

# Complex Fluids Design Consortium Annual Meeting

Monday, February 3, 2014

Materials Research Laboratory, Room 2053  
University of California, Santa Barbara

- 9:00-9:30 am *CFDC: Welcome and Update*  
Prof. Glenn Fredrickson, Director CFDC, Chemical Engineering  
and Materials, UCSB
- 9:30-9:45 am *CFDC Simulation Code Update*  
Dr. Kris Delaney, MRL, UCSB
- 9:45-10:15 am *Cyclic Solvent Annealing: A Case Study in Computational Process  
Design*  
Sean Paradiso, MRL and Chemical Engineering, UCSB
- 10:15-10:45 am Coffee Break
- 10:45-11:15 am *Computational Study of Solvated Block-Copolymer Microphases*  
Dr. Wei Li, MRL, UCSB
- 11:15-11:45 am *Cylinder-Forming Block Copolymers Under Confinement:  
Placement and Rectification Aspects*  
Dr. Nabil Laachi, MRL, UCSB
- 11:45- 12:00 pm *Self-Consistent Field Theory of Directed Self-Assembly on  
Chemically-Prepatterned Surfaces*  
Dr. Ken-ichi Izumi, JSR and MRL, UCSB
- 12:00-1:00 pm Lunch on MRL 3<sup>rd</sup> Floor Patio
- 1:00-1:30 pm *Progress in Complex Langevin Simulations of Fluctuation Effects  
in Multispecies Block Copolymer Blends and Composites*  
Dr. Kris Delaney, MRL, UCSB
- 1:30-2:00 pm *Computational Study of Shape Rectification in Directed Self-  
Assembly*  
Tatsuhiro Iwama, Asahi Kasei and MRL, UCSB

- 2:00-2:30 pm      *Pressure-Driven Channel and Pipe Flow of Semi-Dilute Polymer Solutions*  
Yassine Dhane, Chemical Engineering, UCSB
- 2:30-3:00 pm      *The Disorder-to-Order Transition of the Landau-Brazovskii Model: Defects and Kinetic Effects*  
Michael Carilli, MRL and Physics, UCSB
- 3:00-3:30 pm      Coffee Break
- 3:30-4:00 pm      *Correlating Polymer Properties to Ionic-Conductivity in Poly(glycidyl ether)-Based Electrolytes*  
Kate Barteau, MRL and Chemical Engineering, UCSB
- 4:00-4:30 pm      *Defectivity of Cylindrical Directed Self-Assembly of Diblock Copolymers in Laterally Confined Thin Channel*  
Dr. Bongkeun Kim, MRL, UCSB
- 4:30-5:00 pm      *Improving Relay Dyes for Dye Sensitized Solar Cells with Increased Foerster Self-Transfer*  
Nancy Eisenmenger, MRL and Materials, UCSB
- 5:00-5:15 pm      *Genetic Algorithms for Identifying Globally Stable Phases in Block Copolymers*  
Carol Tsai, MRL & Chemistry, UCSB
- 5:15-5:30 pm      *The Coherent States Formulation of an AB Diblock Copolymer*  
Andrew Hamilton, MRL & Materials, UCSB
- 5:30 pm              Adjourn CFDC meeting
- 5:30-6:00 pm      CFDC Steering Committee Meeting  
Steering Committee Members Only, MRL 3117D

CFDC Dinner – 6:30 pm, Flavor of India