



DR. JOHN SWIERK

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**“MECHANISTIC INVESTIGATIONS OF PHOTOREDOX
CATALYSIS”**

**March 12th, 2021 ~ 11:30AM
Seminar via Zoom**

Abstract

Photoredox catalysis is transforming modern synthetic chemistry. Expensive, hard to handle stoichiometric reagents can be replaced by short-lived excited states using a visible light absorbing photocatalyst. While the scope of photoredox methods has grown at an exceptional pace, mechanistic and kinetic understanding has lagged behind. Using a prototypical alpha-amino arylation reaction as an example, the reaction intermediates and kinetics of each step are determined using a mixture of transient absorption spectroscopy and electrochemical methods. Kinetic modeling is then used to rationalize the design of this and other photoredox reactions.

**SPRING 2021
CHEMISTRY
SEMINAR SERIES**

**HOST:
DR. GALOPPINI**

**ALL THOSE
INTERESTED ARE
WELCOME TO
ATTEND**

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