

The 53rd General Session of the Japanese Society for Dental Materials and Devices(JSDMD)

April 11 (Saturday)- 12 (Sunday), 2009
Tower Hall Funabori(Edogawaku Sougou Kumin Hall)
4-1-1 Funabori Edogawa-ku Tokyo 134-0091, JAPAN

April 11 (Saturday)

Hall A

9:25-9:30 Opening Remark

9:30-11:00 General Presentation (Oral Session)

[Machine and Technology 1]

A-01 Nonexcisional cross-sectional imaging of adhesive restoration using optical coherence tomography

○Yasushi Shimada¹, Yasunori Sumi², Alireza Sadr¹, Junji Tagami^{1,3}

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

³GCOE International Research Center for Molecular Science in Tooth and Bone Diseases

A-02 Fabrication of ceramic restoration by CAD/RP-CAM method -improvement of strength by sintering and glass infiltration-

○Taiji Sohmura¹, Yuka Nakajima¹, Nozomi Tokuyama¹, Kazuyoshi Kitahara¹, Mitsuyori Suwa²,
Yoichi Kumazawa³, Soushu Kirihara²

¹Osaka Univ., ²Osaka Univ. Joining and Welding Res. Inst., ³Bionic Co.,Ltd

A-03 Stress characteristics of trial FRP post core with loading

○Yoji Inaba, Fumio Teraoka, Satoshi Yamaguchi, Masafumi Nakagawa, Taiji Sohmura
Osaka University

[Machine and Technology 2]

A-04 Reevaluation of the effect of water-spray in cutting teeth with the Er:YAG laser

○Toru Tsubibayashi, Masanori Nagame, Tetsuo Fukuoka, Kazutoshi Kakimoto, Koichi Toyoda,
Yutaka Komasa
Osaka Dental University

A-05 Dental hand skill simulation training using VR haptic device (Part V) -Measurements and evaluation for cutting force of dental hand piece-

○Yoshinori Yoshida¹, Satoshi Yamaguchi¹, Kazumichi Wakabayashi¹, Tadashi Nagashima¹, Fumio
Takeshige¹, Yusuke Kawamoto², Hiroshi Noborio³, Taiji Sohmura¹

¹Osaka University, ²TGL Inc., ³Osaka Electro-Communication University

A-06 Dental hand skill simulation training using VR haptic device (Part VI) -Toward introduction of education curriculum-

○Satoshi Yamaguchi¹, Yoshinori Yoshida¹, Kazumichi Wakabayashi¹, Tadashi Nagashima¹, Fumio
Takeshige¹, Yusuke Kawamoto², Hiroshi Noborio³, Taiji Sohmura¹

¹Osaka University, ²TGL Inc., ³Osaka Electro-Communication University

SL-1 Correlation of surface characteristics of dental materials and its application in dentistry

Prof. Lim Bum-Soon

Department of Dental Biomaterials Science, School of Dentistry, Seoul National University

[Metals]

A-07 Difference of Structure of dental casting Ag-Pd-Au-Cu alloy by solidification method

○Hisao Fukui¹, Toru Kanno², Mitsuo Niinomi², Toshikazu Akahori², Shozo Tsuruta¹, Masaaki

Nakai², Harumi Tsutsumi²

¹Aichi-gakuin University, ²Tohoku University

A-08 XAFS analysis of corrosion product of Ni-Ti alloy and stainless steel in soft tissue

○Motohiro Uo, Tsukasa Akasaka, Shigeaki Abe, Fumio Watari
Hokkaido University

A-09 Corrosion behavior of Ti treated by Pt coating and high temperature oxidation in acidic fluoride solution

○Kazuhiko Endo, Hiroko Kamezawa, Masanori Hashimoto, Futami Nagano, Morio Ochi, Hiroki Ohno
Health Sciences University of Hokkaido

[Biological Reaction 1]

A-10 Osteoblasts mediated mineralization in 3D fibrin gel system

○Takuya Matsumoto, Ami Mizuno, Miki Kashiwagi, Taiji Sohmura
Osaka University

A-11 Basic Study on Osteogenesis of Osteogenic Factor-Ceramic Composite

○Hideki Kawai, Uematsu Yasuaki, Tatsuhide Hayashi, Yohsuke Okeya, Yamato Sato, Masaki Asakura, Soichiro Hamashima, Tatsushi Kawai
Aichi-gakuin University

