

The 55th General Session of the Japanese Society for Dental Materials and Devices(JSDMD)

April 17 (Saturday) - 18 (Sunday), 2010
Tower Hall Funabori (Edogawaku Sougou Kumin Hall)
4-1-1 Funabori, Edogawa-ku, Tokyo 134-0091, Japan

April 17 (Saturday)

Hall A

9:25-9:30 Opening Remark

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

[Adhesion]

A-1 New adhesion theory-Functional properties and adhesive strength in cured bonding area-

○Wakasa Kunio¹, Uno Shigeru²

¹Hiroshima University, ²Toranomon Hospital

A-2 Cyclic loading on durability of self-adhesive resin cement to zirconia

○Lin Jie¹, Kuroda Souichi¹, Kishida Sachie¹, Shinya Akihiro¹, Ootaki Erika¹, Hasegawa Aki¹,
Hatta Minoru¹, Yokoyama Daiichiro¹, Shinya Akikazu^{1,2}, Gomi Harunori¹, Shinya Akiyoshi¹

¹The Nippon Dental University at Tokyo, ²Turku University

A-3 The bonding strength between zirconia and porcelain (Part2) Effects of surface treatment

○Tsuruki Jiro, Noda Makoto, Okuda Yuji, Ban Seiji
Kagoshima University

[Ceramics, Bioceramics and Model materials]

A-4 Influence of firing temperature on the bond strength between zirconia and dental porcelain

○Hata Utako¹, Uehara Yoshiki², Sakurai Yasuyuki², Yamamura Osamu¹, Fujiwara Shuu¹, Doi
Yutaka¹

¹Asahi University, ²Fine Co. Inc

A-5 Influence of silica addition to Y-TZP on mechanical property

○Usami Hirofumi¹, Nakamura Takashi¹, Nishida Hisataka², Wakabayashi Kazumichi¹, Yatani
Hirofumi¹

¹Osaka University, ²Osaka Dental University

A-6 Effects of alcohol on the properties of stone model

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

A-7 Induction of remineralization by resin contained Portland cement

○Hashimoto Masanori, Iijima Masahiro, Nagano Futami, Ohno Hiroki, Endo Kazuhiko
Health Sciences of Hokkaido University

April 17 (Saturday)

Hall A

14:10-15:36 General Presentation (Oral Session)

[Cell and Biological tissue]

A-8 Cell response of cell-adhesive protein immobilized titanium using tresyl chloride-activation
technique

○Hayakawa Tohru¹, Yoshinari Masao², Abiko Yoshimitsu³

¹Tsurumi University, ²Tokyo Dental College, ³Nihon University

A-9 Studies on magnetic collection of THP1 monocytes by trial GMA co-polymer magnetic

microbeads containing nano ferrite particles

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

A-10 Biological evaluation of various ratio of ZrO₂/HAp composite material

○Matsumoto Takuya, Matsumoto Takuya, Sohmura Taiji
Osaka University

[Biological Tissue, Cell and Bioceramics]

A-11 Osteoconductivity of OCP/Collagen composite with distinct OCP granule sizes and dehydrothermal treatment

○Tanuma Yuji, Anada Takahisa, Masuda Taisuke, Honda Yoshitomo, Matsui Aritsune, Kawai Tadashi, Kamakura Shinji, Echigo Seishi, Suzuki Osamu
Tohoku University Graduate School of Dentistry

A-12 Cell adhesion to the materials treated with carbon nanotube

○Matsuoka Makoto, Akasaka Tsukasa, Totsuka Yasunori, Watari Fumio
Hokkaido University

A-13 Preparation of siloxane-containing vaterite/poly (lactic acid) hybrid materials for bone regeneration

○Nakamura Jin¹, Obata Akiko¹, Kasuga Toshihiro¹, Ban Seiji²
¹Nagoya Institute of Technology, ²Kagoshima University

A-14 Improvement of the mechanical strength of carbonate apatite bone substitutes prepared by dissolution-precipitation reaction

○Matsumoto Kanako¹, Tsuru Kanji¹, Kawachi Giichiro¹, Maruta Michito¹, Matsuya Shigeki², Takahashi Ichiro¹, Ishikawa Kunio¹
¹Kyushu University, ²Fukuoka dental college

