

Graduate Student Symposium 2008

Department of Chemical Engineering, Princeton University

List of Oral Presentations

SESSION I (9:00 – 10:20 AM)

Wan-Yi Wu	A Non-chromatographic ELP-Intein Based Protein Purification System
Varun Kumar	Nanoparticle Formulation of Hydrophobic Solutes and Factors Governing the Stability
Stephanie Budijono	Composite Nanoparticles for Photodynamic Cancer Therapy
Yoosik Kim	Integration of Maternal Signals via Substrate Competition in Early Patterning of <i>Drosophila</i> Embryo

SESSION II (10:40 AM – 12:00 PM)

John Bishop	Thermoplastic Elastomers Containing Crystalline and Glassy Components from Single-Phase Melts
Joung Eun Yoo	Improving Polyaniline Conductivity Through Controlling the Size and Size Distribution of Its Template
Andrew Marencic	Sphere-Forming and Cylinder-Forming Block Copolymer Thin Films Aligned Under Double Shear
Samantha Sanders	Simulation Studies of Coarse Grained Surfactant Models

SESSION III (1:00 – 2:20 PM)

Santiago Romero-Vargas Castrillon	Effect of Surface Polarity on the Structure and Dynamics of Water in Nano-Scale Confinement
Peter DiMaggio	A Mixed-Integer Linear Optimization Framework for the Identification of Post-translational Modifications in Histone H3 using Electron Transfer Dissociation Tandem Mass Spectrometry
Andrew Ferguson	Solubility and Molecular Conformations of <i>n</i> -Alkane Chains in Water
Peter Verderame	Operational Planning of a Large-Scale Industrial Batch Plant under Demand Uncertainty

SESSION IV (3:20 – 4:40 PM)

Denis Shcherbakov	Pursuing Stability in Aqueous Blends of Micro- and Nanoscale Colloidal Spheres
Edward Matteo	Geologic Storage of Carbon Dioxide in Depleted Hydrocarbon Reserves
Kristen Marino	The Effect of Platinum on Al Diffusion Kinetics in NiAl
Shuyang Pan	The Use of Single Molecule Force Spectroscopy in Probing Poly(dimethylsiloxane)-Functionalized Graphene Sheet Interface