

The 52nd General Session of the Japanese Society for Dental Materials and Devices(JSDMD)

September 20 (Saturday)- 21 (Sunday), 2008
Senri Life Science Center building (Toyonaka), Osaka Univ.

September 20 Saturday

Hall A

8:55-9:00 Opening Remark

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

[Resins 1]

A-01 Vinyl esters/polymer mixture system (Part 6) - Characteristic water durability behavior of multi-functional denture liner based on VE/PEMA paste -

○TANAKA Jiro¹, HASHIMOTO Yoshiya², NAKAMURA Masaaki², SUZUKI Kazuomi¹
¹ Okayama Univ., ²Osaka Dental Univ.

A-02 Long-term stability of adhesion between 4-META/MMA-TBB resin and bone

○NAKATSUKA Megumi¹, KAWAMURA Naoto¹, SUGAYA Tsutomu¹, KAWANAMI Masamitsu¹
¹ Hokkaido Univ.

A-03 Development of flowable dental composite resin using glass flake filler

○OU Motohiro¹, Abe Shigeaki¹, Akasaka Tsukasa¹, Watari Fumio¹
¹ Hokkaido Univ.

A-04 Ceramic Composite Resin Curable under Near Infrared Irradiation

○SOGA Kohei¹, KUDO Eiki¹, UO Motohiro²

¹ Department of Materials Science and Technology, Tokyo Univ. of Science, ²Graduate School of Dental Medicine, Hokkaido Univ.

[Resins 2 and Adhesion]

A-05 Bond strength between fiberposts and composite resin -Compare of Testing method-

○ASAKAWA Yuuya¹, TAKAHASHI Hidekazu², IWASAKI Naohiko², KOHSAKAKengo¹,
KOBAYASHI Masahiro¹,
¹ Chiba Institute of Technology, ²Tokyo Medical and Dental Univ.

A-06 Evaluation of single-step adhesive systems by means of contact angle measurement

○TSUJIMOTO Akimasa¹, TSUCHIYA Hiroaki¹, CHIBA Yasushi¹, TAKAMIZAWA Toshiki^{1,2},
KUROKAWA Hiroyasu^{1,2}, ANDO Susumu^{1,2}, MIYAZAKI Masashi^{1,2}

¹ Department of Operative Dentistry, Nihon Univ. School of Dentistry, ²Division of Biomaterials Science, Dental Research Center

A-07 New adhesion theory-Morphology of dentin bonding specimens-

○WAKASA Kunio¹, UNO Shigeru², OKAZAKI Masayuki¹
¹ Hiroshima Univ., ²Toranomon Hospital

A-08 Dependence of interaction between collagen and lysozyme on pH studied by QCM-D

○NEZU Takashi¹, MASUYAMA Tomoyuki², SASAKI Kaori¹, SAITOH Setsuo¹, TAIRA Masayuki¹, ARAKI Yoshima¹
¹ Iwate Medical Univ., ²Iwate Medical Univ.

SL-1Dental clinical education with patient robot

UZUKA Satoshi

[Metals 1]

A-09 Microbeam X-ray Powder diffraction study of Ti-6Al-7Nb wear surface

○MIURA Eri¹, Ice Gene. E.², Specht Eliot. D.², HisatsuneKunihiro¹
¹ Nagasaki Univ., ²Oak Ridge National Laboratory

A-10 Immobilization of Glycine to Titanium by Electrodeposition for Base Structure of Biofunctional Surface

○KOPYL Svitlana¹, TANAKA Yuta¹, HANAWA Takao¹
¹ Tokyo Medical and Dental Univ.

A-11 Electrochemical corrosion behavior of titanium alloys in a basic peroxide-containing solution

○TAKEMOTO Shinji¹, HATTORI Masayuki¹, YOSHINARI Masao¹, KAWADA Eiji¹, ODA Yutaka¹
¹ Tokyo Dental College

A-12 Spatial design of titanium implant intended to enhance osteoconductivity

○TSURU Kanji¹, SUGINO Atsushi², HAYAKAWA Satoshi³, OHTSUKI Chikara⁴, ISHIKAWA Kunio¹, OSAKA Akiyoshi³
¹ Kyushu Univ., ²Nakashima Propeller, ³Okayama Univ. ⁴Nagoya Univ.