Hall A

15:40-16:40 [Special Lecture]

Involvement of chewing in neurocognition in the elderly

Minoru Onozuka
Kanagawa Dental College

April 17 (Saturday)

Hall B

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

[Award Challenge Posters P-1 -P-7]

P-1 Cytocompatibility of titanium surface immobilized with biofunctional molecules by using a chemical modification method

○Kado Takashi¹, Hidaka Tatsuhiro¹, Aita Hideki¹, Sakata Miyuki², Endo Kazuhiko¹, Furuichi Yasushi¹

¹Health Sciences University of Hokkaido, ²Hokkaido University

P-2 Biocompatibility evaluation of polylactic acid (PLA) hybrid guided bone regeneration (GBR) membrane containing silicon species

○Takeuchi Naoshi¹, Machigashira Miho¹, Yamashita Daisuke¹, Kasuga Toshihiro², Noguchi Kazuyuki¹, Ban Seiji¹

¹Kagoshima University, ²Nagoya Institute of Technology

P-3 Adsorption behaviors of saliva-related protein and dental materials using quartz crystal microbalance nano sensor

○Minoura Sae, Honda Ryo, Hashimoto Yoshiya, Nishiura Aki, Matsumoto Naoyuki, Takeda Syouji
Osaka Dental University

P-4 Improvement of physical properties by changing mold temperatures on 14K gold alloy

○Koiso Kazuo¹, Kawashima Isao², Okada Hidetoshi², Ishida Yoshinori², Ryuukata Ichiro²
¹Ohu University, Graduate School of Dentistry, ²Ohu University

P-5 Mechanical properties of Zr-Nb alloys to prevent artifacts in MRI for dental application

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

P-6 Electron probe microanalysis of the diffusion zone between Pd-free high gold dental alloy and porcelain

○Asakura Masaki, Sato Yamato, Hamajima Soichiro, Uematu Yasuaki, Kominami Yoshiko, Kawai Tatushi
Aichi-Gakuin University

P-7 Position and pose measurement method of implants using optical tracker (Part 3) -Comparison experiment for impression accuracy between proposed method and conventional method-

○Ono Shinji, Yamaguchi Satoshi, Kusumoto Naoki, Yamada Shinichi, Sohmura Taiji, Yatani Hirofumi
Osaka University

[Ceramics]

P-8 Physical properties of silica-added resin-modified glassionomer cement for luting. (Part 2)

○Irie Masao, E Lihua, Nagaoka Yukinori, Yamashiro Takashi, Suzuki Kazuomi
Okayama University

P-9 Microencapsulation of metal oxide and its application to dental materials

○Ito So, Fuchigami Kiyomi, Yoshimoto Ryuichi, Deguchi Mikito
Shofu Inc., R&D

P-10 Improvement of casting accuracy by heating temperature control of rapid heating type investment

○Takeuchi Ken¹, Nagasawa Sakae¹, Kawase Yuji¹, Yoshida Takamitsu¹, Tamura Kaoru¹, Yamazoe Masatoshi^{1,2}, Ito Michio¹
¹Matsumoto Dental University, ²Yamamoto Precious Metal Co., LTD.

P-11 Difference in color of dental porcelain by the addition of silver nano-particles

○Uno Mitsunori, Fujieda Tokushi, Nonogami Ryugo, Kurachi Masakazu, Wakamatsu Nobukazu, Iijima Mayumi, Doi Yutaka
Asahi University

P-12 Effect of metal nano-particles with different fracture toughness of dental porcelain

○Fujieda Tokushi, Uno Mitsunori, Kurachi Masakazu, Wakamatsu Nobukazu, Iijima Mayumi, Doi Yutaka
Asahi University

P-13 Study on adhesive materials for zirconia ceramics(Part 4) The cure process of various cements

○Ikoma Sachie, Kurata Shigeaki, Shimoyama Kazuo, Umemoto Kozo
Kanagawa Dental College

P-14 Study on adhesive materials for zirconia ceramics(Part 5) The analysis of stiffening heat of various cements

○Kurata Shigeaki, Ikoma Sachie, Shimoyama Kazuo, Umemoto Kozo
Kanagawa Dental College

P-15 Influence of sintering process on mechanical properties of zirconia

○Okuda Yuji, Noda Makoto, Tsuruki Jiro, Ban Seiji
Kagoshima University

P-16 Mechanical properties and dissolutions of zirconia implant materials after surface treatments.

