Department of Chemistry Seminar Series
Spring 2023

Friday, February 17, 2023, 3:30 PM – **HPA1-O119 (Health Sciences)**
Host: Titel Jurca and Uribe-Romo

Smart and Programmable Crystalline Sponges for Protection from Bench to Market

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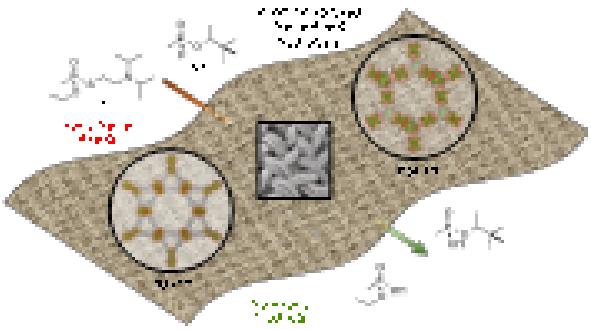

Metal-Organic Frameworks (MOFs) are a class of porous, crystalline materials composed of metal-based nodes and organic ligands that self-assemble into multi-dimensional lattices. In contrast to conventional porous materials such as zeolites and activated carbon, an abundantly diverse set of molecular building blocks allows for the realization of MOFs with a broad range of properties. We have developed an extensive understanding of how the physical architecture and chemical properties of MOFs affect material performance in applications such as catalytic activity for chemical warfare agent detoxification. This talk will focus on MOFs for hydrolysis from solution-phase to solid-state reactivity. Moving MOFs from bench to market within industrial sectors will be discussed as well.