



**2015 Ohio Inorganic Weekend**  
**November 13-14, 2015**  
**Bowling Green State University**

**Poster Presentations**

Friday, November 13, 2015  
7:00-10:00 pm  
Bowen Thompson Student Union 228

#	Title	Presenter		Affiliation	Group
<b>Bio-inorganic</b>					
1	Synthesis and Spectroscopic Characterization of Ferric Heme-Thiolate Complexes as Models for Cytochrome P450 <sub>nor</sub>	Andrew	Hunt	University of Michigan	Lehnert
2	Synthesis, Characterization, and Reactivity of Ferrous Heme-Nitrosoalkane Complexes	Diamond	Thomas	University of Michigan	Lehnert
3	Preparation of Stable Redox Active Compounds for Flow Battery Applications	Desmond	Madu	University of Michigan	Lehnert
4	A Series of [NiFe] Hydrogenase Models	Shelby	Behnke	Ohio State University	Shafaat
5	Catalytic hydrogen production in an artificial metalloenzyme	Jeffrey	Slater	Ohio State University	Shafaat
6	Impact of Secondary Sphere Perturbation on Enzymatic Hydrogen Evolution	Haleigh	Monaco	Ohio State University	Shafaat
7	Azurin as a Protein Scaffold for the Construction of a Functional Nickel Metalloenzyme	Matthew	O'Connor	Ohio State University	Shafaat
8	Using resonance Raman spectroscopy to probe cofactor assembly in R2lox, a novel heterobimetallic oxidase	Pearson	Maugeri	Ohio State University	Shafaat
9	Investigating the role of Riboflavin Binding Protein in copper transport and storage	Hafsa	Masood	University of Michigan Dearborn	Smith
10	Exploring Vitamin B12 Processing and Storage with Advanced Cobalamin Conjugates	Anthony	Giovengo	Kent State University	Brasch
11	Reactivity and Mechanistic Studies of Non-Heme Iron Nitrosyl Model Complexes	Claire	Kozemchak	University of Michigan	Lehnert
12	Synthesis and Photochemical Studies of New Photoactivable Nitroxyl (HNO)-releasing Compounds	Mohammad	Rahman	Kent State University	Sampson
13	Spectroscopic Investigation of H <sub>2</sub> S Reactivity with Ferric Myoglobin (Mb) and Neuroglobin(Ngb)	Jacques	Kumutima	University of Michigan	Lehnert
14	R2lox: A novel system to investigate metallocofactor assembly, metal selection, and pathogenicity	Effie	Miller	Ohio State University	Shafaat
15	Characterization of Blue Copper Proteins Utilized in Ammonia Oxidation Pathway of Ammonia Oxidizing Achaea	Michael	Otten	Bowling Green State University	Torelli

#	Title	Presenter		Affiliation	Group
16	Comparative analysis of binding of SufU and IscU from Gram positive and Gram negative bacteria with metal ions	Poorna	Roy	Bowling Green State University	Torelli
17	Tagging Non-Emissive Ruthenium Based Photodynamic Therapy Agents using Cu(I) Catalyzed Alkyne-Azide Click Chemistry	Thomas	Rohrbaugh	Ohio State University	Turro
<b>Coordination Chemistry</b>					
18	Anionic cryptands as potential lanthanide chelators	Alex	Zuhl	Wayne State University	Allen
19	Concerted Experimental and Theoretical Efforts towards the Design of New Cobalt-based Catalysts for Proton/Water Reduction	Shivnath	Mazumder	Wayne State University	Schlegel
20	Efficient Water Splitting by a Robust Cobalt Catalyst based on a Pentadentate Quinoly-bispyridine Ligand.	Kenneth	Kpogo	Wayne State University	Verani
21	Efficient Water Oxidation Using Langmuir-Blodgett Functionalized Electrode with a Molecular Metallosurfactant	Sunalee	Gonawala	Wayne State University	Verani
22	Development of a Molecular Copper Catalyst based on a Polypyridine Ligand Framework towards Electrochemical Water Reduction	Danushka	Ekanayake	Wayne State University	Verani
23	The Effect of Ligand Substituents on The Electrocatalytic Activity of Cobalt Oxime Complexes	Nour	El Harakeh	Wayne State University	Verani
24	A Nickel-based Polypyridine Electro-Catalyst towards the generation of Dihydrogen from Water	Pavithra	Kankanamalage	Wayne state university	Verani
25	Electrocatalytic Water splitting Using Amido pyridine Frameworks	Habib	Baydoun	Wayne State University	Verani
26	Eu(II)-Containing Complexes for Responsive Magnetic Resonance Imaging	Levi	Ekanger	Wayne State University	Allen
27	Eu(II)-containing Complexes with Applications in Redox and Anion Sensing	Lina	Basal	Wayne State University	Allen