[Metals 2 and Casting]

A-13 Mechanical properties of dental CAD/CAM Ti-Ag alloys

○TAKAHASHI Masatoshi¹, KIKUCHI Masafumi¹, TAKADA Yukyo¹, OKUNO Osamu¹
¹ Tohoku Univ.

A-14 Dust-free dental investment with gel-like colloidal silica

○TAMAKI Yukimichi¹, YOSHIDA Rie¹, ZHANG Zutai², CHO Han-Cheol¹, AIDA Yoshiteru¹, KATAOKA Yuu¹, YAGI Satoshi¹, MIYAZAKI Takashi¹
¹ Showa Univ., ²Capital Univ. of Medical Science

A-15 The application of ring liner made from a soluble biomaterial for dental casting

○ONAGAME Masanori¹, KOMASA Yutaka¹, KAKIMOTO Kazutoshi¹, OKAZAKI Joji¹
¹ Osaka Dental Univ.

A-16 Change in mechanical properties of dental Ag-Pd-Au-Cu alloy fabricated by liquid rapid solidification method

○KANNO Toru¹, NIINOMI Mitsuo², AKAHORI Toshikazu², NAKAI Masaaki², TSUTSUMI Harumi², FUKUI Hisao³
¹ Tohoku Univ., ²Inst. for Mater. Res., Tohoku Univ., ³Aichi Gakuin Univ.

A-17 Antibacterial activity of calcite/nano-scale magnesia composite powders

○YAMAMOTO Osamu¹, FUKUDA Masayuki¹
¹ Akita Univ.

A-18 Influence of sandblasting and heat treatment on low temperature degradation of zirconia

○KONO Hiroshi¹, MIYAMOTO Motoharu¹, SATO Hideo¹, SHINOHARA Naoyuki¹, NAWA Masahiro², BAN Seiji¹
¹ Kagoshima Univ., ²Matsushita Electric Works, Ltd.

A-19 Synthesis and characterization of hydroxyapatite containing glycine and serine

○UDDIN Mohammad Hafiz¹, Matsumoto Takuya¹, Sohmura Taiji¹
¹ Osaka Univ.

A-20 Preparation of Carbonate Apatite Block by Hydrothermal Treatment of Calcium Carbonate - Dicalcium Phosphate Mixture

ODAITOU Fumikazu¹, TAKEUCHI Akari¹, TSURU Kanji¹, MATSUYA Sigeki², TERADA Yoshihiro¹, ISHIKAWA Kunio¹

¹ Kyushu Univ., ²Fukuoka Dental College

SL-2Development of "Kaming Diet" the anti-metabolic syndrome product introducing the mastication method

MORI Toshiyuki
Nissin Food Products Co., Ltd.

September 20 Saturday

Hall B

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

[Award Challenge Posters P-01 - P-08]

P-01Dental hand skill simulation training using VR haptic device (Part 4)-Extarction of caries model and integration of 3D dental arch model-

YOSHIDA Yoshinori¹, YAMAGUCHI Satoshi¹, WAKABAYASHI Kazumichi¹, TAKESHIGE Fumio¹, NAGASAWA Sakae², SOHMURA Taiji¹
¹ Osaka Univ., ⁴Matsumoto Dental Univ.

P-02Development of fuseless zirconia bridge -evaluated by different types of bonding tests-

OKURIYAMA Soichi¹, KUNII Jun¹, CHRISTOPH Goldmmer², TAKANASHI Tomohiro³, MANABE Atsufumi¹, HOTTA Yasuhiro¹
¹ Showa Univ., ²Eberhard-Karls-Univ., ³MEDIA Co.,ltd.

P-03Fabrication of carbonate apatite mnolith from gypsum-calcite composite by compositional transformation reaction

TAKEUCHI Akari¹, ZAMAN Tanira¹, MATSUYA Shigeki², TSURU Kanji¹, ISHIKAWA Kunio¹
¹ Kyushu Univ., ²Fukuoka Dental College

P-04Corrosion resistance evaluation of dental precious-metal alloys by differential pulse voltammetry

FUJITA Takeshi¹, SHIRAISHI Takanobu¹, TAKUMA Yasuko¹, MIURA Eri¹, OKABE Takeo¹, HISATSUNE Kunihiro¹
¹ Nagasaki Univ.

P-05Effect of octacalcium phosphate/collagenon composite on subperiosteal bone augmentation.

