The 62nd General Session of the Japanese Society for Dental Materials and Devices (JSDMD)

- Aug.2, Oct.3 (Rev.) -
October 19 (Saturday) – 20 (Sunday), 2013
The Nippon Dental University, School of Life Dentistry at Niigata
1-8 Hamaura-cho. Chuo-ku, Niigata 951-8580, Japan

October 19 (Saturday)
Hall A
9:55 – 10:00 Opening Remark
9:30 – 11:45 General Presentation (Oral Session)

A-1 Vinyl ester/polymer mixture system (Part 14) Preparation of original powder–liquid mixed type low water absorption PMMA based resin
   O Tanaka Jiro¹, Irie Masao¹, Hashimoto Yoshiya², Takeda Shoji², Matsumoto Takuya¹
   ¹Okayama University, ²Osaka Dental University

A-2 Influence of chlorine dioxide on the physical properties of denture base materials
   O Shinhara Takuya¹, Maeda Takeshi¹, Hong Guang², Wang Wei–qi², Nishizaki Hiroshi¹, Okazaki Joji¹
   ¹Osaka Dental University, ²Tohoku University

A-3 Capability evaluation of orthodontic Gummetal springs by finite element method
   O Kawamura Jun¹, Kojima Yukio², Fukui Hisao¹
   ¹Aichi Gakuin University, ²Nagoya Institute of Technology

A-4 Relevance of released ions to antibacterial activity of S–PRG filler
   O Miki Saeki, Kiba Wakako, Kitagawa Ranna, Hayashi Mikako, Imazato Satoshi
   Osaka University

A-5 Influence of electrically poling apatite to human periodontal ligament cells
   O Arai Hiroshi, Nagai Akiko, Nozaki Kouyouke, Nakamura Mio, Yamashita Kimihiro
   Tokyo Medical and Dental University

A-6 Effect of surface modification on initial attachment of MG–63 on zirconia surface
   O Ando Masahiko, Sasaki Keisuke, Kawase Mayu, Kawai Tatsushi, Murakami Hiroshi, Hattori Masami, Ban Seiji
   Aichi Gakuin University

A-7 Application of a bioluminescence–based cytotoxicity assay to the development of resin monomers
   O Egashira Miki, Orimoto Ai, Suzuki Takahiro, Mizuno Mitsumasa, Ueno Atsuko, Fujimoto Kohtarou
   Kawai Tatsushi
   Aichi Gakuin University

Hall A
13:00 – 14:00 Special Lecture
Redefining tooth regeneration: a more practical road from basic research to therapeutic application
   Nakahara Taka
   Department of Developmental and Regenerative Dentistry, School of Life Dentistry at Tokyo, The Nippon Dental University

15:50 – 16:50 General Presentation (Oral Session)

A-8 Mechanical properties of octacalcium phosphate compact formed from different crystals
   O Iijima Mayumi, Wakamatsu Nobukazu, Komada Yuko, Kamemizu Hideo, Tamaki Yukimitsu
   Asahi University

A-9 Hydro thermal apatite synthesis from Calcium oxide and Polyphosphate
   O Narusawa Hideaki¹, Owada Hiroyuki¹, Takiguchi Yuichi¹, Kataoka yu¹, Tamaki ukimichi², Miyazaki Takashi¹
   ¹Showa University, ²Asahi University
A-10 Controlling porosity and composition in nanoporous calcium phosphates
  O Okada Masahiro, Uehira Mayo, Fujiwara Keiko, Matsumoto Naoyuki, Takeda Shoji
  Osaka Dental University

A-11 Preparation of tricalcium phosphate cement using $\alpha-\beta$ phase transition
  O Arahira Takaaki, Maruta Michito, Matsuya Shigeki
  Fukuoka Dental College

October 19 (Saturday)
Hall B
10:00 – 16:30 General Presentation (Poster Session) (14:15 – 15:45 Discussion)

