

The 72th General Session of the Japanese Society for Dental Materials and Devices (JSDMD)

October 6 (Saturday) - 7 (Sunday), 2018

Hokkaido University (Hokkaido University Conference Hall)

Kita 8 Nishi 5, Kita-ku, Sapporo 060-0808, Japan

October 6 (Saturday)

▪ Hall A

9:25 - 9:30 Opening Remark

9:30 - 9:45 Young Investigator Award Challenge (Oral Session)

9:45 - 11:00 General Presentation (Oral Session)

- A - 1 Fabrication of osteoconductive poly(ether ether ketone)
○Akira Tsuchiya¹, Riki Toita², Kanji Tsuru³, Kunio Ishikawa¹
¹Kyushu University, ²National Institute of Advanced Industrial Science and Technology, ³Fukuoka Dental College
- A - 2 Toothbrush wear of paint-on resins for shade modification of CAD/CAM block
○Yusuke Yamamoto, Naohiko Iwasaki¹, Patharanun Chaiamornsap, Tetsuya Suzuki, Hidekazu Takahashi
Tokyo Medical and Dental University,
- A - 3 Silanization for preparing organic-inorganic composite with nano dual-network structure
○Hiroshi Ikeda, Yuki Nagamatsu, Hiroshi Shimizu
Kyushu Dental University
- A - 4 Influence of aluminum detection of composite resins for abutment at temporary luting, cleaning process and final cementation
○Kazuaki Igarashi¹, Taisuke Moriue¹, Masahiro Takahashi¹, Tatsuya Ohki², Ryuichi Saito², Yoshinori Ishida², Hidetoshi Okada², Hideshi Sekine¹
¹Ohu University, ²Ohu University
- A - 5 Desining mucoadhesive hydrogels toward their clinical applications
○Fumiko Nishio¹, Isao Hirata², Kazuhiro Tsuga¹, Koichi Kato²
¹Hiroshima University Graduate School of Biomedical & Health Sciences Advanced Prosthodontics, ²Hiroshima University Graduate School of Biomedical & Health Sciences Biomaterials
- A - 6 Deep convolutional network cascade for feature point extraction of cephalogram
○Miki Hori¹, Makoto Jincho¹, Tadasuke Hori^{1,2}, Hironao Sekine^{1,2}, Kohtaroh Fujimoto¹, Tatsushi Kawai¹
¹Aichi-Gakuin University, ²Alid inc.

Hall A

13:10 - 14:50 Symposium

「Practical applications of new technologies in dentistry」

Professor Kunio Ishikawa (Department of Biomaterials, Faculty of Dental Science, Kyusyu University)

Assistant Professor Yasuhiko Abe (Department of Advanced Prosthodontics, Graduate School of Biomedical & Health Sciences, Hiroshima University)

Professor Kazuhiro Hikita (Division of Digital Dentistry, Department of Oral rehabilitation, School of Dentistry, Health Sciences University of Hokkaido)

15:40 - 16:40 General Presentation (Oral Session)

- A - 7 Effect of physicochemical property of OCP on the crosstalk between osteoclasts and osteoblasts
Yukari Shiwaku, Linghao Xiao, Keiichi Sasaki, ○Osamu Suzuki
Tohoku University Graduate School of Dentistry
- A - 8 Improving function of low molecular weight osteoinductive agents by an inclusion complex with cyclodextrins
○Atsushi Tamura, Masahiko Terauchi, Nobuhiko Yui
Tokyo Medical and Dental University

- A - 9 In vitro evaluation of a novel poly(lactic acid/caprolactone) bilayer membrane for GBR application
 ○Gabriela Abe¹, Jun-Ichi Sasaki¹, Haruaki Kitagawa¹, Tomoki Kohno², Ririko Tsuboi², Satoshi Imazato^{1,2}
¹Department of Biomaterials Science, Osaka University Graduate School of Dentistry, ²Department of Advanced Functional Materials Science, Osaka University Graduate School of Dentistry

- A - 10 Invention of anti-gravity mechano-dynamic culture system: biological effects on stem cells
 ○Yoshinori KUBOKI¹, Qin Song²
¹Hokkaido University, ²Chengdu University

Hall A

16:40 - 17:40 Special Lecture 1

「Development of a novel cartilage tissue engineering technique using ultra-purified alginate gel for clinical application」