MATSUI Aritsune¹, ANADA Takahisa¹, MASUDA Taisuke¹, KAMAKURA Shinji¹, ECHIGO Seishi¹, SUZUKI Osamu¹
¹ Tohoku Univ.

P-06Carbonate apatite coatings on Ti implants

YAMAGUCHI Yusuke¹, DOI Yutaka¹, YAMAMOTO Kohji¹
¹ Asahi Univ.

P-07*In vitro* transformation of nano-scale calcium phosphate

MURAKAMI Asuka¹, SHIBATA Yo¹, KATAOKA Yu¹, YAMAKI Koichi¹, OTSUKA Fukunaga¹, MIYAZAKI Takashi¹
¹ Showa Univ.

P-08The development of reconstruction materials having both high cellular adhesiveness and electric conductivity

MATSUOKA Makoto¹, AKASAKA Tsukasa¹, TOTSUKA Yasunori¹, WATARI Fumio¹
¹ Hokkaido Univ.

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

[Disinfection, Sterilization]

P-09 Bactericidal activity of improved type of electrolyzed neutral water jell

ONAGAMATSU Yuki¹, KITA Noriaki¹, CHEN Ker-Kong¹, TAJIMA Kiyoshi¹, KAKIGAWA Hiroshi¹, WATANABE Kenji², KOZONO Yoshio¹
¹ Kyushu Dental College, ²ASAHI PRE TEC CORP.

[CAD/CAM, Implant]

P-10 Evaluation of the fit accuracy by the non-destructive examination of micro-CT images and 3D coordinate measure to CAD/CAM crowns

OKISHIDA Sachie¹, HASEGAWA Aki¹, HATTA Minori¹, YOKOYAMA Daiichiro¹, SHINYA Akikazu¹, GOMI Harunori¹, HATANO Yasuo¹, SHINYA Akiyoshi¹
¹ The Nippon Dental Univ.

P-11 Antibacterial titanium anodized by discharge in electrolyte

OSHIBATA Yo¹, KANESHIGE Sayuri¹, KATAOKA Yu¹, MURAKAMI Asuka¹, YAMAOKI Koichi¹, MIYAZAKI Takashi¹
¹ Showa Univ.

[Compsite Resin 1]

P-12 A study on polymerization characteristics of experimental flowable resin composites

OYAMAMOTO Akira¹, IROKAWA Astushi¹, TSUBOTA Keishi¹, TAKAMIZAWA Toshiki¹, RIKUTA Akitomo¹, ANDO Susumu¹, MIYAZAKI Masashi¹
¹ Nihon Univ.

P-13 Ultrasonic monitoring of the setting of core foundation resin composites

OYASUDA Genta¹, YOSIDA Takesi¹, YAMAGUCHI Kanako¹, OTO Tatsuki¹, OOOKA Satoshi¹, KUROKAWA Hiroyasu¹, MIYAZAKI Masashi¹
¹ Nihon Univ.

P-14 Surface properties of new type flowable resin after stored in drinks

OHAN Rinrin¹, OKAMOTO Akira¹, FUKUSHIMA Masayoshi¹, OKIJI Takashi¹
¹ Niigata Univ.

P-15 Experimental composite resin using low viscous monomers - Studies on monomer components -

OMIYASAKA Taira¹, OKAMURA Hiroyuki¹, HAGIWARA Tsuneo²
¹ School of Life Dent at Tokyo, Nippon Dent Univ., ²CMET Co.

[Resin 1]

P-16 Effect of new photoinitiators on the color of light-cured resin

OKARIKAWA HIROYUKI¹, SHINOHARA Naoyuki¹, KANIE Takahiro¹, FUJII Koichi¹, BAN SEIJI¹
¹ Kagoshima Univ.

P-17 Solvent resistance of a new resin applying bisfunctional siloxane oligomer - MMA copolymer

AOYAGI Yujin¹, UMEMOTO Kozo¹, KURATA Sigeaki¹
¹ Kanagawa Dental College

P-18 Retention of crowns cemented on implant abutment with dental cements

ONAGASAWA Yuko¹, HASEGAWA Yoshiaki¹, TAWARAGI Tsutomu¹, YAMAGA Taniichiro¹, HIBINO Yasushi¹, NAKAJIMA Hiroshi¹
¹ Meikai Univ.

