

***The 48th General Session of
the Japanese Society for Dental Materials and Devices(JSDMD)***

*Dept.of Dent.Mater.Sci.Aichi- Gakuin Univ.Sch.of Dentistry
(Place: Place: Aichi-Gakuin Univ.Kusumoto Campus)*

Hall A

Saturday, 28 October , 2006

8:55-9:00 Opening

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

Biological ReactionI

A-01 Differentiation of osteoblast-like cells in oriented hydrogels

OJ.SASAKI, T.MATSUMOTO, H.EGUSA, T.SOHMURA, H.YATANI
Osaka Univ.

A-02 Evaluation of gene expressions of LPS-activated human monocytes THP-1 exposed to LD₅₀ concentration TEGDMA

OM.TAIRA, K.SASAKI, S.SAITOH, T.NEZU, Y.ARAKI
Iwate Medical Univ.

A-03 Effects of incorporating metabolic activation system by cytotoxicity assay

OK.IMAI, M.NAKAMURA
Osaka Dental Univ.

A-04 Effect of ascorbic acid treatment of bovine periosteal cells on extracellular matrix and bone formation.

OM.AKIYAMA, M.NAKAMURA
Osaka Dental Univ.

Biologivcal ReactionII

A-05 Surface properties of dental implants (Part 4) -Surface analysis of the grooved titanium implant extracted from a rat bone-

**OK.WATANABE, S.NOMURA, S.OKAWA, M.KANATANI, S.NAKANO, M.KOBAYASHI,
O.MIYAKAWA**
Niigata Univ.

A-06 The Adsorption Phenomenon of Fibrinogen and Fibronectin on Gold and Titanium

**ON.HORASAWA¹, N.TERASAWA¹, T.MIZOGUCHI¹, K.T.AKEUCHI¹, K.TAIRA¹,
Y.DEGUCHI¹, A.KOGURE², M.ITO¹**
¹Matsumoto Dental Univ., ²Shimadzu Analytical

A-07 Biological modification of the Ti surface with photoreactive gelatin

OY.YOSHIDA, K.SUZUKI
Okayama Univ.

A-08 A novel fabrication method for DNA/chitosan complex film

**OM.KAWAGUCHI¹, T.FUKUSHIMA¹, Y.INOUE², T.HAYAKAWA³, K.TANIGUCHI¹,
R.SAKAGAMI¹**

¹Fukuoka Dental Univ., ²Fukuoka College of Health Scieces, ³Nihon Univ.at Matsudo

Hall A
Saturday, 28 October 2006
13:00-15:00 General Presentation (Oral)

Dental Alloys

A-09 Effect of microstructure and tensile stress on corrosion resistance of dental Ag-Pd-Cu-Au-Zn alloy

○T.NAKANISHI¹, M.MNIINOMI², T.AKAHORI², M.NAKAI², H.FUKUI³, H.TODA¹
¹Toyohashi Univ., ²Tohoku Univ., ³Aichi-Gakuin Univ.

A-10 Fretting fatigue properties and fracture mechanism of dental Ag alloy.

○W.KAWAGISHI¹, M.NIINOMI², T.AKAHORI², M.NAKAI², H.FUKUI³, H.TODA¹
¹Toyohashi Univ., ²Tohoku Univ., ³Aichi-Gakuin Univ.

A-11 Influence of Cu content on heat treatment behavior of Ag-25mass%Pd-Cu alloys

○K.IKEDA¹, M.NISHIMURA¹, M.NIINOMI², H.FUKUI³
¹Kansai Univ., ²Tohoku Univ., ³Aichi-gGakuin Univ.

A-12 Behavior of Co-Cr dental casting alloy made by powder metallurgy

○H.FUKUI¹, M.TOYAMA¹, S.KATSURA^{1,2}, M.NIINOMI³
¹Aichi-Gakuin Univ., ²Yamahachi Dental Co., ³Tohoku Univ.

Dental Alloys, Machine and Technology, Clinical Applications

A-13 Grindability and microstructures of experimental Ti-Zr alloys

○M.TAKAHASHI, M.KIKUCHI, Y.TAKADA, O.OKUNO
Tohoku Univ.