A-12 Preparation of poly(lactic acid)/calcium carbonate composite nonwoven for GBR

○Akiko Obata¹, Takashi Wakita^{1,2}, Yoshio Ota³, Toshihiro Kasuga¹, Seiji Ban⁴
¹Nagoya Institute of Technology, ²Yamahachi Dental Mfg., Co., ³Yabashi Industries Co., Ltd.,
⁴Kagoshima University

[Biological Reaction 2]

A-13 Biocompatibility evaluation of polylactic acid (PLA) hybrid guided bone regeneration (GBR) membrane containing silicon species

○Naoshi Takeuchi¹, Miho Machigashira¹, Daisuke Yamashita¹, Motoharu Miyamoto¹, Hironobu Takeuchi¹, Takeshi Wakita², Akiko Obata², Toshihiro Kasuga², Kazuyuki Noguchi¹, Seiji Ban¹
¹Kagoshima University, ²Nagoya Institute of Technology

A-14 Cell adhesion and proliferation on the inner surface of CNT coated 3D scaffold

○Eri Hirata, Motohiro Uo, Atsuro Yokoyama, Fumio Watari
Hokkaido Univ.

A-15 The effect of CNT on the growth of hepatic cells

○Sachiko Itoh, Tsukasa Akasaka, Yasutaka Yawaka, Fumio Watari
Hokkaido Univ.

SL-2 Novel biosensing devices for oral and health care analysis

Prof. Kohji Mitsubayashi
Institute of Biomaterials and Bioengineering, Tokyo Medical and Dental University

April 11 Saturday
Hall B

9:30-15:30 General Presentation (Poster Session) (11:00-12:00 Discussion)

[Award Challenge Posters P-01 - P-04]

P-01 Immune response to corrosion products of Ti alloy

○Masahiro Hiasa, Kenzo Asaoka
Tokushima University

P-02 Inhibitory action of Ti-Ag alloys on biofilm formation

○Masatoshi Takahashi, Kazuko Nakajo, Masafumi Kikuchi, Nobuhiro Takahashi, Yukyo Takada
Tohoku University

P-03 Dental hand skill simulation training using VR haptic device (Part VII) -Improvement of methods to display 3-dimensional model-

○Satoshi Yamaguchi¹, Yoshinori Yoshida¹, Kazumichi Wakabayashi¹, Tadashi Nagashima¹, Fumio Takeshige¹, Yusuke Kawamoto², Hiroshi Noborio³, Taiji Sohmura¹

¹Osaka University, ²TGL Inc., ³Osaka Electro-Communication University

P-04 The formation mechanism of the biomaterial-tooth interface by functional phosphoric acid ester monomers

○Kumiko Yoshihara, Satoshi Hayakawa, Noriyuki Nagaoka, Yasuhiro Yoshida, Kazuomi Suzuki, Shogo Minagi
Okayama University

[General Poster: 11:00 - 12:00 Discussion]

[Clinical Application]

P-05 Radiation light characteristics of light-curing units. -Reduction in inhomogeneity of radiation light-

○Hiroyuki Arikawa, Naoyuki Shinohara, Takahito Kanie, Koichi Fujii, Seiji Ban
Kagoshima University

P-06 Development of a temporary luting agent for dental implant consisted of nano-size PMMA

○Ichiro Ryukata¹, Hidetoshi Okada¹, Yoshinori Ishida¹, Kazuo Koiso², Isao Kawashima¹
¹Ohu University, ²Ohu University, Graduate School of Dentistry

P-07 The development of making system of maxillofacial prosthetics with three-dimensional image construction -Accuracy of the digital impression-

○Kiyosuke Fukuda, Tomohiro Morikawa, Yoshihiro Terada
Kyushu Univ.

P-08 The high-speed ordinary-temperature ozone disinfection vessel in which again produced portable type is possible.

○Koichi Arai¹, Nobuo Ando²
¹Meikai University, ²Nippon Dental University at Tokyo

[Machine and Technology]

P-09 Position measurement of inserted implant using Optical Tracker (Part 2)-Development of coordinates transformation software-

○Shinji Ono, Satoshi Yamaguchi, Naoki Kusumoto, Tamaki Nakano, Taiji Sohmura, Hirofumi Yatani
Osaka University

P-10 Measuring and Machining of crown by using an optical profile machining with 5 axis control system.