○Professor Norimasa Iwasaki (Department of Orthopedic Surgery, Faculty of Medicine and Graduate School of Medicine, Hokkaido University)

October 6 (Saturday)

▪ Hall B

9:40 - 16:30 General Presentation (Poster Session)

(Odd numbers: 11:10 – 11:50, Even numbers: 14:55 - 15:35 Discussion)

- P - 1 Evaluation of wear resistance for CAD/CAM resin blocks for molar
 ○Komachi Hoshino, Takayuki Ueno, Tomohiro Kumagai
 GC Corporation
- P - 2 Study on dental application of deteriorated PEEK resin
 ○Daisuke Miura, Taira Miyasaka, Harumi Aoki, Yuusuke Aoyagi, Yoshiki Ishida, Yuu Harada, Satoru Watanabe
 Nippon Dental Univ. at Tokyo
- P - 3 Mechanical properties of new light cure type resin core material
 ○So Ishizuka, Naofumi Matsumoto, Akishi Arita, Tomohiro Kumagai
 GC CORPORATION
- P - 4 Evaluation of C. albicans adhesion on self-cured acrylic resin and light-cured resin composite
 ○Futami Nagano-Takebe, Mitsugiu Kakizaki, Gazi Mehedi Hassan, Takashi Nezu, Morio Ochi, Kazuhiko Endo¹
¹Health Sciences University of Hokkaido
- P - 5 Influence of the operation on various properties of self-cured resins -Temporary bond strength to abutment -
 ○Tatsuya Ohki, Ryuichi Saito, Taisuke Moriue, Kazuaki Igarashi, Yoshinori Ishida, Tetsuo Yamamori, Hideshi Sekine, Hidetoshi Okada
 OHU University
- P - 6 Study on characteristics of indirect restorative hybrid resin composite (Part.2) Mechanical properties of each hybrid resin composite
 ○Yuta Katayama¹, Karl-Heinz Kumzelmamm², Yuka Kameyama¹, Yuuki Wada¹, Katsura Ohashi¹, Kaori Aoki¹, Tomoyasu Midono¹, Toshiyuki Suzuki¹, Yasuhiro Tanimoto⁴, Satoshi Hirayama⁴, Tomotaro Nihei¹
¹Kanagawa Dental University Graduate School of Dentistry, ²LMU-Dental School, ⁴Nihon University School of Dentistry at Matsudo ,
- P - 7 Development of original powder-liquid mixed type high performance PMMA/MMA based resin (Part 3)
 ○Sachiko Ikeda¹, Yu Kataoka¹, Jiro Tanaka¹, Tetsuya Hara², Yasuhiro Hotta¹, Takashi Miyazaki¹
¹Showa University School of Dentistry, ²Okayama University
- P - 8 Influence of water immersion on the change in elastic modulus of CAD/CAM composite resin block
 ○Chunwoo Lee, Satoshi Yamaguchi, Satoshi Imazato
 Osaka University
- P - 9 Mechanical property and shear bond strength of light curing composite core material
 ○Sakura Shiratori¹, Akikazu Shinya^{1,2}, Shin Fujishima¹, Akinori Niitsuma¹, Soichi Kuroda¹, Mironi Hatta^{1,2},

