

Southern California Organometallics Meeting

February 10, 2019

Sponsored by the

Loker Hydrocarbon Research Institute

USC Department of Chemistry

Anton B. Burg Foundation

Morning session

9:30-10:00 am Poster setup
Coffee, snacks Olah Library
LHI Bistro

First Plenary Session

SLH 200

10:00 am Opening Remarks / *Lewis Acid Catalysts: Tackling Environmental Plastic Buildup*
Megan Fieser, USC

10:15 am *Redox-Processes in 1D, 2D and 3D Materials*
Michael Inkpen, USC

10:30 am *Geometry Change of a Series of Zr Compounds in Lactide Polymerization*
Ruxi Dai, UCLA (Diaconescu Group)

10:50 am Break

11:00 am *Catalytic Oxidation for Recycling Carbon Fiber Reinforced Polymer Composites*
Carlos Navarro, USC (Williams Group)

11:20 am *Coordination of Macrocyclic Ligands to the Actinides*
Greggory Kent, UCSB (Hayton Group)

11:40 am Flash Talks
Synthesis and Reactivity of a Borane Radical Stabilized by the V(IV/V) Redox Couple
Anthony Wong, UCSB (Menard Group)

Reversible Bond Activation at a Non-Metal Center
Daniel Tolentino, UCSD (Bertrand Group)

Synthesis of Bis(Trityl)Complexes as Precursors to Metal(0) Nano clusters
Alexander Touchton, UCSB (Hayton Group)

Design of a Hangman-Type Co Macrocycle for CO₂ Reduction
Eric Johnson, USC (Marinescu Group)

Catalytic Generation of Chlorine Dioxide
Tayyebah Bakhshi, UCSB (Abu-Omar Group)

12:00-1:20**Lunch / Poster Session (LHI Bistro / Olah Library)****Second Plenary Session**

SLH 200

1:20 pm *Harnessing the Reactivity of Boron Vertex-Centered Radicals in Carborane Clusters*
Harrison Mills, UCLA (Spokoyny Group)

1:40 pm *Readily Available Primary Aminoboranes as Powerful Reagents for Aldimine Synthesis*
Glen Junor, UCSD (Bertrand Group)

2:00 pm *Interfacial Growth of Conjugated Metallopolymers for CO₂ Reduction*
Nicholas Orchanian, USC (Marinescu Group)

2:20 pm *Synthesis and Characterization of a Tetra-Nickel Cluster Capable of Stabilizing Four Nickel(III) Centers*
Samuel Jacob, UCSB (Menard Group)

2:40 pm Break

2:50 pm *Electrochemically Controlled Redox-Switchable Ring-Opening Polymerization*
Zachary Hern, UCLA (Diaconescu Group)

3:00 pm *Chiral Ancillary Ligands for Use in Bis-Cyclometallated Iridium Complexes*
Savannah Kapper, USC (Thompson Group)

3:20 pm *Precatalyst Evolution and Death in Ruthenium-Catalyzed Coupling of Amines and Alcohols*
Valeriy Cherepakhin, USC (Williams Group)

3:40 pm Flash Talks
A Boron Cluster-Based Approach to Nucleophilic Borylation
Xin Mu, UCLA (Spokoyny Group)

Investigating the C-H Bond Activation Mechanism at Phosphorous (V) Oxides using Vanadium Phosphorous Oxide (VPO) Model Complexes
Timothy Carroll UCSB (Menard Group)

Ruthenium Catalyzed Tandem Pictet-Spengler Reaction
Anju Nalikezhathu, USC (Williams Group)

Divergent Synthesis of Well-Defined Copper Nanoclusters
Jesse Peltier, UCSD (Bertrand Group)

Activation of Unsaturated Small Molecules Using 9; 10-Anthracenyl-Linked Bisphenoxide Group IV Complexes
Meaghan Bruening, Cal. Tech. (Agapie Group)

Finding harmony among incompatibility in the selective oxidation of CH_4 to CH_3OH with atmospheric O_2
Benjamin Natinsky, UCLA (Liu Group)

Poster Session

12:00-1:20 and 4:00-6:00 pm

Olah Library

Lewis Acid Catalysts: Tackling Environmental Plastic Buildup
Juan Pablo de los Rios, Sophia Kosloski, Yvonne Manjarrez, USC (Fieser Group)

Redox-Processes in 1D, 2D and 3D Materials
Joseph Parr, Christina Trang, USC (Inkpen Group)

Reversible Bond Activation at a Non-Metal Center
Daniel Tolentino, UCSD (Bertrand Group)

Synthesis of Bis(Trityl)Complexes as Precursors to Metal(0) Nano clusters
Alexander Touchton, UCSB (Hayton Group)

Design of a Hangman-Type Co Macrocyle for CO_2 Reduction
Eric Johnson, USC (Marinescu Group)

A Boron Cluster-Based Approach to Nucleophilic Borylation
Xin Mu, UCLA (Spokoyny Group)

Investigating the C-H Bond Activation Mechanism at Phosphorous (V) Oxides using Vanadium Phosphorous Oxide (VPO) Model Complexes
Timothy Carroll, Rachel Garwick UCSB (Menard Group)

Ruthenium Catalyzed Tandem Pictet-Spengler Reaction
Anju Nalikezhathu, USC (Williams Group)

Is It Really Bifunctional?
Ivan Demianets, USC (Williams)

Activation of Unsaturated Small Molecules Using 9; 10-Anthracenyl-Linked Bisphenoxide Group IV Complexes
Meaghan Bruening, Cal. Tech. (Agapie Group)

Open-Shell Mo(V) Nitrides; Phosphides; and Alkylidyne: Does Radical Character Dictate Coupling Chemistry
Gwendolyn Bailey, Cal. Tech. (Agapie Group)

Zirconium Complexes Supported by a Ferrocene-Based Ligand as Redox Switches for Hydroamination Reactions
Yi Shen, UCLA (Diaconescu Group)

Redox Switchable Polymerization by Aluminum Complexes
Amy Lai, UCLA (Diaconescu Group)

Catalytic Generation of Chlorine Dioxide
Tayyeb Bakhshi, UCSB (Abu-Omar Group)

Divergent Synthesis of Well-Defined Copper Nanoclusters
Jesse Peltier, UCSD (Bertrand Group)

Investigating the Lewis-Acid Assisted Electrochemical Reduction of Carbon Dioxide by Crown-Containing Complexes
Nehal Idris, UCI (Yang Group)

Proximal Lewis Acid Effects on Small Molecule Activation by SNS Pincer Complexes
Jeff Barlow, UCI (Yang Group)

Modification and Complexation of Azaphosphatranes as Ligands in Coordination Chemistry
Zachary Thammavongsy, UCI (Yang Group)

6:00 pm

Dinner