○Hiroshi An, Kosuke Ueda, Hiroshi Shiotani
Osaka Electro-Communication University

P-11 Study on the Crystallographic Change of Enamel by CO₂ Laser Irradiation.

○Yousuke Ga, Yoshizou Okamoto, Shigeki Matsuya
Fukuoka Dental College

P-12 A method for estimation of surface contact fatigue of dental materials

○Koichi Fujii¹, Hiroyuki Minami², Hiroyuki Arikawa¹, Takahito Kanie¹, Seiji Ban¹
¹Kagoshima University, ²Kagoshima University Med. & Dent. Hospital

[Composite Resin]

P-13 Reinforcement of resin composite with carbon fiber

○Yukinori Maruo, Masao Irie, Goro Nishigawa, Yoshiyuki Tamada, Morihiko Oka, Shingo Mori, Shogo Minagi, Kazuomi Suzuki
Okayama University

P-14 Bond strength between fiberposts and composite resin : effect of thermal cycling on bond strength

○Yuuya Asakawa¹, Hidekazu Takahashi², Naohiko Iwasaki², Masahiro Kobayashi¹
¹Chiba Institute of Technology, ²Tokyo Medical and Dental University

P-15 Kinetic properties of composite resins during filling procedure

○Yoichi Tamura, Kiyoshi Kakuta, Hideo Ogura

Nippon Dental University School of Life Dentistry at Niigata

P-16 Application of microcapsule for resin materials

○Masanori Hashimoto, Shinichi Fujita, Futami Nagano, Kazuhiko Endo, Hiroki Ohno

Health Sciences University of Hokkaido

[Resins, Cements]

P-17 The Dynamic Viscoelasticity of Alcohol-free Trail Tissue Conditioner

○Hiroki Tsuka¹, Guang Hong¹, Takeshi Maeda¹, Taizo Hamada²

¹Hiroshima Univ., ²Tohoku Univ.

P-18 Basic study for dental use of thermo-responsive polyurethane

○Takahito Kanie¹, Hiroyuki Arikawa¹, Koichi Fujii¹, Seiji Ban¹, Yuichi Tomiyasu², Shigeki

Katsura²

¹Kagoshima University, ²Yamahachi Dental MFG

P-19 Improved mechanical properties Spherical filler added glass-ionomer for luting. Part I

○Rika O, Masao Irie, Takashi Yamashiro, Kazuomi Suzuki

Okayama University

P-20 Effect from the flexural strength of orthodontic resin cement on the bond strength of bracket

○Jun Li^{1,2}, Isao Shibuya², Yasuhiro Tanimoto², Haruyoshi Takahashi², Norihiro Nishiyama²

¹Nihon University Graduate School of Dentistry at Matsudo, ²Nihon University School of Dentistry at Matsudo

P-21 Thermal property of a new resin applying bisfunctional siloxane oligomer - MMA copolymer

○Yujin Aoyagi, Kozo Umemoto, Shigeaki Kurata

Kanagawa Dental College

P-22 Resistance of brushing abrasion of fluorine and silver doped diamond-like carbon film coated acrylic resin

○Yukari Shinonaga, Kenji Arita

Tokushima University

[Impression Materials]

P-23 Effects of the spray disinfection of alginate impressions on the dimensional accuracy and deformation of stone models simulated full crown preparation with adjacent teeth

○Hisako Hiraguchi, Fumishige Sudo, Yukio Akashi, Masashi Yui, Kenji Yagihara, Toshiaki Nakano,

Takayuki Yoneyama

Nihon University

P-24 Properties of newly developed vinyl polysiloxane impression material

○Masayuki Hattori, Hiromichi Ichikawa, Shinji Takemoto, Masao Yoshinari, Eiji Kawada, Yutaka

Oda

Tokyo Dental College

P-25 Study on the Bond Strength of Self-Wetting Hybrid Polysiloxane Impression Materials

○Akio Izumida, Minoru Ishibashi, Masanobu Yoda

Tohoku University

P-26 Wettability of Vinyl Polysiloxane Impression Materials

○Taniichirou Yamaga, OSatoru Awata, Jun Omatsu, Yoshiaki Hasegawa, Yuko Nagasawa, Yasushi

Hibino, Hiroshi Nakajima

Meikai University

[Biological Tissue]

P-27 Analysis of aging in rat hard tissues

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

Showa University

P-28 In vivo behavior of CNT molecular heater injected into mouse tongue

○Minoru Kawaguchi^{1,3}, Jun Ohno^{2,3}, Tadao Fukushima^{1,3}

¹Bioengineering Section, Fukuoka Dental College, ²Pathology Section, Fukuoka Dental College,

