### Symposium Program • Poster Presentation

**Saturday 6th November 2010**

**Sophs Hall, TOIN Memorial Academium**

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#### 4.30pm-6.00pm

**BIOMEDICAL ENGINEERING**

**Presider: Dr. Shinichi TAKEUCHI**  
Professor, Faculty of Biomedical Engineering, TOIN University of Yokohama

| BE1 | Preoperative 3D plastic model for implant surgery planning with stereo lithography  
Kazuya AKIMOTO, Department of Clinical Engineering, Faculty of Biomedical Engineering, TOIN University of Yokohama |
| BE2 | Effect of high functional lipid lipo-capsule containing acetyl hydroxyproline on animal skin disease  
Satoru FURUMORI, Department of Biomedical Engineering, Graduate School of Engineering, TOIN University of Yokohama |
| BE3 | Effect of Sea buckthorn flavonoids on growth inhibitory activity in U937 cells  
Takuya HARADA, Department of Clinical Engineering, Faculty of Biomedical Engineering, TOIN University of Yokohama |
| BE4 | Biodistribution of PEG-Modified Gold Nanoparticles in Mice  
Kenichi HATANO, Department of Biomedical Engineering, Graduate School of Engineering, TOIN University of Yokohama |
| BE5 | The continuous generation of active oxygen species and upgrading of the device using polyaniline V  
Kensho HORIYOSHI, Department of Biomedical Engineering, Graduate School of Engineering, TOIN University of Yokohama |
| BE6 | Fundamental researches of the breast cancer examination method using the limited element method and consecutive approximation method  
Kyomi ISHIDA, Associate Professor, Home economics subject, Teikyo junior college |
| BE7 | Evaluation of recirculation rate according to flow change in reverse connection of double lumen catheter for hemodialysis  
Hideki ISHIGAKI, Department of Clinical Engineering, Faculty of Biomedical Engineering, TOIN University of Yokohama |
| BE8 | Fluid-structure interaction analysis of stenosis in AVG anastomosis using a finite-element method  
Yuki ISONO, Department of Biomedical Engineering, Graduate School of Engineering, TOIN University of Yokohama |
| BE9 | Studies on the development of surgical guides for implant surgery  
Akihiko KOBAYASHI, Department of Biomedical Engineering, Graduate School of Engineering, TOIN University of Yokohama |
| BE10 | Improvement of the simulation program for the analysis of the mouse model of the autoimmune disease  
Nobutaka KUWAHARA, Department of Biomedical Engineering, Graduate School of Engineering, TOIN University of Yokohama |

#### 4.30pm-6.00pm

**BIOMEDICAL ENGINEERING**

**Presider: Dr. Toshio SATO**  
Associate Professor, Faculty of Biomedical Engineering, TOIN University of Yokohama

| BE11 | Effect of Photodynamic therapy (PDT) using Hypericin on U937 cells: Comparison of different lamps  
Masaya MATSUIURA, Department of Clinical Engineering, Faculty of Biomedical Engineering, TOIN University of Yokohama |
| BE12 | Preoperative 3D plastic replica for orthognathic surgery planning with stereo lithography  
Ryo NAKAI, Department of Biomedical Engineering, Graduate School of Engineering, TOIN University of Yokohama |
| BE13 | Localization of Androgen Receptor Corepressors Testicular Zinc-Finger Protein on Mouse Testis  
Nobuhisa SAKAI, Department of Biomedical Engineering, Graduate School of Engineering, TOIN University of Yokohama |
| BE14 | Aortic Arch Aneurysm Surgery Simulation with Rapid Prototyping Technology  
Sho SAKUMA, Department of Biomedical Engineering, Graduate School of Engineering, TOIN University of Yokohama |
| BE15 | Study of the effective utilization of custom-built, medical device management software  
Takayuki SATONO, Department of Biomedical Engineering, Graduate School of Engineering, TOIN University of Yokohama |
| BE16 | Measurement of Sound Field with Acoustic Cavitation by Using Cavitation Sensor with Hydrothermally synthesized PZT  
Michihisa SHIBA, Department of Biomedical Engineering, Graduate School of Engineering, TOIN University of Yokohama |
| BE17 | Nephrotoxicity of Trichloroethylene Metabolite DCVC in mice  
Nobuaki SHIRAI, Department of Biomedical Engineering, Graduate School of Engineering, TOIN University of Yokohama |
| BE18 | Measurement for Sonochemical Reaction Near Focal Point in 1.6 MHz Focused Ultrasound Field -Relationships between ultrasound duty cycles and production of active oxygen-  
Akiro WATANABE, Department of Biomedical Engineering, Graduate School of Engineering, TOIN University of Yokohama |
| BE19 | Activation and application of molecular oxygen in air using polyaniline  
Hiroo WATANABE, Department of Biomedical Engineering, Graduate School of Engineering, TOIN University of Yokohama |

