



# Ohio Inorganic Weekend 2008

## Poster Presentations: Nov. 7, 2008 (7-9 PM; Wolfe Hall Lobby)

Ultrafast Transient Absorption Spectroscopy of Pt(II) Complexes with Solvent Dependent Excited State Configurations

*Elena A. Glik, Evgeny Danilov, Sébastien Goeb, Aaron A. Rachford, and Felix N. Castellano\**; Bowling Green State University

Microarray Pattern Recognition of VOCs Based on Platinum(II) Terpyridyl Chloride Salts

*Maria L. Muro, Charles A. Daws, and Felix N. Castellano\**; Bowling Green State University

Heteroleptic Terpyridine Dye-Sensitizers for Application in Dye-Sensitized Solar Cells

*Anthony C. Onicha and Felix N. Castellano\**; Bowling Green State University

Microwave-Assisted Preparation of Ru(II) Complexes used as Sensitizers in Dye Sensitized Solar Cells

*Yali Sun and Felix N. Castellano\**; Bowling Green State University

Photocatalytic Hydrogen Generation From Water Using TiO<sub>2</sub> Nanotubes

*Xianghuai Wang, Wei Zhao and Felix N. Castellano\**; Bowling Green State University

Thermodynamics of Metal Binding to *de novo* Designed Protein Scaffolds

*Alex Bludin and Michael Y. Ogawa\**; Bowling Green State University

Effect of Metallopeptide Structure on the Photo-Induced Electron Transfer

*Jiufeng Fan and Michael Y. Ogawa\**; Bowling Green State University

Self-Assembly of a *de novo* Designed Peptide into Nanofibers by Metal Co-coordination

*Madhumita Mukherjee and Michael Y. Ogawa\**; Bowling Green State University

Structural and Photophysical Studies of the Cu-Containing Metallopeptide

*Daniil V. Zaytsev and Michael Y. Ogawa\**; Bowling Green State University

Ultrafast Dynamics of Hexabromoplatinate Complex in Water

*Igor L. Zheldakov, Mikhail Ryasantsev, and Alexander N. Tarnovsky\**; Bowling Green State University

*meta*-Terphenyl Protected Phosphaalkenes: Synthesis, Photochemistry and Effect of Electroactive Groups

*Vittal Babu Gudimetla, Marlena P. Washington, and John D. Protasiewicz\**; Case Western Reserve University

Electron-Withdrawing Effects on a Regioselective Template Reaction

*Kurtis J. Rimmel, Derek A. Pullum, and Richard P. Hotz\**; College of Mount St. Joseph

Kinetics of the Ligand Exchange Reaction Between Ni(tetren)<sup>2+</sup> and Bipyridine

*Larry Kolopajlo\* and Nekuma Hollis; Eastern Michigan University*

Synthesis and Purification of a Fluorogenic Reagent Used in a Spectrofluorimetric Copper Assay  
Kimberly Kern, Catherine Miller\*, and Michael Nichols\*; John Carroll University

Part I: The Synthesis and Characterization of Vanadium Neopentoxide and its Derivatives. Part II: A Study of Phosphate Bridged Transition Metals  
Christopher B. Durr and Scott D. Bunge\*; Kent State University

The Effect of a Series of Lanthanide Complexes on an Intramolecular Hydroalkoxylation  
Thomas Janini and Scott D. Bunge\*; Kent State University

Synthesis and Structural Characterization of Dinuclear and Trinuclear Transition Metal Benzamidinate Complexes  
Brian C. Manor and Scott D. Bunge\*; Kent State University

A Structurally Characterized Series of 1,1,3,3-Tetramethylguanidine Solvated Magnesium Aryloxide Complexes  
Jessie D. Monegan and Scott D. Bunge\*; Kent State University

A Synthetic and Theoretical Investigation of Cyclic Multinuclear Group 11 Guanidinate Complexes  
Jesus A. Ocana and Scott D. Bunge\*; Kent State University

Cyclization of Alkynyl Alcohols Using Lanthanide Aryloxide Catalysts  
Robert Rakosi and Scott D. Bunge\*; Kent State University

Luminescence From Chloro(2,2':6',2''-terpyridine)platinum(II) in Aqueous Micelles  
Natalie A. Larew and Scott Cummings\*; Kenyon College

Luminescence from Dimers of Chloro(2,2':6',2''-terpyridine)platinum(II) in Aqueous Solution  
Abigail R. Van Wassen and Scott Cummings\*; Kenyon College

Synthesis of a Low Energy Molecular Switch  
Tod A. Grusenmeyer and Jeffrey J. Rack\*; Ohio University