A-14 An evaluation by three-dimensional X-ray Micro Focus CT. 13.Mechanical simulation and evaluation for the effect of an inferior alveolar nerve by implantation

○Y.FUKASE, M.SASAO, M.KAKETANI, M.NISHIYAMA
Nihon Univ.

A-15 Application of haptic device to dentistry (Part 15) -Fabrication of surgical guide using the data simulated by a commercially available simulation software, and its clinical application-

○T.SOHMURA¹, H.TOSHIMORI², S.WADA³, M.MORISHIMA⁴, K.KUWAORI⁴,
M.YAMASHITA⁴, Y.NOMURA⁴, A.YAMAGUCHI⁴, S.HIGUCHI⁴, Y.KUMAZAWA⁵,
H.KAWAHARA²

¹Osaka Univ., ²Institute of Clinical Materials, ³Wada Dental Clinic, ⁴Wada Precision Dental Lab.Co.,
Ltd., ⁵Bionic Co., Ltd.

A-16 Analysis of internal and external forces of a human mandible invested by strength of materials: influence of variation of loading ratio of balancing side to working side in temporomandibular joint reaction force upon condylar process.

○M.KUSANO, T.KIRITA
Nara Medical Univ.

15:00-16:00

SL-1 Synthesis, Characterization and Applications of Carbon Nanotubes

OHISANORI SHINOHARA
Nagoya Univ.

16:00-17:15

SL-2 The era of assumed-competence based on undervaluing others

OTOSHIHIKO HAYAMI
Nagoya Univ.

Hall B

9:40~16:00 Award challenge posters (No.P-01-No.P-06)

P-01 Mechanism of Osteoclast Differentiation Induced by Octacalcium Phosphate

OA.MOTIZUKI¹, M.TAKAMI¹, T.KAWAWA¹, O.SUZUKI², M.NAKAMURA¹, R.KAMIJYO¹
¹Showa Univ., ²Tohoku Univ.

P-02 Secondary caries inhibition around composite restoration using thin film

OA.UMINO, M.IKEDA, T.NIKAIDO, J.TAUE
Tokyo Medical and Dental Univ.

P-03 Application of rhBMP-2/FRIOS Algipore composite to direct pulp capping in rats

OT.KOIKE, K.HANDA, T.SAITOH
Health Science Univ.of Hokkaido

P-04 Inhibition of growth of *Streptococcus mutans* with artificial glyco-polymer

OT.AKASAKA, S.ABE, M.UO, F.WATARI
Hokkaido Univ.

P-05 Water Uptake and Diffusion in Glass Ionomer Cements for Luting ; Effect of Constituents in Aqueous Solutions

OA.YAMASAKI, Y.HIBINO, J.OMATSU, H.NAKAJIMA
Meikai Univ.

P-06 Structure change of zirconia surface by sandblasting and heat treatment

OH.SATOH, D.YAMASHITA, S.BAN
Kagoshima Univ.

10:00-16:00 General Presentation (Poster) (11:00-12:00 Discussion)

Mechine, Technology

P-07 Study on Dynamic Viscoelastic Properties of Dental Composite Resins by Split Hopkinson pressure bar

OY.TANIMOTO, N.NISHIYAMA
Nihon Univ.at Matsudo

P-08 Evaluation of radio-opacity of resin composites by digital radiography

OR.NOMOTO¹, A.MISHIMA¹, K.KOBAYASHI¹, J.McCabe², Y.MOMOI¹, S.HIRANO¹
¹Tsurumi Univ., ²Univ.of Newcastle

P-09 Finite element modeling of tooth based on the micro-CT data

OK.TAJIMA, N.TAKAHASHI, K.CHEN, Y.NAGAMATSU, H.KAKIGAWA, M.TERASHITA,
Y.KOZONO
Kyusyu Dental College

P-10 Surface modification of dental alloy by electron beam system.part 6

OJ.TOKKUNAGA¹, T.KOJIMA¹, T.SOHMURA¹, Y.NOMURA², S.KINUTA¹,
K.WAKABAYASHI¹, Y.MUTOBE¹, T.NAKAMURA¹, H.YATANI¹
¹Osaka Univ., ²Wada Precision Dental Lab.