#### 4.30pm-6.00pm

**BIOMEDICAL ENGINEERING**

**Presider: Dr. Akira OCHIAI**  
Associate Professor, Faculty of Biomedical Engineering, TOIN University of Yokohama

| BE20 | Effect of 18-crown-6 on protoporphyrin IX accumulation in cultivated cancer cells  
Shinya WATANABE, Department of Biomedical Engineering, Graduate School of Engineering, TOIN University of Yokohama |
| BE21 | Effects of Catechin Groups on Osteoblast and Osteoclast Metabolism  
Shuei YABUTA, Department of Clinical Engineering, Faculty of Biomedical Engineering, TOIN University of Yokohama |
| BE22 | Effects and Action Mechanism of Polyphenol on Proliferation of Human Cancer Cells  
Tatsuya YAMADA, Department of Medical Technology, Faculty of Biomedical Engineering, TOIN University of Yokohama |
### LIFE and ENVIRONMENTAL SCIENCE

4.30pm-6.00pm

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<th>Session</th>
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<th>Institution</th>
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<tr>
<td>BE23</td>
<td>Transdermal adsorption characteristics of 5-aminolevulinic acid·hydrochloride and phosphate</td>
<td>Ai YAMAGUCHI, Department of Biomedical Engineering, Graduate School of Engineering, TOIN University of Yokohama</td>
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<tr>
<td>BE24</td>
<td>Preparation of Hydroxyapatite with Lamellar-Type Mesopores by a Precipitation Method Using Sodium Dodecyl Phosphate</td>
<td>Keita YAMASHIOTO, Department of Biomedical Engineering, Graduate School of Engineering, TOIN University of Yokohama</td>
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<tr>
<td>BE25</td>
<td>Studies on automatic wheelchair braking system in the prevention of falls</td>
<td>Tsuiki YAMAUCHI, Department of Clinical Engineering, Faculty of Biomedical Engineering, TOIN University of Yokohama</td>
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<tr>
<td>BE26</td>
<td>Studies on anti-slip cushion for wheelchairs</td>
<td>Hiroshi YOSHIIKAWA, Department of Clinical Engineering, Faculty of Biomedical Engineering, TOIN University of Yokohama</td>
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<tr>
<td>BE27</td>
<td>Effect of abdominal breathing (anterograde continuous prolonged inhalation method) on body temperature and weight loss</td>
<td>Hong ZENG, Department of Biomedical Engineering, Graduate School of Engineering, TOIN University of Yokohama</td>
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<tr>
<td>BE28</td>
<td>Surface modification of polymer using Hypericin and Na-Li lamp</td>
<td>Peng-Yong ZENG, Department of Biomedical Engineering, Graduate School of Engineering, TOIN University of Yokohama</td>
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### GENETIC ENGINEERING

4.30pm-6.00pm

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<tr>
<td>GE1</td>
<td>The role of SAP (SLAM-associated protein) gene in the pathogenesis of Systemic Lupus Erythematosus</td>
<td>Yukari AIZAWA, Department of Biomedical Engineering, Graduate School of Engineering, TOIN University of Yokohama</td>
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<tr>
<td>GE2</td>
<td>Differential responses of ovalbumin-specific Th cells towards chemically-modified immunogenic and tolerogenic ovalubmins</td>
<td>Ryo FUJWARA, Department of Biomedical Engineering, Graduate School of Engineering, TOIN University of Yokohama</td>
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<td>GE3</td>
<td>Role of autoimmunity in the development of ankylosing enthesitis in (BXS3B x NZB)F1 male mice</td>
<td>Kanami FUKUNAGA, Department of Biomedical Engineering, Graduate School of Engineering, TOIN University of Yokohama</td>
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<tr>
<td>GE4</td>
<td>Expression analysis of Mg2+ transporters in the kidney of marine and euryhaline pufferfishes</td>
<td>Zouza ISLAM, Department of Biological Sciences, Graduate School of Bioscience and Biotechnology, Tokyo Institute of Technology</td>
<td></td>
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<tr>
<td>GE5</td>
<td>Function and localization of zebrfish carbonic anhydrases Ca2a and Ca15a in Nhe3b-mediated sodium ion transport</td>
<td>Yuuke ITO, Department of Biological Sciences, Graduate School of Bioscience and Biotechnology, Tokyo Institute of Technology</td>
<td></td>
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<tr>
<td>GE6</td>
<td>Mechanism of Borate Secretion by the Kidney of Seawater Fish</td>
<td>Yuki KIMURA, Department of Biological Sciences, Graduate School of Bioscience and Biotechnology, Tokyo Institute of Technology</td>
<td></td>
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<td>GE7</td>
<td>Renal expression of NHE3 in banded houndshark (Triakis scyllium)</td>
<td>Shanshan LI, Department of Biological Sciences, Graduate School of Bioscience and Biotechnology, Tokyo Institute of Technology</td>
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<td>GE8</td>
<td>Genetic Studies on Immune Tolerance</td>
<td>Masanori OBATA, Department of Biomedical Engineering, Graduate School of Engineering, TOIN University of Yokohama</td>
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<td>GE9</td>
<td>Distribution and function of H+-lactate cotransporters MCT1 and MCT4 in the swimbladder of pufferfish</td>
<td>Takihiko UMEZAWA, Department of Biological Sciences, Graduate School of Bioscience and Biotechnology, Tokyo Institute of Technology</td>
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<td>GE10</td>
<td>Characterization of a novel E3 ubiquitin ligase highly expressed in developing spermatids</td>
<td>Prasanna VASUDEVAN, Dep. of Biological Sciences, Graduate School of Bioscience and Biotechnology, Tokyo Institute of Technology</td>
<td></td>
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<tr>
<td>GE11</td>
<td>Localization and possible functions of the E3 ubiquitin ligase MARCH-VII in testis</td>
<td>Boqiang ZHAO, Department of Biological Sciences, Graduate School of Bioscience and Biotechnology, Tokyo Institute of Technology</td>
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### Associate Professor, Faculty of Biomedical Engineering, TOIN University of Yokohama
Electric Double Layer Capacitors with MnO2 for use in High Capacitance “Photocapacitors”
Hiroki NAKAMURA, Department of Biomedical Engineering, Graduate School of Engineering, TOIN University of Yokohama