Photophysics of Dimolybdenum Amidates  
Brian Alberding and Malcolm Chisholm\*; The Ohio State University

Polycarbonates From Renewable Resources  
C. Chatterjee, R. McIntosh, and Malcolm Chisholm\*; The Ohio State University

Multiple Bond Metathesis Involving Molybdenum, Tungsten, Carbon and Nitrogen  
Shentan Chen and Malcolm Chisholm\*; The Ohio State University

Quadruply Bonded Dimetal Complexes Supported by Ethynylarylcarboxylates  
Carly Reed and Malcolm Chisholm\*; The Ohio State University

Extended Structures With Isocarbonyl Linkages:  $M(sol)_x[CoRu_3(CO)_{13}]$   
Christopher M. Potratz, Xuenian Chen, Edward A. Meyers, and Sheldon G. Shore\*; The Ohio State University

Cyanide Bridged Alkaline Earth Transition Metal Complexes: Structures and Application  
Matthew R. Sturgeon, Errun Ding, Sheldon G. Shore\*, and Mark Keane; The Ohio State University

Metallocene and Lanthanide Coordination Compounds Containing Amidotrihydroborate ( $NH_2BH_3^-$ )  
Duane C. Wilson, Christopher M. Potratz, Xuenian Chen, Edward A. Meyers, and Sheldon G. Shore\*; The Ohio State University

Use of Group 6 Carbonyl Reagents to Stabilize Main Group Cationic Species  
*Joanna Beres Alyson Leigh, Chrys Wesdemiotis, and Claire A. Tessier\**; University of Akron

A Study on the Effect of Additives on the Synthesis of Chlorophosphazenes  
*Alexandria Johnson and Claire A. Tessier\**; University of Akron

The Involvement of Strong or Super Acids in the Chemistry of Chlorophosphazenes  
*Zin-Min Tun Amy J. Heston, Matthew J. Panzner, Doug Medvetz, Debasish Banerjee, Deepa Savant, Peter Rinaldi, Wiley J. Youngs, and Claire A. Tessier\**; University of Akron

Poly(organophosphazenes) With Azolyphenoxy Side Groups for Use in Fuel Cells  
*Sujeewani Ekanayake, Supat Moolsin, Matthew J. Panzner, Claire A. Tessier, and Wiley J. Youngs\**; University of Akron

Delivery of Silver Antimicrobial Therapeutics Using Biodegradable Polymeric Nanoparticles and Microspheres  
*Amanda R. Knapp<sup>1</sup>, Nikki Robishaw<sup>1</sup>, Matthew J. Panzner<sup>1</sup>, Khadijah Hindi<sup>1</sup>, Andrew Ditto<sup>1</sup>, Doug A. Medvetz<sup>1</sup>, Brian Wright<sup>1</sup>, Michael DeBlock<sup>1</sup>, Carolyn Cannon<sup>2</sup>, Yang H. Yun<sup>1</sup>, Jeff Leid<sup>3</sup>, D. Mark Estes<sup>4</sup>, Claire Tessier<sup>1</sup>, and Wiley J. Youngs<sup>\*1</sup>*; <sup>1</sup>University of Akron, <sup>2</sup>Washington University School of Medicine, <sup>3</sup>Northern Arizona University, <sup>4</sup>University of Texas Medical Branch, Galveston

Antitumor Activity of Ag(I) N-Heterocyclic Carbene Complexes and Nanoparticle Encapsulation  
*Nikki Robishaw, Doug A. Medvetz, Khadijah Hindi, Matthew J. Panzner, Andrew Ditto, Yang H. Yun, and Wiley J. Youngs\**; University of Akron

Evaluating the Toxicity of a Re(CO)<sub>3</sub><sup>+</sup> Complex Using Cell Lines  
*Sarah Robenstine<sup>b</sup>, Natalie V. Barone<sup>b</sup>, Richard S. Herrick<sup>a</sup> and Christopher J. Ziegler<sup>\*b</sup>*;  
<sup>a</sup> College of the Holy Cross, Worcester, MA <sup>b</sup> University of Akron

Synthesis, Spectroscopic Characterization and Crystal Structure of Dioxime and Pyridine-2-aldoxime Complexes of Re(CO)<sub>3</sub><sup>+</sup>  
*Roshinee Costa<sup>b</sup>, Natalie V. Barone<sup>b</sup>, Richard S. Herrick<sup>a</sup> and Christopher J. Ziegler<sup>\*b</sup>*;  
<sup>a</sup> College of the Holy Cross, Worcester, MA <sup>b</sup> University of Akron

The Synthesis of Re(CO)<sub>3</sub><sup>+</sup>-Amino Acid Conjugates Using 2-Pyridine Carboxyaldehyde  
*Hira Qayyum and Christopher J. Ziegler\**; University of Akron

