

Schedule

October 10th, 2009 (Saturday)

18:00 - Welcome Party at “*ESPOIR*”, EPOCHAL Tsukuba

October 11th, 2009 (Sunday)

8:30 – 9:00		Registration
9:00 – 9:30		Opening Remarks by President of UT, Dr. Yamada and Prof. Ging-Ho Hsiue
9:30 – 10:00	OP-01	Greeting and Oral Presentation by Prof. Youiti Ootuka
10:00 – 10:20		Break
10:20 – 10:40	IL-01	Assistant Prof. Chih-Kuang Yeh
10:40 – 11:00	OP-02	Prof. Hidemi Shigekawa
11:00 – 11:20	IL-02	Dr. Tomonobu Nakayama
11:20 – 11:40	IL-03	Associate Prof. Chien-Neng Liao
11:40 – 12:30		Lunch
12:30 – 14:30	PP-01-63	Poster Session in Room 405
14:30 – 14:50	OP-03	Prof. Yutaka Moritomo
14:50 – 15:10	IL-04	Dr. Katsuhiko Ariga
15:10 – 15:30	IL-05	Associate Prof. Wen-Kuang Hsu
15:30 – 15:50	OP-04	Prof. Tatsuya Nabeshima
15:50 – 16:10		Break
16:10 – 16:30	OP-05	Prof. Takaki Kanbara
16:30 – 16:50	IL-06	Prof. Kuo Chu Hwang
16:50 – 17:10	IL-07	Dr. Yuji Miyahara
17:10 – 17:30	IL-08	Assistant Prof. Ryu Hasunuma
17:30 – 17:45		Photo Session
18:00		Reception

October 12th, 2009 (Monday)

9:00 – 9:20	OP-06	Prof. Toshiharu Teranishi
9:20 – 9:40	IL-09	Prof. Shangjr (Felix) Gwo
9:40 – 10:00	OP-07	Associate Prof. Keiichi Tomishige
10:00 – 10:20		Break
10:20 – 10:40	IL-10	Associate Prof. Michael Hsuan-Yi Huang
10:40 – 11:00	IL-11	Dr. Jun Nakanishi
11:00 – 11:20	IL-12	Assistant Prof. Chien-Chong Hong
11:20 – 11:40	OP-08	Prof. Yukio Nagasaki
11:40		Closing Remarks by Youiti Ootuka

Oral Presentation Program

Invited Lectures (IL) and Oral Presentations (OP)

October 11th, 2009 (Sunday)

OP-01	Electrical Transport through Superconducting Nano-Bridge Prof. Youiti Ootuka (<i>Graduate School of Pure and Applied Sciences, Physics, University of Tsukuba</i>)	9:30–10:00
IL-01	High-Frequency Ultrasound And Molecular Imaging Assistant Prof. Chih-Kuang Yeh (<i>Biomedical Engineering and Environment Sciences, National Tsing Hua University</i>)	10:20-10:40
OP-02	Studies on laser-combined STM Prof. Hidemi Shigekawa (<i>Graduate School of Pure and Applied Sciences, Frontier Science, University of Tsukuba</i>)	10:40-11:00
IL-02	Multiple-scanning-probe microscope for electrical and physiological measurements at the nanoscale Dr. Tomonobu Nakayama (<i>Nano Functionality Integration Group, Materials Nanoarchitectonics (MANA), National Institute for Materials Science (NIMS)</i>)	11:00-11:20
IL-03	In-situ TEM Observation of Electromigration in Nanotwinned Copper Associate Prof. Chien-Neng Liao (<i>Materials Science and Engineering, National Tsin Hua University</i>)	11:20-11:40
OP-03	Advanced functionality of Prussian Blue heterojunction Prof. Yutaka Moritomo (<i>Graduate School of Pure and Applied Sciences, Physics, University of Tsukuba</i>)	14:30-14:50
IL-04	Supramolecular Tricks for Nanotechnology: Hand-Operating Nanotechnology Dr. Katsuhiko Ariga (<i>Supermolecules Group, Materials Nanoarchitectonics (MANA), National Institute for Materials Science (NIMS)</i>)	14:50-15:10
IL-05	Engineering applications of carbon nanotubes Associate Prof. Wen-Kuang Hsu (<i>Materials Science and Engineering, National Tsing Hua University</i>)	15:10-15:30
OP-04	Novel Molecular Recognition Modes via Unique 3D Arrangement of Non- classical Hydrogen Bonds Prof. Tatsuya Nabeshima (<i>Graduate School of Pure and Applied Sciences, Chemistry, University of Tsukuba</i>)	15:30-15:50
OP-05	Molecular Design of Polyaniline Analogues Based on Organometallic Carbon-nitrogen Bond Formation Prof. Takaki Kanbara (<i>Graduate School of Pure and Applied Sciences, Materials Science, University of Tsukuba</i>)	16:10-16:30
IL-06	Metal-Filled Carbon Nanoparticles: Production and Growth Mechanism. Prof. Kuo Chu Hwang (<i>Environmental Health and Safety Center, Dept. of Chemistry, National Tsing Hua University</i>)	16:30-16:50
IL-07	Detection of biomolecular recognition using bio-transistors Dr. Yuji Miyahara (<i>Biomaterials Center, National Institute for Materials Science (NIMS)</i>)	16:50-17:10
IL-08	Nano Structure Control of Silicon Crystal Surface Assistant Prof. Ryu Hasunuma (<i>Graduate School of Pure and Applied Sciences, Applied Physics, University of Tsukuba</i>)	17:10-17:30

