

INORGANIC SEMINAR

Professor Yujie Sun



Stella and Hoke S. Greene Chair in Catalytic Chemistry
Department of Chemistry, University of Cincinnati

Exploring Unconventional Electrochemical and Photochemical Systems: from Bipolar Hydrogenation to Near Infrared Light-Absorbing Chromophores

Sustainable chemical synthesis requires strategies that more effectively harness renewable carbon sources and solar energy. Biomass provides an abundant and renewable carbon feedstock, while solar energy offers a clean and inexhaustible driving force for chemical transformations. Motivated by these opportunities, my research group develops unconventional electrochemical and photochemical systems that enable more efficient utilization of renewable resources. In this presentation, I will discuss our recent progress in hybrid electrocatalytic platforms for bipolar organic hydrogenation, as well as the design of deep-red and near-infrared light-absorbing chromophores for organic transformations and bioimaging applications.