#	Title	Presenter		Affiliation	Group
<b>Electrochemistry</b>					
28	Formamidinate Bridged Dirhodium Complexes as Catalysts for CO <sub>2</sub> Reduction to HCOOH	Suzanne	Witt	Ohio State University	Turro
<b>Magnetism</b>					
29	Divalent Lanthanide Complexes as Single Molecule Magnets	Matt	Bailey	Wayne State University	Allen
<b>Main Group Chemistry</b>					
31	DiPhosphonato Catechol (DPC): From bifunctional electrolytes to conjugated luminescent materials	Joshua	Gaffen	Case Western Reserve University	Protasiewicz
<b>Materials</b>					
30	Towards Organic Photoacids for Metal-Organic Materials	Jacob	Chesnick	Bowling Green State University	Klosterman
32	Synthesis of Highly-Twisted Aromatic Ligands for MOFs	David	Darr	Bowling Green State University	Klosterman
33	The growth mechanism of MnAs nanoparticles: Optimizing properties for magnetic refrigeration	Surangi Hasitha	Pimmachcharige	Wayne State University	Brock
34	Development of Zeolitic Imidazolate Frameworks (ZIFs) and ZIF-Derived Microporous Carbon Composites for CO <sub>2</sub> Adsorption	Yuanyuan	Liu	Kent State University	Jaroniec
35	Synthesis of Naphthol-based Photoacids for Controlling the pH at the Surface of Nanocrystals.	Laura	Skebba	Bowling Green State University	Klosterman
36	Synthesis and Characterization of Discrete CoxM <sub>2</sub> -xP (M = Mn, Fe) Nanoparticles: Compositional Effects on Magnetic and Catalytic Properties	Da	Li	Wayne State University	Brock
37	Thermal Degradation Studies of Fluorine Doped Tin Oxide	Janani Kumar Reddy	Manchala	University of Toledo	Giolando
38	Tiny TiN: Solution Ammonolysis Reactions Towards Nanoparticulate Titanium Nitride and Titanium-Niobium Nitride Alloys	Jimmy	Brancho	University of Michigan	Bartlett

#	Title	Presenter		Affiliation	Group
39	Thickness-Controlled Synthesis of Colloidal PbS Nanosheets and Their Thickness-Dependent Energy Gaps	Zhoufeng	Jiang	Bowling Green State University	Sun
40	Light-Induced Nitric Oxide Release from Sodium Nitroprusside Composites	Joshua	Chaffins	Bowling Green State University	Ostrowski
41	Structural Characterization of Thermochromic and Spin Equilibria in Solid-state Ni(detu) <sub>4</sub> Cl <sub>2</sub> (detu = N,N'-diethylthiourea)	Michael	Jensen	Ohio University	Jensen
42	Progress Towards New Calix[4]arene Based Stationary Phases Useful in the Separation of Rare Earth Metals	Sreejit	Menon	University of Toledo	Schmidt
43	Studies towards the Formation of Novel Gold Copper Alloyed Anti-neoplastic Agents	Bogdan	Benin	Kent State University	Huang
44	Photoreponsive Fe(III)-polyuronates as a tool for modulating the mechanical properties of mixed hydrogels	Giuseppe	Giammanco	Bowling Green State University	Ostrowski
45	Mechanistic Studies for the Acceptorless Dehydrogenation of Primary Amines by NNN-Ru(II) Hydride Complexes	Lillian	Hale	University of Michigan	Szymczak
<b>Organometallic Chemistry</b>					
46	Synthesis of sterically-bulky (3-iminophosphine)palladium complexes and their catalytic hydroamination of allenes with secondary amines	Rajendr	Thakuri	University of Toledo	Schmidt
47	Catalyst hemilabile group variation and lactide ring-expansion polymerization	Shannon	Wright	Kenyon College	Getzler
48	Borrowing Nature's Recipes: Heterodinuclear Metal Complexes for the Reductive Cleavage of CO <sub>2</sub>	Thilini	Poramba-Liyanage	Wayne State university	Groysman
49	Influence of Steric Bulk on Oxidation Stability of Phenolate-Based Magnesium-Ion Battery Electrolytes	Adam	Crowe	University of Michigan	Bartlett
50	Mixed Arrays of Aromatic Chromophores within Metal-Organic Frameworks	Liubov	Lifshits	Bowling Green State University	Klosterman
51	Imparting selectivity over metal oxides for aerobic alcohol oxidations using selective ruthenium catalysts	Sam	Esarey	University of Michigan	Bartlett