October 12th, 2009 (Monday)

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| OP-06 | Synthesis and Structure-specific Functions of Inorganic Nanoparticles
Prof. Toshiharu Teranishi (<i>Graduate School of Pure and Applied Sciences, Chemistry, University of Tsukuba</i>) | 9:00-9:20 |
| IL-09 | Tunable Plasmonic Properties of Near-Field-Coupled Gold Nanoparticles: Dimers, Chains, and Arrays
Prof. Shangjr (Felix) Gwo (<i>Dept. of Physics, National Tsing Hua University</i>) | 9:20-9:40 |
| OP-07 | Conversion of Biomass and CO₂ to Value-Added Chemicals Using Heterogeneous Catalysis
Associate Prof. Keiichi Tomishige (<i>Graduate School of Pure and Applied Sciences, Materials Science, University of Tsukuba</i>) | 9:40-10:00 |
| IL-10 | Aqueous Solution Synthesis of Novel Gold and Palladium Nanostructures
Associate Prof. Michael Hsuan-Yi Huang (<i>Dept. of Chemistry, National Tsing Hua University</i>) | 10:20-10:40 |
| IL-11 | Colloidal gold nanoparticles bearing a photocleavable group as new template for caged compounds synthesis
Dr. Jun Nakanishi (<i>Materials Nanoarchitectonics (MANA), National Institute for Materials Science (NIMS)</i>) | 10:40-11:00 |
| IL-12 | Disposable Lab-on-Chip Systems for Point-of-Care Diagnostics
Assistant Prof. Chien-Chong Hong (<i>Dept. of Power Mechanic Engineering, National Tsing Hua University</i>) | 11:00-11:20 |
| OP-08 | Gold Nanoparticle-Containing Nanogel as a Tool for New Therapy
Prof. Yukio Nagasaki (<i>Graduate School of Pure and Applied Sciences, Materials Science, University of Tsukuba</i>) | 11:20-11:40 |