P-19 Change in color of glass ionomer cements for restoration

OHASEGAWA Yoshiaki¹, TAKAHASHI Yoko¹, NAGASAWA Yuko¹, YAMAGA Taniichiro¹, OMATSU Jun¹, SHIMANO Isokatsu¹, HIBINO Yasushi¹, NAKAJIMA Hiroshi¹
¹ Meikai Univ.

- P-20** Mechanical property of glass ionomer cements for luting mixed at lower powder-liquid ratio
 OOMATSU Jun¹, HIBINO Yasushi¹, NAGASAWA Yuko¹, HASEGAWA Yoshiaki¹, AWATA Satoru¹, YAMAGA Taniichiro¹, NAKAJIMA Hiroshi¹
¹ Meikai Univ.
- P-21** Bonding of resin-modified glass ionomer to dentin treated with tannic acid and/or HEMA
 OYAMAGA Taniichiro¹, AWATA Satoru¹, HASEGAWA Yoshiaki¹, OOMATSU Jun¹, NAGASAWA Yuko¹, YAMAUCHI Masashi¹, HIBINO Yasushi¹, NAKAJIMA Hiroshi¹
¹ Meikai Univ.
- [Ceramics]*
- P-22** Deposition of calcium phosphate on self-assembled monolayers
 OHIRATA Isao¹, FUJII Eri¹, NAGAI Hiroki¹, AKAMATSU Mai¹, NOMURA Yuji¹, OKAZAKI Masayuki¹
¹ Hiroshima Univ.
- P-23** Evaluation of cytotoxicity for resorbable Strontium-containing apatite cement
 OFUJIHARA Emi¹, SEKINE Kazumitsu¹, HAMADA Kenichi¹, KAWANO Fumiaki¹, ASAOKA Kenzo¹
¹ Tokushima Univ.
- P-24** Comparison of X-ray opacity of dental materials
 OMIYAMOTO Motoharu¹, BAN Seiji¹, TAKEUCHI Naoshi¹, YAMASHITA Daisuke¹, KONO Hiroshi¹, MACHIGASHIRA Miho¹, NOGUCHI Kazuyuki¹
¹ Kagoshima Univ.
- P-25** Effect of sintering conditions on properties of zirconia
 OTAKEUCHI Naoshi¹, MACHIGASHIRA Miho¹, YAMASHITA Daisuke¹, MIYAMOTO Motoharu¹, TAKEUCHI Hironobu¹, NOGUCHI Kazuyuki¹, BAN Seiji¹
¹ Kagoshima Univ.
- [Clinical Application 1]*
- P-26** Study about the shear bond strength of experimental zirconia ceramics brackets to orthodontic bonding material
 OFUTAKI Katsuyoshi¹, TANABE Satoru¹, TAKEUCHI Kenichiro¹, MANABE Atsufumi¹, FUJISHIMA Akihiro¹, MAKIKOUTARO¹, MIYAZAKI Takashi¹
¹ Showa Univ.
- P-27** Effects of commercial artificial saliva on Candida growth, acid production and biofilm formation.
 OISHII Hitomi¹, OKURA emi¹, TAKAMOTO Yuko¹, MAKIHIRA Seicho¹, NIKAWA Hiroki¹
¹ Hiroshima Univ.
- P-28** Removal ability of TiO₂-incorporated denture cleanser against Candida biofilm.
 OTAKAMOTO Yuko¹, TAKAYAMA Yukihiko¹, MAKIHIRA Seicho¹, NIKAWA Hiroki¹, MATSUSHITA Noriko²
¹ Hiroshima Univ., ² Nissin Co.Ltd.
- P-29** Influence of denture strengthener on mechanical properties of maxillary complete denture
 OHIRAJIMA Yuki¹, TAKAHASHI Hidekazu², MINAKUCHI Shunsuke¹, IWASAKI Naohiko¹
¹ Tokyo Medical and Dental Univ.
- P-30** Development of luting agent for dental implant (2) Influence of the adhesion durability for fitness of restoration
 OKADA Hidetoshi¹, RYUKATA Ichiro¹, ISHIDA Yoshinori¹, KOISO Kazuo², KAWASHIMA Isao¹
¹ Ohu Univ.
- P-31** Effect of CO₂ laser irradiation on adhesiveness of fissure sealant.