P-29 Preparation of DNA/protamine complex and biological characteristics of complex

○Tadao Fukushima¹, Jun Ohno¹, Yusuke Inoue², Minoru Kawaguchi¹, Tohru Hayakawa³, Makoto Mitarai⁴

¹Fukuoka Dental College, ²Fukuoka College of Health Sciences, ³Nihon University, ⁴Maruha Nichiro Holdings

P-30 Branching morphogenesis of mouse submandibular gland on alginate gel with different stiffness

○Hiroyuki Miyajima, Takuya Matsumoto, Sanghyun An, Taiji Sohmura
Osaka University

P-31 Neovascularization processes in a pellet culture system

○Mari Akiyama, Shoji Takeda
Osaka Dental University

[Disinfection, Sterilization, Toxicity]

P-32 *In vitro* embryotoxicity testing of metal ions by ES-D3 cells with metabolism activity conditions

○Koichi Imai¹, Akito Tanoue², Shinji Kusakawa², Shoji Takeda¹

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

P-33 Literature research regarding developmental and reproductive toxicity induced by dental materials

○Toshio Hongo¹, Sakari Hikage²

¹Tokyo Medical and Dental University, ²Health Sciences University of Hokkaido

P-34 Effects of dose-dependent Cu (2+) ions on production of super-oxide by mouse polymorphonuclear leukocyte (neutrophil)

○Masayuki Taira, Kaori Sasaki, Setsuo Saitoh, Takashi Nezu, Yoshima Araki
Iwate Medical University

P-35 Ab-initio calculations on the structures and electronic states of ozone-water clusters

○Shigeaki Abe, Tsukasa Akasaka, Motohiro Uo, Fumio Watari, Hiroto Tachikawa
Hokkaido University

P-36 Capture of bacteria by flexible carbon nanotubes

○Tsukasa Akasaka, Shigeaki Abe, Motohiro Uo, Fumio Watari
Hokkaido University

P-37 Does triethylene glycol dimethacrylate produce methacrylic acid in human saliva?

○Toshio Hongo¹, Sakari Hikage², Hidekazu Takahashi¹

¹Tokyo Medical and Dental University, ²Health Sciences University of Hokkaido

Banquet (*Event Hall* in Tower Hall Funabori)

April 12 (Sunday)

Hall A

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

[Ceramics 1, Cements 1]

A-16 *In vitro* osteoconductivity of hydrothermally-treated alumina substrates with CaCl₂ solution

○Kanji Tsuru¹, Abdullah Tarique^{1,2}, Michito Maruta¹, Akari Takeuchi¹, Shigeki Matsuya²,
Yoshihiro Terada¹, Kunio Ishikawa¹

¹Kyushu University, ²Fukuoka Dental College

A-17 Effect of stoichiometry of synthetic octacalcium phosphate (OCP) on its bone regenerative property

Naohisa Miyatake¹, Koshi N Kishimoto¹, Takahisa Anada¹, Hideki Imaizumi², Eiji Itoi¹, OOsamu Suzuki¹

¹Tohoku University, ²Osaki Citizen Hospital

A-18 Preparation of Carbonate Apatite Block by Hydrothermal Treatment of Calcium Carbonate - Dicalcium Phosphate Mixture - the second report

○Fumikazu Daitou¹, Akari Takeuchi¹, Kanji Tsuru¹, Shigeki Matsuya², Yoshihiro Terada¹, Kunio Ishikawa¹

¹Kyushu University, ²Fukuoka Dental College

A-19 Synthesis and characterization of hydroxyapatite containing Lysine and Histidine

○Hafiz Mohammad, Takuya Matsumoto, Taiji Sohmura
Osaka University

[Ceramics 2, Cements 2]

A-20 Comparison of poling for porous apatite of different porosity

○Hideki Sagawa, Akiko Nagai, Kimihiro Yamashita
Tokyo Medical and Dental University

A-21 "Self-Sealing" Ability of OCP-based Cement as a Root Canal Filling Material

○Yuki Imamura, Yumi Tanaka, Kimihiro Yamashita
Tokyo Medical and Dental University

A-22 Fabrication of alpha-Tricalcium Phosphate Based Apatite Cement containing Tricalcium Silicate

○Michito Maruta¹, Cardenas Lester.J¹, Akari Takeuchi¹, Kanji Tsuru¹, Shigeki Matsuya², Kunio Ishikawa¹

¹Kyushu University, ²Fukuoka Dental College

SL-3 Present Situation of Korea Dental and Medical Education.