#	Title	Presenter		Affiliation	Group
<b>Photochemistry</b>					
52	Progress Towards Bimetallic Metal-Organic Polyhedra based on Push-pull carbazole ligands	Sara	Sheykhi	Bowling Green State University	Klosterman
53	Towards porous, non-interpenetrated metal organic frameworks of tunable push-pull chromophore.	Mayokun	Ayodele	Bowling Green State University	Klosterman
54	Synthesis, Characterization, and Photochemistry of Novel Ru(II) Complexes for Light-Induced Enzyme Inhibition and Singlet Oxygen Generation	Kelsey	Collins	Ohio State University	Turro
55	Sensitization of indium tin oxide for high-current photocathode	Zhongjie	Huang	Ohio State University	Wu
56	Charge-transfer complexes of the bipyridium/tetraarylborate systems: effects of photophysical properties of the complex and the rate of electron transfer to methyl viologen	Willy Glen	Santos	University of São Paulo	Forbes
57	Investigation into the excited state deactivation of a novel Ru(II) complex for dual reactivity	Lauren	Loftus	Ohio State University	Turro
58	Sensitization of p-GaP with Monocationic Dyes: The Effect of Dye Excited-State Lifetime on Hole Injection Efficiencies	Stefan	Ilic	Bowling Green State University	Glusac
59	Cobalamins as Biologically Compatible Polymer Initiators	Alexander	Brugh	Bowling Green State University	Forbes
60	Design of Responsive Biomaterials for Tissue Engineering.	Jackson	Chory	Bowling Green State University	Ostrowski
61	The Effect of Chloroalkane in the synthesis of PbSe nanorods	Shailendra	Chiluwal	Bowling Green State University	Sun
62	Electrocatalytic CO <sub>2</sub> Reduction of Ruthenium and Rhenium Dimer Complexes	Congcong	Xue	Ohio State University	Turro
63	Europium(II) as a photosensitive reducing agent	Michael	Cross	Wayne State University	Allen

#	Title	Presenter	Affiliation	Group
	<b>Misc</b>			
64	Non-Hydrolytic Sol-Gel (NHSG) Synthesis of Tin Sulfides	Alex Hanes	University of Toledo	Lind
65	Synthesis and Structural Characterization of Lead Oxide Carboxylate and Simple Lead Carboxylate Single Crystals	Noalle Fellah	Oberlin College	Oertel
66	Ultrasmall colloidal PbS quantum dots	Doug Dimick	Bowling Green State University Sun	
66	Ultrasmall colloidal PbS quantum dots	Cody Strombaugh	Bowling Green State University Sun	
67	Ultrafast Radiationless Relaxation of the Lowest-Energy Near-Infrared Metal-Centered Excited States: Cu(II) and Ir(IV)	Sergey Matveev	Bowling Green State University Tarnovsky	
68	Degradation of Aromatic Hydrocarbons by Functional and Structural Models of Iron-Containing Dioxygenases	Jia Li	Oakland University	Chavez