

The 42th General Session of the Japanese Society for Dental Materials and Devices (JSDMD)

Friday, September 19th (1st day)
Hall A

9:30–11:00 Oral presentations

A-01 Establishment of the in vitro cartilage cultivation system using crude BMP
○Tatsuhide HAYASHI, Tatsushi KAWAI, Takashi ITO, Tomoo SUZUKI, Atsuko ISHIKAWA, Hideki KAWAI, Masamichi KABUTOMORI, Yasuaki UEMATSU
Aichi-Gakuin Univ

A-02 Effect of test periodontal dressing materials on tubule-like structure formation in vitro
○Koichi IMAI¹, Akira AWAYA², Akihiro UEDA¹, Masaaki NAKAMURA¹
¹Osaka Dental Univ, ²Japan Science and Technology Corp

A-03 Effect of particles in periodontal ligament cell
○Kazuchika TAMURA, Noriyuki TAKASHI, Tukasa AKASAKA, Iosif ROSCA, Motohiro UO, Tosi SUGAWARA, Syouji OOKAWA, Yasunori TOTSUKA, Fumio WATARI
Hokkaido Univ

A-04 Charge induce mechanism and osteoinductivity of electrically poled hydroxyapatite
○Satoshi NAKAMURA, Kimihiro YAMASHITA
Tokyo Medical and Dental Univ

A-05 Artificial bone formation using carbonate apatites with bone marrow cells
○Tadakatsu KASAI, Yutaka DOI, Nobutake KANEMATSU
Asahi Univ

A-06 Bone growth on the surfaces of platinum-iron magnet alloy castings
○Yukyo TAKADA, Yasumoto MUKAIYAMA, Seishi ECHIGO, Osamu OKUNO
Tohoku Univ

13:30–14:30 Special lecture

Nano bio-machine by muscle protein gel
○Yoshihito OSADA
Hokkaido Univ

14:40–16:10 Special symposium: Frontier of regenerative medicine

SS1 Studies on regeneration of teeth and periodontal tissues: Current status, future and their problems
○Hidemitsu HARADA
Osaka Univ

SS2 Frontier of regenerative medicine based on bio-materials and tissue engineering

○Yasuhiko TABATA

Kyoto Univ

SS3 Frontier of regenerative medicine in dentistry and oral surgery

○Kenichiro HATA

Nagoya Univ

16:15–17:00

A-7 The trial simulation compression fatigue test in oral cavity of resin for a denture base

○Suong-Hyu HYON, Hajime SUGAI, Sadami TSUTSUMI

Kyoto Univ

A-8 Strengthening of denture base resin by compounding short glass fibers with zirconium-containing glass

○Masayuki KON¹, Masahiro KOBAYASHI², Fumiaki KAWANO¹, Kenzo ASAOKA¹

¹Tokushima Univ,²Chiba Inst Tech

A-9 Marginal leakage test by a student of faculty of engineering

○Yoshiaki TANI, Youhei KANDATSU

Univ of East Asia

Hall B

9:30–11:00 Oral presentations

B-01 Application of haptic device to dentistry (Part 4) – Support for surgical orthodontics –

○Taiji SOHMURA¹, Hirokazu HOJO², Masahiro NAKAJIMA², Seiji IIDA¹, Taiji

KITAGAWA¹, Mikihiko KOGO¹, Junzo TAKAHASHI¹

¹Osaka Univ,²Osaka Dental Univ

B-02 Thermoplasticity of the experimental root canal filling materials including guttapercha

○Masaki HAYASHI¹, Yoshima ARAKI¹, Akio IZUMIDA², Hirofumi KATSURA¹, Kouhei KIMURA²

¹Iwate Medical Univ,²Tohoku Univ

B-03 Function of calcium phosphates of to enamel surfaces by CO2 laser –Phase changes of MCPM and DCPD by heat treatments–

○Hirosuke GOTO, Masatoshi TAGAYA, Seizo TANASE, Nobukazu WAKAMATSU, Mayumi IIZIMA, Hideo KAMEMIZU, Masanori ADACHI, Yutaka DOI, Yasuo TAMURA

Asahi Univ

B-04 Immobilization of cell-adhesive protein onto tresylated titanium–Analysis with a quartz crystal microbalance–dissipation