Harunori Gomi¹

¹Nippon Dental Univ., ²Univ. of Turku

- P - 1 0 Study on hybrid resin composites using CAD/CAM (Part. 7).-Characteristics of experimental blocks with different volume of inorganic filler content-
○Yuka Kameyama¹, Katsura Ohashi¹, Yuuki Wada¹, Yuta Katayama¹, Kaori Aoki¹, Yasuhiro Tanimoto², Satoshi Hirayama², Tomotarou Nihei¹
¹Kanagawa Dental University, ²Nihon University School of Dentistry at Matsudo
- P - 1 1 The retention force with resin composites and fiber posts with enhanced network structures
○Tomoko Someya¹, Masaaki Kasahara¹, Kei Kyogoku¹, Koji Hasegawa¹, Tatsumi Noguchi¹, Masayuki Hattori¹, Hidekazu Takahashi²
¹Tokyo Dental College, ²Tokyo Medical and Dental University
- P - 1 2 The performance of resin composite for constructing tooth foundation(Part.3)-Mechanical strength of experimental resin core-
○Yuuki Wada, Kaori Aoki(Miyake), Yuka Kameyama, Yuta Katayama, Akihiro Oshikawa, Kazuo Shimoyama, Katsura Ohashi, Tomotaro Nihei
Kanagawa Dental University
- P - 1 3 Development of composite resin using propoxylated bisphenol-A diacrylate monomers
○Yusuke Aoyagi, Taira Niyasaka, Yoshiki Ishida, Harumi Aoki, Daisuke Miura, Yuu Harada, Watanabe Satoru
The Nippon Dental University, School of life Dentistry at Tokyo
- P - 1 4 The influence of various experimental silane coupling agents on adhesiveness between resin block for CAD/CAM crowns and resin cement
○Masatsugu Hirota, Kou Tsukakoshi, Rie Nomoto, Tohru Hayakawa
Tsurumi University School of Dental Medicine
- P - 1 5 Relationship between reaction products and physical properties of tooth interfaces in one step adhesive system
○Kazuomi Suzuki¹, Noriyuki Nagaoka¹, Kumiko Yoshihara¹, Takuya Matsumoto¹, Yasuhiro Yoshida²
¹Okayama University, ²Hokkaido University
- P - 1 6 Characterization of chemical cured multi-primer / tooth Interfaces
○Kumiko Yoshihara¹, Noriyuki Nagaoka¹, Yasuhiro Yoshida²
¹Okayama University, ²Hokkaido University
- P - 1 7 Modification effect of multi light-cured type primer (Part.2)-Tensile bond strength of modified dentin surface after long-term water storage
○Tomotaro Nihei, Tomoyasu Midono, Kaori Aoki (Miyake), Yuka Kameyama, Yuuki Wada, Yuta Katayama, Yurie Okuhama, Aimi Omata, Keisuke Nakamura, Tetsuro Kuroda, Katsura Ohashi
Div. of Clinical Biomaterials, Dept. of Oral Science, Kanagawa Dental University
- P - 1 8 Development of titanium adhesive systems (Part 2) -The effect of H₂O₂ oxidation on the titanium bonding performance through γ -MPTS-
○Taro Iwasaki, Yasuhiro Tanimoto
Nihon University School of Dentistry at Matsudo
- P - 1 9 Influence of yttria content on translucency and flexural strength of highly translucent dental zirconia
○Masanao Inokoshi, Kosuke Nozaki, Haruki Shimizu, Shunsuke Minakuchi
Tokyo Medical and Dental University (TMDU)
- P - 2 0 Influence of the number of insertions and removals of telescopic Ce-TZP/Al₂O₃ crowns on retentive force and settling
○Yusuke Yoshikawa, Katsunori Torii, Masahiro Tanaka
Osaka Dental University
- P - 2 1 Effect of mechanical surface treatments for high translucent zirconia ceramics
○Masahiro Okada, Yoshiko Fujii, Soichiro Uno, Hiroaki Taketa, Yasuhiro Torii, Takuya Matsumoto
Okayama University
- P - 2 2 Effect of sintering conditions on translucent of zirconia
○Hiroshi Kono, Hiroyuki Arikawa, Masafumi Kikuchi
Kagoshima Univ.
- P - 2 3 Develop of high strength beta-tricalcium phosphate cement: Effects of addition of fiber zirconia