○Yoshida Takamitsu¹, Yamazoe Masatoshi^{1,2}, Tamura Kaoru¹, Mizoguchi Toshihide¹, Kashiwabara Takeki³, Nagasawa Sakae¹, Ito Michio¹
¹Matsumoto Dental University, ²Yamamoto Precious Metal Co., LTD., ³Kikusui Chemical Industries Co., LTD.

P-17 Fabrication of coating glass for zirconia (Part 2). An in vitro evaluation of apatite formation

ability.

○Noda Makoto, Okuda Yuji, Tsuruki Jiro, Ban Seiji
Kagoshima University

P-18 Preparation of carbonated apatite containing Sr as bone graft materials

○Sakai Akiko, Ga Yousuke, Okamoto Yoshizou, Ozaki Masao, Motokawa Wataru, Matsuya Shigeki
Fukuoka Dental College

P-19 Small voids formation in apatite single crystal

○Matsumoto Takuya¹, Uddin MH¹, An Sang-Hyun¹, Okazaki Masayuki², Sohmura Taiji¹
¹Osaka University, ²Hiroshima University

P-20 Characterization of calcium phosphate deposited on titanium with thin organic film

○Okawa Seigo, Watanabe Kouichi, Kanatani Mitsugu
Niigata University

P-21 Synthesis and characterization of octacalcium phosphate prepared by hydrolysis and co-precipitation in the presence of fluoride

○Shiwaku Yukari, Honda Yoshitomo, Anada Takahisa, Morimoto Shinji, Sasaki Keiichi, Suzuki Osamu
Tohoku University Graduate School of Dentistry

P-22 Flexural behavior of octacalcium phosphate (OCP)/apatite-type I collagen composite-Effect of wet pressing

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

[Machine and Technology]

P-23 Fusion of phosphate glasses to tooth with a CO₂ laser

○Shinya Akihiro¹, Ootaki Erika¹, Lin Jie¹, Kuroda Souichi¹, Kishida Sachie¹, Kasuga Toshihiro²,
Shinya Akiyoshi¹

¹The Nippon Dental Univ., at Tokyo, ²Nagoya Institute of Technology

P-24 Dental hand skill simulation training using VR haptic device (Part 14) - Development of simulator to locate orthodontic brackets -

Yamaguchi Satoshi¹, Okamura Maya¹, Yamauchi Junpei¹, Yoshida Yoshinori¹, Ohno Hiroko¹,
Uematsu Setsuko¹,

○Yagi Masakazu¹, Kawamoto Yusuke², Noborio Hiroshi³, Takada Kenji¹, Sohmura Taiji¹
¹Osaka University, ²TGL Inc., ³Osaka Elec-Com University

P-25 Fabrication of ceramic restoration by CAD/RP-CAM method-Improvement of strength by sintering and glass infiltration and evaluation of adaptability-

○Sohmura Taiji^{1,2}, Nakajima Yuka¹, Hayashibe Hitomi¹, Kitahara Kazuyoshi¹, Suwa Mitsuyori¹,
Kirihara Soshu¹, Kumazawa Yoichi²
¹Osaka University, ²Bionic Co., Ltd

P-26 Effect of shaking off water drops on mechanical spatulator for vacuum mixing and hand spatula

○Kanatani Mitsugu, Okawa Seigo, Watanabe Kouichi, Kimura Isao
Niigata University

P-27 Detection of cemented carbide from bronchoalveolar lavage fluid using micro fluorescence XAFS method

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

P-28 Observation of contact-fatigue surfaces of dental noble metal alloys

○Fujii Koichi¹, Tsuruki Jiro¹, Minami Hiroyuki², Arikawa Hiroyuki¹, Kanie Takahito¹, Ban Seiji¹
¹Kagoshima University, ²Kagoshima University Med. & Dent. Hospital

