The 61th General Session of the Japanese Society for Dental Materials and Devices(JSDMD)

– February 13, March 29 (modified version) –
April 13 (Saturday) – 14 (Sunday), 2013
Tower Hall Funabori
4-1-1 Funabori, Edogawa-ku, Tokyo 134-0091, Japan

April 13 (Saturday)
Hall A
9:25 – 9:30 Opening Remark
9:30 – 11:00 General Presentation (Oral Session)

A-1 Anti-bacterial effect of Protamine adsorbed on Silica -part3-
O Narusawa Hideaki, Kataoka Yu, Tamaki Yukimich, Miyazaki Takashi
Showa University

A-2 Structural change of crystal phase of octacalcium phosphate co-precipitated gelatin composite by hydrolysis reaction-
O Ezoe Yushi, Anada Takahisa, Handa Takuto, Takahasi Tetsu, Suzuki Osamu
Tohoku University

A-3 Facilitation of DNA/protamine complex-induced bone regeneration by elastins or elastin peptide
O Toda Masako[1], Ohno Jun[1], Ozaki Masao[1], Hayakawa Tohru[2], Fukushima Tadao[1]
[1]Fukuoka Dental College Medical and Dental Hospital, [2]Tsurumi University

A-4 Development of a dental temporary luting agent by applying methacrylate-based polymers
O Okada Hidetoshi, Ryukata Ichirou, Ishida Yoshinori, Kawashima Isao
Dept of Biomaterials Science, Ohu University School of Dentistry

A-5 Reaction of macrophage-like cells against Portland cement powder
O Toshima Hirokazu, Hashimoto Masanori, Nagano Futami, Kaga Masayuki, Endo Kazuhiko
Health Sciences University of Hokkaido

A-6 Effect of silver nanoparticles on cells ?Comparison between 2 and 3 dimension culture systems-
O Hashimoto Masanori[1], Toshima Hirokazu[1], Yonezawa Tetsu[2], Kawai Koji[3], Kaga Masayuki[1], Endo Kazuhiko[1]
[1]Health Sciences University of Hokkaido, [2]Hokkaido University, [3]Miyosi Oil & Fat

Hall A
14:00 – 15:00 Special Lecture
Not flock
Not flatter
Not located
Innovation from private factory
Hiroshi Takeuchi, President, Shinko Sellbic CO., LTD

15:15 – 17:00 General Presentation (Oral Session)

A-7 Inhibition of demineralization by pit and fissure sealant releasing multiple ions
O Kakuda Shinichi[1], Kaga Masayuki[2], Ida Yusuke[2], Toshima Hirokazu[2], Hashimoto Masanori[2], Endo Kazuhiko[2], Sano Hidehiko[1]
[1]Hokkaido University, [2]Health Sciences University of Hokkaido

A-8 Fatigue strength and wear resistance of composite resins
O Koottathape Natthavoot[1], Takahashi Hidekazu[1], Finger J Werner[2], Kanehira Masafumi[2] Sasipin Lauvahutanon[3]
[1]Tokyo Medical and Dental University, [2]Tohoku University, [3]Chulalongkorn Univ.

A-9 Vinyl ester/polymer mixture system (Part 13) – Preparation of original powder-liquid mixed type biodegradable resin composition –
O Tanaka Jiro[1], Irie Masao[1], Hashimoto Yoshiya[2], Takeda Shoji[2], Matsumoto Takuya[1]

[1]Okayama University, [2]Osaka Dental University

A-10 Adhesive properties of epithelial cells on zirconia

O Okabe Eijiro, Ban Seiji, Kawai Tatushi, Ishihara Yuichi, Noguchi Toshihide

Aichi Gakuin University

A-11 Translucency of dental zirconia

O Suzuki Takayuki, Yoshihara Kentaro, , Kawai Tatsushi, Murakami Hiroshi, Hattori Masami, Ban Seiji

Aichi Gakuin University

A-12 Bioactive surface modification of zirconia using Ca-ion incorporation

O Sasaki Keisuke, Kobayashi Syuichiro, Hayashi Tatsuhide, Yoshihara Kentaro, Suzuki Takayuki, Kawai Tatsushi, Ban Seiji

Aichi Gakuin University

A-13 Relation between low temperature degradation and surface treatment of high translucent zirconia

O Ban Seiji[1], Suzuki Takayoshi[1], Kawai Tatsushi[1], Kono Hiroshi[2]

[1]Aichi Gakuin University, [2] Kagoshima University

April 13 (Saturday)

Hall B

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

P-1 Inhibition of P-glycoprotein by multi-walled carbon nanotubes in Caco-2 cells

