

# 2011 Ohio Inorganic Weekend Poster Presentations

7-9 pm on Friday October 28, 2011

The Great Hall in Tangeman University Center (TUC)

University of Cincinnati



*We would like to thank the following sponsors of the 2011 Ohio Inorganic Weekend:*



No.	Poster Title	Presenter	Affiliation	Advisor
1	Slowly Tumbling Eu(II) Complexes as T1-Reducing Contrast Agents for Magnetic Resonance Imaging	Joel Garcia	Wayne State University	Matt Allen
2	Monitoring the Role of Water in the Lanthanide-Catalyzed Mukaiyama Aldol Reaction Using Luminescence-Decay Measurements	Derek Averill	Wayne State University	Matt Allen
3	Toward the Solid-Phase Synthesis of Lanthanide-Based Oligomeric Complexes	Lauren Hopper	Wayne State University	Matt Allen
4	Influence of Structural Changes on the Oxidative Stability of Eu(II)-Cryptates	Akhila Kuda-Wedagedara	Wayne State University	Matt Allen
5	Rational Design of Flavone-Based Compounds for Targeting Metal-Associated Amyloid-beta Species	Xiaoming He	University of Michigan	Mi Hee Lim
6	New Insight into Reactivity of a High-Valent Nonheme Oxoiron(IV) Intermediate: Reaction with Hydrogen Peroxide	Joseph Braymer	University of Michigan	Mi Hee Lim

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7	Development of Two Families of Bifunctional Small Molecules that Target and Modulate the Reactivity of Metal-A $\beta$ Species	Joseph Braymer	University of Michigan	Mi Hee Lim
8	Characterization of Pyridinylimine and Pyridinylmethylamine Derivatives and Their Corresponding Metal Complexes	Nathan Merrill	University of Michigan	Mi Hee Lim
9	Kinetic and Mechanistic Studies on the Reactions of the Reduced Vitamin B12 Complex Cob(I)alamin with Nitrite and Nitrate	Rohan Dassanayake	Kent State University	Nicola Brasch
10	Studies on the Synthesis of Methoxy-molybdenum(V)-oxo <i>meso</i> -Tetra( <i>p</i> -methylphenyl)porphyrin Complex and its Interaction with Hydrogen Peroxide	Yang Zhou	Kent State University	Nicola Brasch
11	Metal-Iminoxyl Complex Activates Oxygen	Gleason Wilson	University of Cincinnati	Mike Baldwin
12	Photochemistry of Iron Complexes of $\alpha$ -Hydroxy Acid Derivatives	Jennifer Grabo	University of Cincinnati	Mike Baldwin
13	Novel Light Responsive <i>alpha</i> -Hydroxy Acid Iron Chelates	Mark Shelton	University of Cincinnati	Mike Baldwin
14	Isomerization of Terminal Alkenes to Internal Alkenes Catalyzed by Bis(phosphinite) Nickel Pincer Hydride Complexes: A Mechanistic Investigation	Sumit Chakraborty	University of Cincinnati	Hairong Guan
14	Nickel-Catalyzed Multicomponent Coupling: A New Approach to Synthesize 1,4-Difunctionalized Compounds	Sanjeewa Rodrigo	University of Cincinnati	Hairong Guan
15	Geometric Isomerization at an Iron Center: Unveiling the Mechanistic Details	Papri Bhattacharya	University of Cincinnati	Hairong Guan
16	Single Crystal X-ray Crystallography at the Heart of Research	Jeanette Krause	University of Cincinnati	

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17	Spectroscopic Investigations of the Bone Development in Chick Embryos Exposed to Sublethal Doses of Platinum Group Metals	Adam Stahler	Wright State University	Ioana Pavel
18	Unraveling the Secrets of Superoxide-induced DNA-Protein Crosslinks	Morwena Solivio	University of Cincinnati	Eddie Merino
19	Superoxide Dismutase Activates a Novel DNA Modifying Agent	Amy Jones	University of Cincinnati	Eddie Merino
20	A ROS-Caged Agent Targets Cancer Cells Known to Possess Elevated Reactive Oxygen	Guorui Li	University of Cincinnati	Eddie Merino
21	Spectroscopic Studies of Reactions between Cyanoferrates and Organomercury Compounds. 1. Ultraviolet and Visible Spectroscopy	John Thayer	University of Cincinnati	
22	Spectroscopic Studies of Reactions between Cyanoferrates and Organomercury Compounds. 2. Raman Spectroscopy	John Thayer	University of Cincinnati	
23	Synthesis and Emissive Properties of Mixed-donor Group 10 Metal Pincer Complexes	Kevin Lavelle	University of Cincinnati	Bill Connick
24	Crystal Structures of [Pt(tpy)X] <sup>+</sup> Salts	Amie Norton	University of Cincinnati	Bill Connick
25	Reactions of Pt(IV) and Pd(IV) Complexes with Multi-electron Substrates	Kumudu Madduma-Liyanage	University of Cincinnati	Bill Connick
26	Four Electron Transfer Pt Complexes for Water Splitting	Hemanthi Manamperi	University of Cincinnati	Bill Connick
27	Reactions of a Palladium(II) Complex and Bromine: Toward Establishing the Relationship between Redox Potential and Chemical Oxidation	Allison Muldoon	University of Cincinnati	Bill Connick
28	Study of Geometric and Spectroscopic Behavior of Manganese(III) Complexes with Redox-rich Pentadentate [N <sub>2</sub> O <sub>3</sub> ] Ligands	Rajendra Shakya	Wayne State University	Claudio Verani