Poster Presentation Program

- PP-01** **Functionality of heterojunction of Prussian blue analogues**
Takayuki Shibata (*Graduate School of Pure and Applied Sciences/Physics, University of Tsukuba*)
- PP-02** **Dynamics of photo-induced phase transition in Co-Fe cyanide films and search for hidden phase**
Hayato Kamioka (*Institute of Physics and TIMS · Physics, University of Tsukuba*)
- PP-03** **Structural phase transition induced by hole-doping in Co-Fe cyanide**
Kazuhiro Igarashi (*Graduate School of Pure and Applied Sciences/Physics, University of Tsukuba*)
- PP-04** **Valence-differential spectroscopy of Fe-Fe cyanide film**
Yutaro Kurihara (*Graduate School of Pure and Applied Sciences, University of Tsukuba*)
- PP-05** **Optical spectra of $(K_{1-x}Na_x)_{0.35}Co[Fe(CN)_6]_{0.74}zH_2O$**
Yuta Abe (*Dept. of Physics, University of Tsukuba*)
- PP-06** **Electrochemical control of the elution property of Prussian blue nanoparticles thin films: Mechanism and Applications**
Ayako Omura (*Graduate School of Pure and Applied Sciences · physics AIST*)
- PP-07** **Cation Exchange Induced Phase Transition in Cobalt(II) Hexacyanoferrate(II)**
Tomoyuki Matsuda (*Graduate School of Pure and Applied Sciences/Department of Physics, University of Tsukuba*)
- PP-08** **Thermal Expansion Phenomena in Prussian Blue Analogues**
Tomoyuki Matsuda (*Graduate School of Pure and Applied Sciences/Department of Physics, University of Tsukuba*)
- PP-09** **Cation Recognition of Oligo-Dipyrin Boron Complexes by the BF₂ Moieties**
Naoya Sakamoto (*Graduate School of Pure and Applied Sciences, Chemistry, University of Tsukuba*)
- PP-10** **Aromatic Guest Recognition of Molecular Clefs Bearing Inert Terpyridine Platinum(II) Complexes**
Yuki Hasegawa (*Graduate School of Pure and Applied Sciences, University of Tsukuba*)
- PP-11** **Synthesis of Heteronuclear Trisaloph Complexes Having Adamantane Moieties**
Masao Sasaki (*Graduate School of Pure and Applied Sciences/Frontier Science (Chemistry), University of Tsukuba*)
- PP-12** **Spontaneous Enrichment of One-handed Helix by Dissolution of Pseudoracemic Crystals of a Tetranuclear Helical Complex**
Sayaka Hotate (*Graduate School of Pure and Applied Sciences/Frontier Science, University of Tsukuba*)
- PP-13** **Metal Ion Recognition of Novel Binaphthyl Podands Bearing Phosphoryl Groups**
Futoshi Sato (*Graduate School of Pure and Applied Sciences, University of Tsukuba*)

- PP-14 Synthesis and Cation Recognition of Macrocyclic Metallohost Bearing Two ickel(II) Complex Moieties**
Shunjin Piao (*Graduate School of Pure and Applied Sciences, University of Tsukuba*)
- PP-15 Synthesis and Functions of Dipyridylbipyrimidine Ligand Bearing Thiourea Moieties**
Yui Togawa (*Graduate School of Pure and Applied Sciences, University of Tsukuba*)
- PP-16 Synthesis and Optical Properties of Aluminum Complex of N2O4-type Dipyrrin**
Manami Daicho (*Graduate School of Pure and Applied Sciences, University of Tsukuba*)
- PP-17 Mg²⁺ triggered phosphorescence of a new iridium complex**
Jeremy Brandel (*Graduate School of Pure and Applied Sciences/ Tsukuba Research Center for Interdisciplinary Materials Science (TIMS), University of Tsukuba*)
- PP-18 Synthesis and Complexation of Oligo(bipyridine-phenol) Ligand**
Hiroki Nagumo (*Graduate School of Pure and Applied Sciences, University of Tsukuba*)
- PP-19 Development of Novel Conjugated Polymers Containing Aminoazobenzene Units**
Minoru Kukino (*Tsukuba Research Center for Interdisciplinary Materials Science (TIMS), University of Tsukuba*)
- PP-20 Aerobic oxidation of imidazolines promoted by cyclometalated Ru catalyst**
Ayako Taketoshi (*Tsukuba Research Center for Interdisciplinary Materials Science (TIMS), University of Tsukuba*)
- PP-21 Syntheses of Regioregulated Poly(aminopyridine)s and Investigation by DFT Calculation**
Junpei Kuwabara (*Tsukuba Research Center for Interdisciplinary Materials Science (TIMS), University of Tsukuba*)
- PP-22 Stimuli-responsive PEGylated nanogels for biomedical applications**
Motoi Oishi (*Graduate School of Pure and Applied Sciences, Materials Science, Tsukuba Research Center for Interdisciplinary Materials Science (TIMS), Tsukuba Advanced Research Alliance (TARA), University of Tsukuba*)
- PP-23 Effect of PEAMA-g-PEG on the Heat-induced Inactivation of Enzymes Based on Enzyme/Polymer Complex Formation**
Sumon Ganguli (*Graduate School of Pure and Applied Sciences, Materials Science, University of Tsukuba*)
- PP-24 Synthesis of carbohydrate-oligonucleotides conjugates and application for the oligonucleotide delivery**
Daisuke Kubota (*Graduate School of Pure and Applied Sciences, Materials Science, University of Tsukuba*)
- PP-25 Preparation of core cross-linked micelles composed of PEG-b-PLA copolymer with crosslinkable boron cluster for boron neutron capture therapy**
Shogo Sumitani (*Graduate School of Pure and Applied Sciences, Materials Science, University of Tsukuba*)