O Chen Xiao, Watari Fumio

Hokkaido University

P-2 Effect of the number of the implant and position by 3D FEA

O Nakai Taishin, Sakamoto Tarou, Ishikawa masahiro, Nakanishi Yasuhiro, Hirose Yukito, Ochi Morio

Health Sciences University of Hokkaido

P-3 Osteoblast-like cells attachment to an experimental cement containing multi-ions-releasing S-PRG filler

O Kiba Wakako, Miki Saeki, Imazato Satoshi

Osaka University

P-4 Studies on mixing of cells and magnetic beads using micro fluid chips

O Taira Masayuki, Hatakeyama Wataru, Kihara Hidemichi, Kondo Hisatomo

Iwate Medical University

P-5 Study of collagen derived from tilapia scales as three-dimensional scaffold of mouse ES cell differentiation

O Imai Koichi, Takeda Shoji

Osaka Dental University

P-6 Preparation and evaluation of properties of the alginate gel for cell culture with drug releasing ability

O Sasaki Kaori, Saitoh Setsuo, Nezu Takashi, Taira Masayuki

Iwate Medical University

P-7 Tensile strength of dentin-enamel junction region

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

Showa University

P-8 Bone formation by implantation of DNA/protamine complexes with different DNA molecular weight

O Tamura Shogo[1], Shinozaki Yousuke[2], Oono Jun[1], Ozaki Masao[1], Hayakawa Taro[2]2, Fukushima Tadao[1]

[1]Fukuoka Dental College Medical and Dental Hospital, [1]Turumi University

P-9 Preparation of patterned biomaterials with micro- and nano-topographies

O Akasaka Tsukasa, Abe Shigeaki, Watari Fumio

Hokkaido University

P-10 Preparation of alginate/OCP beads as a new bone substitute material and analysis of osteoblastic cell viability

O Endo Kosei[1], Anada Takahisa[1], Yamada Masumi[2], Seki Minoru[2], Sasaki Keiichi[1], Suzuki Osamu[1]

[1]Tohoku University, [2]Chiba University

P-11 Hardness evaluation of bone graft materials and the new life bone

O Takiguchi Yuichi, Kataoka Yu, Ikeda Shigeru, Shibata Yo, Miyazaki Takashi
Showa University

P-12 Characterization of Surface Modified Zirconia by Hydrothermal Method

O Hsu Shin-kuan[1], Lee Kuan-Hsie[1], Wang Hsueh-Far[2], Ho Wen-Fu[3], Wu Shih-Ching[1], Hsu Hsueh-Chuan[1]
[1]Central Taiwan University of Science and Technology, [2]HungKuang University, [3]Da-Yeh University

P-13 Characterization of bone substitute materials gelatin and gelatin/OCP complex

O Uzuka Risa, Anada Takahisa, Kanada Naofumi, Kobayashi Kazuhito, Sasaki keiichi, Suzuki Osamu
Tohoku University

P-14 Chemical treatment and bioactivity of nanotubular anodized Ti alloy

Ho Wen-Fu[1], OHung Yung-Hao[1], Hsu Hsueh-Chuan[2], Wu Shin-Ching[2], Hsu Shih-Kuang[2]
[1]Da-Yeh University, [2]Central Taiwan Univ. of Sci. and Tech

P-15 Porous pure titanium prepared by sponge replication method for biomedical applications

Ho Wen-Fu[1], OWang Peng-Hsiang[1], Hsu Hsueh-Chuan[2], Wu Shin-Ching[2], Hsu Shih-Kuang[2]
[1]Da-Yeh University, [2]Central Taiwan Univ. of Sci. and Tech

P-16 Mechanical properties of super engineering plastic made orthodontic wires

O Maekawa Minami, Wada Takahiro, Hongo Toshio, Doi Hisashi, Hanawa Takao, Uo Motohiro
Tokyo Medical and Dental University

P-17 Improvement of visibility of fluorescence bonding materials for orthodontics

O Hamba Yusuke[1], Yamagata Shuichi[1], Akasaka Tsukasa[1], Uo Motohiro[2], Iida Junichiro[1], Watari Fumio[1]
[1]Hokkaido University, [2]Tokyo Medical and Dental University

P-18 Effect of gutta-percha added with an organic antibacterial agenton Porphyromonas gingivalis

O Tomino Masafumi, Kuroki Kenjiro, Takahashi Yoshifumi, Nagano Kenji, Kawai Tatsushi
Aichi Gakuin University

P-19 Evaluation of commercial powder-type denture adhesives - Test method for adhesion strength to denture base acrylic resins -

