# Event Schedule

<table>
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<th>Time</th>
<th>Event Details</th>
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<tr>
<td>8:00 – 8:50 AM</td>
<td>Breakfast/Check-in (Room E100, Scott Labs)</td>
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<td>8:50 – 9:00 AM</td>
<td>Opening Remarks – Prof. Stuart Cooper (Room E001, Scott Labs)</td>
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<tr>
<td>9:00 – 10:20 AM</td>
<td>Oral Presentations – Session 1 (Room E001, Scott Labs)</td>
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<td>10:20 – 10:30 AM</td>
<td>Break</td>
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<td>10:30 – 11:30 AM</td>
<td>Oral Presentations – Session 1 (Room E001, Scott Labs)</td>
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<td>11:30 AM – 1:30 PM</td>
<td>Lunch and Poster Session (Room E100, Scott Labs)</td>
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<td>1:30 PM – 2:50 PM</td>
<td>Oral Presentations – Session 2 (Room E001, Scott Labs)</td>
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<td>2:50 – 3:00 PM</td>
<td>Break</td>
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<tr>
<td>3:00 – 4:00 PM</td>
<td>Oral Presentations – Session 2 (Room E001, Scott Labs)</td>
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<tr>
<td>4:00 – 5:00 PM</td>
<td>Reception/Informal Networking (Room E100, Scott Labs)</td>
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9:00 AM – 11:30 AM    Session 1 – Oral Presentations
         Room E001 – Scott Laboratories, 201 W. 19th Ave

9:00 – 9:20 AM    CO₂-Assisted Development of PCL-Gelatin Based Scaffolds for Biomedical Application
                  Hrishikesh Munj (Prof. David Tomasko)

9:20 – 9:40 AM    Single-Step Process for Simultaneous Removal of CO₂, SO₃ and NOₓ from Coal Combustion Flue Gas
                  Niranjani Deshpande (Prof. Liang-Shih Fan)

9:40 – 10:00 AM   Scale-up of an Amine-based Polymer Membrane for Fuel Cell Hydrogen Purification
                  Kartik Ramasubramanian (Prof. W.S. Winston Ho)

10:00 – 10:20 AM  Life Cycle Assessment of Multimegawatt Wind Turbines with Carbon Nanofiber-Reinforced Polymer Composite Rotor Blades
                  Laura A. Merugula (Prof. Bhavik Bakshi)

10:30 – 10:50 AM  Photo-responsive Micellar Solutions as Smart Drag-Reducing Fluids for Use in District Heating/Cooling Systems
                  Haifeng Shi (Prof. Jacques Zakin)

10:50 – 11:10 AM  D₂O and Nonane Non-equilibrium Droplet Growth in the Free Molecular Regime
                  Harshad Pathak (Prof. Barbara Wyslouzil)

11:10 – 11:30 AM  Non-noble Metal Catalysts for Oxygen Reduction Reaction (ORR) in Proton Exchange Membrane (PEM) Fuel Cells
                  Deepika Singh (Prof. Umit Ozkan)
Calcium Looping Process (CLP) for Clean $H_2$ and Electricity Production from Coal
Nihar Phalak (Prof. Liang-Shih Fan)

Catalytic Steam Reforming of Bio-derived Liquids
Ibrahim Ilgaz Soykal / HyunTae Sohn (Prof. Umit Ozkan)

Surface Morphology Variation and Solid-Phase Ionic Transfer Mechanisms in Chemical Looping Reactions
Elena Chung (Prof. Liang-Shih Fan)

Evidence of Surface Freezing in Supercooled n-alkane Nanodroplets
Viraj Modak (Prof. Barbara Wyslouzil)

Hemoglobin Regulates the Migration of Glioma Cells Along Poly(ε-caprolactone)-Aligned Nanofibers.
Alex Roth (Prof. Andre Palmer)

Nano-pore Confinement of Volatile C-H-O Species
Sumant Patankar (Prof. David Tomasko)

Iron Looping Process Demonstration and Development
Mandar Kathe (Prof. Liang-Shih Fan)
1:30 PM – 4:00 PM    Session 2 – Oral Presentations
Room E001 – Scott Laboratories, 201 W. 19th Ave

1:30 – 1:50 PM    Screen Development for Directed Evolution of Controllable Inteins Using Yeast Surface Display
Michael Coolbaugh (Prof. David Wood)

1:50 – 2:10 PM    Recent Computational Tools for the Analysis of Complex Biochemical Reaction Networks
Daniel Knight (Prof. Martin Feinberg)

2:10 – 2:30 PM    Magnetic Quantum Dots Coupled with Magnetic Microarrays for Molecular Detection and Separation
Kalpesh Mahajan (Prof. Jessica Winter)

2:30 – 2:50 PM    Role of Biogeochemical Cycles in Supply Chains: Improved C & N Footprints for Sustainability Assessment
Shweta Singh (Prof. Bhavik Bakshi)

BREAK

3:00 – 3:20 PM    Expansion of Human Amniotic Fluid Stem Cells in 3-dimensional Fibrous Scaffolds in Bioreactors
Meimei Liu (Prof. Shang-Tian Yang)

3:20 – 3:40 PM    Construction of Neurexin Biosensor and Screening of Potential Ligands
Jeevan Baretto (Prof. David Wood)

3:40 – 4:00 PM    High-yield and High-titer n-Butanol Production in Clostridium Tyrobutyricum with External Driving Forces
Yingming Du (Prof. Shang-Tian Yang)

4:00 PM – 5:00 PM    Reception/Informal Networking
Room E100 – Scott Laboratories, 201 W. 19th Ave