

11th UT² Student Workshop

Monday, June 18, 2012

Session 1

Day1 AM Session

10:00- 10:10	Opening Remarks <i>Prof. Chisachi Kato, Univ. of Tokyo</i>	
10:10- 10:30	Fluidized bed selective sulfation roasting of nickel sulfide concentrate <i>Dawei Yu, Univ. of Toronto</i>	5
10:30-10:50	Upgrade of Titanium Ore by Selective Chlorination <i>Jungshin Kang, Univ. of Tokyo</i>	7
10:50-11:10	Decarburization of Fe-Cr-C_{sat} using CO₂-Ar Mixture: Kinetics Consideration <i>Paul Wu, Univ. of Toronto</i>	9
11:10-11:30	Break	
11:30-12:10	Invited Talk: Paving the way for materials design by microscopy, spectroscopy, and first principles calculation <i>Prof. Teruyasu Mizoguchi, Univ. of Tokyo</i>	11
12:10-13:30	Lunch (group photo before lunch)	

Session 2

Day1 PM Session

13:30-13:50	MgCl₂ Brines as Processing Media for Magnesium-Containing Ores <i>Douglass Duffy Univ. of Toronto</i>	13
13:50-14:10	Self-Heat Recuperation using Magnetocaloric effect <i>Yui Kotani, Univ. of Tokyo</i>	15
14:10-14:30	Chemical Modeling of FeCl₃ Solubility in Concentrated MgCl₂ Solutions Using OLI <i>Michael Carlos, Univ. of Toronto</i>	17
14:50-15:10	Break	
15:10-15:30	High Efficiency Texturing By Ultrafast Direct Hard-Mask Writing <i>Kitty Kumar, Univ. of Toronto</i>	19
15:30-15:50	Thin GeO₂ Film Formation by Radical Oxidation and Its Electrical Properties <i>Woojin Song, Univ. of Tokyo</i>	21
15:50	Day1 Presentation End	

Tuesday, June 19, 2012

Session 3		Day2 AM Session
10:00- 10:20	Construction of interaction models of dissipative particle dynamics by coarse-graining Lennard-Jones fluids <i>Yuta Yoshimoto, Univ. of Tokyo</i>	23
10:20-10:40	Using Quenched Surface Density Functional Theory for Electrode Characterization of an Activated Carbon Supercapacitor <i>Johnathon Caguiat, Univ. of Toronto</i>	25
10:40-11:00	Molecular simulation of carbon nanostructures for novel heat transfer <i>Derek A. Thomas , Univ. of Tokyo</i>	27
11:00-11:20	Break	
11:20-12:00	Invited Talk: Research in the Department of Mechanical and Industrial Engineering at the University of Toronto <i>Prof. Shaker Meguid, Univ. of Toronto</i>	29
12:00-13:30	Lunch	
Session 4		Day2 PM Session
13:30-13:50	Mosaic Hydrogels: One-Step Formation of Multiscale Soft Materials <i>L. Leng, Univ. of Toronto</i>	31
13:50-14:10	Smart siRNA Delivery System Based on Polyion Complex Micelle <i>Mitsuru Naito, Univ. of Tokyo</i>	33
14:10-14:30	Development and Characterization of Novel Aerogels and Polymer <i>Enuji In, Univ. of Toronto</i>	35
14:30-14:50	Break	
14:50-15:10	Anomalous magnetic property at the dislocations in antiferromagnetic NiO single crystalline thin film <i>Issei Sugiyama, Univ. of Tokyo</i>	37
15:10-15:30	Evanescence Photosynthesis - An Optofluidic Approach to Bioenergy <i>Matthew D. Ooms, Univ. of Toronto</i>	39
15:30-15:50	HRTEM Observations of Growth Process of Decagonal Quasicrystals <i>Ryu Okuda, Univ. of Tokyo</i>	41
15:50-16:00	Closing Remarks <i>Prof. Kosuke Nagashio, Univ. of Tokyo</i>	