Dental Alloys

P-11 Effects of surface treatment on bonding between titanium and porcelain

OC.WANG^{1, 2}, K.CHEN², Y.NAGAMATSU², K.TAJIMA², H.KAKIGAWA², Y.KOZONO²
¹China Medical Univ.Hospital, ²Kyusyu Denal College

P-12 Susceptibility to hydrogen embrittlement of Ti-0.2% Pd alloy in acidic fluoride solution

OK.YOKOYAMA, K.ASAOKA
Tokushima Univ.

P-13 Machinability of experimental Ti-Cu alloys

OM.KIKUCHI, M.TAKAHASHI, O.OKUNO
Tohoku Univ.

P-14 Effects of femtosecond laser induced nanotopography of titanium on osteoblast-like cells

OS.TAKEDA¹, K.KAWAHARA², H.SAWADA², M.NAKAMURA¹
¹Osaka Dental Univ., ²Canon Machinery Ltd.

P-15 Effect of the solid solution heat treatment temperature on the crystal phase homogeneity and Ag selective dissolution of an Ag-Pd-Au-Cu alloy

OS.SAITOH, K.SASAKI, T.NEZU, M.TAIRA, Y.ARAKI
Iwate Medical Univ.

P-16 The effects of chemical composition and microstructure on tarnish resistance of experimental Ag-Au-Pt-Cu alloys

OY.TAKUMA, T.SHIRAIISHI, T.FUJITA, E.MIURA, K.HISATSUNE
Nagasaki Univ.

Biological Reaction

P-17 XMA and XRD analysis of the tooth substance decalcified by actinomyces

OI.KAWASHIMA, H.OHNO, K.ENDO, Y.YAMANE
Health Science Univ.of Hokkaido

P-18 Proliferation and differentiation of osteoblastic cells on octacalcium phosphate

OT.ANADA, Y.HONDA, S.KAMAKURA, O.SUZUKI
Tohoku Univ.

P-19 Biocompatibility test of Dextrin -(Part 1) Cytotoxicity test-

OT.ASAI, Y.TAKEI, K.KUROKI, M.OKANO, M.KABUTOMORI, T.HAYASHI, T.KAWAI

P-20 Bone reproduction by S100A4 inhibition on human mesenchymal stem cells Part3 Long term silencing of S100A4 gene using siSTABLE®

OS.ADACHI, Y.HASHIMOTO, M.NAKAMURA
Osaka Dental Univ.

P-21 Compressive stress of denture base material affects denture foundation

OY.NISHIKAWA, M.OKA, M.IRIE, K.SUZUKI
Okayama Univ.

P-22 Mineralization of fibrin gels in vitro

OR.YOH, T.MATSUMOTO, J.SASAKI, T.SOHMURA
Osaka Univ.

P-23 Fatigue fracture in human dentine under cyclic compressive loadings

OS.OOMOTO, N.WAKAMATSU, Y.DOI
Asahi Univ.

P-24 A synergistic effect of bisphenol A on CYP1A1 expression

OS.HIKAGE¹, T.HONGO², A.SATOH³

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

P-25 Estrogenic Activity of Phthalate Esters by in vitro VTG assay using primary-cultured Xenopus hepatocytes

ON.MITSUI¹, Y.NOMURA^{2,3}, U.BHAWAL⁴, M.SAWAJIRI^{2,3}, T.TAKAHASHI⁵, M.OKAZAKI²

¹Towa Kagaku Co., Ltd., ²Hiroshima Univ., ³Met Co., Ltd., ⁴DENTSPLY-Sankin K.K., ⁵Kumamoto Health Science Univ.

P-26 Induction of cytotoxicity and apoptosis by polymerization initiator

OK.MASUKI, Y.NOMURA, R.NISHIKIORI, M.SAWAJIRI, I.HIRATA, M.OKAZAKI
Hiroshima Univ.

P-27 Effect of Light Irradiation on Mouse Fibroblasts

ON.HATTORI, S.JINNO, H.OKEYA, M.ITO, T.HAYASHI, T.KAWAI, T.NOGUCHI
Aichi-Gakuin Univ.

P-28 Design and synthesis of fullerene derivatives for biological applications

OS.ABE, T.AKASAKA, M.UO, F.WATARI
Hokkaido Univ.

Inorganic

P-29 Degradation of Temporary Cements in Acidic Conditions

OY.NAGASAWA, A.YAMAZAKI, M.HONDA, J.OMATSU, Y.HASEGAWA, T.YAMAGA,
Y.HIBINO, H.NAKAJIMA
Meikai Univ.