[Titanium and Titanium Alloy]

P-29 Anodic polarization behavior of experimental Ti-Ag alloys based on ISO 10271

○Takahashi Masatoshi, Kikuchi Masafumi, Takada Yukyou
Tohoku University

P-30 The effects of Hf addition to Ti on its elastic modulus and corrosion resistance

○Shiraishi Takanobu¹, Shishido Toetsu², Shinozaki Nobuya³, Fujita Takeshi¹
¹Nagasaki University, ²Tohoku University, ³Kyushu Institute of Technology

P-31 Improvement in mechanical properties of dental precision cast Ti-29Nb-13Ta-4.6Zr by heat treatment process

○Tsutsumi Harumi¹, Niinomi Mitsuo¹, Akahori Toshikazu¹, Nakai Masaaki¹, Fukui Hisao²
¹Tohoku University, ²Aichi-Gakuin University

[Clinical Application]

P-32 Evaluation of retention force of denture adhesives and mouth moisturizers between the denture base resin.

○Kano Hiroshi, Kurogi Tadafumi, Murata Hiroshi
Nagasaki University

P-33 Octacalcium phosphate-precipitated gelatin scaffold as a bone substitute material

○Handa Takuto, Honda Yoshitomo, Anada Takahisa, Masuda Taisuke, Kubota Hiroyuki, Kamakura Sinji, Echigo Seishi, Suzuki Osamu
Tohoku University Graduate School of Dentistry

P-34 Development of the usable ozonized oil adsorption sheet manufacturing equipment

○Arai Koichi¹, Ando Nobuo²
¹Meikai University, ²Nippon Dental University at Tokyo

P-35 Development of temporary luting agent for dental implant consisted of nano size PMMA(3)

○Ryukata Ichiro¹, Okada Hidetoshi¹, Ishida Yoshinori¹, Koiso Kazuo², Kawashima Isao¹
¹Ohu University, ²Ohu University Graduate School of Dentistry

April 17 (Saturday)

17:00-19:00

Banquet (2F Event Hall Zuiun and Heian in Tower Hall Funabori)

April 18 (Sunday)

Hall A

9:30-10:56 General Presentation (Oral Session)

[Composite, Resin and Laser]

A-15 Mechanical properties of composite resins, consisting of different spherical fillers

○Tamura Yoichi, Kakuta Kiyoshi, Ogura Hideo
The Nippon Dental University School of Dentistry at Niigata

A-16 Vinyl ester/polymer mixture system (Part 9) - Influence of the distance between polymerizable groups of divinyl ester (DiVE) on the flexural properties of polymerized DiVE/PMMA paste

○Tanaka Jiro¹, Hashimoto Yoshiya², Takeda Shoji², Suzuki Kazuomi¹
¹Okayama University, ²Osaka Dental University

A-17 Tooth Surface Observation by Means of Optical Coherence Tomography

○Shimamura Yutaka, Kawamoto Ryo, Yoshida Takeshi, Takamizawa Toshiki, Kurokawa Hiroyasu, Ando Susumu, Miyazaki Masashi
Nihon University School of Dentistry

[CAD/CAM, Cutting and Polishing]

A-18 Dental hand skill simulation training using VR haptic device (Part-12)

-Handskill educational system using HAP-DENT-

○Sohmura Taiji^{1,4}, Yamaguchi Satoshi¹, Yoshida Yoshinori¹, Takeshige Fumio¹, Nagashima Tadashi¹, Wakabayashi Kazumichi¹, Kawamoto Yusuke², Noborio Hiroshi³
¹Osaka University, ²TGL Inc., ³Osaka Ele-Com University, ⁴Bionic Co., Ltd

A-19 Dental hand skill simulation training using VR haptic device (Part-13) -Introduction of animation based on reaction force-

○Yoshida Yoshinori¹, Yamguchi Satoshi¹, Wakabayashi Kazumichi², Nagashima Tadashi³, Kawamoto Yusuke⁴, Takeshige Fumio³, Noborio Hiroshi⁵, Sohmura Taiji¹

¹Osaka University Graduate School of Dentistry, ²Osaka University MEI center,
³Osaka University Dental Hospital, ⁴TGL Inc.,
⁵Osaka Electro-Com University,

