

## 2009 TIMS-NTHU Joint Symposium: Nano and Bio-related Material and Technology

### # Conference Room B18 (Chemical Engineering Building of NTHU)

Time		Presenters	Institution	Title
08:20	— 08:40	Check In		
		Host: Director Tai Bor Wu 、 Director Youiti Ootuka		
08:40	— 09:00	Opening speech ( President Wen Tsuen Chen 、 Director Youiti Ootuka)		
09:00	— 09:25	Youiti Ootuka	TIMS, University of Tsukuba	Electrical transport of hydrigen bridge between superconducting electrodes
09:25	— 09:50	J. Jou	MSE, NTHU	Some-approaches for high efficiency OLEDs
09:50	— 10:15	Ryu Hasunuma	TIMS, University of Tsukuba	<i>Roughness Increase on Surface and Interface of SiO<sub>2</sub> Grown on Atomically Flat Si (111) Terrace</i>
10:15	— 10:40	Shih Yuan Lu	CHE, NTHU	Applications of CdS Nanowires as Piezoelectric Nanogenerator
10:40	— 11:00	Coffee Break		
		Chairman: Prof. Hsin Lung Chen 、 Prof. Tatsuya Nabeshima		
11:00	— 11:25	Arnold C.M.Yang	MSE, NTHU	Molecular confinement and residual stresses in ultrathin polymer films
11:25	— 11:50	Tatsuya Nabeshima	TIMS, University of Tsukuba	Metallo-supramolecules for Cooperative and Responding Functions
11:50	— 12:15	Hsing Wen Sung	CHE, NTHU	Novel Nanoparticles Shelled with Chitosan for Oral Delivery of Protein Drugs
12:15	— 12:40	Chi-Young Lee	CNMM, NTHU	Preparation and Application of Nanomaterials - Stratagem and Method
12:40	— 13:30	Lunch and Poster Presentation		
		Chairman: Director Ging Ho Hsiue 、 Prof. Yukio Nagasaki		
13:30	— 13:55	Yukio Nagasaki	TIMS, University of Tsukuba	Bionanopatricle for Apoptosis Detection
13:55	— 14:20	Hsin Lung Chen	CHE, NTHU	Nanostructures of Block Copolymers with Comb-Coil Architecture
14:20	— 14:45	Takaki Kanbara	TIMS, University of Tsukuba	Molecular Design of $\pi$ -Conjugated n-Type Electrically Conducting Polymers by Organometallic Polycondensation
14:45	— 15:10	Rong Ming Ho	CHE, NTHU	Novel Nanostructures from Self-assembly of Chiral Block Copolymers
15:05	— 15:25	Coffee Break		
		Chairman: Prof. Fan Gang Tseng 、 Prof. Tabaki Kanbara		
15:25	— 15:50	Kohai Soga	Tokyo University of Science	Bioimaging under NIR excitation
15:50	— 16:15	Fan Gang Tseng	ESS, NTHU	Single Molecule/single Cell Based m-Nano Biochips
16:15	— 16:40	Katsuhisa Kitano	CAMT, Osaka University	Atmospheric-pressure plasma processings in liquids
16:40	— 17:05	Yen Chung Chang	IMM, NTHU	Development of a chip for studying the degeneration and

	regeneration of neuronal axons
17:05 —	Dinner

## Poster List

Fram No.	Presenters	Institution	Title
1	Ayako Taketoshi	TIMS, University of Tsukuba	Preparation and characterization of novel pi-conjugated polymers containing squaraine dye unit
2	Akitsu Tsujimoto	TIMS, University of Tsukuba	Development of ruthenium-catalyzed oxidation of 2-substituted imidazolines with aerial oxygen
3	Naoya Sakamoto	TIMS, University of Tsukuba	Synthesis and Ion Recognition Ability of Macrocyclic Oligo-dipyrrins
4	Yusuke Furukawa	TIMS, University of Tsukuba	Cooperative Ion-pair Recognition of Nonaamide-Pseudocryptand
5	Keitaro Yoshimoto, Yukio Nagasaki	TIMS, University of Tsukuba	Bioreactivity of PEGylated Gold Surfaces Constructed by Homo/Hetero-Telechelic PEGs
6	Xiaofei Yuan, Keitaro Yoshimoto, Yukio Nagasaki	TIMS, University of Tsukuba	Novel immuolatex possessing mixed-PEG/antibody co-immobilized surface for immunodiagnosics of ferritin
7	Atsushi Tamura, Motoi Oishi, Yukio Nagasaki	TIMS, University of Tsukuba	Novel siRNA Delivery System Based on the Polyion Complex with PEGylated Polyamine Nanogels Directed to Enhance the Gene Silencing Efficiency
8	Shinya Matsumoto, Keitaro Yoshimoto, Yukio Nagasaki	TIMS, University of Tsukuba	PEG-Polyamine/DNA co-immobilized Gold Surfaces as a Novel Platform for DNA Sensing: Comparison of PEG-b-PAMA Layer and PAMA-g-PEG Layer using SPR and XPS Analysis