P-30 Degradation of Glass Ionomer Cements for Luting in Acidic Conditions

OJ.OMATSU, A.YAMAZAKI, Y.HASEGAWA, M.HONDA, T.YAMAGA, Y.HIBINO,
H.NAKAJIMA
Meikai Univ.

P-31 Influence of Brown- Colored Resin Cements on Color of Esthetic Restorative Materials

OY.HASWGAWA, Y.TAKAHASHI, A.YAMAZAKI, M.HONDA, Y.NAGASAWA, J.OMATSU,
T.YAMAGA, Y.HIBINO, H.NAKAJIMA
Meikai Univ.

P-32 Weibull Analysis of Adhesive Strength of Resin Cements to Ceramics.

OM.HONDA, Y.HASWGAWA, J.OMATSU, Y.NAGASAWA, A.YAMAZAKI, T.YAMAGA,
Y.HIBINO, H.NAKAJIMA
Meikai Univ.

P-33 An evaluation by three-dimensional X-ray Micro Focus CT. 13.An ebaluation of self
disintergrate of bone cement

OM.KANEDA, Y.FUKASE, M.SASAO, M.KAKETANI, T.INOUE, M.NISHIYAMA
Nihon Univ.

P-34 Performance of all-ceramic crown and bridge restorations Part1 .Adhesion properties with dentai
cements

OY.INABA, F.TERAOKA, M.NAKAGAWA, M.HARA, T.SOHMURA
Osaka Univ.

P-35 Application of Apatite-Collagen Complex as Apical Barrier Materials for Root Canal with
Enlarged Physiological Foramen

OY.TAKENAKA, S.KAWANO, Y.AKITA, T.YOSHIDA, M.IIJIMA, Y.DOI, I.SEKINE
Asahi Univ.

P-36 Flexural Strength and Fracture Toughness of Porcelain Fused to Alumina and Zirconia Frame

OM.HATTA, D.YOKOYAMA, A.SHINYA, H.GOMI, Y.HATANO, A.SHINYA
The Nippon Dental Univ. at Tokyo

P-37 Tensile bond strength of dental adhesive cements to zirconia ceramics

OY.NAKAHARA, S.KURATA, K.SHIMOYAMA, K.UMEMOTO
Kanagawa Dental College

P-38 Cyclic fatigue strength of glass porcelains composed of two feldspathic frits with different
thermal properties

OR.TOKUNAGA¹, H.TAKAHASHI¹, M.KON², N.IWASAKI¹, K.TONAMI¹, N.KUROSUKI¹
¹Tokyo Medical and Dental Univ., ²Tokushima Univ.

Organic

P-39 A study on polymerization characteristics of flowable resin composites

OA.YAMAMOTO, G.YASUDA, T.KOJIMA, A.RIKUTA, S.ANDO, S.MIYAZAKI
Nihon Univ.

P-40 Influence of calcium hydroxide application on elastic modulus of bovine dentin

OH.KUROKAWA, K.YAMAGUCHI, Y.ASAKA, T.TAKAMIZAWA, H.INAGE, S.ANDO,
S.MIYAZAKI
Nihon Univ.

P-41 Development of Fiberpost with pull-up method and their flexural properties

OM.KOBAYASHI¹, H.TAKAHASHI², N.IWASAKI², M.KON³, K.HASHIMOTO¹
¹Chiba Institute of Technology, ²Tokyo Medical and dental Univ., ³Tokushima Univ.

P-42 Development of Fiberpost with continuous molding method and their flexural properties.

ON.IWASAKI¹, H.TAKAHASHI¹, M.KOBAYASHI², M.KON³, K.HASHIMOTO²

P-43 Elastic properties of silicone type soft lining material having two laminated layers

○T.KANIE, H.ARIKAWA, K.FUJII, S.BAN
Kagoshima Univ.

P-44 Shape memory alloy fiber reinforced resin matrix smart composite (Part 13) -analysis of interface properties-

○K.HAMADA, F.KAWANO, K.ASAOKA
Tokushima Univ.

P-45 Property change of denture base materials by denture cleaners

○M.HACHI, Y.NISHI, T.KANIE, E.NAGAOKA, S.BAN
Kagoshima Univ.