A-20 Dental hand skill simulation training using VR haptic device (Part 15)

- Skill training in supine position by fusion augmented reality and haptics -

○ Yamaguchi Satoshi¹, Yoshinori Yoshida¹, Nagashima Tadashi¹, Takeshige Fumio¹, Wakabayashi Kazumichi¹, Kawamoto Yusuke², Noborio Hiroshi³, Sohmura Taiji¹
¹Osaka University, ²TGL Inc., ³Osaka Elec-Com University

A-21 Cutting performance of diamond burs for zirconia

○ Ariyoshi Mei¹, Takahashi Rena¹, Nikaido Toru¹, Okano Syukan¹, Nagai Masahiro¹, Yasue Toru¹, Ikeda Masaomi¹, Miura Hiroyuki¹, Takakuda Kazuo¹, Tagami Junji^{1,2}
¹Tokyo Medical and Dental University,

²GCOE Program; International Research Center for Molecular Science in Tooth and Bone Diseases

Hall A

13:05-14:25 [An Open Symposium and Special Seminar for Dental Materials Adviser/Senior Adviser]

-Specification for dental materials and devices -Point of ISO standards-

1. Developmental and Reproductive Toxicity of Bisphenol A

○ Minoru KAWAGUCHI¹, Koichi IMAI²

¹Fukuoka Dental College, ²Osaka Dental University

2. Elution of Bisphenol A from Dental Materials

○ Shigeru HIRABAYASHI
Tsurumi University

3. Current Status of Each Country to Bisphenol A Toxicity

○ Toshio HONGO¹, Sakai HIKAGE²

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

Hall A

14:30-15:44 General Presentation (Oral Session)

[Titanium and Dental Alloy]

A-22 Influence of peroxide in acidulated solution on corrosion behavior of titanium alloys

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

A-23 Effect on soft tissue compatibility of chain length of RGD-immobilizing PEG electrodeposited on titanium

○ Oya Kei, Tsutsumi Yusuke, Doi Hisashi, Nomura Naoyuki, Hanawa Takao
Tokyo Medical and Dental University

A-24 Application of Co-Cr alloys to telescopic dentures

-Evaluation of static frictional coefficients in dental alloys- part 2

○ Ohida Masahito, Nomura Naoyuki, Hanawa Takao, Igarashi Yoshimasa
Tokyo Medical and Dental University

[Dental Alloy]

A-25 Influence of Cr and N on mechanical characteristic of Co-Cr alloy for dentistry

○ Yoda Keita¹, Nomura Naoyuki¹, Chiba Akihiko², Hanawa Takao¹, Igarashi Yoshimasa¹
¹Tokyo Medical and Dental University, ²Tohoku University

A-26 Effect of Cu content on anodic polarization behavior of dental casting Au-Ag-Pd -Cu alloys

○ Fukui Hisao¹, Kuroda Kensuke², Tsuruta Shozo¹, Niinomi Mitsuo³, Akahori Toshikazu³, Nakai Masaaki³, Tsutsumi Harumi³, Kim YongHwan³

¹Aichi-Gakuin University, ²Nagoya University, ³Tohoku University

A-27 Relationship between Unique Hardening and Microstructure of Dental Ag-Pd-Au-Cu alloy Subjected to a Solution Treatment

April 18 (Sunday)

Hall B

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

[Adhesion]

P-36 Surface tension and contact angle to human dentin of one-step bonding agents

○Kusakabe Shusuke, Fukuda Takateru, Yamaguchi Yusuke, Kotake Hiroto, Doi Yutaka, Hotta Masato
Asahi University

P-37 The effect of colloidal Platinum nanoparticles on resin-dentin adhesion using total etching system.

○Nagano Futami¹, Hasimoto Masanori¹, Sano Hidehiko², Hoshika Shuhei², Ida Yusuke¹, Ohno Hiroki¹, Endo Kazuhiko¹
¹Health Sciences University of Hokkaido, ²Hokkaido University

P-38 Shear bond strength of nanozirconia ceramics treated with surface modifications

○Fujishima Akihiro, Takeuchi Kenichiro, Narumi Yuuko, Manabe Atufumi, Miyazaki Takashi
Showa University

P-39 Bonding durability against water of a fluorinated adhesive resin using a redox initiator

○Kadoma Yoshinori
Tokyo Medical and Dental University

P-40 Shear bond strength of veneering composite resin to dental alloys using various metal primers.