- Yeeun Kim¹, Jiyoung Bae¹, Yumika Ida², Kazumitsu Sekine¹, Fumiaki Kawano³, Kenichi Hamada¹
¹Department of Biomaterials and Bioengineering, Tokushima University Graduate School of Oral Science,
²Department of Conservative Dentistry, Tokushima University Graduate School of Oral Science,
³Department of Comprehensive Dentistry, Tokushima University Graduate School of Oral Science
- P - 2 4 Evaluation of surface chemical state of octacalcium phosphate in simulated body environment
 ○Ryo Hamai, Susum Sakai, Yukari Shiwaku, Osamu Suzuki
 Tohoku University
- P - 2 5 withdraw
- P - 2 6 Evaluation of bone strength and efficacy on carbonate apatite granule *in vivo*
 ○Katsuyuki Yamanaka, Masuda Hijiri, Yusuke Shigemitsu, Tomohiro Kumagai
 GC Corporation
- P - 2 7 Evaluation of guided bone regeneration of Ti-Ta-Mo-Zr alloy membrane coated with CaP-doped nanotube:
in vivo study
 Nguyen Phuong Mai H.^{1,2}, Lee Min-Ho², ○Bae Tae-Sung²
¹Dept. of Odonto-Maxillo-Facial., Hue Central Hospital, Viet Nam,
² School of Dentistry, Chonbuk National Univ., South Korea
- P - 2 8 Alloy phase study and tensile strength of cast Ti-Nb-Cu ternary alloys
 ○Kotaro Sato, Masatoshi Takahashi, Hanako Sakatsume, Yukyo Takada
 Tohoku University
- P - 2 9 Development of high strength Ti-Mn alloys using metastable β phase: corrosion resistance
 ○Koji Sasazaki, Masatoshi Takahashi, Hanako Sakatsume, Yukyo Takada
 Tohoku University
- P - 3 0 Effects of multiple times sterilization using Low-energy Electron Beam irradiation on cp titanium surface
 ○Mitsugu Kanatani¹, Isao Kimura², Kenji Izumi¹
¹Niigata University, ²Niigata University
- P - 3 1 Fabrication of sodium titanate nanorod array on Ti6Al4V alloy
 ○Yaming Wang^{1,2}, Masahiro Okada², Takuya Matsumoto²
¹Henan University of Science and Technology, ²Okayama University
- P - 3 2 Implanting examination of the screw-type PEEK implant into artificial bone
 ○Eiji Yoshida, Rie Nomoto, Tohru Hayakawa
 Tsurumi University School of Dental Medicine
- P - 3 3 Preparation of carbonate-containing hydroxyapatite from eggshells by hydrothermal method
 ○Wen-Fu Ho¹, Hsueh-Chuan Hsu², Shih-Ching Wu², Shih-Kuang Hsu²
¹National University of Kaohsiung, ²Central Taiwan University of Science and Technology
- P - 3 4 Evaluation of implant stability in bone reconstruction site with porous titanium
 ○Reiko Kobatake, Kazuya Doi, Takayasu Kubo, Hanako Umehara, Kazuhiro Tsuga
 Hiroshima Univ
- P - 3 5 Comparison of adsorption behavior of antibacterial proteins on titanium surface studied by QCM method
 ○Takashi Nezu, Futami Nagano-Takebe, Mehedi Hasan Gazi, Kazuhiko Endo
 Health Sciences Univ. Hokkaido
- P - 3 6 Fabrication of alpha-tricalcium phosphate film on SLA-Ti implants using Er: YAG laser deposition
 ○Mizuki Hirai¹, Shigeki Hontsu¹, Tomoki Minamino¹, Yoshiya Hashimoto², Shunsuke Baba²
¹Kinki University, ²Osaka Dental University
- P - 3 7 Development of CAD/CAM composite resin crown for primary teeth-Evaluation of physical properties of
 experimental CR block containing S-PRG filler-
 ○Yutaro Nakase, Satoshi Yamaguchi, Rena Okawa, Kazuhiko Nakano, Satoshi Imazato
 Osaka University
- P - 3 8 Study on mechanical properties of specimens produced by SLS layered modeling using pure titanium powder
 ○Yuu Harada, Taira Miyasaka, Yoshiki Ishida, Harumi Aoki, Daisuke Miura, Satoru Watanabe, Yusuke
 Aoyagi¹
 Nippon Dental Univ. at Tokyo

- P - 3 9 Detail reproduction of model obtained by 3D scanner -Influence of lightness value of gypsum-
 ○Tadasuke Hori^{1,2}, Miki Hori³, Hironao Sekine^{1,2}, Tatsushi Kawai¹
¹Aichi-Gakuin University, ²Alid inc.
- P - 4 0 Development of a dental mirror with adjustable magnification from wide-angle to close-up
 ○Takashi Kameda, Kazuo Ohkuma
 Nippon Dental Univ..
- P - 4 1 Development of driving units for an occlusion-training/rehabilitation assist robot preventing from oral frailty
 ○Takashi Kameda, Kazuo Ohkuma
 Nippon Dental Univ
- P - 4 2 Shock absorption analysis of mouthguard made of glass fiber reinforced material using high-speed camera
 ○Hiroshi Churei, Gen Tanabe, Takahiro Wada, Rio Kinjo, Yuriko Yoshida, Kairi Hayashi, Motohiro Uo, Hidekazu Takahashi, Toshiaki Ueno
 Tokyo Medical and Dental Univ.
- P - 4 3 Development of selective drug release behavior of nanoporous particles in dental materials
 ○Yuko Era^{1,2}, Ko Nakanishi², Shigeaki Abe², Miho Tamai², Tsukasa Akasaka², Yasuhiro Yoshida²
¹Saitama Prefectural University, ²Hokkaido University
- P - 4 4 The effect of new disinfection agent for impression body to the dimensional stability of impression body and the surface roughness of gypsum body
 ○Ayumi Dodomi, Eibu Sakata, Koichirou Hirata
 Tokuyama Dental Corporation