Prof. Kyohan Kim

Department of Dental Biomaterials, School of Dentistry, Kyungpook National University

SL-4 The mechanism of Impact Factor: citation metrics for scholarly journals and research evaluation

Yoko Miyairi

Thomson Reuters Scientific

14:15-16:30 General Presentation (Oral Session)

[Ceramics 3, Adhesion]

A-23 Effect of methodology and specimen thickness on the flexure strength of zirconia

○Hiroshi Kono¹, Motoharu Miyamoto¹, Daisuke Yamashita¹, Makoto Noda¹, Yuji Okuda¹,
Masahiro Nawa², Seiji Ban¹

¹Kagoshima Univ., ²Panasonic Electric Works Co., Ltd.

A-24 Bonding strength of resin-based cement for zirconia -Effect of surface treatment-

○Makiko Hashiguchi, Hideo Sato, Yasuhiro Nishi, Makoto Noda, Yuji Okuda, Eiichi Nagaoka, Seiji Ban

Kagoshima Univ. Grad. Sch.

A-25 Adhesive properties between FRP and restorative resin

○Fumio Teraoka, Yoji Inaba, Masafumi Nakagawa, Taiji Sohmura
Osaka University

A-26 New adhesion theory -Cure strain and bond strength-

○Kunio Wakasa¹, Shigeru Uno², Masayuki Okazaki¹
¹Hiroshima Univ, ²Toranomon Hospital

[Resins]

A-27 Vinyl ester/Polymer mixture system (Part 7) -Effect of polymer on the mechanical properties of polymerized VE/polymer paste -

○Jiro Tanaka¹, Yoshiya Hashimoto², Shoji Takeda², Kazuomi Suzuki¹
¹Okayama University, ²Osaka Dental University

A-28 Influence of surface roughness to color and gloss of Estelite Sigma Quick

○Yumiko Hosoya, Toshiaki Ogata, Takanobu Shiraishi
Nagasaki University

A-29 SEM observations of the Acid-Base Resistant Zone after long-term storage in water

○Chiaki Ichikawa¹, Go Inoue¹, Toru Nikaido¹, Junji Tagami^{1,2}

¹Tokyo Medical and Dental University, ²Support Program for Improving Graduate School Education
at Tokyo Medical and Dental University

A-30 Influence of irradiation duration on dentin bond strength of a composite for core foundation

○Tatsuki Oto, Akimasa Tsujimoto, Satoshi Oooka, Atsushi Irokawa, Keishi Tsubota, Akitomo
Rikuta, Susumu Andou, Masashi Miyazaki
Nihon University School of Dentistry

A-31 Ultrasonic monitoring of the elastic modulus of composites for core foundation

○Genta Yasuda, Ryou Kawamoto, Hiroaki Tuchiya, Takeshi Yosida, Toshiki Takamizawa, Hiroyasu
Kurokawa, Susumu Ando, Masashi Miyazaki
Nihon University

April 12 (Sunday)

Hall B

9:30-15:30 General Presentation (Poster Session) (11:00-12:00 Discussion)

[Non clasp denture]

P-38 Basic Properties of polymer materials for "non clasp denture"

○Hidekazu Takahashi¹, Eiji Kawada², Yukimichi Tamaki³, Fumio Teraoka⁴, Norio Hosoi⁵, Takaichi
Yishida⁶

¹Tokyo Medical and Dental University, ²Tokyo Dental Collage, ³Showa University, ⁴Osaka
University, ⁵Tsurumi University, ⁶Nippon Dental Collage

[Cements]

P-39 The Development of a New Apatite Glass-ionomer Cement

○Aimi Yamamoto¹, Kenji Arita¹, Milanita E. Lucas¹, Yukari Shinonaga¹, Katsuhito Kato²
¹The University of Tokushima, ²GC corporation, Tokyo, Japan

P-40 Effects of a new temporary cement on final cementation

○Katsuhito Kato, Hisashi Nakaseko, Hideki Yarimizu, Tetsuro Sakuma
GC CORPORATION

P-41 Characteristics of experimental temporary cements containing flake shaped glass filler