○Tohru HAYAKAWA¹, Masao YOSHINARI², Kimiya NEMOTO¹

¹Nihon University at Matsudo,²Tokyo Dental College

B-05 Immobilization of simvastatin onto surface-modified titanium– Analysis with QCM–D technique–

○Masao YOSHINARI¹, Shinji TAKEMOTO¹, Hisashi SESHIMA¹, Yutaka ODA¹, Tohru HAYAKAWA²

¹Tokyo Dental College,²Nihon Univ at Matsudo

B-06 Cross-sectional TEM observation gold-coated titanium-porcelain interface

○Yasuhiro TANAKA¹, Eri MIURA¹, Takano SHIRAISHI¹, Kunihiro HISATSUNE¹, Ikuya WATANABE², Cai ZHUO², Toru OKABE²

¹Nagasaki Univ,²Baylor College of Dentistry

16:15-17:00

B-7 Manufacture and evaluation of the Ti-HAP complex by the dry-type synthetic method

○Hideomi KONDO, Aturo YOKOYAMA, Takao KAWASAKI, Motohiro UO, Syouji OHKAWA, Toshi SUGAWARA, Tsukasa AKASAKA, Fumio WATARI

Hokkaido Univ

B-8 HA coating on the surface of micro-porous structure created on an gold alloy

○Hiroki OHNO, Kazuhiko ENDO, Makoto TAMURA, Yuro Yamane, Isao KAWASHIMA, Katsumi HANEDA

Helath Sciences Univ of Hokkaido

B-9 Novel calcium phosphate/collagen composite synthesized by use of discharging in electrolyte

○Hiroyuki KAWAI, Yo SHIBATA, Hiroki YAMAMOTO, Mizuyo HOSAKA, Takashi MIYAZAKI

Showa univ

Hall C

10:00-15:00 Poster presentations

P-01 Effect of beta stabilizing elements on elastic modulus of titanium alloys

○Masatoshi TAKAHASHI, Eisei HAYASHI, Osamu OKUNO

Tohoku Univ

P-02 Apatite coating on titanium mesh using hydrothermal-electrochemical method -Evaluation of biocompatibility in vitro-

○Akihiko YUDA, Yukari IWAYA, Yuichi IZUMI, Seiji BAN

Kagoshima Univ

P-03 Development of fluoride-releasing resin responsive to pH

○Satoshi NAKABO¹, Yasuhiro TORII¹, Toshiyuki ITOTA¹, Kazuomi SUZUKI², Masahiro YOSHIYAMA¹

¹Kyushu Dental College,²Okayama Univ

P-04 Effect of double coating of all-in-one adhesives on dentin bonding

○Wataru SASAKAWA, Yasuko NAKAOKI, Sigeru UNO, Susumu KAWAKAMI, Hisanori KOMATU, Hidehiko SANNO

Hokkaido Univ

P-05 Angiogenic activity of osteopontin-derived peptide SVVYGLR

○Yoshinosuke HAMADA¹, Nariaki MATSUURA, Kiyoshi NOKIHARA², Takuya MATSUMOTO¹, Ayumu FUJITANI¹, Junzou TAKAHASHI¹

¹Osaka Univ,²Hipep Labo

P-06 Bioactivity of biodegradable composite membrane containing oriented needle-like apatite and BMP

○Toshiki ITOH¹, Taizo WATANABE¹, Shozo TSURUTA¹, Seiji BAN², Tatsushi KAWAI¹, Hiroshi NAKAMURA¹

¹Aichi-Gakuin Univ,²Kagoshima Univ

P-07 Immobilization of nm-order ultrathin polymer layer on metal surface

○Isao HIRATA, Yuji NOMURA, Kunio WAKASA, Masayuki OKAZAKI
Hiroshima Univ

P-08 EDX analysis of remineralization using xylitol chewing gum

○Yasuhiro MATSUDA, Tooru TANAKA, Shigeru UNO, Hisanori KOMATSU, Hidehiko SANO

Hokkaido univ

P-09 Effect of surface treatment on adhesion to titanium prosthesis

○Yohei TSUCHIMOTO¹, Yasuhiro YOSHIDA¹, Atsushi MINE¹, Takuo KUBOKI¹, Hirohumi YATANI², Kazuomi SUZUKI¹