- PP-26 Novel Biocompatible Polymer Possessing Stable Nitroxy Radicals as Side Chains -Nitroxy Radical Containing Polymer (NRP) Suppresses an Activation of Blood-**
Yu Yamaguchi (*Graduate School of Pure and Applied Sciences, Materials Science, University of Tsukuba*)
- PP-27 Preparation of Highly PEGylated Nanogel for Long Circulating Drug Carrier**
Satoshi Ichinohe (*Graduate School of Pure and Applied Sciences, University of Tsukuba*)
- PP-28 Suppressive effect of radical containing nanoparticles on cerebral infarction in cerebral ischemia-reperfusion rat model**
Kazuko Toh (*Tsukuba Research Center for Interdisciplinary Materials Science (TIMS), University of Tsukuba*)
- PP-29 Spheroid array of fetal liver cells for regenerative medicine in liver: regulation of liver function by three dimensional co-culture system**
Ryota Kojima (*Graduate School of Pure and Applied Sciences, Materials Science, University of Tsukuba*)
- PP-30 Cellular patterning on an amino-terminated surface by grafting poly(ethylene glycol) via a photocleavable linker**
Shingo Kaneko (*Materials Nanoarchitectonics (MANA), National Institute for Materials Science (NIMS)*)
- PP-31 Preparation of the Au Nano-Particles as the Delivery Carriers of siRNA and their Application**
Shuian-yin Lin (*Chemical Engineering, National Tsing Hua University*)
- PP-32 Mixed micelle systems formed from critical micelle concentration and temperature-sensitive diblock copolymers for cancer therapy**
Shuian-yin Lin (*Chemical Engineering, National Tsing Hua University*)
- PP-33 A Novel Thermo-Sensitive, Biodegradable and Biocompatible Hydrogel as an Intraocular Sustained-Release Carrier for Biologics**
Yung-Sheng Chiang (*Chemical Engineering, National Tsing Hua University*)
- PP-34 Development of new polyion complex micelles for encapsulating and delivering Anti-Fungi Drug**
Yung-Sheng Chiang (*Chemical Engineering, National Tsing Hua University*)
- PP-35 Synthesis and characterization of lipid-microbubbles in ultrasound targeting imaging**
Chung-Hsin Wang (*Biomedical Engineering and Environmental Sciences, National Tsing Hua University*)
- PP-36 High-frequency Ultrasound Targeted Imaging in Small Animals Study**
Jia-Jiun Chen (*Biomedical Engineering and Environmental Sciences, National Tsing Hua University*)
- PP-37 Controllable Polyol Synthesis of Uniform Palladium Icosahedra: Effect of Twinned Structure on Deformation of Crystalline Lattices**
Cuncheng Li (*Graduate School of Pure and Applied Sciences/Chemistry, University of Tsukuba*)
- PP-38 The fabrication of optical electric-field enhancement site with noble metal nanoparticles**
Miharu Eguchi (*Graduate School of Pure and Applied Sciences / Department of Chemistry, University of Tsukuba*)
- PP-39 Control of atomic step flow on Si(111) with immersing in ultra low dissolved oxygen water**
Katsuya Kamata (*Institute of Applied Physics, University of Tsukuba*)

