

International Symposium on Micro/Nano Aspects of Biomaterials, The Satellite Symposium of the 3rd International Symposium on Surface and Interface of Biomaterials (SIB2011) and The 5th Annual Meeting of the Nano Biomedical Society

MEETING LOCATION

<http://www.kyoto-terrsa.or.jp/floormap.html>

Kyoto TERRASA (Kyoto Citizen's Amenity Plaza: Address: Shinmachi Kujo Minami-ku, Kyoto) is located close to Kyoto Station. 15 minutes walk straight to the south from Japan Railway (JR) and Shinkansen Kyoto Station. 5 min by subway (Karasuma Line) from Kyoto Station to Kujo Station, and 5 min walk. 5min walk from To-ji Station on the Kintetsu Line.

REGISTRATION DESK

Kyoto TERRASA

East Building 2nd Floor

Seminar Room No. 3:

Telephone number: 81+75-692-3400

REGISTRATION TIME

Tuesday, 19 July: 9 a.m. – 16 p.m.

REGISTRATION FEE

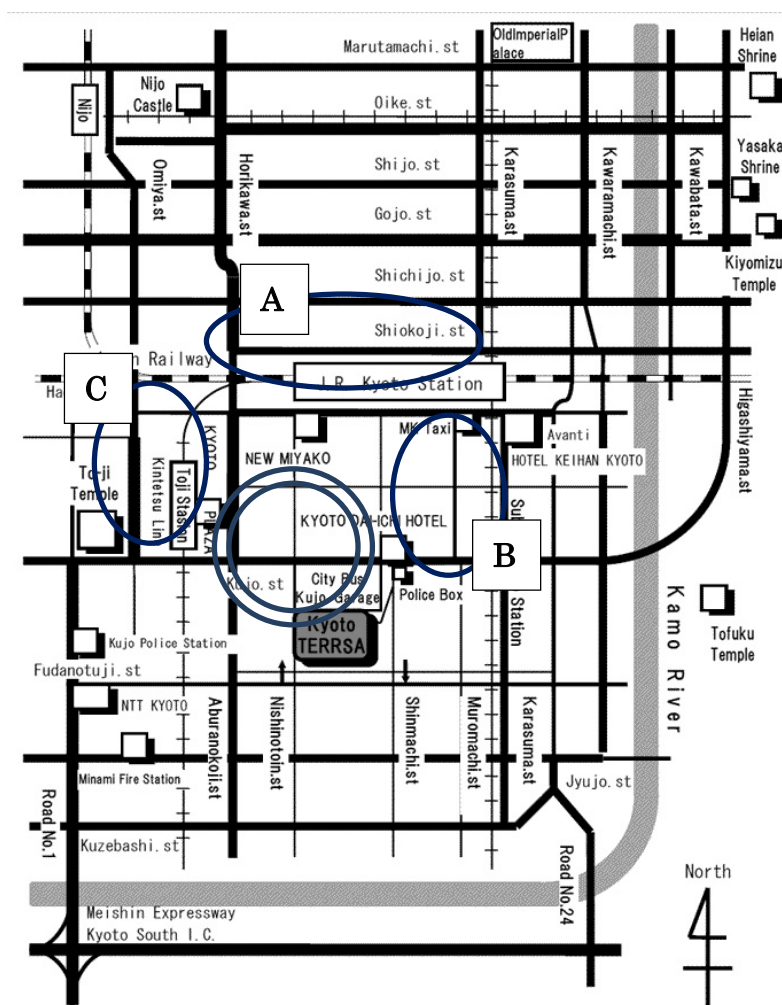
In the case of SIB2011 registrant, 5,000 JPY
for others, 10,000 JPY

SOCIAL FUNCTION

The optional tour to Shimadzu Corp
(Nishinokyo-Kuwabara-cho, Nakagyo-ku,
Kyoto 604-8511, Japan)

July 20 (Wednesday) has been determined in
collaboration with Shimadzu Corporation
with optional free tour.

As a special project will be conducted free
tour of Shimadzu Corp. in Kyoto city. A
half-day scheduled for the morning of July
20. Please join if you are interested in this
tour. You can apply to join this free tour on
July 19.



ORGANIZING COMMITTEE and PROGRAM COMMITTEE

Kenzo ASAOKA

The University of Tokushima

Koichi IMAI

Osaka Dental University

SCIENTIFIC PROGRAM

Opening Remarks: Kenzo Asaoka

9:55-10:00

SESSION I

10:00-11:00

Chair Person: Shokyu Gen (Kyoto University)

O-1 10:00-12

Preparation and characterization of dithranol loaded solid lipid nanoparticles to provide better dithranol-skin retention and enhanced storage stability for effective treatment of psoriasis

Gireesh Tripathi¹, B.K.Dubey² (¹Oriental College of Pharmacy, ²T.I.T. College of Pharmacy)

O-2 10:12-24

Novel phosphodiester CpG oligodeoxynucleotides with high stimulatory effects on human toll-like receptor 9

Wenjun Meng^{1,2}, Tomohiko Yamazaki^{1,2}, Nobutaka Hanagata^{1,2,3} (¹Hokkaido University, ²International Center for Materials Nanoarchitectonics (MANA), National Institute for Materials Science (NIMS), ³Interdisciplinary Laboratory for Nanoscale Science and Technology, NIMS)

O-3 10:24-36

Imaging study of proteins interaction following the contact of living cell to artificial membrane

Ling Zhang^{1,2}, Yoshihisa Kaizuka², Nobutaka Hanagata^{1,2,3} (¹Hokkaido University, ²International Center for Materials Nanoarchitectonics (MANA), National Institute for Materials Science (NIMS), ³Interdisciplinary Laboratory for Nanoscale Science and Technology, National Institute for Materials Science (NIMS))