¹Okayama Univ,²Osaka Univ

P-10 The biocompatibility of polyurethane elastomer

○Maki HAGIO, Xing Yan WANG, Kuniyoshi TANIGUCHI, Wataru MOTOKAWA, Kouji MIYAZAKI

Fukuoka Dental College

P-11 The study on the fluoride-releasing polyurethane elastomers

○Xing Yan WANG, Minoru KAWAGUCHI, Yoshizo OKAMOTO, Tadao FUKUSHIMA, Kouji MIYAZAKI, Maki HAGIO¹, Wataru MOTOKAWA¹

Fukuoka Dental College

P-12 Hydrolysis of phthalate esters in human saliva

○Minoru KAWAGUCHI, Kouji MIYAZAKI, Yutaka TAKAHASHI

Fukuoka Dental College

P-13 Characteristics of DNA films prepared by hot-press method

○Yusuke INOUE¹, Tadao FUKUSHIMA², Tooru HAYAKAWA³, Kouji MIYAZAKI²

¹Fukuoka College of Health Sciences,²Fukuoka Dental College,³Nihon Univ

P-14 Collagen-adhesive monomer interaction in adhesion to dentin -Structural stability of cross-linked collagen mimetics-

○Tomohiro MORIKAWA, Takashi NEZU, YaLi CHENG, Kyouyuki FUKUDA, Hatsumi NAGADOME, Yoshihiro TERADA

Kyushu Univ

P-15 Imparting storage/release function to a cross-linked polymer -The case of type I collagen-

○YaLi CHENG, Takashi NEZU, Tomohiro MORIKAWA, Yoshihiro TERADA

Kyushu Univ

P-16 Cytotoxicity of camphorquinone on human pulp cells and ROS production

○Toshiko ATSUMI, Seiichiro FUJISAWA
Meikai Univ

P-17 Cytotoxicity of monomers of biodegradable polymers in vitro

○Masashi HARA, Fumio TERAOKA, Yoshinosuke HAMADA, Masafumi NAKAGAWA,
Hideki TAMASAKI, Junzou TAKAHASHI
Osaka Univ

P-18 The development of in vitro model of periodontitis using human oral fibroblasts

○Yoshiya HASHIMOTO, Masaaki NAKAMURA
Osaka Dental Univ

P-19 Observation of the bone-implant interface using micro-CT

○Yoshifumi TAKAHASHI, Michitoshi ARIMOTO, Koshin SHINODA, Ichiro YAMAMOTO,
Keita MORIMOTO
Aichi-Gakuin Univ

P-20 Evaluation of new bone formation by three-dimensional X-ray micro focus CT – Bone parameters and FEM –

○Yasumasa FUKASE, Kensuke TAKAHASHI, Hiroyuki UEHARA, Masahiro KAKETANI,
Mitsuhiko MATSUMOTO, Minoru NISHIYAMA
Nihon Univ

P-21 Sterilization of dental instruments by various types of electrolyzed waters and their corrosion behaviors

○Yuki NAGAMATSU, Hongwei DONG, Kiyoshi TAJIMA, Ker-Kong CHEN, Hiroshi KAKIGAWA, Yoshio KOZONO

¹Kyushu Dental College

P-22 The histological reaction for apatites in Rats Motohiko

○NAGAYAMA, Yutaka DOI, Hiroshi TAKEUCHI
Asahi Univ

P-23 Development of hard-tissue substitute of carbonate apatite by superplastic deformation – Structure of superplastic deformed apatite–

○Masanori ADACHI, Nobukazu WAKAMATU, Takayasu GOTO, Hideo KAMEMIZU,
Mayumi IIZIMA, Takasi HORIGUCHI, Yutaka DOI
Asahi Univ

P-24 Degradation of biodegradable composite materials containing calcium phosphate

○Mariko WATANABE, Yohji IMAI
Tokyo Medical and Dental Univ

P-25 Development of HAP carrier with micro-porosities

○Kimiya NEMOTO¹, Norihiro NISHIYAMA¹, Kenichi TAKAHASHI¹, Isao SHIBUYA¹,
Tutomu ISHIZAKI²

¹Nihon Univ at Matsudo, ²Sangi Co

P-26 Development of a-TCP/Te-CP cement for pulpotomy

○Masatoshi TAGAYA, Hirosuke GOTO, Mayumi IIZIMA, Nobukazu WAKAMATHU, Hideo KAMEMIZU, Masanori ADACHI, Yutaka DOI, Yasuo TAMURA
Asahi Univ