○Yuko Nagasawa, Yoshiaki Hasegawa, Jun Omatsu, Taniichiro Yamaga, Yasushi Hibino, Hiroshi
Nakajima
Meikai University

P-42 Characteristics of a new temporary cement "FTC-100"

○Yasushi Hibino, Yuko Nagasawa, Yoshiaki Hasegawa, Jun Omatsu, Satoru Awata, Taniichiro
Yamaga, Hiroshi Nakajima
Meikai University

P-43 Bioreactivity and biocompatibility study of Strontium containing apatite cement

○Kazumitsu Sekine, Ken-Ichi Hamada, Kikuji Yamashita, Fumiaki Kawano, Kenzo Asaoka
The University of Tokushima

[Ceramics]

P-44 Effect of surface treatment of zirconia ceramics on the bonding strength to resin cements

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

P-45 The fabrication and biocompatibility evaluation of ZrO₂/HA composite scaffold

○Sanghyun An¹, Takuya Matsumoto¹, Shiho Ishihara², Atsushi Nakahira², Taiji Sohmura¹
¹Osaka University, ²Osaka Prefecture University

P-46 Mechanical properties of 2 piece type zirconia implant

○Takamitsu Yoshida¹, Kaoru Tamura¹, Sakae Nagasawa¹, Toshihide Mizoguchi¹, Takei Kashiwabara², Michio Ito¹

¹Matsumoto Dental University, ²Kikusui Chemical Industries CO., LTD.

P-47 Preparation of porous carbonate apatite from DCPD

○Atsushi Shibatsuji, Keiichi Kanayama, Mayumi Iijima, Masanori Adachi, Toshiaki Shibutani, Yutaka Doi
Asahi university

P-48 Apatite-like compound formation on the carbon nanotube surface in body simulated fluid

○Takamitsu Koshikawa¹, Motohiro Uo¹, Tsukasa Akasaka¹, Yoshinori Kuboki², Fumio Watari¹
¹Hokkaido University, ²Professor Emeritus, Hokkaido University

P-49 Acid resistance of zirconia

○Makoto Noda, Yuuji Okuda, Hiroyuki Arikawa, Takahito Kanie, Koichi Fujii, Seiji Ban
Kagoshima University

P-50 Synergistic immunostimulating effect of CpG DNA/calcium phosphate complex

○Yoshitomo Honda, Takahisa Anada, Osamu Suzuki
Tohoku University

P-51 Effect of Coloring Conditions while Sintering on Bending Strength and Hardness of Zirconia

Ceramics

○Soichi Kuroda, Daichiro Yokoyama, Sachie Kishida, Jie Rin, Minori Hatta, Aki Hasegawa, Akikazu Shinya, Harunori Gomi, Akiyoshi Shinya
The Nippon Dental Univ., at Tokyo

P-52 Microstructure evaluation of the interface between dental zirconia ceramics and porcelain

○Yohei Kawai, Motohiro Uo, Fumio Watari
Hokkaido University

[Porcelains]

P-53 Impact strength of dental all-ceramic for CAD/CAM

○Min Yan¹, Shinn-Jyh Ding¹, Hidekazu Takahashi²

¹Chung Shan Medical University, ²Tokyo Medical and Dental University

P-54 Toughening of dental porcelain by silver nano-particles

○Mitsunori Uno, Ryugo Nonogaki, Toshikazu Omori, Masakazu Kurachi, Nobukazu Wakamatsu, Mayumi Iijima, Yutaka Doi, Takayasu Goto
Asahi University

[Metals]

P-55 Anodic oxidation of titanium by polarity inversion in alkaline electrolyte

○Seigo Okawa, Kikuo Homma, Mitsugu Kanatani, Kouichi Watanabe
Niigata University

P-56 Fabrication of sintered products of titanium using a PAS method (part 8) -Mechanical properties of porous titanium sheet for the surgical operation-

○Won Sik Lee, Yu Kataoka, Fukunaga Ohtsuka, Fumio Ata, Yukimichi Tamaki, Takashi Miyazaki, Ryutaro Kamijo
Showa University

P-57 Fatigue test of Ni-Ti orthodontic wires under corrosive environment

○Shin-Ichi Goto, Kazuo Ohkuma, Hideo Ogura
Nippon Dental Univ.