P-1 Evaluation method of hard direct denture reline resins –Biocompatibility & dynamic mechanical properties–
  O Takase Kazuma¹, Suehiro Fumio¹, Watanabe Ikuya¹, Nishimura Masahiro², Murata Hiroshi¹
  ¹Nagasaki University, ²Kagoshima University

P-2 Regulation of salivary gland morphogenesis using peptide modified hydrogel
  O Taketa Hiroaki, Sathi Glusan Ara, Farahat Mahmoud, Torii Yasuhiro, Matsumoto Takuya
  Okayama University

P-3 Evaluation of surface treatments on bond strength between polyamide resins and chemically-cured resin
  O Asakawa Yuya¹, Takahashi Hidekazu¹, Iwasa Naohiko¹, Kobayashi Masahiro²
  ¹Tokyo Medical and Dental University, ²Chiba Institute of Technology

P-4 Mechanical properties of polymers made from polymer/monomer mixtures of methacrylic ester
  O Kanie Takahito, Arikawa Hiroyuki, Kikuchi Masafumi, Kadokawa Akihiko
  Kagoshima University

P-5 Mechanical properties of flowable hard resin for crowns and bridges
  O Izumida Akio, Ishibashi Minoru, Kasahara Shin
  Tohoku University

P-6 Toothbrush abrasion of resin Luna-Wing for crown and bridge
  O Tsuneishi Mari, Kato Takahiro, Anraku Teruo
  Yamamoto Precious Metal Co., Ltd.

P-7 Grinding of dental zirconia –Grinding efficiency with dental abrasive points –
  O Tsuruta Shozo, Mizuno Masanobu, Uematsu Yasuaki, Fujimoto Kotaro, Kawai Tatsushi, Yamamoto Itiro
  Aichi Gakuin University

P-8 Bond strength between zirconia and porcelain veneer
  O Goto Shin-ichi, Kakuta Kiyoshi, Miyagawa Yukio
  Nippon Dental University at Niigata

P-9 Characteristics of reflected light from Transpa Dentine porcelain for veneering zirconium dioxide substructure
  O Shiraishi Takanobu¹, Ikeda Kahori², Shinozaki Nobuya³, Watanabe Ikuya¹
  ¹Nagasaki University, ²Iruka Dental Clinic, ³Kyushu Institute of Technology

P-10 Cell adhesion on micro/nano-patternedapatite scaffold
  O Akasaka Tsukasa, Watari Fumio
  Hokkaido University

P-11 Effect of laser irradiation angle on the penetration depth of titanium
  O Kikuchi Hisaji, Kaketani Masahiro, Hiraguchi Hisako, Kurotani Tomoko, Hirose Hideharu, Yoneyama Takayuki
  Nihon University

P-12 Development of hybrid composite resins for CAD/CAM processing (Part 1): A detection method of air bubbles inside the resin materials
  O Kato Takahiro¹, ², Saigo Kazuhiko², Anraku Teruo¹
  ¹Yamamoto Precious Metal Co., Ltd., ²Kochi University of Technology

P-13 Electrical welding of titanium alloy wires for orthodontics
  O Nakao Noriko, Matsunaga Junko, Watanabe Etsuko, Yoshida Noriaki, Watanabe Ikuya
  Nagasaki University

P-14 Dental restorations created by 3D printer Part 1 Dimensional accuracy of the fixture created by stereo lithography
Antibacterial activity of apatite photocatalyst (La-OAP)/HAP complex

Model studies on bleaching with toothpaste containing apatite photocatalyst

The application limit of the bending test

Comparative study of osteogenic differentiation induced by BMP–2–contained osteogenic media for mouse and human mesenchymal stem cells

A study of strategy beneficial for patients by utilizing title system of Japanese society for dental materials and devices

Analysis of the zirconia surface treated with phosphoric acid monomers

Effect of acid treatment on bond strength of resin composite to Er, Cr:YSGG Laser prepared dentin