- PP-40** **Trap Generation by Hole Injection into Dielectrics MOSFETs**
Chihiro Tamura (*Graduate school of Pure and Applied Science, University of Tsukuba*)
- PP-41** **Investigating carrier dynamics around localized gap states by SPPX-STM**
Atsushi Okubo (*Institute of Applied Physics, University of Tsukuba*)
- PP-42** **Formation and study of isolated C60 on Cu(111) realized by glycine nanomesh self-assembly**
Hui Huang (*Institute of Applied Physics, University of Tsukuba*)
- PP-43** **Local band structure fluctuation in pentacene thin film investigated by scanning tunneling microscopy/spectroscopy**
Noriaki Takeuchi (*Institute of Applied Physics, CREST, University of Tsukuba*)
- PP-44** **Suppression of superfluid transition temperature of 3He films in submicron geometry**
Masamichi Saito (*Tsukuba Research Center for Interdisciplinary materials Science (TIMS), University of Tsukuba*)
- PP-45** **Manipulation of vortex states in a mesoscopic superconducting square by local current injection**
Shinya Hatsumi (*Institute of Physics, Tsukuba Research Center for Interdisciplinary materials Science (TIMS), University of Tsukuba*)
- PP-46** **Influence of surface defects on transitions between mesoscopic vortex states in small superconducting squares**
Yutaka, Kuroda (*Institute of Physics, University of Tsukuba*)
- PP-47** **Fabrication of a ballistic graphene unction**
Hikari Tomori (*Institute of Physics, University of Tsukuba*)
- PP-48** **Proximity-induced supercurrent in single-layer grapheme**
Hidenori Goto (*Institute of Physics, University of Tsukuba*)
- PP-49** **Effect of current annealing on electronic properties of multilayer grapheme**
Sho Tanaka (*Institute of Physics, University of Tsukuba*)
- PP-50** **Detection of Supported Lipid Bilayers Using Their Electric Charge**
Chiho Kataoka (*Biomaterials Center, National Institute for Materials Science (NIMS)*)
- PP-51** **How little of metallic impurities is little enough so they do not dominate the redox properties of carbon nanotubes?**
Martin Pumera (*National Institute for Materials Science Biomaterial Systems Group, Biomaterials Center and International Center for Materials Nanoarchitectonics (MANA)*)
- PP-52** **Ultrafast dynamics of surface plasmon polaritons: Propagations, interferences, and focusing.**
Atsushi Kubo (*Institute of Physics, University of Tsukuba*)
- PP-53** **Initial Stage of Film Growth of Octithiophene on Cu(111) Substrate**
Toshiyuki Kakudate (*Materials Science and Engineering, Graduate School of Pure and Applied Sciences, University of Tsukuba*)
- PP-54** **Spherical and Urchin-like TiO₂ in Various Applications**
Po-Chin Chen (*Materials Science and Engineering, National Tsing Hua University*)
- PP-55** **Au Nanocrystal-Directed Growth of Au–Cu₂O Core–Shell Heterostructures with Precise Morphological Control**
Chun-Hong Kuo (*Chemistry, National Tsing Hua University*)

- PP-56 Long-Range Ordered Gold Nanostructure Assembly by Solvent Evaporation**
Yeh-Sheng Lin (*Chemistry, National Tsing Hua University*)
- PP-57 Atomic layer growth and applications of aligned TiO₂/MWCNT array**
Hsin-Fu Kuo (*Materials Science and Engineering, National Tsing Hua University*)
- PP-58 The technique and applications of carbon nanotubes reinforced PAN nanofiber via electrospinning process**
Hsin-Jung Tsai (*Materials Science and Engineering, National Tsing Hua University*)
- PP-59 Understanding the Mechanism of Silver Nanowires with nitrate ion**
Chien-Lin Kuo (*Chemistry, National Tsing Hua University*)
- PP-60 Low-Cost Optical Microfluidic Systems with Molecularly Imprinted Biosensors for Anesthetic Sensing**
Meng-Hua Chong (*Power Mechanical Engineering, National Tsing Hua University*)
- PP-61 Modification of A Plastic Into A Highly Transparent Superhydrophobic Surface**
Sheng-Yuan Huang (*Power Mechanical Engineering, National Tsing Hua University*)
- PP-62 Plasmonic Properties of One-dimensional Gold Nanoparticle Chains**
Chieh-Lun He (*Physics and Institute of Nanoengineering and Microsystems, National Tsing Hua University*)
- PP-63 Plasmon Hybridization in Individual Gold Nanocrystal Dimers: Direct Observation of Bonding and Antibonding Modes**
Shu-Chun Yang (*Physics and Institute of Nanoengineering and Microsystems, National Tsing Hua University*)