



March 6, 2017, 12:00 pm

Seaver Science Library, Room 150

SSC Auditorium next to the library

Professor Randall Goldsmith

Department of Chemistry

University of Wisconsin, Madison

Single-Molecule Spectroscopy with Molecular Catalysts, Conductive Polymers, and Optical Microresonators

Abstract:

Measurements on individual molecules have revolutionized how chemists can perceive molecular properties and dynamics, yet single-molecule techniques can only be applied with considerable experimental constraints. The Goldsmith group develops new tools through chemical synthesis, micro and nanophotonics, and microfluidics that allow single-molecule techniques to be applied in previously inaccessible scenarios and enable new measurements. I will discuss recent measurements on the initiation of individual organometallic catalysts, observation of single-molecule binding dynamics at millimolar concentrations, detecting the heat dissipated from molecules using optical microresonators, hybrid photonic-plasmonic systems, and spectroscopy on individual conductive polymer molecules.

Hosted by Professor Anna Krylov

The scientific community is invited

USC Department of Chemistry

chem.usc.edu