

**FALL 2021
CHEMISTRY
SEMINAR SERIES**



DR. JENNY YANG

*Department of Chemistry
University of California
Irvine, CA*

**HOST:
DR. PROKOPCHUK**

**ALL THOSE
INTERESTED ARE
WELCOME TO
ATTEND**

“Catalysis for Renewable Fuels”

**Friday, October 22, 2021, 11:30 AM
Seminar via Zoom**

Abstract: My group is focused on developing molecular catalysts for energy conversion (redox) reactions. The thermochemistry for key bond-making and -cleavage steps for H⁺ reduction to H₂ and CO₂ reduction to HCO₂⁻, and how to apply these properties to elicit product selectivity will be discussed. Our recent work in this area has led to the discovery of a catalyst that reversibly catalyzes CO₂ reduction and HCO₂⁻ oxidation. Reversible reactivity is a property that had previously only been observed in the formate dehydrogenase enzymes, and indicates the catalyst is operating near the thermodynamic potential, or very low overpotential.

Biographical sketch: Jenny Yang received her BS at UC Berkeley (research with Professor Jeffrey R. Long) and completed her doctoral studies at MIT under the guidance of Professor Daniel G. Nocera. After her postdoctoral position with Dr Daniel L. Dubois at the Pacific Northwest National Laboratory, she was hired as a research scientist in the Center for Molecular Electrocatalysis. After a subsequent position as a scientist at the Joint Center for Artificial Photosynthesis, she started her current position as a faculty member at the University of California, Irvine. She was promoted to Associate Professor with tenure in 2019 and Professor in 2021.

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