○Takahashi Hidekazu, Iwasaki Naohiko, Nakano Fumio, Asakawa Yuya, Koottathape Natthavoot, Takahashi Hidenao
Tokyo Medical and Dental University

P-41 Water Durability and Bond Strength of Commercial Silane Coupling Agents

○Ohashi Katsura¹, Nihei Tomotaro¹, Tanaka Takahiro¹, Suzuki Toshiyuki¹, Kondo Yukishige²,
Kurata Shigeaki¹, Umemoto Kozo¹, Teranaka Toshio¹
¹Kanagawa Dental College, ²Tokyo University of Science,

[Composite]

P-42 Influence of power density on bond strength of resin core foundation systems to root dentin

○Oto Tatsuki, Tsujimoto Akimasa, Oooka Satoshi, Irokawa Atsushi, Rikuta Akitomo, Ando Susumu, Miyazaki Masashi
Nihon University

P-43 Effect of photoinitiators on color and color stability of light-cured resin

○Arikawa Hiroyuki, Minesaki Yoshito, Kanie Takahito, Fujii Koichi, Ban Seiji
Kagoshima University

P-44 Development of new hybrid resin for crown. (part4) Relation between the refractive indices of their components and the transparency of the resins.

○Kato Takahiro, Hoshikawa Takeshi, Nagai Masahiro, Yamamoto Shigenari
R&D Center, Yamamoto Precious Metal Co., Ltd.

P-45 Influence of nano-filler on fatigue strength of filler hybrid type resin composite

○Nishikawa Izuru¹, Toyama Tatsuya¹, Takahashi Hidekazu²
¹Osaka Institute of Technology, ²Tokyo Medical and Dental University

P-46 Effect of the surface properties and flexural strength of flowable resin with acidic and alcoholic drinks

○Han Linlin, Ishizaki Hiroko, Fukushima Masayoshi, Okiji Takashi
Niigata University

P-47 Effect of thermocycling on mechanical properties of indirect resin composite

○Hibino Yasushi, Nagasawa Yuko, Omatsu Jun, Awata Satoru

P-48 Properties of complete denture with framework made of composite resin

○Ida Yusuke, Kakizaki Mitsugi, Nagano Futami, Hashimoto Masanori, Ohno Hiroki, Endo Kazuhiko
Health Sciences University of Hokkaido

**P-49 Modification effect of benzene group silane coupling agent contained double bond (Part 7) -
Relationship between wear loss values and surface hardness of the experimental composites-**

○Nihei Tomotaro¹, Kunzelmann Karl-Heinz², Ohashi Katsura¹, Tanaka Takahiro¹, Suzuki
Toshiyuki¹, Kondo Yukishige³, Yoshino Norio³, Teranaka Toshio¹

¹Kanagawa Dental College, ²Dental School of LMU, ³Tokyo University of Science

[Denture Base Resin]

P-50 The effect of chopped form glass fiber on flexural property of self-cured acrylic resin

○Maruo Yukinori, Nishigawa Goro, Irie Masao² Tamada Yoshiyuki, Oka Morihiko, Yoshihara
Kumiko, Minagi Shogo, Suzuki Kazuomi
Okayama University

**P-51 Development of new denture resin ~Preparation of the new denture resin powder by suspension
polymerization~**

○Aoyagi Yujin, Umemoto Kozo, Kurata Shigeaki
Kanagawa Dental College

P-52 Mechanical properties of methacrylate/UDMA blend polymers

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

P-53 Influence of components on the water sorption and solubility of Trail Tissue Conditioners

○Tsuka Hiroki¹, Hong Guang², Maeda Takeshi¹, Nomura Yuzi¹, Okazaki Masayuki¹, Hamada
Taizo², Sadamori Sinnsuke¹, Akagawa Yasumasa¹

¹Hiroshima University, ²Tohoku University

P-54 The effect of Sericin powder on the Dynamic Viscoelasticity of Trail Tissue Conditioner