P-27 Cyclic fatigue strength of IPS Empress 2 after one-year storage in water

○Jin GYUEJIN, Yuzin AOYAGI, Hidekazu TAKAHASHI, Naohiro IWASAKI
Tokyo Medical and Dental Univ

P-28 Study on fiber reinforced ceramics (Third report) –Application of fabric fiber reinforcement–

○Yasuhiro TANIMOTO, Kenichi TAKAHASHI, Kimiya NEMOTO
Nihon Univ at Matsudo

P-29 Surface shape change and cell proliferation change of heat-treated Ti

○Toshihide MIZOGUCHI, Takamitsu YOSHIDA, Sakae NAGASAWA, Nobuyoshi TERASHIMA, Hiroshi YAGASAKI, Michio ITO
Matsumoto Dental Univ

P-30 A study on the fitness of titanium product restoration Part 2 The assessment of the factor on the fitness

○Masaaki ANZAI, Akihiro KUROIWA, Go UDA, Takashi MINEMURA, Akio YAMAMOTO, Etsuo KASAHARA, Yoshimasa IGARASHI, Mitsuo ITO
Matsumoto Dental Univ

P-31 Mechanical properties and reaction layer of titanium alloy castings

○Hisaji KIKUCHI, Tomoko KUROTANI, Kenji YAGIHARA, Norihiro HAGINO, Masashi YUI, Minoru NISHIYAMA¹
Nihon Univ

P-32 Chemical mechanical polishing of titanium using slurry with an oxidizing agent – XPS analysis of polished surface –

○Seigo OKAWA, Syuji NAKANO, Kouichi WATANABE, Mitsugu KANATANI, Hossain AWLAD, Osamu MIYAKAWA, Masayoshi KOBAYASHI
Niigata Univ

P-33 Bonding behavior of heat-polymerized denture base resin to Ti-6Al-7Nb alloy

○Tetsuya SUZUKI¹, Hidekazu TAKAHASHI¹, Naohiko IWASAKI¹, Mansuang ARKSORNNUKIT², Sigezo HIRANO¹, Iwao HAYAKAWA¹
¹Tokyo Medical and Dental Univ,²Chulalongkorn Univ

P-34 Degradation of mechanical properties of orthodontic wires in acid fluoride solution

○Kenichi YOKOYAMA, Kazuyuki KANEKO, Keiji MORIYAMA, Kenzo ASAOKA
Tokushima Univ

P-35 Characterization of Ca- and P-enriched anodized Ti-6Al-7Nb

○Tae Sung BAE¹, Min Ho LEE¹, Dae Hee WON¹, Oh Song KWON¹, Il Song PARK¹, Shoji OHKAWA², Fumio WATARI²
¹Chonbuk National Univ,²Hokkaido Univ

P-36 Effects of heat treatments on the mechanical properties of 35Ag-30Pd-20Au-15Cu alloy containing Ga

○Pornkiat CHURNJITAPIROM, Shin-ichi GOTO, Yukio MIYAGAWA, Hideo OGURA
Nipon Dental Univ at Niigata

P-37 The effects of chemical composition on the optical properties of experimental Pd-free dental low-karat gold alloys

○Takanobu SHIRAISHI, Yasuko TAKUMA, Kunihiro HISATSUNE, Yasuhiro TANAKA, Eri

MIURA
Nagasaki Univ

P-38 Tarnish resistance of experimental Pd-free dental low-karat gold alloy in a 0.1% Na₂S solution

○Yasuko TAKUMA, Takanobu SHIRAISHI, Yasuhiro TANAKA, Kunihiro HISATSUNE
Nagasaki Univ

P-39 XMA, XRD, and XPS analysis of the Ag-Pd-Cu-Au alloy restorations fixed in the oral cavity

○Isao KAWASHIMA, Hiroki OHNO, Katsumi HANEDA, Yuroo YAMANE
Health Sciences Univ of Hokkaido

P-40 Studies on the solubilizing agent for gypsum product

○Kazuyuki KANEKO, Kazunori SHIMOMURA, Toshiyuki SEJIMA, Jouji SHIMEGI, Toyonori INOUE, Nobuyuki YAMANAKA, Yoshie SHIINA, Junko HAYASHI, Katsumi YOKOSE, Hideharu HIROSE, Minoru NISHIYAMA, Takashi KURODA
Nihon Univ