O Murata Hiroshi, Kano Hiroshi, Kurogi Tadafumi
Nagasaki University

P-20 Test production of tenporary luting agent consisting of PMMA

O Ryukata Ichiro, Okada Hidetoshi, Ishida Yoshinori, Kawashima Isao
Ohu University

P-21 Characteristics of the new temporary splint material: GC G-FIX

O Akiyama Shigenori, Fusejima Futoshi, Sakuma Tetsuro
GC Corporation

P-22 Effects of occlusal force on wear of dental synthetic resin for crown and bridge

O Kakuta Kiyoshi, Goto Shinichi, Ogura Hideo
The Nippon Dental University

P-23 A new method to fabricate zirconia copings using Nd-YVO_4 laser - Machining accuracy by the modification program-

O Kazama-Koide Miku[1], Ookuma Kazuo[1], Ebihara Yoshinori[2], Miyoshi Ai[1], Ogura Hideo[1]
[1]The Nippon Dental University School of Life Dentistry, [2]GC corporation

P-24 Evaluation of additive manufacturing Co-Cr alloy crown and zirconia CAD/CAM crowns by 3Shape

O Shinya Akihiro[1], Shinya Akiyoshi[1], Kobayashi Shigeyuki[1], Miyazaki Yoji[2], Niu Dongping[3], Zheng Gang[3]
[1]The Nippon Dental University, School of Life Dentistry at Tokyo, [2]Sanwa Dental, [3]Dental Materials Laboratory Beijing University

P-25 Development of fluorescent filler for composite resins using rare earth phosphor

O Uo Motohiro, Wada Takahiro, Hongo Toshio
Tokyo Medical and Dental University

P-26 Frictional properties of aesthetically coated orthodontic wires

O Nakao Noriko, Matsunaga Junko, Watanabe Etsuko, Yoshida Noriaki, Watanabe Ikuya
Nagasaki University

P-27 Geometry analysis of the titanium surface processed by laser lithograph

O Saito Setsuo, Sasaki Kaori, Nezu Takashi, Taira Masayuki

Iwate Medical University

April 14 (Sunday)
Hall A
9:30 – 11:00 General Presentation (Oral Session)

A-14 Long-term release of cetylpyridinium chloride by polyHEMA/TMPT hydrogel – loading mechanism and release profile under different recharging protocol –
O Kitagawa Haruaki, Imazato Satoshi, Takeda Kahoru, Kitagawa Ranna, Miki Saiki, Hayashi Mikako
Osaka University

A-15 The inhibition of bacterial adhesion by lactoferrin adsorption on the implant-abutment materials corroded in an acidic fluoride solution
O Takebe-Nagano Futami, Akanuma Masayasu, Hashimoto Masanori, Ida Yusuke, Ochi Morio, Endo Kazuhiko
Health Sciences University of Hokkaido

A-16 Effect of surface charged dental glass-ceramics on bacterial adhesion
O Nozaki Kosuke, Yamashita Kimihiro, Nagai Akiko
Tokyo Medical and Dental University

A-17 Examination of enamel repairing method using ultrathin apatite sheet (Part2)
O Hontsu Shigeki[1], Yoshikawa Kazushi[2], Isai Arata[1], Yamamoto Ei[1], Kato Nobuhiro[1], Nishikawa Hiroaki[1], Kusunoki Masanobu[1], Hashimoto Yoshiya[2], Yamamoto Kazuyo[2]
[1]Kinki University, [2]Osaka Dental University

A-18 Mechanical property of octacalcium phosphate (OCP)/apatite-type I collagen composite with various mineral content- influence of pressing condition
O Iijima Mayumi, Wakamatu Nobukazu, Kamemizu Hideo, Doi Yutaka
Asahi University

A-19 Simple and quick method to synthesize bio-active apatite
O Oowada Hiroyuki, Narusawa Hideaki, Kataoka Yu, Tamaki Yukimichi, Miyazaki Takashi
Showa University

Symposium
13:00 – 15:00

April 14 (Sunday)
Hall A
15:15 – 16:00 General Presentation (Oral Session)

A-20 Dynamic fracture analysis of bio-composite tissue by particle simulation-Comparison with finite element analysis for micro tooth structure-
O Yamaguchi Satoshi[1], Coelho Paulo[2], Tovar Nick[2], Thompson Van[2], Imazato Satoshi[1]
[1]Osaka University, [2]New York University

A-21 Evaluation of T-loop retraction springs by the finite element method
O Kawamura Jun[1], Kojima Yukio[2], Fukui Hisao[1]
[1]Aichi Gakuin University, [1]Nagoya Institute of Technology

A-22 Development of Ni free magnetic shielding materials composed of solid solution of nitrogen
O Takada Yukyo[1], Takahashi Masatoshi[1], Kikuchi Masafumi[1], Kikuchi Akira[2]
[1]Tohoku University, [2]NEOMAX ENGINEERING Co.,Ltd.