Reactions of Electrochemically Generated Platinum(IV) and Palladium(IV) Complexes with Multi-Electron Substrates  
*Kumudu Madduma-Liyanage and William B. Connick\**; University of Cincinnati

Synthesis and Characterization of a Luminescent Platinum(II) Phenylacetylide Complex  
*Vikas Shingade and William B. Connick\**; University of Cincinnati

Synthesis and Characterization of Platinum(II) Complexes with Pincer Ligands  
*Daoli Zhao and William B. Connick\**; University of Cincinnati

Umpolung of  $\alpha,\alpha$ -Unsaturated Imines: Synthesis, Structure and Reactivity of Azazirconacyclopentenes  
*Jie Zhang, Jeanette A. Krause and Hairong Guan\**; University of Cincinnati

Effects of Covalently Bound N-Donor Ligands on Synthetic Models of NorBC  
*Tim Berto and Nicolai Lehnert\**; University of Michigan

Characterization of High-Spin and Low-Spin Fe(III) in Cytochrome P450 and Mutants Using Magnetic Circular Dichroism Spectroscopy

Mary Grace I. Galinato, Tatyana Spolitak, David P. Ballou, and Nicolai Lehnert\*; *University of Michigan*

Synthesis of Biologically Relevant Iron Sulfur Clusters

Deidra Gerlach, Dimitri Coucouvanis, and Nicolai Lehnert\*; *University of Michigan*

Ferric Bis-Picket Fence Porphyrin Nitrosyls as Synthetic Models of P450<sub>nor</sub>

Lauren Goodrich and Nicolai Lehnert\*; *University of Michigan*

Ruthenium Nitrosyls: Synthesis, Characterization and Photolabilization

Anna Merkle and Nicolai Lehnert\*; *University of Michigan*

Molecular Phosphates, Phosphonates, and Phosphinates of Aluminum and Gallium

Ryan Rondo, Mark Matthews, Vira Ponomarova, and Mark R. Mason\*; *University of Toledo*

Bidentate, Tridentate, and Bridging Coordination Modes For Indolyl Based Complexes of Aluminum and Gallium

Nick Kingsley, Bassam Fneich, Anirban Das, Kristen Kirschbaum, and Mark R. Mason\*; *University of Toledo*

Chemical Bonding in Energetic RDX: An Experimental and Theoretical Study

Vladimir Zhurov, Elizabeth Zhurova, and A. Alan Pinkerton\*; *University of Toledo*

Orthometallated Acetophenone Imines as Ligands For Early Transition and Main Group Metals: Isolation and Characterization

John Beck and Joseph A. R. Schmidt\*; *University of Toledo*

Functionalized Calix[4]arenes as Ligands For the Design of Lanthanide and Actinide Hydroamination Catalysts

Andrew C. Behrle<sup>a</sup>, Matthew P. Hertel<sup>a</sup>, Samantha A. Williams<sup>b</sup>, Jordan L. Fantini<sup>b</sup>, and Joseph A. R. Schmidt<sup>a\*</sup>; <sup>a</sup>*University of Toledo*; <sup>b</sup>*Denison University*

Synthesis and Characterization of New Niobium and Tantalum Complexes with Orthometallated Acetophenone Imine Type Ligands

Abdollah Neshat, Cheryl L. Seambos, and Joseph A. R. Schmidt\*; *University of Toledo*

Luminescence Decay Study of Water Tolerant Lanthanide Triflates

Prabani Dissanayake and Matthew J. Allen\*; *Wayne State University*

Stable Eu(II) Complexes For Use as Contrast Agents in High Field Magnetic Resonance Imaging

Nipuni Gamage and Matthew J. Allen\*; *Wayne State University*

Activatable Zero-Background Contrast Agents For MRI

Jeremy Moore, Stephanie Neal, Holliness Nose and Matthew J. Allen\*; *Wayne State University*

Fine-Tuning the Redox-Cyclability of Asymmetrical Trivalent Iron and Cobalt Complexes as Prototypes for Molecular Switches

Marco M. Allard and Claudio N. Verani\*; *Wayne State University*

Cobalt and Copper-Containing Surfactants as Precursors for Langmuir-Blodgett Films

Sarmad Sahiel Hindo, Rajendra Shakya, Libo Wu, Sandro R. P. da Rocha, and Claudio N. Verani; *Wayne State University*

Langmuir-Blodgett Film Formation of Nickel, Cobalt and Zinc Containing Metallo-Amphiphiles

Rama Shanmugam and Claudio N. Verani\*; *Wayne State University*