Dentin bond strengths of a dual-cured adhesive system—Shear bond strengths without light irradiation—

Evaluation of the adhesive strength of resins with a newly developed primer against precious metals, non-precious metals and ceramics

Bond strength of opaque porcelain materials to Co–Cr alloys frame using laser–sintering method

Effect of long term immersion in disinfectant of silicone rubber impressions with multiple-mix-technique on the dimensional accuracy of stone models

Methods to obtain suitable bonding of silicone rubber to mouth guard sheet

Surface modification effect of teeth and dental materials—Antimicrobial effect of a novel silane coupling agent—
Effect of low-temperature softening type gutta-percha added with Cetylpyridinium chloride on Dental bacteria

P-29 In-vitro biocompatibility of an expandable root canal filling material in wet condition

P-30 Development of an antibacterial conditioner containing MDPB –Evaluation of antibacterial effects against oral bacteria–

P-31 Study on some properties of a newly developed self-cured acrylic resin with low curing temperature

P-32 All-ceramic crown prepared by a new method – the influence of glass infiltration condition –

P-33 Test production of temporary luting agent consisting of PMMA (2) –Pressure Displacement–

P-34 Comparison of dentin tubule occluding ability of four dentin desensitizers

P-35 Detection and chemical state analysis of trace metallic elements contained in the oral lichenoid lesion using quantum beams

P-36 The development of the new functional water rectified of isotonic property closely to the physiological saline solution’s (Part1) –In case of the acidic water–

P-37 Bond strength of orthodontic bracket to enamel with two adhesive systems and additional fiber–reinforced composite intermediate layer

P-38 Preparation of a poly lactic acid/layered silicate nanocomposite for using as a dental material

P-39 Influence of micro/nano materiales on osteoblast–like cell

October 20 (Sunday)
Hall A
9:30 – 11:30 General Presentation (Oral Session)

A-12 Evaluation of mechanical properties of dental composites by multiscale in silico analysis

A-13 Evaluation of reference model reproduction using by 3Shape and 3D-Printer
A new method to fabricate zirconia copings using Nd:YVO₄ laser –surface Raman analysis of machined surface–

O Kazama–Koide Miku, Ohkuma Kazuo, Ogura Hideo, Miyoshi Ai, Miyagawa Yukio
Nippon Dental University

Low temperature degradation and flexural strength change of high translucent zirconia

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

Staining and discoloration of high translucent zirconia

O Ban Seiji, Okada Yuji, Suzuki Takayuki, Kawai Tatsushi
Aichi Gakuin University

Static and fatigue strength of surface–roughened zirconia

O Yoshinari Masao, Harada Rino, Soejima Hirotaka, Takemoto Shinji, Hattori Masayuki, Kawada Eiji, Oda Yutaka
Aichi Gakuin University

Histological evaluations of bone re–generation in rat calvarial bone defects by nano–apatite/collagen composites

Hatekeyama Wataru, OTaira Masayuki, Kihara Hidemichi, Kondo Hisatomo
Iwate Medical University

Osteoinduction of recombinant human Bone Morphogenetic Protein–2(rhBMP–2) with the metallic three–dimensional scaffold

O Fuyama Hironari, Miyamae Shin, Matsumura Akiko, Ueno Atsuko, Hayashi Tatsuhide, Kawai Tatsushi, Hattori Masami
Aichi Gakuin University

Effect of estrogen deficiency on bone formation around surface charged titanium implant

O Nozaki Kosuke, Yamashita Kimihiro, Nagai Akiko
Tokyo Medical and Dental University

Photofunctionalization of titanium compensates for age–related compromised osteoblastic response

O Aita Hideki, Kono Mai, Endo Kazuhiko, Koshino Hisashi
Health Science University of Hokkaido