October 7 (Sunday)

▪ Hall A

9:00 - 10:00 General Presentation (Oral Session)

- A - 11 Strain-dependent elastic-plastic transition of tooth enamel at nanoscale
 ○Yo Shibata, Reina Tanaka, Naofumi Shimomura, Jun Zhou, Rihan Wu, Takashi Miyazaki
 Showa University
- A - 12 Hydrothermal apatite synthesis from calcium oxide and polyphosphate (Part10) Product purification and application example -
 ○Hideaki Narusawa, Yu Kataoka, Takashi Miyazaki
 Showa University
- A - 13 Preparation of β -TCP with controlled formability and solubility
 ○Michito Maruta, Takaaki Arahira, Noboru Kajimoto, Kanji Tsuru
 Fukuoka Dental College
- A - 14 Fabrication and evaluation of porous carbonate apatite from alpha tricalcium phosphate spheres
 ○Koichiro Hayashi, Tya Arifta, Kanji Tsuru, Kunio Ishikawa
 Kyushu Univ.

Hall A

10:00 - 11:00 Special Lecture 2

「The frontiers of dental adhesives -Translational research from laboratory outcome to clinical outcome」

○Professor Bart Van Meerbeek

KU Leuven (University of Leuven), Department of Oral Health Research,

BIOMAT, & UZ Leuven (University Hospitals Leuven), Dentistry,

▪ Hall C

12:00 - 13:00 Luncheon Seminar

「Proposing a delightful life with a denture - Leverage non-metal clasp denture and an appropriate treatment of a denture - 」

○Fujio Nakai

i-CAST Co.,Ltd Dental Technician/Director

▪ Hall A

13:10 - 14:10 General Presentation (Oral Session)

A - 15 Strontium doped coating on titanium implant to enhance osseointegration

○Urangoo Sugarbaatar¹, Takashi Kado¹, Takashi Nezu², Futami Nagano-Takebe², Yuki Ichioka¹, Yasushi Furuichi¹,
Kazuhiko Endo²

¹Health Science University of Hokkaido, ²Health Science University of Hokkaido

A - 16 The effect of Fe addition to the wear resistance of titanium

○Hirofumi Yamaguchi, Masatoshi Takahashi, Hanako Sakatsume, Keiichi Sasaki, Yukyo Takada

Tohoku University

A - 17 Optimization of surface roughness of composite resin block by controlling milling condition

○Mayuko Matsumura, Kosuke Nozaki, Kimihiro Yamashita, Mitsuaki Matsumura, Hiroyuki Miura

Tokyo Medical and Dental University

A - 18 Evaluation for oral scanner with 3-unit bridges made from digital casts

○Mitsunobu Okamura¹, Masato Yokosuka², Hiroshi Shimizu³, Shiniti Masumi³

¹Okamura dental clinic, ²Yokosuka dental clinic, ³Kyushu dental university

▪ Hall A

15:10 - 15:55 General Presentation (Oral Session)

A - 19 Fabrication of low magnetic Zr alloys by laser-powder bed fusion process

○Naoyuki Nomura¹, Yusuke Tsutsumi², Hisashi Doi², Akira Kawasaki¹, Takao Hanawa²

¹Department of Materials Processing, Tohoku University, Tokyo Medical and Dental University.

