

# 2015 AFOSR MURI on CO<sub>2</sub>

## Poster Session Program

January 15, 2015

University of California, San Diego, La Jolla, CA

### Hydrogen Evolution in Alkaline Solutions

Karen Chan, Chuan Shi, Joey Montoya, Jens Nørskov<sup>a,†</sup>

### Geometrical considerations for light absorbers for photoelectrochemical CO<sub>2</sub> reduction

Robert Coridan, Nathan S. Lewis<sup>b,†</sup>

### Surface Functionalization of Gallium Phosphide for CO<sub>2</sub> reduction

Victoria Dix, Nathan Lewis<sup>b,†</sup>

### Homogeneous electrochemical reduction of CO<sub>2</sub> by Ni(cyclam)

Jesse Froehlich, Alissa Sasayama, Clifford Kubiak<sup>c,†</sup>

### CO<sub>2</sub> Reduction on Ruthenium Dioxide

Mohammadreza Karamad, Heine A. Hansen, Jan Rossmeisl and Jens K. Nørskov<sup>a,†</sup>

### Py-catalyzed CO<sub>2</sub> Reduction on GaP Electrodes: Can Surface Hydrogen Atoms Play a Role?

Martina Lessio, Christoph Riplinger, Emily A. Carter<sup>d,†</sup>

### Synthesis of Alkoxy-Pyridine Derivatives for Catalytic Activity Testing and pKa Characterization

Leon Lin, Eric Yu, Kristie Yu, Raymond N. Dominey, Emma W. Goldman<sup>e,‡</sup>

### High Pressure Solution NMR: Safe and Easy

John Linehan, James Franz, Clement Yonker, Scott Wallen, Wendy Shaw<sup>f,‡</sup>

### The Koper Effect: CO dimerization in CO<sub>2</sub> electroreduction on Cu

Joseph H. Montoya, Chuan Shi, Karen Chan, Jens K. Nørskov<sup>a,†</sup>

### Sawhorse Ni(0) Tetracarbene Complexes: Synthesis, Structural Studies, and Spectroscopy

Mark H. Reineke, Matthew D. Sampson, Clifford P. Kubiak<sup>c,†</sup>

### High Selectivity for Ethylene from Carbon Dioxide Reduction over Copper Nanotube Electrocatalysts

F. Sloan Roberts, Kendra P. Kuhl, Anders Nilsson<sup>a,†</sup>

### Iridium complexes for the generation of methanol from formic acid<sup>†</sup>

Alissa Sasayama, Clifford Kubiak<sup>c,†</sup>

### Design of a Catalytic Active Site for CO<sub>2</sub> Reduction<sup>†</sup>

Travis W. Shaw, Andrew B. Bocarsly<sup>d,†</sup>

### Chemical and Electrochemical Kinetics of CO<sub>2</sub> Reduction on Transition Metal Surfaces

Chuan Shi, Karen Chan, Heine A. Hansen, Joseph H. Montoya, Jens K. Nørskov<sup>a,†</sup>

### Molecular Models for Spin-Crossover, Catalysis, and Proton Conduction in Metal Organic Frameworks

Zack Terranova, Jordi Cirera, Francesco Paesani<sup>c,‡</sup>

### The Effect of EMIM+ on CO<sub>2</sub> Electrochemical Reduction

Makoto Urushihara, Karen Chan, Chuan Shi, Jens Nørskov<sup>a,†</sup>

### Enhanced Carbon Dioxide Reduction Mediated by Impurity Ion Chelation

Anna Wuttig, Yogesh Surendranath<sup>g,‡</sup>

### Affiliation Key

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