OGA Yousuke¹, OKAMOTO Yoshizou¹, MATSUYA Shigeki¹
¹ Fukuoka Dental College

P-32 Behavior of dust in dental clinic office using attained height of metal particle as circumstantial evidence

OKANATANI Mitsugu¹, OKAWA Seigo¹, WATANABE Kouichi¹, HOTTA Noriyasu¹, KIMURA Isao¹, KOBAYASHI Masayoshi¹
¹ Niigata Univ.

[Adhesion 1]

P-33 Long-term bonding durability against water of fluorine-containing adhesive resin for precious metal alloys

OKADOMA Yoshinori¹
¹ Tokyo Medical and Dental Univ.

P-34 Influence of polymerization mode on bond strength of dual-curing resin cements to dentin

HIRABAYASHI Shigeru¹, YOSHIDA Eiji¹, HIRANO Susumu¹
¹ Tsurumi Univ.

P-35 A study on shear bond strength of a new composite resin core material to dentin

OASAKI Yumi¹, TSUBOTA Yuji¹, SASAKI Keita¹, TOKINIWA Yumiko¹, FUKUSHIMA Shunji¹
¹ Tsurumi Univ.

P-36 Early shear bond strength of a new composite resin core material

YAMAZAKI Hiromitsu¹, TSUBOTA Yuji¹, SASAKI Keita¹, TOKINIWA Yumiko¹, FUKAGAWA Nao¹, HASIMOTO Ko¹, NISHIMURA Yasushi¹, FUKUSHIMA Shunji¹
¹ Tsurumi Univ.

P-37 Durability of dental luting cements to zirconia ceramics

TAKEUCHI Kenichiro¹, FUJISHIMA Akihiro¹, MANABE Atsufumi¹, KUNII Jun¹, HOTTA Yasuhiro¹, TAMAKI Yukimiti¹, MIYAZAKI Takashi¹
¹ Showa Univ.

[Biological Reaction, Toxicity]

P-38 The difference of the effect of multi-walled carbon nanotubes on human hepatic normal and cancer cells

ITOHI Sachiko¹, AKASAKA Tsukasa¹, YAWAKA Yasutaka¹, WATARI Fumio¹
¹ Hokkaido Univ.

P-39 Effects of methyl methacrylate and N,N-dimethyl-p-toluidine on differentiation of a macrophage-like cell line

HONGO Toshio¹, HIKAGE Sakari²,
¹ Tokyo Medical and Dental Univ., ² Health Sciences Univ. of Hokkaido

P-40 Development of the new differentiation test method by cell recovery from the influence on ES-D3 cell

OIMAI Koichi¹, TANOUE Akito², KUSAKAWA Shinji²
¹ Osaka Dental Univ., ² National Res. Inst. for Child Health and Development

Banquet ("Senri Room" in Senri Life Science Center)

September 21 Sunday

Hall A

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

[Biological Reaction 2]

A-21 Evaluation of damage mechanism of macrophage by ID₁₀ high-concentration copper ions

○TAIRA Masayuki¹, SASAKI KAORI¹, SAITOH Setsuo¹, NEZUTakashi¹, ARAKI Yoshima¹
¹ Iwate Medical Univ.

A-22 Cell culture on transparent conductive single-walled carbon nanotube thin films

○AKASAKA Tsukasa¹, ABE Shigeaki¹, UO Motohiro¹, WATARIFumio¹
¹ Hokkaido Univ.

A-23 Biological evaluation of implantable poly ethyl methacrylate Resin

○OOKANO Masashi¹, HAYASHI Tatuhide¹, ASAHI Takahumi¹, HAMAZIMA Souitiro¹, SATO Yamato¹, ASAKURA Masaki¹, TOMINO Masafumi¹, DEGUTI Mikito¹, KAWAI Tatushi¹
¹ Aichi gakuin Univ., ²K.K. SHOFU

A-24 Antibacterial activity of bamboo extract for dental bacteria

○TERAOKA Fumio¹, INABA Yoji¹, YAMAMOTO Koichi¹, NAKAGAWA Masashi¹, SOHMURA Taiji¹
¹ Osaka Univ.