P-41 Effects of calcium oxide and phosphoric acid on expansion of dental stone (Part 4)
Application for dental casting materials

○Mikiko YAMADA¹, Kumiko MORISHITA¹, Shigeaki KURATA¹, Kozo UMEMOTO¹, Kazuhiko JOSHIN²

¹Kanagawa Dental College,²Takatsuki-shi

P-42 Scratch hardness of stone models 1. Measuring condition

○Hisami NAKAGAWA, Hisako HIRAGUCHI, Hirobumi UCHIDA, Naoki TANABE
Nihon Univ

P-43 Casting ring liners XIV -Rate of vacant space and water sorption of casting ring liners-

○Nobuyuki USUI, Hideharu HIROSE¹, Kenji TAKAOKA, Michiaki SASAO, Kazue YOSHIHASHI¹, Kazunori SHIMOMURA, Minoru NISHIYAMA¹

¹Nihon Univ

P-44 Effects of deoxidizer addition on the properties of investments that prevents surface blackening of noble alloy castings

○Yukun MENG, Akira NAKAI, Kiyoshi KAKUTA, Hideo OGURA
Nippon Dental Univ at Niigata

P-45 Study on the fitness of recycled gypsum bonded investment Part3 The fitness of cast crown on the clinical model

○Go UDA¹, Akihiro KUROIWA¹, Takashi MINEMURA¹, Yuuki MATSUYAMA¹, Akira SUZUKI¹, Mitsuo SAKOH¹, Takehiko KAIDA¹, Shigeo YOSHIDA¹, Yoshimasa IGARASHI¹, Michio ITO¹, Yasushi HIBINO², Hiroshi NAKAZIMA²

¹Matsumoto Dental Univ,²Meikai Dental Univ

P-46 Shortening schedule of casting with calcia investment

○ Shozo TSURUTA¹, Yukiko TAKEI, Kenjiro NAKANO, Kenta TAKAHASHI, Yosuke SATO, Tatsushi KAWAI¹

Aichi-Gakuin Univ

P-47 Physical properties and solidification structure of the dental metals in the high temperature

(Part 4) –Microstructure of dental casting alloys at melting and solidifying times–

○ Sakae NAGASAWA¹, Takamitsu YOSHIDA, Nobuyoshi TERASHIMA, Toshihide MIZOGUCHI, Hiroshi YAGASAKI, Michio ITO¹
Matsumoto Dental Univ

Saturday, September 20 (2nd day) Hall A

9:30–11:00 Oral presentations

A–10 Polymerization characteristics of ethyl methacrylate resin initiated by TBB

○Tae–Yub KWON, Yohji IMAI
Tokyo Medical and Dental Univ

A–11 Polymerization characteristics of PMMA/MMA–TBB resin–Influence of TBB concentration–

○Yohji IMAI, Chiemi HIRABAYASHI
Tokyo Medical and Dental Univ

A–12 Effect of irradiated violet–LEDs on polymerization rates of dental resins added with various photoinitiators

○Wataru TESHIMA, Yuji NOMURA, Toshiya KAWAHARA, Nobuyuki TANAKA, Masayuki OKAZAKI, Yukinori NAHARA
Hiroshima Univ

A–13 The laboratory performance of a newly designed one bottle/one step resin bonding

○Toshimoto YAMADA¹, Jumpei SUGIZAKI¹, Makoto MORIGAMI¹, Satoshi FUJIWARA², Naoki ODA²

¹Toranomon Hospital,²Dentsply Sankin Co

A–14 The comparison of the penetration of the various resin monomers to the dentin

○Naoko KAMISHIMA¹, Noriyuki SATO, Motohiro UO, Syouji OHKAWA, Tsukasa AKASAKA, Toshi SUGAWARA, Noboru OHATA, Fumio WATARI
Hokkaido Univ

A–15 Dentine bonding system

○Kunio WAKASA¹, Atsuharu IKEDA¹, Yuuji NOMURA¹, Isao HIRATA¹, Masayuki OKAZAKI¹, Hideaki SHINTANI¹, Hidehiko SANO²

