

# 2024 Ohio Inorganic Weekend

November 15<sup>th</sup> and 16<sup>th</sup>

Wayne State University

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# Itinerary

## Poster Session, Friday, November 15, 2024

Location: chemistry building atrium

Food: pizza and drinks will be provided

5:00-8:00pm- Registration in atrium of the chemistry building (5101 Cass Avenue)

6:00-9:00pm Poster Session

6:00-7:30pm Poster Session 1

7:30-9:00pm Poster Session 2

## Saturday, November 16, 2024

Location: Schaap Hall, Chemistry Building Atrium

Food: light pastries and coffee will be provided in the morning; lunch is not provided

Registration 8:15-9:00am in the atrium of the chemistry building

### **9:00am-10:20am Session 1, chaired by Prof. Michael Young**

9:00-9:15 **Qing Yun Li**

Tuning Formamidinate Ligand Scaffolds to Extend Excited State Lifetimes in Paddlewheel Dirhodium Photocatalysts

9:15-9:30 **Margaret Ball**

The Role of Electron Transfer in Copper-Mediated C(sp<sup>2</sup>)-H Trifluoromethylation

9:30-9:45 **Alexander Stone**

Non-Covalent Interactions of the Useful Air-Stable Primary Phosphine Ortho-Phosphinophenol

9:45-10:00 **Man Kshetri**

Engineering Novel Amphiphilic Platinum(IV) Complexes to Co-Deliver Cisplatin and Doxorubicin

10:00-10:15 **Erin Ramey**

Dinuclear First-Row Photosensitizer for Use in Hydrogen Evolution.

### **10:20-10:40am Break 1**

### **10:40-11:50am Session 2 Chaired by Professor Daniela Arias-Rotondo**

10:40-10:55 **Justin Miller**

Comparison of the Stability and Reactivity of Square Pyramidal Cobalt(III) Alkyl Complexes with a Redox-Active and Redox-Inert Ligand Framework

10:55-11:10 **Lingfeng Yin**

Catalytically Relevant Organocopper(III) Complexes

11:10-11:25 **Michael O. Lengel**

Synthesizing Iron-Hyponitrite Complexes Relevant to NO Reduction in Flavodiiron Nitric Oxide Reductases

11:25-11:40 **Donovan Dugger**

Ligand-controlled Selective Couplings of Organotetrafluorosilicate and Aryldiazonium salts

**11:50am-1:30 pm Lunch Break**

**1:30-2:50pm Session 3 Chaired by Professor Matt Dent**

1:30-1:45 **Christopher Woodley**

Cu Doping Increases Capacity Retention in  $\text{LiNi}_{0.6}\text{Mn}_{0.2}\text{Co}_{0.2}\text{O}_2$  (NMC622) by Altering the Potential of the Ni-Based Redox Couple and Inhibiting Particle Pulverization

1:45-2:00 **Josalyne Beringer**

Linked Dicopper Bis- $\beta$ -determinates: Flexible Metal-Metal Distances and Ammonia Activation

2:00-2:15 **Sara Worku**

Selective Separation of Rare-Earth Elements

2:15-2:30 **Elizabeth R. Pugliese**

Organometallic Rare Earth Complexes and Their Prospects in Single-Molecule Magnet Design

**Break 2 2:30-2:50 pm**

**Session 4: 2:50-3:55pm Chaired by Professor Michael Wade Wolfe**

2:50-3:05 **Elliot Furr**

Protein Based Lanthanide Capture from Coal Fly Ash

3:05-3:20 **Andrew LaDuka**

The Effect of Secondary Sphere Hydrogen Bonds on  $\text{O}_2$  Reactivity within a Non-Heme Iron Complex

3:20-3:35 **Md Masudur Rhaman**

Addressing Synthetic Challenges in Calcium Sulfide Aerogel Formation via Oxidative Assembly

3:35-3:50 **Rashidat Bamidele**

Synthesis of Metal Oxide Materials by Non-Hydrolytic Mineralization of Organic Precursors