



**Chemical & Biomolecular Engineering
November 4, 2017**

Location: Duncan Hall, Rice University

8:15AM – 9:00AM	Breakfast and Registration
9:00AM – 9:30AM	Keynote: Prof. Sherry Gao
9:30AM – 10:30AM	<p>Session 1 Chair: Walter Chapman</p> <ul style="list-style-type: none"> Nicholas Curtis: <i>Development and application of a CRISPRa system for Yarrowia lipolytica</i> Bobi Simonsen: <i>Enhancing ethanol production with RNA-engineering of Zymomonas mobilis</i> Kevin Le: <i>Development of a Potent Chimeric Antigen Receptor for Human Cytomegalovirus Therapy</i> Poonam Reena Bhikha: <i>Uncovering the Effects of Oxidative RNA Modifications on the Formation of Protein-RNA Complexes</i>
10:30AM–10:45AM	Coffee Break
10:45AM – 11:45AM	<p>Session 2 Chair: Sherry Gao</p> <ul style="list-style-type: none"> Ranad Humeidi: <i>Synthesis and Optimization of a Near-Infrared Fluorescent Choline Kinase α Inhibitor</i> Alondra Escobar: <i>High resolution optical imaging of human leukocytes in aqueous buffer</i> Andrea Gavilanes Trivino: <i>Preparation, Characterization and Reaction Kinetics of Green Cement: Ecuadorian Natural Modernite-based Geopolymers</i> Juan J. Izurieta: <i>Effect of Surface Moisture on Bonding Behaviour of Epoxy Coatings on Concrete</i>
11:45AM – 1:00PM	Lunch
1:00PM – 1:30PM	Keynote: Prof. Tom Senftle
1:30PM – 2:30PM	<p>Session 3 Chair: Rafael Verduzco</p> <ul style="list-style-type: none"> Aisha Hasan: <i>Antibody-Functionalized Nanophosphor Particles for Use as Reporters in Lateral Flow Assays</i> Neal Cardoza: <i>Fast Charging, High Energy Rechargeable Li-S batteries: Carbon Sulfur Composites from Autogenic Synthesis</i> James Owens: <i>Cellulose Nanocrystal Templates for Transparent Conductive Films</i> Victoria Hicks: <i>Detection and Quantification of Carbon Nanotubes Through Thermal Response to Electromagnetic Radiation</i>
2:3 PM – 2:45PM	Break

2:45PM- 3:45PM	<p>Session 4 Chair: Tom Senftle</p> <ul style="list-style-type: none"> • Kathryn Wilcox: <i>QCM-D Investigation of Swelling Behavior of Layer-by-Layer Thin Films upon Exposure to Monovalent Ions</i> • Fernando Lejarza: <i>BSA-Protected Gold Nanoclusters for On-Site Detection of Pb(II) in Water</i> • Lazaro Lopez Mendez: <i>Nanoscale Resolution Optical Microscopy of Fibrin and Platelet Matrix</i> • Njideka (Syndi) Nnorom: <i>Alternative Ion-Exchange Water Treatment Method-Reducing Mineral Scale in Evaporative Cooling Towers</i>
3:45PM-5:00PM	Break / Group Photo / Campus Tour
6:00PM	Symposium Reception-BRC Event Space

**All participants will attend keynote talks together, prior to splitting into sessions.
Students are asked to participate as audience members when not speaking.**