P-46 Setting retardation of commercial cold-curing resin by fullerene adding

○I.YAMAMOTO, S.TSURUTA, K.MORIMOTO, M.MIZUNO, T.KAWAI
Aichi-Gakuin Univ.

P-47 Mechanical Properties of a New Hard Resin for Crown and Bridge

○A.IZUMIDA, M.ISHIBASHI, R.INAGAKI, S.YAMADA, S.KASAHARA, M.YODA,
K.KIMURA
Tohoku Univ.

P-48 Influence of phosphoric acid etching on dentin bond strengths of single-step systems

○K.TSUBOTA, S.UEKUSA, Y.CHIBA, T.YOSHIDA, A.RIKUTA, S.ANDO, S.MIYAZAKI
Nihon Univ.

P-49 Activation of gelatinolytic activity in dentin by self-etching adhesives

○Y.NISHITANI, T.ITOTA, M.YOSHIYAMA
Okayama Univ.

P-50 Long-term bonding durability against water of resin bond to pure gold treated with primers

○Y.KADOMA, K.KOJIMA
Tokyo Medical and Dental Univ.

P-51 Studies on dental adhesive resin system for metals using soft type resin

○K.KOJIMA, Y.KADOMA
Tokyo Medical and Dental Univ.

P-52 Electrodeposition of adhesive monomer on dental alloy - Adhesion between treated surface of cobalt-chromium alloy and denture base resin-

○M.KAKETANI, K.MIYANAGA, M.YUI, K.MIYAZAKI, Y.FUKASE, M.NISHIYAMA
Nihon Univ.

P-53 Filler content and Nano-Hardness of Bonding Resins

○T.ICHIMURA, H.KOTAKE, M.HOTTA, K.YAMAMOTO
Asahi Univ.

Hall A

Sunday, 29 October 2006

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

Inorganic

A-17 Withdrawn

A-18 Proliferation of osteoblast-like cells on zirconia/alumina nanocomposite

○D.YAMASHITA, M.MIYAMOTO, H.SATO, H.KONO, M.HASHIGUCHI, K.KANBARA,
M.MACHIGASHIRA, Y.IZUMI, S.BAN
Kagoshima Univ.

A-19 Bonding strength of zirconia to veneering porcelains

○ S.BAN, H.SATO, D.YAMASHITA
Kagoshima Univ.

A-20 Application of new silica coating method to adhesive restration

○K.HANAOKA¹, T.TANAKA¹, M.YAMAGUCHI², T.SHINDO³, T.TERANAKA¹
¹Kanagawa Dental College, ²Yamaguchi Dental Clinic, ³Contamination Control Services

Inorganic, Machiene

A-21 Ceramic bridge fabricated by CAD/CAM -Accuracy of Zirconia coping-

○J.KUNII, Y.HOTTA, Y.TAMAKI, Y.SHIMAKURA, T.KAWAWA, T.MIYAZAKI
Showa Univ.

A-22 The Effect of Ultrasonic device on the Tensile Bond Strength of Dentin Bonding System

○H.TAKANASHI, N.IWAMOTO, R.KISHIKAWA, M.OTSUKI, J.TAGAMI
Tokyo Medical and Dental Univ.

A-23 The all ceramic crown by new method-The second report-

○A.KOISHI, K.KAKIMOTO, Y.KOMASA
Osaka Dental Univ.

A-24 Adaptability of mod inlay after the shortened heating time by microwave irradiation.

○Y.MORI, S.FUJIWARA, H.KAMEMIZU, M.ADACHI, Y.DOI
Asahi Univ.

Hall A

Sunday, 29 October 2006

14:00-16:30 General Presentation (Oral)

Organic1

A-25 Vinyl esters/Polymer mixture system(Part 3) - Characteristic properties of the polymerized vinyl esters/PEMA paste -

○J.TANAKA¹, Y.HASHIMOTO², M.NAKAMURA², K.SUZUKI¹
¹Okayama Univ. ²Osaka Dental Univ.

A-26 Mechanical property and adaptability of meta-free dentures

○F.TERAOKA, M.NAKAGAWA, Y.INABA, M.HARA, T.SOHMURA
Osaka Univ.

