

KANSAS STATE UNIVERSITY

College of Arts and Sciences
Department of Chemistry

ADVANCE Distinguished Lecture Series

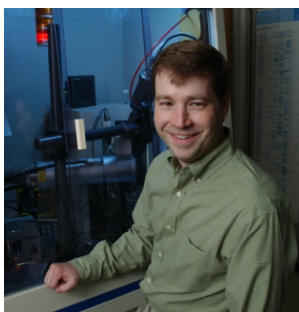
Thursday, 11 March | 1:30 pm | Virtual

<https://ksu.zoom.us/j/99051594843?pwd=UUI4TFINCvP5UHQvSTRvcW90ZURSQT09>

Meeting ID: 990 5159 4843

Passcode: 346718

“Metal-Organic Frameworks: From Energy Storage to Drug Delivery”



Professor Adam J. Matzger

Charles G. Overberger Collegiate Professor of Chemistry
University of Michigan, Ann Arbor

ABSTRACT: For well over a decade, metal-organic frameworks have been investigated as the most promising class of hydrogen storage materials. Commercial potential has been limited by several factors including modest volumetric storage capacities in storage systems. Solutions to this problem will be discussed with an emphasis on packing density optimization. Discussion will pivot to applications of MOFs in drug delivery followed by approaches to spatially inhomogeneous linker distributions through selective ligand exchange/functionalization.

BIO: Adam J. Matzger received his B.A. degree in 1992 from Oberlin College. His Ph.D. was completed at the University of California at Berkeley in the group of K. Peter C. Vollhardt, where he conducted theoretical and experimental investigations of dehydrobenzoannulenes and phenylenes. He went on to postdoctoral work jointly with Nathan S. Lewis and Robert H. Grubbs at the California Institute of Technology investigating a novel class of chemical sensors. In 2000, he joined the faculty at the University of Michigan at Ann Arbor, where he is now the Charles G. Overberger Collegiate Professor of Chemistry and Professor of Macromolecular Science and Engineering. His current research interest focus is on organic materials in the solid state and encompasses pharmaceuticals, organic electronic materials, explosive cocrystals, and porous materials.