A - 20 Corrosion behavior of materials for dental implant abutment in acidic fluoride solution

○Gazi Mehedi Hasan, Futami Nagano-Takebe, Takashi Nezu, Kazuhiko Endo

Health Sciences University of Hokkaido

A - 21 Investigation of allergic property of palladium by accelerated corrosion test

○Yusuke Tsutsumi, Ashida Maki, Hisashi Doi, Takao Hanawa

Tokyo Medical and Dental University

15:55 Closing Remark

October 7 (Sunday)

▪ Hall B

9:40 - 15:30 General Presentation (Poster Session)

(Odd numbers: 11:10 - 11:50, Even numbers: 14:20 - 15:00 Discussion)

P - 45 Anion-doped monoclinic apatite as a possible origin for enamel regeneration

○Reina Tanaka, Yo Shibata, Takashi Miyazaki

Showa University

- P - 4 6 Structural properties of human coronoid process by micro region bone analysis
○Masaaki Kasahara, Tomoko Someya, Toshio Igarashi, Tetsuya Aichi, Hiromichi Ichikawa, Masao Yoshinari, Masayuki Hattori
Tokyo Dental College
- P - 4 7 Structural analysis of dentin exposed to excimer UV irradiation
○Toshiko Inoue, Makoto Saito, Masato Yamamoto, Fumio Nishimura, Takashi Miyazaki
Showa University
- P - 4 8 Observation of H₂O₂ production from gold and silver leaf adherent human leukocyte
○Keiichi Moriguchi¹, Masaki Asakura², Shozou Turuta², Tathusi Kawai²
¹Department of Oral Anatomy, School of Dentistry, Aichi-Gakuin University, ²Department of Dental Materials, School of Dentistry, Aichi-Gakuin University
- P - 4 9 Photocrosslinking of Gelatin Methacryloyl using Riboflavin and visible light
○Shuichiro Kobayashi¹, Masaki Asakura², Tatsushi Kawai², Akio Mitani¹
¹Department of Periodontology, Aichi Gakuin university, school of dentistry, ²Department of Dental Material Science, Aichi Gakuin university, school of dentistry
- P - 5 0 Preparation and evaluation of calcium phosphate / dental pulp stem cell composite sheet for periodontal disease treatment
○Tomoki Minamino¹, Mizuki Hirai¹, Derong Yin², Satoshi Komasa², Yosiya Hasimoto², Sigeeki Hontsu¹,
¹Kinki Univ, ²Osaka Dental Univ
- P - 5 1 Optimization of methods for artificial cell nanofragment mineralization
○Nahid Akter, Emilio Satoshi Hara, Masahiro Okada, Takuya Matsumoto
Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences
- P - 5 2 Response of exposed pulp to basic fibroblast growth factor preparation in rat molars
○Kazuki Imura, Yoshiya Hashimoto, Kazushi Yoshikawa, Kazuyo Yamamoto
Osaka Dental University
- P - 5 3 Bonding properties of fiberglass reinforced composite resin blocks for CAD/CAM - Effect of bonding primer on matrix resin bonding –
○Tohru Yasue, Naohiko Iwasaki, Hidekazu Takahashi, Tetsuya Suzuki
Tokyo Medical and Dental University
- P - 5 4 Effect of atomospheric plasma treatment on the bonding property of CAD/CAM composite resin
○Masaki Asakura¹, Tatsuhide Hayashi¹, Yasuaki Uematsu¹, Kouki Aimu¹, Hiroyasu Kataoka¹, Tatsushi Kawai¹
Aichi Gakuin University
- P - 5 5 Surface degradation of CAD/CAM composite resin (for molars) immersed in water
○Junji Iwata, Masaki Asakura, Shozo Tsuruta, Seiji Ban, Akimichi Mieki, Tatsushi Kawai
Aichi Gakuin University
- P - 5 6 Effects of thermocycling on the mechanical properties of CAD/CAM composite resin block for molar region
○Naohiko Iwasaki, Toru Yasue, Maho Shiozawa, Yusuke Yamamoto, Patcharanun Chaiamornsap, Tetsuya Suzuki, Hidekazu Takahashi
Tokyo Medical and Dental University
- P - 5 7 Surface property and gloss of CAD/CAM composites after tooth brush abrasion
○Kentaro Okamura¹, Hiroyasu Koizumi², Akihisa Kodara¹, Hiroshi Nogawa¹, Haruto Hiraba¹, Tomoyo Okazaki¹, Hideo Matsumura¹, Takayuki Yoneyama²
¹Department of Fixed Prosthodontics, Nihon University school of Dentistry, ²Department of Dental Materials Nihon University school of Dentistry
- P - 5 8 Machinabilities of CAD/CAM resin blocks for molar region
○Hidekazu Takahashi¹, Yusuke Yamamoto¹, Kazuhiro Hikita³, Naohiko Iwasaki¹, Tohru Yasue¹, Maho Shiozawa¹, Tetsuya Suzuki¹
¹Tokyo Medical and Dental University, ²Hokkaido Health Science University
- P - 5 9 Adhesive properties of fiber reinforced PEEK with surface modifications
○Seigo Okawa¹, Norimasa Taka², Tatsuya Kimura², Yujin Aoyagi², Kenji Izumi¹
¹Niigata University, ²Niigata University