[Ceramics 2]

A-25 Effect of surface roughness of zirconia on initial attachment of osteoblast-like cell

○YAMASHITA Daisuke¹, MACHIGASHIRA Miho¹, MIYAMOTO Motoharu¹, TAKEUCHIHironobu¹, TAKEUCHI Naoshi¹, NOGUCHI Kazuyuki¹, BAN Seiji¹
¹ Kagoshima Univ.

A-26 Enhanced osteoconductivity of HA/TCP composite ceramics by electrical polarization

○SAGAWA Hideki¹
¹ Tokyo Medical and Dental Univ.

A-27 Development of functionally gradient materials by SPS. 1. Preparing specimens by laminating method.

○FUKASE Yasumasa¹, IZUI Yu¹, KAKETANI Masahiro¹, SATO Takako¹, YAMAMOTO Takaaki², YONEYAMA Takayuki¹
¹ Nihon Univ., ²Yamamoto Dental Office

A-28 Bonding durability of resin cements to zirconia

○HASHIGUCHI Makiko¹, SATO Hideo¹, NISHI Yasuhiro¹, NAGAOKA Eiichi¹, BAN Seiji¹
¹ Kagoshima Univ.

SL-3Optically-driven nanomachine and biochemical IC chips for future medicine

IKUTA Koji
Nagoya Univ.

[Metals 3]

A-29 Internal structures and materials of wide variety of dental magnetic attachments

○TAKADA Yukyo¹, OKUNO Osamu¹,
¹ Tohoku Univ.

A-30 Effects of nitrogen and boron addition on microstructure and mechanical properties of Co-Cr-Mo alloys

○ONOMURA Naoyuki¹, DOI Hisashi¹, TSUTSUMI Yusuke¹, HANAWA Takao¹, CHIBA Akihiko²
¹ Tokyo Medical and Dental Univ., ²Tohoku Univ.

A-31 Evaluation of corrosion resistance of Zr-Nb and Zr-Ta alloys in simulated body fluid

○TSUTSUMI Yusuke¹, DOI Hisashi¹, NOMURA Naoyuki¹, HANAWA Takao¹
¹ Tokyo Medical and Dental Univ.

[Clinical Application 2]

A-32 The improved study of the ozonized oil adsorption sheet manufacturing equipment.

○ARAI Koichi¹, HOSOYA Masato², NOMURA Mitsuru³, ANDO Nobuo⁴

¹ Meikai Univ., ²Hosoya Dental Clinic., ³Nippon Dental Univ. at Matsudo, ⁴Nippon Dental Univ.

A-33 Clinical report on the resin bonding system according to the ADA Guideline -Short-term clinical performance of Bond Force at 18 months-

○MORIGAMI Makoto¹, SUGIZAKI Jumpei¹, UNO Shigeru¹, YAMADA Toshimoto¹
¹ Toranomon Hosp.

A-34 Expansion of nano-technology for dentistry: application for dentin adhesion

○HOSHIKA Shuhei¹, NAGANO Futami¹, TANAKA Toru¹, SANO Hidehiko¹
¹ Hokkaido Univ.

[Clinical Application 3, Machine, Technology]

A-35 Fundamental study on elucidation of the forces applied to the human mandible during masticatory activity: Analysis of a mandibular model with whole premolar and molar zone oblique to a sagittal plane invested by structural mechanics

○KUSANO Masaaki¹, KIRITA Tadaaki¹
¹ Nara Medical Univ.

A-36 Development of high sensitivity QCM titanium sensor

○HASHIMOTO Yoshiya¹, MINOURA Sae¹, ITOU Atsushi², KAWAGOE Tetsuya³, NISHIURA Aki¹, HONDA Ryou¹, MATSUMOTO Naoyuki¹
¹Osaka Dental Univ., ²ULVAC, ³Initium

A-37 Dental hand skill simulation training using VR haptic device (Part 3) -Improvement and validation of volume model-

○YAMAGUCHI Satoshi¹, YOSHIDA Yoshinori¹, WAKABAYASHI Kazumichi¹, NAGASHIMATadashi¹, KAWAMOTO Yusuke¹, NOBORIO Hiroshi¹, TAKESHIGE Fumio¹, KAMISAKI Yoshinori², SOHMURA Taiji¹
¹ Osaka Univ., ²TGL Inc.