Stress reaction to Several Plant on Pb Pollution soil
Yuichi SUGANO, Department of Biomedical Engineering, Graduate School of Engineering, TOIN University of Yokohama

Metallic Electrical Conductivity in Langmuir-Blodgett Films based on Alkylammonium-Au(dmit)2 salt
Naoki SUGIMOTO, Department of Medical Technology, Faculty of Biomedical Engineering, University of Yokohama

A Study on the Module Characteristic of Electrically Connected Dye-sensitized Solar Cells
Keina YAMAMOTO, Department of Biomedical Engineering, Graduate School of Engineering, TOIN University of Yokohama

The inspection about the summer heat environment relaxation effect according to the planting height of the tree in the roof tree planting
Tetsuro YOKOBORI, Department of Biomedical Engineering, Graduate School of Engineering, TOIN University of Yokohama

IM3 Studies on the Effect of Music on The Human Brain Behavior in The Frontal Association Area
Kouichi HATA, Department of Informatics and Mechanical Engineering, Graduate School of Engineering, TOIN University of Yokohama

IM2 An Application of Program Size Estimation Model Base on PROBE method and Its Evaluation
Yoshiyuki ITIKAWA, Dept. of Informatics and Mechanical Engineering, Graduate School of Engineering, TOIN University of Yokohama

Underground Imaging Using Shear Waves
Takahiro KITAZAWA, Department of Electronics and Information Engineering, Faculty of Engineering, TOIN University of Yokohama

IM4 Study on the Healthy Index Value by the Korotkov’s Sound Analysis
Kensuke KOYAMA, Department of Electronics and Information Engineering, Faculty of Engineering, TOIN University of Yokohama

IM5 A Study on Thought Pattern Analysis Using the Rock Paper Scissor Game
Tatsuya MARUYAMA, Dept. of Informatics and Mechanical Engineering, Graduate School of Engineering, TOIN University of Yokohama

IM6 A Hybrid Implementation of a Genetic Algorithm and Simulated Annealing (GA-SA) for Searching for the Pairs of Inputs that Activates the Maximum Number of Gates in a Combinational Circuit
Akiko MIYASHITA, Dept. of Informatics and Mechanical Engineering, Graduate School of Engineering, TOIN University of Yokohama

IM7 Basic Study of Water Distribution Measurement in Soil using a Sound Vibration
Yutaka NAKAGAWA, Department of Electronics and Information Engineering, Faculty of Engineering, TOIN University of Yokohama

IM8 A Diagnostic Support System of Renal Cancer using Support Vector Machine
Kazuyoshi NAKANO, Dept. of Informatics and Mechanical Engineering, Graduate School of Engineering, TOIN University of Yokohama

On the Application of an Evolutionary Algorithm for Searching of the Input Pair that Activates the Maximum Number of Switching Gates in a Combinational Circuit
Shigeru TADAKA, Dept. of Informatics and Mechanical Engineering, Graduate School of Engineering, TOIN University of Yokohama

IM10 Inverse Kinematics using Fuzzy Logic and its Application
Osamu TOJO, Dept. of Informatics and Mechanical Engineering, Graduate School of Engineering, TOIN University of Yokohama

IM11 Study on the Non-Contact Acoustic Imaging Method for Non-Destructive Inspection using SLDV and LRAD
Ituki UECHI, Dept. of Informatics and Mechanical Engineering, Graduate School of Engineering, TOIN University of Yokohama

IM12 Studies on the Effect of Laugh on the Human Brain Behavior in the Frontal Association Area
Manabu YAMANE, Dept. of Informatics and Mechanical Engineering, Graduate School of Engineering, TOIN University of Yokohama