A-27 New development of adhesion theory

OK.WAKASA¹, S.UNO², M.OKAZAKI¹
¹Hiroshima Univ., ²Toranomon Hospital

Organic2

A-28 Improvement of a GIOMER composite - SEM observation and clinical application of BEAUTIFIL II -

OT.TAKADA, M.MORIGAMI, J.SUGIZAKI, S.UNO, T.YAMADA
Toranomon Hospital

A-29 SEM observation on the interfacial ultrastructure of an experimental adhesive resin cement

OM.MORIGAMI, T.TAKADA, J.SUGIZAKI, S.UNO, T.YAMADA
Toranomon Hospital

A-30 Microtensile bond strength of composite core to pulpal floor dentin using resin coating.

OM.ARIYOSHI, T.NIKAIDO, J.TAGAMI
Tokyo medical and Dental Univ.

A-31 Bond Strength of Newly Developed Composite Core System to Root Canal Dentin

OT.TAKAGAKI¹, T.NIKAIDO¹, J.TAGAMI¹, T.SUZUKI², Y.IMAI²
¹Tokyo Medical and Dental Univ., ²MD Material Lab.

Organic³, Biological Reaction, Clinical Applications

A-32 Influence of hydrogen peroxide on mechanical properties of bovine enamel

OT.USHIGOME, S.TAKEMOTO, M.HATTORI, M.YOSHINARI, E.KAWADA, Y.ODA
Tokyo Dental College

A-33 Soft tissue adhesive of the 2 liquid reaction type with biodegradability

OS.GEN, N.NAKASHIMA, H.SUGAI, S.TSUTSUMI
Kyoto Univ.

A-34 Controlled release of simvastatin based on cyclodextrin inclusion system

OM.YOSHINARI, T.KONO, T.NOGUCHI, Y.ODA
Tokyo Dental College

Hall B

10:00-16:00 General Presentation (Poster) (11:00-12:00 Discussion)

Mechine, Technology

P-54 Evaluation of damage in all-ceramic crowns fabricated by a CAD/CAM system

OR.NONOGAKI, M.UNO, M.KURACHI, N.WAKAMATSU, Y.DOI
Asahi Univ.

P-55 Application of Rapid Prototyping to dentistry (Part 3) -Fabrication of ceramic restoration by RP method-

OT.SOHMURA, R.LOWMUNKONG, M.ISHIKAWA, S.KIRIHARA, Y.MIYAMOTO
Osaka Univ.

P-56 Temperature changes in the subject exposed to LLLT laser with experimental robot system

OY.KOZONO, H.KAKIGAWA, M.MAKIHARA, Y.NAGAMATSU, K.TAJIMA
Kyusyu Dental College

P-57 Effect of argon gas shield in laser welding

OH.KIKUCHI, T.KUROTANI, T.SATO, M.WAKASHIMA, K.SHIMOMURA, T.NAKANO,
M.NISHIYAMA
Nihon Univ.

P-58 Prevention of laser welding defects in dental alloy by pulse shaping - Butt welding -

OK.KAKIMOTO, A.KOISHI, T.FUKUOKA, T.KAMEMIZU, T.INOUE, J.OKAZAKI,
Y.KOMASA
Osaka Dental Univ.

Dental Alloys

P-59 Discoloration and weight change of titanium and titanium alloys -Tooth brushing test by fluoride-containing dentifrice or immersion test by sodium sulfide solutions-

OH.AOKI, N.IRIE, T.YOSHIDA
The Nippon Dental Univ. at Tokyo

P-60 Surface texture of titanium castings modified by experimental molds including NaCl

OY.TAMAKI, Z.ZHAN, H.CHO, Y.AIDA, Y.KATAOKA, T.MIYAZAKI
Showa Univ.

P-61 Chemical deposition of carbonate apatite coatings on SAM-Ti substrate

OY.YAMAGUCHI, S.SAKU, T.KAJIMOTO, K.YAMAMOTO, Y.DOI
Asahi Univ.

P-62 Effect of fluoride for milk tooth of crown

OK.SRAI, S.MARUYAMA, K.MATSUNE, N.NISHIYAMA, K.NEMOTO, T.MAEDA
Nihon Univ. at Matsudo

P-63 Effect of water and sodium chloride on small fatigue crack growth and crack closure behaviors of 12%Au-Pd-Ag-Cu alloy

OS.TSUSHIMA¹, I.NISHIKAWA¹, H.TAKAHASHI²
¹Osaka Institute of Technology, ²Tokyo Medical and Dental Univ.