April (Sunday)
Hall B
9:30 – 16:00 General Presentation (Poster Session) (11:00 – 12:00 Discussion)

P-28 The coefficient of friction of titanium and a titanium alloy

O Nagasawa Sakae[1], Kawase Yuji[1], Takeuchi Ken[1], Yamazoe Masatoshi[1, 2], Nakajima Mitsuharu[1]
[1]Matsumoto Dental University, [2]Yamamoto Precious Metal Co., Ltd.

P-29 Formation of calcium phosphates on biomedical porous titanium alloys prepared by mechanical alloying and powder sintering

O Ho Wen-Fu[1], Hsu Hsueh-Chuan[2, 3], Tsai Ming-Shiun[4], Kikuchi H[5, 6], Kurotani T[5], Wu Shin-Ching[2, 3], Hsu Shin-Kuang[2, 3]
[1]Da-Yeh University, [2]Central Taiwan University of Science and Technology, Department of Dental Technology and Materials Science, [3]Central Taiwan University of Science and Technology, Institute of Biomedical Engineering and Materials Science, [4]Da-Yeh University, [5]Nihon University

P-30 Mechanical properties of casting titanium with laser surface treatment

O Hayashi Taro, Kurogi Tadafumi, Murata Hiroshi, Shiraishi Takanobu, Watanabe Ikuya
Nagasaki University

P-31 Evaluation of corrosion behavior and biocompatibility of biomedical Ti-25Nb-xSn alloys

Hsu Hsueh-Chuan[1], OLin Yi-Hsin[1], Wang Cheng-Feng[2], Hsu Shin-Kuan[1], Wu Shin-Ching[1], Ho Wen-Fu[3]
[1]Central Taiwan University of Science and Technology, [2]Min-Hwei College of Health Care Management, [3]Da-Yeh University

P-32 Static and fatigue properties of beta titanium orthodontic wires in bending

O Murakami Takashi[1], Iijima Masahiro[2], Kawashima Isao[3]
[1]Shimadzu Co., [2]Health Sciences University of Hokkaido, [3]Ohu University

P-33 Effects of small amounts of Al adding on the cast structure of 14K gold alloys

O Ishida Yoshinori, Okada Hidetoshi, Ryukata Ichiro, Hayashi Mikita, Kawashima Isao
Ohu University

P-34 Modification effect of benzene group silane coupling agent contained double bond (Part 9) - Mechanical properties of experimental composite -

O Nihei Tomotaro[1], Kunzelmann Karl-Heinz[2], Ohashi Katura[1], Oshikawa Takahiro[1], Suzuki Toshiyuki[1], Yoshino Norio[3], Teranaka Toshio[1]
[1]Kanagawa Dental College, [2]Dental School of LMU, [3]Tokyo Univ. of Science

P-35 Effects of thermal shock on light-cured glazing agents applied to the composites and hard resins

O Ishida Yoshiki, Miyasaka Taira, Aoki Harumi, Aoyagi Yusuke
Nippon Dental University at Tokyo

P-36 The mechanical properties of poly-ethoxylated bis-phenol A dimethacrylate polymers

O Aoyagi Yusuke, Miyasaka Taira, Aoki Harumi, Ishida Yoshiki
Nippon Dental University at Tokyo

P-37 Effect of resin component on water absorption of experimental resin-modified glass ionomer for filling

O Hibino Ysushi, Nagasawa Yuko, Shigeta Hirotaka, Awata Satoru, Matumoto Kenichi, Omatu Jun, Nakajima Hiroshi
Meikai University

P-38 Surface texture and antibacterial effect of the experimental glass ionomer cements blended with nano-particle fillers

O Fujishima Akihiro, Miyazaki Takashi
Showa University

P-39 Effect of antimicrobial surfactants addition on the properties of an acrylic resin

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

P-40 Effect of fluorinated polymer contents in experimental fluorinated soft lining materials on bond strength to denture base resin

O Hoshino Yoshihito[1], Inoue Minoru[1], Iwaki Maik[1], Nagasawa Yuuko[2], Hibino Yasushi[2], Sumi Yasunori[3], Mizuguchi Syunsuke[1], Nakajima Hiroshi[2]
[1]Tokyo Medical and Dental University, [2]Meikai University, [3]National Center for Geriatrics and Gerontology

P-41 Degradation products of N,N'-dimethyl-p-toluidine occurring during a polymerization in cold-cured resins

