

# 9th UT<sup>2</sup> Student Workshop

Tuesday, June 1, 2010

AM1 Session Chair : D. Wei

- 9:30- 9:40 **Opening Remarks**  
*Prof. T. Kondo, Professor, Univ. of Tokyo*
- 9:40- 10:05 **Change of local chemistry during a hydrogen charge-discharge process of Ti-Cr-V alloys**  
*I. Park , Univ. of Tokyo*
- 10:05-10:30 **Microstructural and mechanical characterization of multilayered iron electrodeposits**  
*C. Chan, Univ. of Toronto*
- 10:30-10:55 **Chemical co-treatment of two waste streams: Ni/Co/Cu-containing slag and pyrrhotite tailings**  
*I. Perederiy, Univ. of Toronto*
- 10:55-11:15 **Break**

AM2 Session Chair : M. Sakamoto

- 11:15-12:15 **Invited Talk: An introduction of Leaders of Tomorrow Programme**  
*Prof. J. Nogami, Professor, Univ. of Toronto*
- 12:15-13:30 **Lunch**

PM1 Session Chair : L. Tafaghodi

- 13:30-14:15 **Invited Talk: High sensitive microchip immunoassay based on biocompatible interface**  
*Prof. M. Takai, Associate Professor, Univ. of Tokyo*
- 14:15-14:40 **Multifunctional Nano-Tailored Composites for In Situ Self-Health Monitoring of Aircraft Structures**  
*J. Wernik, Univ. of Toronto*
- 14:40-15:05 **Manipulation and Characterization of Micro and Nanometer-Sized Objects Using MEMS Devices and Micro-NanoRobotic Systems**  
*B. Chen, Univ. of Toronto*
- 15:05-15:25 **Break**

PM2 Session Chair : A. Namazi

- 15:25-15:50 **Numerical modeling of metal nanoparticles and Single-Walled Carbon nanotubes in Induction Thermal Plasma**  
*S. A. Esfarjani, Univ. of Toronto*
- 15:50-16:15 **Experimental and numerical study on thermal decomposition of carbon feedstock during CVD synthesis of single-walled carbon nanotubes**  
*B. Hou, Univ. of Tokyo*
- 16:15-16:40 **Isotropic photonic band gap formation in a photonic amorphous diamond**  
*S. Imagawa, Univ. of Tokyo*
- 16:40-17:05 **Mixed Conduction in Tungsten Phosphate Glass System**  
*I. Oliva, Univ. of Tokyo*

Wednesday, June 2, 2010

AM1 Session Chair : I. Park

- 9:30- 10:15 **Invited Talk: Three-Dimensional Finite Element Analysis on Tightening and Loosening Mechanism of Bolted Joint**  
*Prof. S. Sakai, Professor, Univ. of Tokyo*
- 10:15-10:40 **Smart and Multifunctional Nanostructured Polymers**  
*R. Rizvi, Univ. of Toronto*
- 10:40-11:05 **Microwave-assisted Pyrolysis of Biomass for Porous Carbon Production**  
*A. Namazi, Univ. of Toronto*
- 11:05-11:25 **Break**

AM2 Session Chair : B. Hou

- 11:25-11:50 **Study of the interface passivation in LaLuO<sub>3</sub>/Ge MIS gate stacks**  
*T. Tabata, Univ. of Tokyo*
- 11:50-12:15 **Precursors of SiCH film and properties for low-k Cap dielectrics in Back End of Line process of ULSI**  
*H. Shimizu, Univ. of Tokyo*
- 12:15-13:30 **Lunch**

PM1 Session Chair : J. Wernik

- 13:30-14:30 **Invited Talk: A Glimpse of a Great Institution in an Exciting City: The University of Toronto**  
*Prof. S. Meguid, Professor, Univ. of Toronto*
- 14:30-14:55 **Applied quantity metrology based on temporal coherence of a femtosecond optical frequency comb**  
*D. Wei, Univ. of Tokyo*
- 14:55-15:15 **Break**

PM2 Session Chair : S. Imagawa

- 15:15-15:40 **The Local Structure of P and Si in Molten CaO-SiO<sub>2</sub>-PO<sub>2.5</sub> Slag**  
*M. Sakamoto, Univ. of Tokyo*
- 15:40-16:05 **Solvent Refining-Physical Separation of Si: Thermodynamics of Impurity Distribution**  
*L. Tafaghodi, Univ. of Toronto*
- 16:05-16:30 **High yield silicon deposition from SiHCl<sub>3</sub> under mesoplasma condition for a next generation SIEMENS technology**  
*S. D. Wu, Univ. of Tokyo*
- 16:30-16:40 **Closing Remarks**  
*Prof. K. Morita, Professor, Univ. of Tokyo*