



CHEMISTRY & CHEMICAL BIOLOGY SEMINAR:

Molecular Design of Solids and Surfaces

Megan Jackson

Postdoctoral Fellow
University of California, Berkeley

Date:

4/9/2021

Time:

2:30 PM-4:00 PM

Link:

Please contact
snsgradstaff@ucmerced.edu
for the Zoom link and
passcode.

About the Speaker:

Megan Jackson is originally from the San Francisco Bay Area. She received her B.S. in chemistry from Caltech, where she worked with Prof. Harry Gray. She then pursued a Ph.D. in chemistry in Prof. Yogesh Surendranath's group at MIT as a National Defense Science and Engineering Graduate Fellow. Her research focused on understanding the factors governing the thermodynamics and kinetics of interfacial inner-sphere electron transfer steps, i.e. electron-transfer steps in which a bond is broken or formed at an electrode surface. She is currently an Arnold O. Beckman Postdoctoral Fellow in Prof. Jeffrey Long's group at the University of California, Berkeley, where she studies the molecular principles behind the crystallization of metal-organic frameworks.

Abstract:

Novel materials will be central to solving some of the greatest challenges facing us in the 21st century, including energy storage and utilization, chemical separations, water purification, and targeted drug delivery. This talk will focus on bringing molecular-level understanding to two areas of materials design. In part one, I will focus on bringing molecular-level precision to heterogeneous electrocatalytic active sites through a new class of materials called graphite-conjugated catalysts. In part two, I will discuss strategies for controlling the phase, size, shape, and defect chemistry of a family of anisotropic metal-organic framework crystals that show promise in gas storage and separation.



For more information, contact : Anne Kelley
amkelley@ucmerced.edu