



MURI ANNUAL REVIEW 2014

AFOSR MURI Novel Catalytic Mechanisms for
the Chemical Reduction of Carbon Dioxide
to Energy-Dense Liquids
Tuesday, January 20, 2015
UCSD Faculty Club

AGENDA

- 8:00am – Pick up at Hotel (hotel shuttle starting at 7:45am). Coffee and pastries will be served at the Faculty Club, or on your own.
- 8:30am – Welcome, scope of the project, and principles from molecular catalysts. Cliff Kubiak, UCSD
- 9:05am – Photoelectrochemical and electrochemical CO₂ reduction: Theoretical investigations. Emily Carter, Princeton University
- 9:40am – Photoelectrochemical CO₂ reduction: Spectroscopic investigations. Anders Nilsson, Stanford University
- 10:15am – 15 minute break (coffee and snacks)
- 10:30am – Electrochemical CO₂ reduction: Theoretical investigations. Jens Nørskov, Stanford University
- 11:05am – Enhanced Carbon Dioxide Reduction Mediated by Impurity Ion Chelation, Yogi Surendranath, MIT
- 11:30am – Lunch and poster viewing time.
- 1:00pm – Photoelectrochemical CO₂ reduction: Using Visible Light on Semiconductors. Nate Lewis, Caltech
- 1:35pm – Theoretical investigations of CO₂ reduction. Victor Batista, Yale
- 1:55pm – Design of functional semiconductor interfaces and new organic catalytic systems for CO₂ reduction. Andrew Bocarsly, Princeton University
- 2:30pm – Poster viewing continues (drinks and snacks)
- 3:30pm – Reduction of CO₂ to Methanol Catalyzed by Biomimetic Organo-Hydrides, Charles Musgrave, University of Colorado
- 3:50pm – Sum frequency studies of CO₂ reduction catalysts. Tim Lian, Emory
- 4:10pm – Hydrogenation of CO₂ in Switchable Ionic Liquids, John Linehan, Pacific Northwest National Laboratory
- 4:30pm – Internal and external collaboration discussions, discussion of research and new ideas and opportunities.
- 6:00pm – Leave for dinner, Fidel's Little Mexico Restaurant, Solana Beach