P-64 Semiconductor property and protectiveness of the passive film formed on titanium and titanium alloy in simulated physiological environments

OK.ENDO, Y.YUASA, M.IIJIMA, I.MIZOGUCHI, H.OHNO
Health Science Univ. of Hokkaido

Biological Reaction

P-65 Differentiation control of myoblast in oriented hydrogel

OT.MATSUMOTO, J.SASAKI, M.Udin, Y.HAMADA, T.SOHMURA
Osaka Univ.

P-66 Effect of Oral Environment on Cu-induced Oxidative Stress

OT.YAMAZAKI, H.Onuki, A.YAMAZAKI, Y.HIBINO, H.NAKAJIMA, H.SAKAGAMI,
J.SHIMADA
Meikai Univ.

P-67 Analysis of Type of Cell Death Induced by Contact with Cu in Human Oral Cells

OH.SAKAGAMI, T.YAMAZAKI, H.ONUKI, A.YAMAZAKI, Y.HIBINO, H.NAKAJIMA,
J.SHIMADA
Meikai Univ.

P-68 Effect of Long Term Contact of Cells with Metals on Cellular Function

○A.ONUKI, T.YAMAZAKI, A.YAMAZAKI, Y.HIBINO, H.NAKAJIMA, H.SAKAGAMI,
J.SHIMADA
Meikai Univ.

P-69 Application of DNA/chitosan complex sheet to GTR

○Y.INOUE¹, T.FUKUSHIMA², M.KAWAGUCHI², T.HAYAKAWA³, R.OGURA²,
H.KAMINISHI², N.KANEKO¹, R.SAKAGAMI²

¹Fukuoka College of Health Science, ²Fukuoka Dental College, ³Nihon Univ. at Matsudo

P-70 The mechanisms of bone formation and adaptation for early treatment of bone defects by carbonated apatite phosphate

○Y.NIWA, N.HIRAI, N.ITO, Y.KUSAKA, K.OTOMO, H.TAKUCHI, Y.DOI, K.YAMAMOTO
Asahi Univ.

P-71 Tensile properties of radicular dentin

○T.INOUE, M.YAMAMOTO, M.SUZUKI, T.MIYAZAKI, F.NISHIMURA
Showa Univ.

P-72 Biocompatibility of sintered titanium dioxide -Implantation test-

○Y.TAKEI, M.ITO, H.KAWAI, Y.UEMATSU, T.HAYASHI, T.KAWAI
Aichi-Gakuin Univ.

P-73 Cell differentiation on mixed SAMs

○Y.FUSE, I.HIRATA, Y.NOMURA, M.OKAZAKI
Hiroshima Univ.

P-74 Development of elution test used saliva containing polysorbate 80

○T.HONGO¹, S.HIKAGE², A.SATO³

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

P-75 Development of electrolyzed neutral water jell and its bactericidal activity

○Y.NAGAMATSU, N.KITA, K.CHEN, K.TAJIMA, H.KAKIGAWA, Y.KOZONO
Kjusyu Dental College

P-76 Dimensional accuracy of stone dies obtained from agar/alginate combined impressions disinfected by sodium hypochlorite -Comparison of commercially available hydrocolloid impression materials-

○H.HIRAGUCHI, N.HAGINO, Y.NAKAJIMA, K.YOSHIHASHI, K.KITO, M.NISHIYAMA
Nihon Univ.

P-77 The development of possible carrying ozone disinfection vessel for the medical device.

○K.ARAI¹, N.ANDO²

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Inorganic

P-78 Relationship of strain rate in plastic deformation and crack initiation of carbonate apatite ceramic

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P-79 XPS analysis of nano-particles deposited by anodic oxidation of titanium in solution containing

Ca and P

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P-80 Constitution of composite of OCP/apatite crystals grown on cation selective membrane and reconstructed type I collagen

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P-81 Setting and thermal expansion of gypsum-bonded investment materials

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P-82 Setting and heating properties of quick heating casting investment

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Organic

P-83 Comparative study on a new type of composite resin core material by three point bending test

○K.SASAKI, Y.TSUBOTA, Y.TOKINIWA, R.NOMOTO, S.HIRANO, S.FUKUSHIMA
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P-84 Fracture Behaviour of Fiber-Reinforced Resin Composite under Flexural Loading-Investigation for apply to clasps-

