

## **UCSB ChE's 5th Clorox-Amgen Grad Student Symposium**

Friday, October 5, 2012

8:00 AM	Registration and Breakfast	ESB Courtyard
8:30 AM	Welcome Professor Michael Doherty, UCSB Chemical Engineering Department Cha	<b>ESB 1001</b> uir
8:45 AM	Session I: Biophysics and Bioengineering  Sunyia Hussain: Filming hydration and conformational dynamics to understand transmembrane protein function  Brad Spatola: Serum antibody profiling of celiac disease via bacterial cell surface display Tallie Forbes: Photo-activated drug release from temperature sensitive liposomes using hollow gol nanoshells  Dong-Woog Lee: Articular joint lubrication and the wear mechanism under mild conditions	
10:15 AM	Break	<b>ESB Courtyard</b>
10:30 AM	Session II: Complex Fluids, Colloids, and Interfaces  Zachary Zell: On the surface shear viscosity of soluble surfactants  Kyu-Han Kim: The effect of low amounts of cholesterol on model lung surfactant monolayers by measurement of the dynamical response properties of monolayers  Mansi Seth: Microstructural transformations in concentrated, charged vesicle suspensions  Stephen Donaldson: A general interaction potential for hydrophobic and hydrophilic interactions	
12:00 PM	Lunch	ESB Courtyard
1:00 PM	Poster Session Biophysics & Bioengineering; Complex Fluids, Colloids & Interfa Simulations & Control; Materials, Energy & Catalysis	ESB Courtyard ces; Modeling,
2:00 PM	Session III: Modeling, Simulations and Control  Chia-Chun Fu: A systematic coarse-graining of molecular dynamics simulations Brian Giera: Molecular dynamics simulations and mean-field models of the electric double layer Zoltan Mester: Gibbs ensemble calculations of phase coexistence in supramolecular assembly of block copolymers Rebecca Harvey: Development and implementation of the health monitoring system for the artificial pancreas	
3:30 PM	Break	ESB Courtyard
3:45 PM	Session IV: Materials, Energy, and Catalysis  Issac Riisness: Development of a multifunctional microscopy system for probing charge transfer processes in polymer solar cells  Travis Koh: Plasma phase growth of semiconducting metal-oxide nanowires for dye sensitized solar cells and gas sensing  Donghun Kim: Functionalized mesoporous silica and carbon materials for fuel cell applications  Taeho Hwang: Kinetics and thermodynamics for the sequential complexation of methyltrioxorhenium by peroxide	
5:15 PM	Conclusion Rebecca Harvey, Symposium Co-Organizer	ESB 1001
5:30 PM	Reception Dinner and Award Ceremony Presenters, Faculty, and Industry are all Welcome	TBD

This symposium is generously supported by