Castability and mechanical properties of Zr–14Nb alloys for dental casting

O Kajima Yuka, Takaichi Atsushi, Doi Hisashi, Tsutsumi Yuusuke, Hanawa Takao, Wakabayashi Noriyuki
Tokyo Medical and Dental University

Evaluation of microstructures of biomedical Co–Cr–Mo alloys through high–pressure torsion

O Cho Ken¹, Niinomi Mitsuo¹, Nakai Masaaki¹, Hieda jyunke¹, Isik Murat¹, Horita Zenji²
¹Tohoku University, ²Kyusyu University

Relationship among Cu contents, microstructures and mechanical properties in as–solutionized Ag–Pd–Au–Cu alloys

O Hieda Junko¹, Niinomi Mitsuo¹, Nakai Masaaki¹, Cho Ken¹, Kim Yonghwan¹, Fukui Hisao²
A-26 Corrosion resistance of the magnetic shielding stainless steel composed of solid solution of nitrogen

O Takada Yukyo\textsuperscript{1}, Takahashi Masatoshi\textsuperscript{1}, Kikuchi Akira\textsuperscript{2}, Tenkumo Taichi\textsuperscript{1}
\textsuperscript{1}Tohoku University, \textsuperscript{2}Aichi Gakuin University

A-27 Evaluation of long-term corrosion rates of metallic dental materials by EIS technique

O Tsutsumi Yusuke, Doi Hisashi, Hanawa Takao
Tokyo Medical and Dental University
P-53 A new phase in the development of high strength pure titanium by Multi-Directional Forging
O Hoshi Noriyuki¹, Saita Makiko¹, Kumasaka Tomonari¹, Banka Masako¹,², Miura Hiromi², Kimoto Katsuhiko¹
¹Osaka Dental University, ²Tohoku University

P-54 Surface characteristics and adhesion behavior of cobalt chromium alloy fabricated by selective laser melting process
O Aoki Harumi, Miyasaka Taira, Ishida Yoshiki, Aoyagi Yusuke, Miura Daisuke, Shinya Akiyoshi
Nippon Dental University at Tokyo

P-55 Effect of Cu content on mechanical strength and microstructure of commercial dental Au–Ag–Pd type alloy with different Cu content fabricated at various solidification temperatures
O Yasuda Tomoya¹, Akahori Toshikazu¹, Sugimura Toyohiko², Fukui Hisao²
¹Meijo University, ²Aichi Gakuin University

P-56 The EPMA observations of the cast joining area between the cast abutment for implant parts and several kinds of Au–based alloys
O Kawashima Isao, Ishida Yoshinori, Hayashi Mikita, Kakumoto Yoshimi, Ryukata Ichirouto, Okada Hidetoshi
Ohi University

P-57 Contact corrosion of Ag–Pd–Cu–Au alloys with different Cu content –Analysis of corroded surface by XPS–
O Kaneko Hiromi, Okawa Seigo, Kanatani Mitsugu, Ito Kyosuke, Yamaga Yoshio, Nomura Shuichi, Izumi Kenji
Niigata University

P-58 Tendency for fitting accuracy of the casting crown with using general adjustment method for better fitting
O Fukushima Emiko, Mori Daizaburo, Horiuchi Haruhiko, Kumagai Tomohiro
GC Corporation

October 20 (Sunday)
Hall C
9:30 – 16:00 General Presentation (Poster Session) (13:50 – 15:20 Discussion)

P-59 Structural analysis of boron in human tooth of S-PRG filler eluate using $^{11}$B-NMR
O Wada Takahiro, Hongo Toshio, Uo Motohiro
Tokyo Medical and Dental University

P-60 Water sorption, solubility and corrosion-resistance of trial magnetic resin composite materials
O Soma Hiroko, Miyagawa Yukio
Nippon Dental University at Niigata

P-61 Effect of temperature on the color of restorative composite resins
O Arikawa Hiroyuki, Kanie Takahito, Kikuchi Takafumi
Kagoshima University

