², Masuji Tsuchikawa³, Tohru Hayakaw
¹ Tsurumi University, ² Tsubota Dental Clinic, ³ Sun Medical Co., Le
P - 5 2 Influence of accelerated deterioration on bending strength of hard resins
○Yoshiki Ishida, Taira Miyasaka, Harumi Aoki, Yusuke Aoyagi, Daisuke Miu
Nippon Dental University at Tok
P - 5 3 Difference of mechanical strength in biaxial and three-point bending test
○Takumasa Kimura, Nobuhito Takagi, Takayuki Ueno, Tomohiro Kumag
GC Corporation
P - 5 4 Development of dental composite resin utilizing low viscous and low shrinking novel monomers
○Yusuke Aoyagi, Taira Miyasaka, Harumi Aoki, Yoshiki Ishida, Daisuke Miu
Nippon Dental University at Tok

P - 5 5	The development of acrylamide monomer containing pulp capping materials
	○Kumiko Yoshihara¹, Noriyuki Nagaoka¹, Yasuhiro Yoshida²
	¹ Okayama university, ² Hokkaido University
P - 5 6	Development of visible light-polymerized soft denture liners with i-BMA and ATBC- Setting characteristics -
	○Tomoyasu Mori, Kazuma Takase, Takafumi Egoshi, Hiroshi Murata
	Nagasaki University
P - 5 7	The performance of resin composite for constructing tooth foundation (Part 2) - Three point bending strength and dentin bond strength -
	○Yuuki Wada, Kaori Miyake, Katsura Ohashi, Yuka Kameyama, Akihiro Oshikawa, Kazuo Shimoyama,
	Tomotaro Nihei
	Kanagawa Dental University
P - 58	Dispersed/dissolved state of cetylpyridinium chloride in HEMA-MMA monomer mixture
	○Takashi Nezu, Futami Nagano-Takebe, Kazuhiko Endo
	Health Sciences University Hokkaido
P - 59	Dimensional changes in stone casts resulting from long-term immersion of silicone impressions taken with
	individual tray in disinfectant solutions
	○Hisako Hiraguchi, Takayuki Yoneyama
	Nihon University
P - 6 0	Influence of different smear layers on enamel bond durability of self-etch adhesives
	○Toshiki Takamizawa, Akimasa Tsujimoto, Arisa Imai, Hajime Endo, Keishi Sai, Masashi Miyazaki
	Nihon University
P - 6 1	Comparison of lamination bonding strength of mouth guard sheet materials due to change in welting
	temperature
	○Gen Tanabe, Hiroshi Churei, Yuriko Yoshida, Takahiro Shirako, Takahiro Wada, Toshiaki Ueno
	Tokyo Medical and Dental University
P - 6 2	Bond strength of self-adhesive resin cement with tooth primer to dentin
	○Keiichi Yoshida, Takashi Sawase
	Nagasaki University Hospital
P - 63	Influence of the oxygen-inhibited layer on bonding performance of dental adhesive systems
	OAkimasa Tsujimoto, Toshiki Takamizawa, Kie Nojiri, Hajime Ouchi, Takayuki Suzuki, Masashi Miyazaki
	Nihon University
P - 6 4	Evaluation of laser pretreatment on shear bond strength of adhesive resin cement to polyetheretherketone (PEEK)
	○Hiroki Tsuka, Koji Morita, Kazuya Doi, Yasuhiko Abe, Kazuhiro Tsuga
	Hiroshima University
P - 65	Effect on tensile bond strength of resin composite to ultraviolet and mutli-purpose bonding system treated

adherends

Improving the durability of resin-dentin bonds with an antibacterial monomer MDPB P-66 OMasanori Hashimoto, Nanako Hirose, Haruaki Kitagawa, Satoshi Yamaguchi, Satoshi Imazato Osaka University Evaluation of initial dentin bonding properties of novel self-adhesive resin cement G-CEM ONE P - 67 OAyaka Sugawara, Tomohiro Kumagai GC Corporation Layering mechanism of MDP-Ca salt produced in demineralization of enamel and dentin apatite P-68 OTakehiro Yaguchi, Manamu Nagakura, Yasuhiro Tanimoto, Norihiro Nishiyama Nihon University at Matsudo P - 69 Development of zirconia adhesive system using silane adhesive system OTakahiro Murakami, Norihiro Nishiyama, Masahiro Aida Nihon University at Matsudo P - 70Effect of the amounts of lower left lateral incisor linguoversion on the force in multi-bracket appliance OKeisuke Tochigi, Naomi Saze, Takashi Koda, Kazuhito Arai Nippon Dental University at Tokyo P - 7 1 Canine and first molar widths of stainless steel preformed arch wire OTakashi Koda, Naomi Saze, Keisuke Tochigi, Kazuhito Arai Nippon Dental University at Tokyo Enamel micro-crack examination using DIAGNOcam with fluorescence-staining P - 7 2 OToshio Maseki, Yoichiro Nara Nippon Dental University at Tokyo P - 7 3 Influence of composition and P/L ratio of powder-type denture adhesives comprised of CMC-Na and PVM-MA on adhesive strength OHitomi Okazaki, Kazuhiro Yoshida, Hiroshi Murata Nagasaki University P - 7 4 Surface properties of glass fiber-reinforced non-metal-clasp denture materials OYasuhiro Tanimoto, Manamu Nagakura, Masahiro Teshima, Norihiro Nishiyama Nihon University at Matsudo

OTakuo Yamamura^{1, 2}, Taiyu Gen¹, Shusuke Kusakabe¹, Masayasu Ando², Masato Hotta¹

¹Asahi University, ²Chubu Implant Academy