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29	Synthesis and Characterization of Redox-Active Asymmetrical Iron(III) and Gallium(III) Metallosurfactants	Lanka Wickramasinghe	Wayne State University	Claudio Verani
30	Metals in Anticancer Therapy: Towards Inhibition of the Proteasome	Dajena Tomco	Wayne State University	Claudio Verani
31	Mono- <i>terpy</i> Ruthenium Complexes with Electroactive Ligands as Catalysts for Water Splitting	Dakshika Wanniarachchi	Wayne State University	Claudio Verani
32	Electronic Structures of Platinum Monomers and Dimers Complexes with Bis(oxazoliny)phenyl Pincer Ligands	Daoli Zhao	University of Cincinnati	Bill Connick
33	Cobalt Acceptors and Ruthenium-Cobalt Acceptor-Antennae Conjugates for Catalytic and Energy Related Applications	Debashis Basu	Wayne State University	Claudio Verani
34	Bioinspired Fe <sup>III</sup> Hg <sup>II</sup> and Fe <sup>III</sup> Cd <sup>II</sup> Complexes: Synthesis, Characterization and Promiscuous Catalytic Evaluation	Fernando Xavier	Wayne State University	Claudio Verani
35	3-Iminophosphine Palladium Complexes for the Hydroamination of Alkenes with Primary and Secondary Amines	John Beck	University of Toledo	Joe Schmidt
36	Synthesis, Characterization, and Antitumor Studies of Gold (III) Coordinated Complexes	Rebecka Walrath	College of Wooster	Sibrina Collins
37	2,6-Bis(azaindole)pyridine: Reactivity with Platinum(II) Salts	Michael Debord	College of Wooster	Sibrina Collins
38	Substituent Effects on a Regioselective Template Reaction	Marcus Roland	College of Mount St. Joseph	Richard Hotz
39	Alkene Addition to Ruthenium Co-ordinated Thiyl Radicals: Synthesis by Chemical Oxidants and Reactivity Studies	Rajat Chauhan	University of Louisville	Craig Grapperhaus

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40	Synthesis, Structure, and Solution Properties of the <i>cis</i> -N <sub>4</sub> FeCl <sub>2</sub> Iron(III) Complex [mim-TASN)FeCl <sub>2</sub> ] <sup>+</sup>	Jinlan Cui	University of Louisville	Craig Grapperhaus
41	Redox Regulated Binding of Alkenes to Rhenium Thiolates	Kagna Ouch	University of Louisville	Craig Grapperhaus
42	Characterization of the Lowest Energy Excited State in Ruthenium Mono-Bipyridine Complexes by Emission Spectroscopy	Marco Allard	Wayne State University	John Endicott
43	Synthesis of Nickel(II) Complexes with Tri-oxime Ligands to be Oxygen-Activating Catalysts	Ariel Hall	Xavier University	Craig Davis
44	Biomass Derived Precursors for Synthetic Organic and Organometallic Chemistry	Tony Bova	University of Toledo	Mark Mason
45	Nanoparticles of KMn[Fe(CN) <sub>6</sub> ] as a Potential Contrast Agent for Magnetic Resonance Imaging	Vindya Perera	Kent State University	Songping Huang
46	Ultrafast Charge Carrier Dynamics in CdTe and CdTe/CdS Nanocrystals	Yueran Yan	Ohio University	Greg Van Patten
47	Phosphinimine Aryl Sulfonates – New Ligands for Group 10 Polymerization Catalysts	Suisheng Shang Rajesh Thapa	University of Louisville	Chris Burns
48	Photomechanical Effects in Glassy Photochromic Materials	Yuhuan Jin	Ohio University	Jeffrey Rack
49	Photoisomerization in a Ruthenium Bissulfoxide Chelate	Albert King	Ohio University	Jeffrey Rack
50	Solvent Effects on the Photochromic Properties of [Ru(bpy)(biq)PYSO] <sup>2+</sup>	Preston Roeper	Ohio University	Jeffrey Rack
51	Photoactive Liquid Crystalline Materials for Potential Application in Three-Dimensional, Holographic Information Storage	Ethan Cottrill	Ohio University	Jeffrey Rack

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52	The Role of Solvents in the Synthesis of Metal-Organic Frameworks and Their Potential Properties	Tausif Siddiqui Dr. Koteswara Rao	Youngstown State University	Sherri Lovelace-Cameron
53	Catalytic Dehydrogenation of Ammonia-Borane and Amine-Boranes with Bis(phosphinite) Nickel Pincer Complexes	Mike Gibson	University of Cincinnati	Hairong Guan