



13th Cohen-Register Microsymposium

June 7-8, 2005 ✧ Princeton University

Eisenhart Room, G201 Engineering Quadrangle



Tuesday, June 7

- Noon Arrival and Lunch in the Eisenhart Room (Engineering Quadrangle, Room G201)
- 1:00 pm **Ryan Bennett** (Cohen)
Strategies for Modifying Micellar-Templated Metal Nanocluster Arrays for Applications in Carbon Nanotube Synthesis
- 1:25 **Mingshaw Wu** (Chaikin/Register)
Shear Alignment of Sphere-Forming Diblock Copolymer Thin Films
- 1:50 **Zhizhong Wu** (Cohen/Rubner)
Layer-by-Layer Assembled Silica Nanoparticles on Flexible Substrates: Toward Antireflection Coatings on Deformable Lenses
- 2:15 **Jeff Quinn** (Register)
Synthesis of Poly(N-vinylcarbazole)-block-Polystyrene by Living Free Radical Polymerization
- 2:40 **** B • R • E • A • K ****
- 2:55 **Andy Miller** (Cohen/Hammond/Irvine)
Nanostructured Amphiphilic Block Copolymer Micelle Thin Films for Control of Antigen-Presenting Cell Function
- 3:20 **Vincent Pelletier** (Chaikin/Register)
Shear Alignment of Cylinder-Forming Diblocks by Fluid Flow and Application to Polarizers
- 3:45 **Zhi Li** (Cohen/Rubner)
Efforts Towards Polyelectrolyte-Multilayer-Based Antibacterial, Antireflection Coatings with Superhydrophobicity and Biocompatibility
- 4:10 **Hongwei Zhang** (Register)
Poly(ethylene glycol)-based Hydrogels Formed in Situ by Michael Reaction
- 4:35 **** B • R • E • A • K ****
- 4:50 **Roger Aronow** (Cohen/Rubner)
Rigid Nanoparticle Toughening of Amorphous Polymer Blends
- 5:15 **Rick Register** (work of Chiajen Lai and Lynn Loo)
Thermoreversible Transitions to and from the Hexagonally-Perforated Lamellar Structure in Diblock Copolymers
- 5:40 **Xiaoxia Sheng** (Cohen/Rubner)
Self-Decontaminating Coatings from Polyelectrolyte Multilayers
- 6:30 DINNER at Kalluri Corner (corner of Nassau and Olden Streets)

Wednesday, June 8

- 8:30 am Continental Breakfast in the Eisenhart Room (Engineering Quadrangle, Room G201)
- 8:50 **Daeyeon Lee** (Cohen/Rubner)
Hydrogen-Bonded Multilayer Coatings on Microparticles and Applications
- 9:15 **Weining Man** (Chaikin/Register)
Order-Disorder Transition in Thin Films of Cylinder-Forming Diblock Copolymers
- 9:40 **Adam Nolte** (Cohen/Rubner)
Determining the Young's Modulus of Polyelectrolyte Multilayer Films via Stress-Induced Buckling Instabilities
- 10:05 **** B • R • E • A • K ****
- 10:20 **Katsuyuki Wakabayashi** (Register)
Effects of Crystallinity and Neutralization on the Mechanical Properties of the Amorphous Phase in Semicrystalline Ionomers
- 10:45 **Ben Wang** (Cohen/McKinley)
Fabrication of Nanostructured Polymeric Composites Using Forced Assembly
- 11:10 **Sasha Myers** (Register)
Synthesis of ROMP/Anionic Block Copolymers
- 11:35 **Sharon Soong** (Cohen/Boyce)
Mechanics of Rate-Dependent Deformations of POSS-Filled Polymers