

The 2023 CAPA Winter Symposium

December 20th, 2023, 9:00 am – 5:30 pm

Chemistry Department, CHE 100, University of South Florida, 12111 USF Sweetgum Ln, Tampa, FL 33620

SCHEDULE

9:00-9:05 Welcome remarks (*Wenshe Liu*, CAPA President)

Session 1: The Synthesis Session (Chaired by *Xiaodong Shi*, Professor, University of Maryland)

9:05-9:30 **New Chemical Methods and Strategies for Molecular Imaging**
Qiu Wang, Professor, Duke University

9:30-9:55 **Total Synthesis for Chemical Innovation and Biological Discovery**
Mingji Dai, Professor, Emory University

9:55-10:20 **Enantioselective C-C Bond Formation via Organoboron Compounds**
Ming Chen, Associate Professor, Virginia Tech

10:20-10:35 Coffee Break and Group Photo Time

10:35-11:00 **Pi-Extended Porphyrins: from Knows to Unknowns**
Hong Wang, Professor, University of North Texas

11:00-11:25 **Distal Functionalization via Transition Metal Catalysis**
Haibo Ge, Professor, Texas Tech University

11:25-11:50 **Into the Next Dimension: Pharmaceutically Relevant sp³-Rich Scaffolds**
Tian Qin, Associate Professor, University of Texas Southwest Medical Center

11:50-1:00 Lunch Break (lunch boxes provided)

Session 2: The Polymer & Material Science Session (Chaired by *Lei Fang*, Professor, Texas A&M University)

1:00-1:25 **Polymer Materials for Sustainable Energy and Environment**
Guoliang Liu, Associate Professor, Virginia Tech

1:25-1:50 **Diversifying Polymer Properties through Microstructure Engineering**
Mingjiang Zhong, Assistant Professor, Yale University

1:50-2:15 **Dynamic Approaches to Synthetic Receptors for Molecular Recognition of Hydrophilic Substrates in Water**
Wenqi Liu, Assistant Professor, University of South Florida

2:15-2:40 **Entropically Driven Ring-Opening Polymerization for Circular Polymer Economy**
Ying Yang, Assistant Professor, University of Nevada

2:40-3:05 **Sustainable Polymers: History, Challenges, and Circularity**
Chuanbing Tang, Professor, University of South Carolina

3:05-3:20 Coffee Break

Session 3: The Chemical Biology Session (Chaired by *Xue Gao*, Assistant Professor, Rice University)

3:20-3:45 **Directed Evolution of an Adenine Base Editor with Increased Context Compatibility**
Weixin Tang, Assistant Professor, University of Chicago

3:45-4:10 **RNA Editing-Based Sensors for Intracellular and Extracellular Cues**
Xiaojing Gao, Assistant Professor, Stanford University

4:10-4:35 **Harnessing generative AI to Decode Enzyme Catalysis and Evolution for Enhanced Engineering**
Wenjun Xie, Assistant Professor, University of Florida

4:35-5:00 **Synthetic Biology and Enzymology in Natural Product Research**
Yousong Ding, Professor, University of Florida

5:00-5:25 **Multiplex Base-Editing Enables the Discovery of Novel Fungal Natural Products and Biocatalysis**
Xue Gao, Assistant Professor, Rice University

5:25-5:30 Closing Remarks (*Wenshe Liu*, CAPA President)

6:15-8:30 Dinner Gathering for CAPA Members