

PROGRAM FOR THE
CATALYSIS CLUB OF CHICAGO
2020 SYMPOSIUM

AUGUST 27TH AND 28TH, 2020

VIRTUAL MEETING
HELD *VIA* ZOOM

Day 1 (Thursday, August 27th, 2020) – All times listed in CDT

Morning Session

10:00 **Opening Remarks**

10:15 **Controlled Synthesis, Characterization, and Catalytic Activity of Supported Boron Catalysts**

Melissa Cendejas, University of Wisconsin - Madison

10:40 **Keynote Address**

Bridging Molecular and Heterogeneous Electrocatalysis Through Graphite Conjugation

Prof. Yogesh (Yogi) Surendranath, Massachusetts Institute of Technology

11:30 **Investigating Transition Metal Doping in Strontium Iridate for the Oxygen Evolution Reaction in Acid**

Jane Edgington, Northwestern University

11:55 **Electronic Metal-Support Communication in Surface Organometallic Catalysis**

Dr. David (Dave) Kaphan, Argonne National Laboratory

12:30 **Lunch and Vendor Lightning Talks**

Afternoon Session

13:30 **Break / Poster Setup Time**

13:45 **Poster Session #1**

14:45 **Interconversion of agglomerated Pd domains and ion-exchanged Pd²⁺ in CHA zeolites**

Trevor Lardinois, Purdue University

15:10 **Computational Interrogation of Single-Site, Oxide-Supported Group 4 Metal Hydrides for Ethylene Oligomerization**

Neha Mehra, University of Notre Dame

15:35 **Homogeneously catalyzed Guerbet chemistry in flow reactor**

Nicholas Wang, University of Illinois at Urbana-Champaign

16:00 **Closing Remarks – Day 1**

Day 2 (Friday, August 28th, 2020) – All times listed in CDT

Morning Session

10:00 **Opening Remarks**

10:15 **High-Valent Metal-Oxo Species for C–H Activation and Where to Find Them: A Computationally Guided Expedition**

Andrew Rosen, Northwestern University

10:40 **Keynote Address**

Molybdenum carbide catalysts for biomass upgrading – from bulk to nanoscale

Dr. Daniel (Dan) Ruddy, National Renewable Energy Laboratory

11:30 **Computational investigation of Al distribution in SSZ-13 zeolites and its influence on Cu speciation**

Yujia Wang, University of Notre Dame

11:55 **Electric-Field Assisted Modulation of Surface Thermochemistry**

Dr. Manish Shetty, University of Minnesota

12:20 **Lunch and Focus Groups**

Afternoon Session

13:20 **Break / Poster Setup Time**

13:35 **Poster Session #2**

14:35 **2020 Herman Pines Award Address**

Well-Defined Materials for Hydrocarbon Transformations: Zeolite Structure / Property Relationships for Catalysis

Dr. Christopher (Chris) Nicholas, Honeywell UOP

15:35 **Effects of Dioxygen Pressure on Turnover Rates of NO_x Selective Catalytic Reduction with NH₃ on Cu-CHA Zeolites**

Casey Jones, Purdue University

16:00 **Concluding Remarks, Announcement of Poster Prizes and 2020-2021 Club Officers**