

2008 Schoenborn Graduate Research Symposium

Coffee 8:00 – 8:30 AM

Welcome 8:30 – 8:35 AM

Oral Presentations 8:35 – 10:05 AM

- 8:35 AM **Caryn Heldt** (<https://www.cbe.ncsu.edu/wp-content/uploads/2016/07/1.png>)
Affinity Adsorption of Viruses Using Small Peptide Ligand
- Young Kuk Jhon**
9:05 AM *Heteropolymers with Adjustable Monomer Sequences: Interfacial & Thermodynamic Behavior*
- Tamer Ahmed**
9:35 AM *Copolymerization of Vinylidene Fluoride with Hexafluoro-propylene in Supercritical Carbon Dioxide*

COFFEE BREAK 10:05 – 10:35 AM

Oral Presentations 10:35 AM – 12:05 PM

Biotechnology

- 10:35 AM **Xiaoyu Sun** (<https://www.cbe.ncsu.edu/wp-content/uploads/2016/07/3.png>)
Surface Modification of Electrospun Fibers
- Vinnie Verruto** (<https://www.cbe.ncsu.edu/wp-content/uploads/2016/07/1.png>)
11:05 AM *SANS of Water-in-Oil Emulsions: Asphaltenic Film Properties and their Relation to Emulsion Stability*
- Chun-Chao Wang**
11:35 AM *Systematic Analysis of Crosstalk in the PDGF Receptor Signal Transduction Network*

Lunch and Award Presentations 12:05 – 1:00 PM

Sharif Arifuzzaman

Multivariant Polymer Brushes: A new platform for understanding surface-protein interactions

Fadhel Azeez

Lithium Bis(Oxalato)Borate (LiBOB)-Based Electrolyte for Lithium-Ion Batteries

Erich Bain

Initiators for novel surface-grafted polymerization studies

Dipak Barua

Rule-based computational modeling of protein-protein interactions: structural modularity as a determinant of protein function

Suk Tai Chang (<https://www.cbe.ncsu.edu/wp-content/uploads/2016/07/3.png>)

Gel diodes: Unidirectional current response of an ionic junction between polyelectrolyte aqueous gels

Annie Chu (<https://www.cbe.ncsu.edu/wp-content/uploads/2016/07/1.png>)

Electrospun Nanofibers of Enzymatically-modified Polysaccharide for Drug Delivery

Murat Cirit

Analysis of a kinetic model characterizing the PDGF receptor signal transduction network

Charlotte Cooper

Functional roles of VapBC TA Loci in *Sulfolobus solfataricus*

Matej Krajcovic

Effect of Rac/PAK signaling on leading-edge morphology during cell migration

Sumit Gangwal (<https://www.cbe.ncsu.edu/wp-content/uploads/2016/07/2.png>)

Dielectrophoretic Assembly and Electrohydrodynamic Mobility of 'Janus' Particles in Electrical Fields

Matt Glicksman

Naturally Inspired Dye-Sensitized Solar Cells

Steve Gray

Biodiversity and Biogeography of *Thermotoga* Species

Lindsey Jerrim

Capillarity-Driven Deposition of Linear Assemblies from Nanoparticles and Microparticles

Jairus Kleinert

Electric field controlled flow and colloidal assembly in nanoscale-thin liquid films

Elizabeth Lynch

On-chip Self-assembly and Electric Field Manipulation of Bioparticles and Synthetic Particles for Separation and Detection of Cells

Adam Melvin

The Chemoattractants M-CSF and C5a Elicit Distinct Intracellular Signaling Kinetics in Macrophages

Jeong-Seok Na

Real-time Conductivity Analysis through Single-Molecule Electrical Junctions

Anand Patel

Phase Behavior of Hydroxypropyl Cellulose and Silk Fibroin Blend Films

Qing Peng

Atomic Layer Deposition of Zinc Hybrid Material from Diethyl Zinc and Ethylene Glycol

Celia Ponder

Environmental Footprint of Hospital Textiles Using Life Cycle Analysis

Kristen Roskov

Tissue Scaffolds of Bombyx mori silk and Poly(glycolic acid-co-lactic acid)

Fei Shen

Silica surface modifications for bio-applications

Saloman Turgman

Adsorption of Asphaltenic Aggregates onto Mixed Self-Assembled Monolayers

Rameshwar Yadav

Cross-linked Polymer Electrolyte Membranes for Applications in PEM Fuel Cells