O Hongo Toshio, Wada Takahiro, Uo Motohiro
Tokyo Medical and Dental University

P-42 Effects of thermal shock on light-cured glazing agents applied to the denture base acrylic resins

O Aoki Harumi, Miyasaka Taira, Isida Yoshiki, Aoyagi Yusuke
Nippon Dental University at Tokyo

P-43 Effect of cyclic thermal stressing on viscoelastic characteristics of experimental soft lining materials

O Inoue Minoru[1], Hoshino Yoshihito[1], Akiba Norihisa[1], Nagasawa Yuuko[2], Hibino Yasushi[2], Sumi Yasunori[3], Mizuguchi Shunsuke[1], Nakajima Horoshi[2]
[1]Tokyo Medical and Dental University, [2]Meikai University, [3]National Center for Geriatrics and Gerontology

P-44 Effect of various discoloration media on discoloration of denture lining materials

O Iwasaki Naohiko, Takahashi Hidekazu, Suzuki Tetsuya, Asagawa Yuuya, Shiozawa Maho, Koottathape Natthavoot
Tokyo Medical and Dental University

P-45 TEM microstructure analysis of surface treated Zirconia by Rocatec system

O Tamada Yoshiyuki, Nagaoka Noriyuki, Taketa Hiroaki, Yoshihara Kumiko, Irie Masao, Nishigawa Goro, Maruo Yukinori, Yoshida Yasuhiro, Torii Yasuhiro, Matsumoto Takuya, Minagi Shogo
Okayama University

P-46 Effect of Water Immersion on Bond Strength to Zirconia(Ce-TZP/Al_2O_3)

O Kuroda Soichi[1], Yokoyama Daiichiro[1], Shinya Akikazu[1, 2], Gomi Harunori[1], Shinya Akiyoshi[1]
[1]Nippon Dental Univesity, School of Life Dentistry at Tokyo, [2]University of Turku

P-47 Effect of hydrolyzable groups possessed by silane coupling agent on the adhesion between lithium disilicate glass ceramic and resin cement

O Nishigawa Goro, Irie Masao, Maruo Yukinori, Yamamoto Yoshie, Tamada Yoshiyuki, Maeda Naoto, Nagaoka Noriyuki, Matsumoto Takuya, Minagi Shogo
Okayama University

P-48 The influence of different cured mode on cement-ceramic adhesive with dual-cure type self-adhesive resin luting cements

O Han Iinlin, Fukushima Masayoshi, Okiji Takashi
Niigata University

P-49 Durability of the bond strength of facing resin system-With or without retention beads-

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

P-50 Development of a primer containing silane coupling agents for zirconia

O Kimura Hiroaki[1], Kato Tkahiro[1, 2], Saigo Kazuhiko[2], Yamada Bunichirou[1], Yamauchi Junichi[1], Anraku Teruo[1]
[1]Yamamoto Precious Metal Co., Ltd, [2]Kochi Univercity of Technology

P-51 Reaction between zirconia and phosphate bonded investment for press-on-technique - part2 effect of reaction layer on flexural and adhesive strength-

O Yoshihara Kentaro, Suzuki Takayoshi, Ban Seiji, Kawai Tatsushi, Tanaka Yoshinobu
Aichi Gakuin University

P-52 Property changes with coloring of dental zirconia

O Okuda Yuji[1], Noda Makoto[2], Tsuruki Jiro[2], Kono Hiroshi[2], Kawai Tatushi[1], Ban Seiji[1]
[1]Aichi Gakuin University, [2]Kagoshima University

P-53 $CaO-SiO_2$ based cement recycled from dental waste materials

O Tamaki Yukimichi, Yamagauchi Nobuaki, Kataoka Yu, Washizawa Norimasa, Narusawa Hideaki, Miyazaki Takashi
Showa University

P-54 Phase transformation of porcelain fused zirconia

Wu Shih-Ching[1], OCheng Wei-Chih[1], Lin Fu-Tsang[1], Ho Wen-Fu[2], Hsu Shih-Kuang[1], Hsu Hsueh-Chuan[1]
[1]Central Taiwan University of Science and Technology, [2]Da-Yeh University

P-55 Preparation and characteristics of bone-like apatite nanopowder

Ho Wen-Fu[1], OO Liou Shu-Ping[1], Tsou Hsi-Kai[2], Hsu Hsueh-Chuan[3], Wu Shih-Ching[3], Hsu Shih-Kuang[3], Wang Hsueh-Fang[4]
[1]Da-Yeh University, [2]Taichung Veterans General Hospital, [3]Central Taiwan University of Science and Technology, [4]HungKuang University