¹Hiroshima Univ,³Hokkaido Univ

13:15–15:30 Oral presentations

A–16 Ion release from Ti–Ni alloy with electrolytic treatment

○Osamu FUKUSHIMA, Takayuki YONEYAMA, Hisashi DOI, Ikuo KOBAYASHI, Hitoshi HAMANAKA
Tokyo Medical and Dental Univ

A–17 Surface changes of titanium by the corrosion in fluoride containing solution

○Masaharu NAKAGAWA, Yoshinari MATONO, Koichi UDOH, Shigeki MATSUYA, Kunio ISHIKAWA

Kyushu Univ

A-18 The application of impedance spectroscopy to the study of corrosion

○Toshihiro YUASA, Kazuhiko ENDO, Masahiro IJIMA, Hiroki OHNO, Itaru MIZOGUCHI

¹Health Sciences Univ of Hokkaido

A-19 Friction and wear in the fretting and sliding of dental alloys

○Hisao FUKUI¹, Shozo TSURUTA¹, Wei YANG¹, Kentaro KAIKAWA¹, Masashi

TOYAMA¹, Mitsuo NIINOMI²

¹Aichi-Gakuin Univ, Toyohashi Univ of Technology

A-20 Effects of Au and Pd content on the corrosion resistance of dental Ag-Pd-Cu-Au alloy in 0.9% NaCl solution

○Kazuhiko ENDO, Hiroki OHNO, Isao KAWASHIMA, Yuro YAMANE, Ken KAKINO

Health Sciences Univ of Hokkaido

A-21 Microstructures and anodic polarization behavior of Ti-Au alloys

○Masatoshi TAKAHASHI¹, Yukyo TAKADA¹, Masafumi KIKUCHI¹, Kohei KIMURA¹, Mari

KOIKE², Toru OKABE³, Osamu OKUNO¹

¹Tohoku Univ, ²Nagasaki Univ, ³Baylor College of Dentistry

A-22 Properties of nickel-free stainless steel wire manufactured with nitrogen absorption technique

○Takao HANAWA, Daisuke KURODA

National Inst Mater Sci

A-23 Relation between thermal expansion curve and disorder-order transformation on AuCu castings by metal-mold

○Teruo ANRAKU¹, Iwao SAKAIHARA², Takeshi HOSHIKAWA², Masahumi TANIWAKI¹

¹Kochi Univ of technology, ²Yamamoto Precious Metal Co

A-24 Effects of microstructure and casting defect on dynamic characteristic of Ag-Pd-Cu-Au-Zn alloy

○Masaki MORI¹, Toshio MIZUMOTO¹, Mitsuo NIINOMI¹, Toshikazu AKAHORI¹, Hisao

FUKUI²

¹Toyohashi Univ of Technology, ²Aichi-Gakuin Univ

Hall B

9:30-11:00 Oral presentations

B-10 Surface modification of dentin by adsorption of carbon nanotube

○Tsukasa AKASAKA, Motohiro UO, Shoji OHKAWA, Toshi SUGAWARA, Fumio WATARI

Hokkaido Univ

B-11 Cell response of sintered poly(L-lactide) scaffold treated with plasma Part 1 Sintering methods and nature of the sintered scaffold

○Fumio TERAOKA, Masashi HARA, Masafumi NAKAGAWA, Hideki TAMASAKI, Junzo TAKAHASHI

Osaka Univ

B-12 Application of haptic device to dentistry (Part 3) –CAD/CAM fabrication of stent for dental implant–

○Taiji SOHMURA, Naoki KUSUMOTO, Masahiko NISHIDA, Kazumichi WAKABAYASHI, Mitsumasa NAGAO, Shinichi YAMADA, Tetsuya KOJIMA, Takashi NAKAMURA, Hirofumi YATANI, Junzo TAKAHASHI
Osaka Univ

B-13 A jaw robot using the parallel mechanism (Part 2) Reproduction of a jaw movement with the inverse dynamics for parallel mechanism

○Yubong KANG, Toshiyuki NAMBU, Sadami TSUTSUMI
Kyoto Univ

B-14 Automatic registration of plural range data sets for 3-D dental cast models

○Yasushi HIROGAKI¹, Taiji SOHMURA², Junzo TAKAHASHI²
¹Communications Research Laboratory,²Osaka Univ

B-15 Automatic fabrication of prostheses using a CAD/CAM system (Part22) Variations of structural strength of different machining methods for ceramic crown