- P - 60 Effect of various surface pre-treatments on shear bond strength of adhesive resin cement to polyetheretherketone(PEEK)
○Hitomi Kimura, Hiroki Tsuka, Kouji Morita, Hitoshi Abekura, Kazuhiro Tsuga
Hiroshima University
- P - 61 Evaluation of adhesion performance of novel 2-step adhesive
○Kosuke Honda, Akishi Arita, Tomohiro Kumagai
GC CORPORATION
- P - 62 Effect of hydrofluoric acid treatment on the resin composites for CAD/CAM crown on shear bond strength of resin cement
○Yuko Nagasawa, Yasushi Hibino, Hirotaka Shigeta, Yoshikazu Eda, Shigeki Matsumoto, Jun Omatsu, Tsutomu Tawaragi, Hiroshi Nakajima
Meikai University School of Dentistry
- P - 63 Bond strength to tooth structure and flexural properties of a new precapsulated glass-ionomer cement for filling
○Masao Irie¹, Yukinori Maruo², Goro Nishigawa², Shogo Minagi³, Takuya Matsumoto¹
¹Department of Biomaterials, Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama University, ²Occlusion and Removable Prosthodontics, Okayama University Department of Occlusion and Removable Prosthodontics, ³Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama University.
- P - 64 Fluoride uptake from fluoride-containing restorative materials to hydroxyapatite disks
○Katsushi Okuyama, Kohei Shintani, Yuko Komada, Takashi Horiguchi, Yukimichi Tamaki
Asahi University
- P - 65 Tensile bond strength between calcium silicate-based cement and composite resin. (Part 2) -The effect of setting conditions of cement to tensile bond strength-
○Takafumi Nakano, Shingo Mizobuchi, Ritaro Matsuura, Takahiro Kato, Masatoshi Yamazoe, Teruo Anraku
YAMAKIN Co., Ltd
- P - 66 Inhibition of root dentine demineralization by zinc-glass (BioUnion filler) containing glass ionomer cement after pH-cycling
○Ayaka Fujimoto, Daizaburo Mori, Tomohiro Kumagai
GC Corporation
- P - 67 Acid buffering capacity of a novel S-PRG filler contained glass ionomer cement
○Makoto Shimizubata, Masanao Inokoshi, Keita Hatano, Takahiro Wada, Rena Takahashi, Motohiro Uo, Shunsuke Minakuchi
Tokyo Medical and Dental University
- P - 68 *in vivo* evaluation of β -TCP cement modified by mechanochemical method
○Yumika Ida, Jiyoung Bae, Kazumitsu Sekine, Fumiaki Kawano, Kenichi Hamada
Tokushima Univ..
- P - 69 Improvement of water resistance of water glass films
○Yoshiro Fujii, Masahiro Okada, Masao Irie, Takuya Matsumoto
Okayama University
- P - 70 Development of electrically-debondable dental cements (Part5) - The effects of electric current application on the properties -
○Noboru Kajimoto¹, Takaaki Arahira¹, Michito Maruta¹, Emi Takegawa², Kazumitsu Sekine², Kenichi Hamada², Kanji Tsuru¹
¹Fukuoka Dental College, ²Tokushima University
- P - 71 Effect of Water Sorption on Shear Strength of Self-Adhesive Resin Cement
○Yoshikazu Eda, Yuko Nagasawa, Yasushi Hibino, Hirotaka Shigeta, Shigeki Matsumoto, Isokatsu Shimano, Hiroshi Nakajima
Meikai University
- P - 72 Fracture resistance of porcelain veneered lithium disilicate crown
Lee Jung-Jin¹, Seung-Geun Ahn¹, ○Tae-Sung Bae²
¹Chonbuk National University, ²Hospital Chonbuk National University
- P - 73 Bond strength of veneered porcelain on cast Ti-Cr alloy
○Tomofumi Sawada^{1,2}, Shiho Sugawara¹, Kaori Sasaki¹, Setsuo Saitoh¹, Masayuki Taira¹, Shinji Takemoto¹
¹Iwate Medical Univ, ²Univ. Tübingen