○F.TAKITA, M.IWAHORI, N.WAKAMATSU, Y.DOI, M.MIYAO
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P-85 Development of soft magnetic resin composite material with high corrosion resistance -Effects of size and acid treatment time of filler particles on setting and flexural properties-

○H.SOMA, Y.MIYAGAWA
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P-86 Development of dental composite resin utilizing low viscous and low shrinking monomers - Effect of multi-functional monomer compositions on mechanical and physical properties -

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P-87 Biocompatibility of tissue conditioners using vinyl ester as a plasticizer:leachability of plasticizers and cytotoxicity using 3D Skin Models

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P-88 Development of soft and flexible resin base denture for elderly persons: softness and stress relaxation of EHMA-MMA copolymers

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P-89 Comparison of mechanical properties of acrylic resin

○K.KUROKI, T.HIGA, T.ASAI, M.OKANO, T.HAYASHI, Y.TAKAHASHI, T.KAWAI
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P-90 Shear bond strength of experimental denture teeth composite resin: Effect of surface treatment

OP.LOYAGA RENDON, H.TAKAHASHI, N.IWASAKI, F.REZA
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P-91 Physical properties of paste type alginate impression material "AROMA PASTE"

OS.FUKUSHIMA, T.KAMOHARA, S.AKAHANE
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P-92 Retention of composite resin core buildups with fiber post

ON.FUKAGAWA, Y.TSUBOTA, S.KITAMURA, Y.TOKINIWA, K.SASAKI, Y.NISHIMURA,
K.HASHIMOTO, S.FUKUSHIMA
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P-93 Measurement and semi-quantitative analysis of swelling/shrinking behavior of collagen using QCM technique

OT.NEZU, K.SASAKI, S.SAITOU, M.TAIRA, Y.ARAKI
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P-94 The best pretreatment procedure of an experimental two-bottle two-step self-etching adhesive system

OT.NITTA, M.HASEGAWA, T.SUZUKI, T.MASEKI, T.KIMISHIMA, H.AIHARA, Y.NARA,
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P-95 Morphological Observation of Root Dentin

OK.NAKANO, T.MASUDA, Y.SATOH, A.SENDA, M.HATTORI, H.MASUDA, T.KAWAI
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P-96 The best bonding procedure of experimental all-in-one adhesive system

OM.HASEGAWA, T.SUZUKI, T.NITTA, T.MASEKI, T.KIMISHIMA, H.AIHARA, Y.NARA,
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P-97 Development of adhesive primer comprised of amid monomer part3; hydrolytic stability

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P-98 Structural analysis of acid-base resistant zone using self-etching primer

OY.IIDA, D.WEERASINGHE, G.INOUE, T.NIKAIDO, J.TAGAMI
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Clinical Applications

P-99 Analysis of internal and external forces of a human mandible invested by strength of materials: creation of clinical application model for mandibular fracture cases fixed with bio-absorbable osteosynthesis system.

OM.KUSANO, T.KIRITA
Nara Medical Univ.

P-100 Morphological observation of dental mini-screw for Orthodontics

OM.IWAI, A.FUJISHIMA, J.KUNII, H.NAKANO, T.MIYAZAKI, K.MAKI
Showa Univ.

P-101 Trial production of expansive temporary sealing material -Bond strength of a core-resin after removal of a temporary sealing material-

OH.NOGUCHI, H.OKADA, Y.ISHIDA, I.RYUUKATA, K.NAGAYAMA

P-102 Volume change of hydraulic temporary filling materials.

○Y. OGURA, M. MAEDA, Y. YAMADA, I. KATSUUMI
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P-103 Development of temporary luting agent (4) Sterilized effect and Cytotoxicity

○H. OKADA, Y. ISHIDA, H. NOGUCHI, I. RYUUKATA, K. NAGAYAMA
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P-104 Retention force of suprabulge type clasp using Co-Cr wires less than 0.7 mm diameter in facies approximalis of abutment teeth - For removable partial dentures for upper central incisor -

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P-105 Direct vision of impression pressure while seating impression tray

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P-106 Metal artifact of dental material in MR imaging (Part 4) -Quantitative analysis on metal artifact-

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