P-62 Preparation and characterization of organo–mineral complex by electrolysis
O Okawa Seigo, Kaneko Hiromi, Yamaga Yoshio, Kanatani Mitsugu, Izumi Kenji
Niigata University

P-63 Modification effect of novel silane containing double bond (Part 10) –Mechanical properties of experimental composites after water storage–
O Nihei Tomotaro¹, Kunzelmann Karl–Heinz², Ohashi Katsura¹, Miyake Koari¹, Oshikawa Takaki¹, Yamanaka Hideki¹, Suzuki Toshiyuki¹, Yoshino Norio³, Teranaka Toshio¹
¹Kanagawa Dental University, ²Ludwig–Maximilians–Universität München, ³Tokyo University of Science

P-64 Application of highly ethoxylated bis–phenol A dimethacrylates to the composite resin
O Aoyagi Yusuke, miyakaka Taira, Aoki Harumi, Isida Yoshiki, Miura Daisuke
Nippon Dental University at Tokyo

P-65 Bone formation of TGF–b2 immobilized implant in the bone defect of rat femur model
O Suzuki Takuma, Hayakawa Tohru, Gomi Kazuhiro
Tsurumi University

P-66 Effect of alendronate immobilization for immediate implantation to rat maxillary bone
O Raita Yuki¹, Sato Mitsunobu², Hayakawa Tohru¹
P-67 Evaluation of angiogenesis in bone regeneration by octacalcium phosphate/gelatin composites
O Murakami Yoshitaka, Anada Takahisa, Shimauchi Hidetoshi, Suzuki Osamu
Tsurumi University, 2Kogakuin University

P-68 Pigment degradation ability of the titanium for implants which anodized the surface. When titanium oxide powder is suspended in a sulfuric acid electrolysis solution
O Ito Yuki, Onoue Hideaki, Sugao Motoki, Shirachi Yuta, Nonami Toru
Chukyo University

P-69 Pigment degradation ability of the titanium for implants which anodized the surface. When the titanium oxide powder of a crystal system which is different in an electrolysis solution is suspended
O Onoue Hideaki, Ito Yuki, Nonami Toru
Chukyo University

P-70 The reaction of the tissues around titanium implant to LPS
O Shuto Takahiro, Wachi Takanori, Makihira Seicho
Kyushu University

P-71 Surface modification of Ti–6Al–4V alloy by electron cyclotron resonance plasma oxidation
O Oikawa Mayumi, Masamoto Hiroshi, Orii Yusuke, Anada Takahisa, Sasaki Keiichi, Suzuki Osamu
Tohoku University

P-72 Characteristics of experimental resin provisional cement
O Nagasawa Yuko, Hibino Yasushi, Shigeta Hirotaka, Nakajima Hiroshi
Meikai University

P-73 Fracture toughness of experimental glass ionomer cement for filling containing resin components
O Shigeta Hirotaka, Nagasawa Yuko, Hibino Yasushi, Nakajima Hiroshi
Meikai University

P-74 Shear bond strengths of resin cement to high toughness zirconia
O Sato Kotaro, Hotta Yasuhiro, Fujishima Akihiro, Miyazaki Takashi
Showa University

P-75 Surface texture and antibacterial effect of the experimental glass ionomer cements blended with silver–supported zirconium phosphate fillers
O Fujishima Akihiro, Morisaki Hirobumi, Miyazaki Takashi
Showa University

P-76 Application of α–TCP/Te–CP Cement to Pulp Capping Materials—Histopathological Evaluation—
O Takeda Shinpei, Kawano Satoshi, Kamiyama chikako, Doi Yutaka, Tamaki Yukimiti, Yoshida Takakazu
Asahi University

P-77 Application of α–TCP/Te–CP Cement to Root Canal Sealer
O Kamiyama chikako, Takeda Shinpei, Kawano Satoshi, Adachi Masanori, Doi Yutaka, Tamaki Yukimiti, Yoshida Takakazu
Asahi University