○Yasuhiro HOTTA, Atsushi OZAWA, Toshihisa FUJIWARA, Takashi MIYAZAKI
Showa Univ

13:15–15:30

B-16 Laser groove welding for titanium and dental precious alloys Keiji

○IWASAKI, Shoji OHKAWA, Motohiro UO, Tukasa AKASAKA, Toshi SUGAWARA, Fumio WATARI
Hokkaido Univ

B-17 Application of laser speckle correlation method for determining the polymerization characteristics of a light-cured resin

○ Masashi MIYAZAKI, Tomomi SATO, Susumu ANDO
Nihon Univ

B-18 Analysis of internal and external forces of a human mandible invested by strength of materials: Influence of variation of bearing ratio of balancing side to working side in masticatory muscle force

○ Masaaki KUSANO, Tadaaki KIRITA
Nara Medical Univ

B-19 Preparation of carbonated apatite monolith by treatment of calcium carbonate in phosphate solutions

○Shigeki MATSUYA, Xin LIN, Koichi UDO, Masaharu NAKAGAWA, Kunio ISHIKAWA
Kyushu Univ

B-20 Preparation of porous carbonate apatite

○Kimie WAKAE, Koichi UDOH, Melvin MUNAR, Masaharu NAKAGAWA, Shigeki MATSUYA, Kunio ISHIKAWA
Kyushu Univ

B-21 Development of self-setting calcium hydroxide preparation (Part 3) Effect of self-setting calcium hydroxidepreparation on dental pulp

○Mariko NAKAMURA¹, Kunio ISHIKAWA², Yasuhiro YOSHIDA¹, Kazuomi SUZUKI¹
¹Okayama Univ,²Kyushu Univ

B-22 A basic study on water-based temporary sealing materials –setting time–

○Taizo WATANABE, Kimitoshi ANDO, Toshiki ITO, Naritaka KITAMURA, Kazuhiko NAKATA, Shozo TSURUTA, Tatsushi KAWAI, Hiroshi NAKAMURA

Aichi-Gakuin Univ

B-23 Study on the experimental investments without binder materials –Effect of additional stickiness–

○Yukimichi TAMAKI, Zutai ZHANG, Yasuhiro HOTTA, Shigeyuki TAKASHIBA, Yuichiro OKAZAKI, Takashi MIYAZAKI, Hisashi HISAMITSU

Showa Univ

B-24 Development of zirconium-containing glass fibers for composite materials

○Masahiro KOBAYASHI¹, Masayuki KON²

¹Chiba Ins Tech,²Tokushima Univ

Hall C

10:00–15:00 Poster presentations

P-48 Apatite-collagen complex 2. Characterization of physical chemistry

○Yasumitsu AKITA, Satoshi KAWANO, Yoshihiro TAKENAKA, Takakazu YOSHIDA, Yutaka DOI, Ichiro SEKINE

Asahi Univ

P-49 Leaching of phthalic acid esters from dental materials immersed in human saliva

○Toshio HONGO¹, Sakari HIKAGE², Atsushige SATO³

¹Tokyo Medical and Dental Univ,²Health Sciences Univ of Hokkaido,³Showa Univ

P-50 Functional polymer for dental use(IV) Molecular composite resin reinforced by rigid polymer

○Kumiko MORISHITA, Kazuo SHIMOYAMA, Shigeaki KURATA, Kozo UMEMOTO
Kanagawa Dental College

P-51 Shape memory alloy fiber reinforced resin matrix smart composite (Part 8) – Effects of super elastic fiber –

○Kenichi HAMADA, Fumiaki KAWANO, Kenzo ASAOKA

Tokushima Univ

P-52 Effect of hot water immersion on mechanical properties of compomers

○Atsushi YAMAZAKI, Atsushi HARASHIMA, Muneaki HONDA, Kenichi KURAMOCHI, Yoko TAKAHASHI, Taniichirou YAMAGA, Yasushi HIBINO, Hiroshi NAKAJIMA

Meikai Univ

P-53 Synthesis of new urethane monomers

○Katsunori KOJIMA, Yohji IMAI

Tokyo Medical and Dental Univ

P-54 Improvement of dental resins in properties (Part 8) – Mechanical properties of experimental compomer used UDMA/acidic monomer resin as a matrix –