O-4 10:36-48

C-terminal ligand binding analysis of human toll-like receptor 9

Suwarti^{1,2}, Tomohiko Yamazaki^{1,2}, Nobutaka Hanagata^{1,2,3} (¹Hokkaido University, ²International Center for Materials Nanoarchitectonics (MANA), National Institute for Materials Science (NIMS), ³Interdisciplinary Laboratory for Nanoscale Science and Technology, NIMS)

O-5 10:48-11:00

Co-immobilization of chitosan and bone morphogenic protein-2 (BMP-2) on titanium surfaces to achieve osteoinductivity

Lu Xiong¹, Lin Hong¹, Qu Shuxin¹, Feng Bo, Weng Jie¹, Fumio Watari² (¹Southwest Jiaotong University, ²Hokkaido University)

KEYNOTE ADDRESS

11:15-12:00

Chair Person: Koichi Imai (Osaka Dental University)

The potential risk of silica nanoparticles

Jiao SUN (Shanghai Jiaotong University)

SESSION II

13:30-14:42

Chair Person: Lu Xiong (Southwest Jiaotong University)

O-6 13:30-42

**Molecular modeling of interactions between alginate chains and bivalent metal Ions:
Computational and thermodynamic aspects**

Wojciech Plazinski (Institute of Catalysis and Surface Chemistry, Polish Academy of Sciences)

O-7 13:42-54

**Solvent-free formation of hydroxyapatite coated biodegradable microspheres via
nanoparticle-stabilized emulsion route**

Masahiro Okada¹, S. Fujii², T. Nishimura², Y. Nakamura², S. Takeda¹, T. Furuzono³
(¹Osaka Dental University, ²Osaka Institute of Technology, ³Kinki University)

O-8 13:54-14:06

Identification of boron nitride nanosphere binding peptides

Huijie Zhang^{1,2}, Tomohiko Yamazaki^{1,2}, Chunyi Zhi², Nobutaka Hanagata^{1,2,3} (¹Hokkaido University, ²International Center for Materials Nanoarchitectonics (MANA), National Institute for Materials Science (NIMS), ³Interdisciplinary Laboratory for Nanoscale Science and Technology, NIMS)

O-9 14:06-18

**Cartilage regeneration from mesenchymal stem cells by RWV bioreactor and tracking of
quantum-dot labeled cell aggregates transplanted into osteochondral defects of rabbits.**

Toshimasa Uemura¹, T. Yoshioka², M. Nishi¹, S. Kaul¹, R. Wadhwa¹, H. Mishima²
(¹AIST(National Institute of Advanced Industrial Science and Technology), ²University of Tsukuba)

O-10 14:18-30

Study on calcium phosphate cement loaded with rhizoma drynaria

Shuxin Qu¹, Xiaoxin Jiang¹, Sunzhong Lin¹, Jie Weng¹ (¹Southwest Jiaotong University)

O-11 14:30-42

Observation of hard tissue with confocal laser scanning microscopy

Tetsunari Nishikawa¹, K. Masuno¹, H. Kato¹, M. Kokubu¹, K. Tominaga¹, M. Wato¹, K. Imai², S. Takeda², T. Ono³, N. Matsumoto³, A. Tanaka¹ (¹Department of Oral Pathology, ²Department of Biomaterials, ³Department of Orthodontics, Osaka Dental University)

KEYNOTE ADDRESS

15:00-15:45

Chair Person: Kenzo Asaoka (The University of Tokushima)

Possibility of new biomaterials with ability of bone induction

Kikuji Yamashita (The University of Tokushima)

POSTER VIEWING

15:50-16:30

P-1 Water soluble silicon quantum dots as fluorescent probes for bio-applications

Chinnathambi Shanmugavel¹, Venkata Krishnan², Katsuhiko Ariga² and Nobutaka Hanagata^{1,3} (¹Biosystem and biomolecule control group, National Institute for Material Science, ²World Premier International (WPI) Research Center for Materials Nanoarchitectonics (MANA), National Institute for Materials Science (NIMS), ³Interdisciplinary Laboratory for Nanoscale Science and Technology, National Institute for Materials Science (NIMS))

P-2 The biocompatibility and antibacterial properties of chitosan-hyaluronic acid -metal nanocomposites

Hui-Hsuan Hsieh¹, Chih-Wei Chou¹ (¹Department of Cosmeceutics, China Medical University)

P-3 Effect of novel anti-cancer ABC drug-loaded nanoparticles on digestive tract cancer cell lines

Chih-Wei Chou¹, Onon Batnyam^{1,2} (¹China Medical University, ²Asia University)

P-4 Cell culture on carbon nanotubes thin films

Tsukasa Akasaka, Shigeaki Abe, Motohiro Uo, Fumio Watari (Hokkaido University)

P-5 Co-culturing of bone marrow mesenchymal stem cells and endothelial cells by an RWV bioreactor

Masanori Nishi, Rena Matsumoto, Jian Dong¹, Toshimasa Uemura (National Institute of Advanced Industrial Science and Technology, ¹Fudan University)

P-6 In Vivo evaluation of crystalline strontium substituted calcium phosphate cement

Kazumitsu Sekine¹, Kenichi Hamada¹, Emi Takekawa¹, Kikuji Yamashita¹, Fumiaki Kawano², Kenzo Asaoka¹ (¹Institute of health biosciences, University of Tokushima graduate school, ²Tokushima Medical and Dental Hospital, University of Tokushima)

Closing Remarks: Koichi Imai

16.30-35