September 21 Sunday

Hall B

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

[Composite Resin 2]

P-41 Wear resistance of restorative composites by ACTA wear machine

○NIHEI Tomotaro¹, KUNZELMANN Karl-Heinz², OHASHI Katsura¹, TERANAKA Toshio¹
¹Kanagawa Dental College, ²Dental Sch. of LMU

P-42 Cohesion of composite resin to filling instrument materials

○KAKUTA Kiyoshi¹, OHOKUMA Kazuo¹, GOTO Shin-ichi¹, NAKAI Akira¹, OGURA Hideo¹
¹ Nippon Dental Univ.

P-43 Static and dynamic properties of composite resins

○TANIMOTO Yasuhiro¹, HIRAYAMA Satoshi², IKEMI Takuji², NISHIYAMA Norihiro¹
¹ Nihon Univ. at Matsudo.

P-44 Mechanical properties of fiber reinforced post and resin core build up materials

○HATTORI Masayuki¹, TAKEMOTO Shinji¹, MATSUMOTO Michihiko¹, HASEGAWAKoji¹,

AICHI Tetsuya¹, YOSHINARI Masao¹, KAWADA Eiji¹, ODA Yutaka¹
¹ Tokyo Dental College

P-45Effect of long-term water immersion on bending strength of fiber reinforced composite

○KURODA Soichi¹, HATTA Minoru¹, HASEGAWA Aki¹, YOKOYAMA Daiichiro¹, SHINYA Akikazu¹, GOMI Harunori¹, SHINYA Akiyoshi¹
¹ The Nippon Dental Univ.

P-46Influence of filler contents on fatigue strength of dental composite resin.

○TOYAMA Tatsuya¹, NISHIKAWA Izuru¹, TAKAHASHI Hidekazu²
¹ Osaka Institute of Technology, ²Tokyo Medical and Dental Univ.

P-47Influence of environmental atmosphere on dentin bond strength of self-etch adhesives

○TSUCHIYA Hiroaki¹, CHIBA Yasushi¹, TSUJIMOTO Akimasa¹, UEKUSASatoshi¹, RIKUTA Akitomo¹, ANDO Susumu¹, MIYAZAKI Masashi¹
¹ Nihon Univ.

P-48Contraction Gap of Floable Composite Resins in the Human Teeth.

○YOSHIDA Koichi¹, YOSHIDA Takaichi¹
¹The Nippon Dental Univ.

[Metals, Titanium]

P-49Preparation of oxygen-infused Ti and its born-forming evaluation in vitro

○YAMAMOTO Osamu¹, FUKUDA Masayuki¹
¹ Akita Univ.

P-50Anodic oxidation of titanium by polarity inversion in calcium phosphate solution - Effect of current density on the kind of deposited calcium phosphates and their size

○OKAWA Seigo¹, HOMMA Kikuo¹, KANATANI Mitsugu¹, WATANABE Kouichi¹
¹ Niigata Univ.

P-51Apatite precipitation on titanium hydrothermally treated in calcium hydroxide solution at high temperature

○HAMADA Kenichi¹, FUJIHARA Emi¹, ASAOKA Kenzo¹
¹ The Univ. of Tokushima

P-52Elastic modulus measurements of Ti-Zr alloys for biomedical application by means of ultrasonic wave velocity measurements

○SHIRAISHI Takanobu¹, SHISHIDO Toetsu², SHINOZAKI Nobuya³, HISATSUNE Kunihiro¹
¹ Nagasaki Univ., ²Tohoku Univ., ³Kyushu Institute of Technology

[Laser]

P-53Non-destructive inspection at welded area of laser-welded alloys

○TAKAYAMA Yasuko¹, NOMOTO Rie¹, TSUCHIDA Fujio¹, HIRANO Susumu¹
¹ Tsurumi Univ.

P-54Effect of laser irradiatin position on laser welding of gold alloy and cobalt-chromium alloy

○MIYANAGA Kohichi¹, KIKUCHI Hisaji¹, KUROTANI Tomoko¹, AKASHI Yukio¹, YONEYAMA Takayuki¹
¹ Nihon Univ.

[Resin 2]

P-55Experimental soft lining materials based on urethane acrylate oligomers

○KANIE Takahito¹, TOMITA Koichi¹, ARIKAWA Hiroyuki¹, FUJII Koichi¹, BAN Seiji¹
¹ Kagoshima Univ.