○Jiro TANAKA, Toshiaki HASHIMOTO, Kazuomi SUZUKI

Okayama Univ

P-55 Fatigue strength of UDMA/acidic monomer resin Part 2 Effect of acidic monomer

○Naohiko IWASAKI¹, Hidekazu TAKAHASHI¹, Jirou TANAKA², Yujin AOYAGI¹, Jingyue

JIN¹, Kazuomi SUZUKI²

¹Tokyo Medical and Dental Univ, ²Okayama Univ

P-56 Stabilities of optical properties and color of paint-on resins for shade modification of crown and bridge resins

○Hiroyuki ARIKAWA, Takahito KANIE, Koichi FUJII, Seiji BAN
Kagoshima Univ

P-57 Toothbrush abrasion of commercially available resins for crown and bridge

○Koichi FUJII, Hiroyuki ARIKAWA, Takahito KANIE, Seiji BAN
Kagoshima Univ

P-58 Toothbrush abrasion of an indirect prosthodontic composite

○Hiroyasu KOIZUMI, Kazunori OTANI, Hisaka SHIRATSUTI, Yoshiyuki KAKEHASHI,
Masahiro SAITOH, Minoru NISHIYAMA, Hideo MATSUMURA
Nihon Univ

P-59 Radiopacity characteristics of composite resin

○Yujin AOYAGI, Jingyue JIN, Hidekazu TAKAHASHI, Naohiko IWASAKI, Kenichi
BABASONO
Tokyo Medical and Dental Univ

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○Hidetoshi OKADA, Mitsunori KANAMARU, Hiroshi NOGUCHI, Yoshinori ISHIDA,
Katuya NAGAYAMA
Ohu Univ

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Nippon Dental Univ at Tokyo

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Nihon Univ

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○Naoki TANABE, Hirobumi UCHIDA, Hisami NAKAGAWA, Hisako HIRAGUCHI
Nihon Univ

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○Akio IZUMIDA¹, Makoto HOSOTANI², Masanobu YODA¹, Kohei KIMURA¹, Naoyuki
KATAKURA¹, Osamu OKUNO¹

¹Tohoku Univ, ²Tohoku Employees' Pension Welfare Hospital

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○Shigeru HIRABAYASHI
Tsurumi Univ

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Tsurumi Univ

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Kimiya NEMOTO¹, Kazuomi SUZUKI²
¹Nihon Univ at Matsudo,²Okayama Univ

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Kanagawa Dental College

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Hideo MATSUMURA
Nihon Univ

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Nihon Univ

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Tokyo Dental College

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Tokyo Medical and Dental Univ

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¹Kanagawa Dental College,²Tokyo Univ of Science

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○Tomotaro NIHEI¹, Shigeaki KURATA¹, Katsura OHASHI¹, Naohiro OMOTO¹, Yukishige KONDO², Kozo UMEMOTO¹, Norio YOSHINO², Toshio TERANAKA¹

¹Kanagawa Dental College,²Tokyo Univ of Science

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○Takehiko KAIDA¹, Mitsuo SAKOH¹, Akihiro KUROIWA¹, Shigeo YOSHIDA¹, Akira SUZUKI¹, Go UDA¹, Keiko YOSHIDA¹, Takashi MINEMURA¹, Yuki MATSUYAMA¹, Tomoyuki TAKAI¹, Yoshimasa IGARASHI¹, Michio ITO¹, Yasushi HIBINO², Hiroshi NAKAJIMA²

¹Matsumoto Dental Univ,²Meikai Univ

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Tokyo Medical and Dental Univ

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Niigata Univ

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○Taishi KOJIMA¹, Masahiro KAKETANI¹, Masahiro SAITOH¹, Terumasa KANEDA¹, Taro INOUE¹, Teiji SHIBASAKI², Minoru NISHIYAMA¹

¹Nihon Univ,²Saiseikai Central Hospital

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Nihon Univ

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Meikai Univ

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Nippon Dental Univ at Tokyo

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Nippon Dental Univ at Tokyo

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○Yoshizo OKAMOTO¹, Kazuhiko HORIE¹, Shigeyasu NARUSE², Xing Yan WANG¹, Koji MIYAZAKI¹

¹Fukuoka Dental College, ²Tokuriki Honten

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○Kazuhiko HORIE, Yoshizou OKAMOTO, Koji MIYAZAKI
Fukuoka Dental College