○Hong Guang, Dilinuer Maimaiti Shawuti, Hamada Taizo, Sasaki Keiichi
Tohoku University

**P-55 Effect of surface treatment of acrylic resin on the bonding strength to silicone rubber denture
lining material**

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

[Impression Materials]

P-56 Flow Properties of a New Polyaddition-type Silicone for Fitness Test

○Izumida Akio, Yoda Masanobu
Tohoku University

P-57 Detail reproducibility of newly-developed vinyl polysiloxane impression materials

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

P-58 The surface free energy of the hydrophilic vinyl polysiloxane impression materials

○Yamaga Taniichirou, Awata Satoru, Nagasawa Yuko, Hibino Yasushi, Nakajima Hiroshi
Meikai University

**P-59 Foundational study of microencapsulation of rare metal catalysts and its application on dental
materials**

○Fuchigami Kiyomi, Ito So, Yoshimoto Ryuichi, Deguchi Mikito
Shofu Inc., R&D

[Biological Reaction]

P-60 Influence of Commercial Soft Denture Liners on Human Gingival Fibroblasts

○Kurogi Tadafumi, Minato Teppei, Yoshida Kazuhiro, Nishimura Masahiro, Murata Hiroshi
Nagasaki University

P-61 Withdrawn

[Toxicity, Sterilization and Disinfection]

P-62 Adsorption of antibacterial surfactants to the oxide surfaces and viscoelasticity of the adlayer

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

P-63 Dimensional change of addition-type silicone rubber impression materials by long term immersion in disinfectant solutions

○Hiraguchi Hisako, Sasao Michiaki, Nakajima Yoshio, Kurotani Tomoko, Yoneyama Takayuki
Nihon University

P-64 Surface roughness and dimensional accuracy of stone models with a new alginate impression material immersed in a sodium hypochlorite solution

○Hiraguchi Hisako, Sudo Fumishige, Akashi Yukio, Yoneyama Takayuki
Nihon University

P-65 Degradation of dental monomers by porcine liver esterase in the presence of polysorbate 80

○Hongo Toshio¹, Hikage Sakari², Takahashi Hidekazu¹

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

P-66 Biodistribution of micro- / nano- materials in mice

○Iwadera Nobuki, Itoh Sachiko, Abe Shigeaki, Ohguchi Ikuko, Akasaka Tsukasa, Uo Motohiro, Yawaka Yasutaka, Watari Fumio

Hokkaido University

P-67 Influence of nano level titanium dioxide on formation of tubule-like structures *in vitro*

○Imai Koichi, Takeda Shoji, Takashima Hiromasa, Watari Fumio^{1 1 23}

Osaka Dental University, Hatano Research Institute, Food and Drug Safety Center, Hokkaido University

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[Bioceramics 2]

P-68 Development of carbonate apatite collagen sponges with cytokines

○Matsuura Ayumu, Maretaningtias Dwi Ariani, Hirata Isao, Doi Kazuya, Kubo Takayasu, Okazaki Masayuki, Akagawa Yasumasa¹²²²¹²²

Hiroshima University Hospital, Hiroshima University Graduate School of Biomedical Sciences

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P-69 Observation and evaluation of osteoblasts and marrow cells on nanotubes

○Kitahara Hiromi, Kuboki Yosinori, Akasaka Tsukasa, Uo Motohiro, Abe Sigeaki, Watari Fumio, Inoue Nobuo

Hokkaido University

P-70 The analysis of behavior of the cells to carbon nanotubes

○Itoh Sachiko, Taira Toshio, Yawaka Yasutaka, Watari Fumio^{12 11}

Hokkaido University, Primary Cell

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P-71 Preparation of CNT/antibody complex for molecular heating device

○Kawaguchi Minoru, Irie Akihito, Fukushima Tadao, Ohno Jun, Yamazaki Jun, Matsuura Masarou^{1, 21, 21, 21, 21, 21}

Fukuoka Dental College, CREST

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P-72 Influence of carbon nanotubes on biofilm growth

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

Hokkaido University

P-73 Age-related changes of mandibular bone characteristics in rats

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

Showa University