- P - 7 4 Evaluation of titanium surface brushed with various toothpastes and its cell compatibility
○Takahiro Shuto¹, Yuichi Mine², Takanori Wachi³, Hiroki Nikawa², Kazutoshi Kakimoto¹
¹Osaka Dental University, ²Hiroshima University, ³Kyushu University
- P - 7 5 Aspect of apatite formation ability of alkali treated titanium membrane
○Hanako Umehara, Kazuya Doi, Reiko Kobatake, Takayasu Kubo, Kazuhiro Tsuga
Hiroshima University
- P - 7 6 Modification of surface of implant material using lower alcohol
○Kohei Shintani¹, Harumi Kawaki², Sakurako Nagahara³, Takashi Horiguchi¹, Motonori Nishikawa¹,
Yuzo Kondoh³, Katsushi Okuyama¹, Toshiichiro Tanabe³, Kuniteru Nagahara³, Nobuo Kondoh², Yukimichi
Tamaki¹
¹Department of Dental Materials Science, Division of Oral Functional Science and Rehabilitation, Asahi
University School of Dentistry, ²Department of Oral Biochemistry, Division of Oral Structure, Function, and
Development, Asahi University School of Dentistry, ³Department of Oral and Maxillofacial Implantology,
Division of Oral Pathogenesis and Disease Control, Asahi University School of Dentistry
- P - 7 7 Analysis of adsorbed human serum proteins on the implant materials immersed in phosphate buffer
○Sakurako Nagahara¹, Harumi Kawaki², Kohei Shintani³, Takashi Horiguchi³, Motonori Nishikawa³, Yuzo
Kondoh¹, Katsushi Okuyama³, Toshiichiro Tanabe¹, Nobuo Kondoh², Yukimichi Tamaki³, Kuniteru
Nagahara¹
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- P - 7 8 Change in microstructure and mechanical properties of dental Ag system alloy subjected to various heat
treatments
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- P - 7 9 Relationship between microstructures and fatigue strengths in selective laser melted Co-Cr-Mo alloy subjected
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- P - 8 0 Thermal conductivity behavior on electrical welded orthodontic wires with different alloy
○Noriko Nakao, Yumiko Tashima, Ikuya Watanabe
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- P - 8 1 Fabrication of the fluorescent orthodontic bonding material using a europium complex
○Aiko Matsumoto, Shuichi Yamagata, Yoshiaki Sato, Shigeaki Abe, Tsukasa Akasaka, Yasuhiro Yoshida
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- P - 8 2 Fabrication and characterization of rectangular wire made from GFRTTP
○Yasuhiro Tanimoto, Norio Hirayama, Taro Iwasaki, Yoshio Aoki, Kazutaka Kasai
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- P - 8 3 Evaluation of CAD/CAM hybrid resin blocks applicable to molar part by the weight-drop impact test
○Satoru Watanabe, Taira Miyasaka, Yoshiki Ishida, Yuu Harada, Harumi Aoki, Daisuke Miura, Yusuke
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- P - 8 4 Evaluation of fitness accuracy on the MDF titanium crown
○Masateru Anzai¹, Noriyuki Hosni¹, Tomonori Kumasaka¹, Toru Hayakawa², Chikahiro Okubo², Hironori
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- P - 8 5 Properties of temporary luting material based on PEMA and anethole
○Kazuaki Igarashi, Taisuke Moriue, Tatsuya Ohki, Ryuichi Saito, Yoshinori Ishida, Hidetoshi Okada
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- P - 8 6 Acid buffering capacity of a novel S-PRG filler containing denture adhesive
 ○Keita Hatano¹, Masanao Inokoshi¹, Makoto Shimizubata¹, Motohiro Uo², Takahiro Wada², Rena Takahashi³,
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- P - 8 7 Effect of water-powder ratios on strength of dental stone mixed by shaking
 ○Hiroataka Shigeta, Yuko Nagasawa, Yoshikazu Eda, Shigeki Matsumoto, Satoru Awata, Jun Omatsu, Ken-ichi
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 Meikai Universit
- P - 8 8 Influence of chlorine concentration on disinfection of dental instruments with non-electrolytic functional water
 ○Ishida Yoshinori, Ohki Tatsuya, Saitoh Ryuichi, Igarashi Kazuaki, Moriue Taisuke, Yamamori Tetsuo,
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