P-58 Corrosion of anodized Ni-Ti orthodontic wire in acidic solution containing fluoride

○Kikuo Homma, Kouichi Watanabe, Seigo Okawa, Mitsugu Kanatani
Niigata University

P-59 Structure and mechanical properties of Ag-Pd-Cu-Au dental alloy held in high temperature and quenched following casting

○Setsuo Saito, Kaori Sasaki, Hisashi Nezu, Masayuki Taira, Yoshima Araki
Iwate Medical University

P-60 Relation between elapsed time and casting accuracy after invested

○Ken Takeuchi¹, Sakae Nagasawa¹, Takamitsu Yosida¹, Kaoru Tamura¹, Yuji Kawase¹, Masatoshi Yamazoe^{1,2}, Mitio Ito¹

¹Matumoto Dental University, ²Yamamoto Precious Metal CO., Ltd

P-61 Chemical deposition of carbonate apatite coatings on Ti with self-assembled monolayers

○Masanori Adachi, Yuusuke Yamaguchi, Nobukazu Wakamastu, Hideo Kamemizu, Mayumi Iijima, Yutaka Doi
Asahi University

[Cells]

P-62 Endocrine-disrupting activity of ultraviolet absorbers

○Tomomi Hayashida, Yuji Nomura, Ryo Nishikiori, Isao Hirata, Masayuki Okazaki
Hiroshima University

P-63 Fabrication of sintered products of titanium using a PAS method (part 9)-Biocompatibility of porous titanium sheet for the surgical operation-

○Yu Kataoka, Fukunaga Otsuka, Won Sik Lee, Fumio Ata, Yo Shibata, Yukimichi Tamaki, Ryutaro Kamijo, Takashi Miyazaki
Showa University

P-64 Development of calcium phosphate-binding liposome

○Takahisa Anada, Yoshitomo Honda, Osamu Suzuki
Tohoku University

[Adhesion]

P-65 Surface modification effects of the bonding surface treated by Sirano Pen

○Akihiro Fujisima¹, Kenichiro Takeuchi¹, Aya Kusano^{1,2}, Atsufumi Manabe¹, Takashi Miyazaki¹
¹Showa University, ²Japan Air Self Defense Force

P-66 Development of the self-etching primer with high hydrolytic stability

○Shen Ma^{1,2}, Yasuhiro Tanimoto², Ichiko Teshima², Norihiro Nishiyama²

¹Nihon University Graduate School of Dentistry at Matsudo, ²Department of Dental Biomaterials, Nihon University School of Dentistry at Matsudo

P-67 Influence of different mixing method on physical properties of the self-adhesive resin cement

○Linlin Han, Masayoshi Fukushima, Takashi Okiji
Niigata Univ.

P-68 The tensile bond strength between dentin and bonding agent after cyclic loading

○Kohyoh Soeno, Yohsuke Taira, Takashi Sawase
Nagasaki University

P-69 Adhesion to pure gold using an experimental adhesive resin containing a fluorinated polymer

○Yoshinori Kadoma
Tokyo Medical and Dental University

P-70 Influence of bonding strength on surface roughness of metal core

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

P-71 The effect of self-adhesive resin cement and surface treatment on bond strength to enamel

○Jie Lin, Souichi Kuroda, Sachie Kichida, Aki Hasegawa, Minoru Hatta, Daiichiro Yokoyama, Akikazu Shinya, Harunori Gomi, Yasuo Hatano, Akiyoshi Shinya
The Nippon Dental University

P-72 Long-term durability and degradation of one-bottle resin adhesives

○Shinichi Fujita, Masanori Hashimoto, Kazuhiko Endo, Hiroki Ohno
Health Sciences University of Hokkaido

P-73 The effects of Colloidal Platinum Nanoparticles on resin/dentin adhesion using 4-META/MMA-TBB influenced by sodium hypochlorite.

○Futami Nagano¹, Kazuhiko Endo¹, Masanori Hashimoto¹, Shuhei Hoshika², Hidehiko Sano², Hiroki Ohno¹

¹Health Sciences University of Hokkaido, ²Hokkaido University

P-74 Preparation of pseudo-dentin QCM sensor by adsorption of collagen on HAP sensor

○Takashi Nezu, Kaori Sasaki, Setsuo Saitoh, Masayuki Taira, Yoshima Araki
Iwate Medical University

P-75 Influence of grinding condition on bond strength of self-etching adhesive systems to tooth substrates

○Shigeru Hirabayashi, Eiji Yoshida, Susumu Hirano
Tsurumi University