9	Sumon Ganguli, Keitaro Yoshimoto, Hiroshi Sakuma, Tsunekichi Matsuoka, Shyunsuke Tomita, Kentaro Shiraki, Yukio Nagasaki	TIMS, University of Tsukuba	Regulation of Lysozyme Activity by Artificial Smart Copolymer: Recovery of Its Enzymatic Activity After Heat-Treatment Using Polyion Complex Chemistry
10	Hiroshi Atsumi, Keitaro Yoshimoto, Shingo Saito, Moriya Okuma, Mizuo Maeda, Yukio Nagasaki	TIMS, University of Tsukuba	Fluorescence-Based Colorimetric Discrimination of Single Nucleotide Transversion by the Combined Use of DOTA-Conjugated Naphthyridine Derivatives and Its Terbium Complex
11	Motohiko Nishio, Keitaro Yoshimoto, Yukio Nagasaki	TIMS, University of Tsukuba	C-reactive protein binding activity of Fab'/mixed-PEG co-immobilized gold sensor surface: Characterization by Surface Plasmon Resonance and <sup>125</sup> I Radiometric Assay
12	Kimikazu Tokuzen, Y. Okumura, M. Kamimura, Yu Saito, K. Soga, Y. Nagasaki	PTRC, Tokyo University of Science	Liposome encapsulating Rare Earth-doped Yttrium Oxide Nanoparticles for Fluorescence Bioimaging under NIR Excitation
13	Yoshihito Okumura, K. Soga	PTRC, Tokyo University of Science	Effect of Phosphate Salt During Calcination of Yttrium Oxide Nanoparticles for NIR Fluorescence Bioimaging
14	Suh-Chin (Samuel) Wu	IBT,NTHU	Chimerization of Virus-like Nano-particles from Human and Avian Influenza Viruses
15	Oliver I. Wagner	LS,NTHU	Design of a bio-chip for identification and selection of neural stem cells from mixtures of various cell types
16	Shih-Yuan Lu	CHE,NTHU	Transparent, hydrophobic composite aerogels with high mechanical strength and low high-temperature thermal conductivities
17	Shih-Yuan Lu	CHE,NTHU	Preparation and Magnetic Properties of Diluted Magnetic Semiconductor Nanowires of Mn doped CdSe

18	Sinn-wen Chen	CHE,NTHU	Liquidus projections and phase equilibria isothermal sections of Sn-Bi-Ag and Sn-Bi-Ni alloys
19	Hwan-You Chang	IMM,NTHU	Site-specific cell differentiation on a single multicellular spheroid
20	Ren-Kuei Wu	ESS, NTHU	MWCNTs Structured Charge selective nanochannel for Biomolecule Preconcentration
21	Yuan-Tai Tseng	NEMS, NTHU	A gold-nanoparticle-enhanced immune sensor based on fiber optic interferometry
22	Rong-Ming Ho	CHE,NTHU	Nanopatterning from Silicon-containing Block Copolymers
23	Rong-Ming Ho	CHE,NTHU	Pore-Filling Nanoporous Templates from Degradable Block Copolymers for Nano-scale Drug Delivery
24	Jem-Mau Lo	BMES, NTHU	RGD Conjugated and Doxorubicin Encapsulated Liposome for targeting U-87 MG Tumor
25	Rong-Ming Ho	CHE,NTHU	Graphite-like Tubes from Carbonization of Polyacrylonitrile in AAO Templates
26	Ruey-an Doong	BMES, NTHU	Fabrication of Highly Ordered Mesoporous Carbon/TiO <sub>2</sub> Hybrid Materials via EISA Process
27	Jenq-Gong Duh	MSE,NTHU	Electrochemical Behavior of Dental Amalgam with Ag-Cu Nanopowder Additive
28	Chun-Liang Lo	CHE,NTHU	Novel Mixed Micelles from a Cmc and a Cmt Diblock copolymers for Anticancer Drug Delivery.
29	Hsin-Lung Chen	CHE,NTHU	Confined Crystallization and Morphology of Melt Segregated PLLA- $\beta$ -PE and PLDA-b-PE diblock copolymers
30	Hsin-Lung Chen	CHE,NTHU	Controlled Crystal Orientation of Poly(ethylene oxide) in Poly(ethylene oxide)/Clay Nanocomposites

31	Chi-Chang Hu	CHE,NTHU	Preparation and Characterization of TiO <sub>2</sub> Thin Films by a Novel Cathodic Deposition
32	Ging-Ho Hsiue	CHE,NTHU	Multifunctional Mixed Micelles for Cancer Targeting Imaging and Therapy
33	Rong-Long Pan	LS,NTHU	Atomic Force Microscope Study on the <i>Leptospira</i> Outer Membrane Lipoprotein LipL32 Binding on Toll-like Receptor 2

**\* Instructions for Poster Presentation :**

- 1. Poster boards will be set up in the lobby of the Chemical Engineering Building , presenters are advised to set up before Tuesday, Jan. 20<sup>th</sup>, 2009, 10:00 AM.**
- 2. Each poster should be of 90cm ( W ) x 120cm ( H ) size , poster tapes will be provided.**
- 3. Poster Number : We will provide a printed number identifying each poster board. The number corresponds to the poster list number.**
- 4. Please remove your materials from the poster board after Jan. 20<sup>th</sup>, 5:00 PM . Materials left on the boards after the workshop will be discarded.**