P-56Dynamic mechanical thermal analysis of a new resin applying bisfunctional siloxane oligomer - MMA copolymer

○AOYAGI Yujin¹, UMEMOTO Kozo¹, KURATA Sigeaki¹
¹ Kanagawa Dental College

[Impression Materials]

P-57 Effects of the spray disinfection period of alginate impressions on the dimensional accuracy and deformation of stone models simulated full crown preparation with adjacent teeth

○HIRAGUCHI Hisako¹, WAKASHIMA Mitsuru¹, NAKANO Toshiaki¹, YONEYAMA Takayuki¹
¹ Nihon Univ.

P-58 Basic properties of self-wetting hybrid polysiloxane impression materials

○IZUMIDA Akio¹, YODA Masanobu¹
¹ Tohoku Univ.

[Cells]

P-59 Effect of carbon nanotubes on cellular functions *in vitro*

○LI Xiaoming¹, AKASAKA Motohiro¹, ABE Shigeaki¹, AKASAKA Tsukasa¹, WATARI Fumio¹
¹ Hokkaido Univ.

P-60 Gene expression analyses of macrophage phagocytizing sub-micron titanium particles by DNA allergy chip

○TAIRA Masayuki¹, SASAKI Kaori¹, SAITOH Setsuo¹, NEZU Takashi¹, ARAKI Yoshima¹
¹ Iwate Medical Univ.

P-61 Cytotoxic and apoptotic studies of anti-infectives

○NISHIKIORI Ryo¹, NOMURA Yuji¹, MASUKI Kohei¹, SONODA Yoshiko¹, HIRATA Isao¹,
OKAZAKI Masayuki¹
¹ Hiroshima Univ.

P-62 Development of multi walled carbon nanotubes coated collagen for cell culturing and application to metals

○TERADA Michiko¹, UO Motohiro¹, KITAGAWA Yoshimasa¹, WATARI Fumio²
¹ Hokkaido Univ.

P-63 Cytotoxicity of glass-ionomer cement added by CPSA glass short fiber

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P-64 H₂O₂ production of human polymorphonuclear leukocytes on aluminium plate

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P-65 Cell culturing of osteoblast like cell on imogolite

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[Metals 4]

P-66 Sag resistance of dental alloy

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P-67 Discoloration and weight change on the dental alloys by various kinds of dipping water

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P-68 Embryonic teratogenicity of chromium, antimony, palladium and tin in whole embryo culture

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[Biological Tissue]

P-69 Possibility of biologic application of PVDC film

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P-70 Controlled calcification with bio-mimetic polymer

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P-71 Studies on carbon nanotubes added chitosan-bonded bone regeneration materials : -part 1.
mechanical properties-

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P-72 Hardness and structure of human teeth

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[Adhesion 2]

P-73 Collagen-adhesive monomer interaction in adhesion to dentin -Bond strength of hydrophobic
effect of monomer analogues with collagen-

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P-74 Influence of cyclic loading on bond strength between bonding agent and dentin

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P-75 The Effect of self-adhesive resin cement and tribochemical treatment on bond strength to
zirconium oxide ceramics

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P-76 Electrodeposition of adhesive monomer on dental alloy - Electrodeposition on cobalt and
chromium surface -

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[Metal 5, Casting 2, Corrosion]

P-77 Cushioning effect of casting ring liners on the setting expansion of investment in casting ring.

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P-78 Mechanical properties and corrosion resistance of Zr-Nb alloy added Pd and Pt.

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[Ceramics]

P-79 Preparation of silver nano-particles doped dental porcelains

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P-80*In vitro* research about the effects of the surface texture of veneered Y-TZP core material on the bending- and fatigue strength

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P-81Effect of surface treatment for the Zirconia-ceramic bond characterization

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P-82Study on adhesive materials for zirconia ceramics (Part 3) Adhesive strength of dental hard resin

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[Clinical Application 2]

P-83Effect of purple LED on bleaching agent containing titanium oxide photo-catalyst

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P-84Dental alloy sorting by the measurement of thermal electromotive force

○KIKUCHI Masafumi¹

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P-853D finite element stress analysis of tooth for abfraction Part 2 Effects of loading position and direction

○CHEN Ker-Kong¹, TAJIMA Kiyoshi¹, NAGAMATSU Yuki¹, KAKIGAWA Hiroshi¹, KOZONO Yoshio¹, TERASHITA Masamichi¹

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