



2012 Ohio Inorganic Weekend Poster Presentations
7–9 p.m.
Friday, October 19, 2012
Wayne State University
Chemistry Building

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No.	Title	Presenter	Affiliation	Advisor
P1	A Dimetallic Eu ³⁺ -Based Luminescent Probe that Responds to Changes in pH	Jeremy Moore	Wayne State University	Matt Allen
P2	Exploring the Reactivity of Flavonoid Derivatives with Metal-Free and Metal-Associated Amyloid- β Species	Alaina DeToma	University of Michigan	Mi Hee Lim
P3	In Vitro Reactivity of Diphenylpropynone and Diphenylpropanone Derivatives toward Metal-Free and Metal-Associated Amyloid- β Species	Amit Pithadia	University of Michigan	Mi Hee Lim

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P4	Studying Chiral Europium-Based Precatalyst Environments by Steady State Luminescence Measurements	Derek Averill	Wayne State University	Matt Allen
P5	Lowering the Band-Gap of TiO ₂ by Co-Alloying with Nb and N Donor-Acceptor Pairs: Photocatalytic Applications	Tanya Breault	University of Michigan	Bart Bartlett
P6	Bio-safe Bismuth Initiators for the Production of Biocompatible Polymers from Renewable Resources	Vagulejan Balasanthiran	The Ohio State University	Malcolm Chisholm
P7	Solid-Phase and Microwave-Assisted Synthesis of Ligands for Lanthanides	Lauren Hopper	Wayne State University	Matt Allen
P8	Targeted Contrast Agents for Magnetic Resonance Imaging	Sashiprabha Vithanarachchi	Wayne State University	Matt Allen
P9	Modulation of Water-Exchange Rates Using Polymers in Ln ^{III} -Containing Complexes	Buddhima Siriwardena- Mahanama	Wayne State University	Matt Allen
P10	Relaxometric Studies of Eu ²⁺ -Containing Cryptates	Joel Garcia	Wayne State University	Matt Allen
P11	Initial Studies on the Effect of a Polarizing Interactions in a Metal's Secondary Coordination Sphere	Oscar Tutusaus	University of Michigan	Nathaniel Szymczak
P12	Assembly of Phosphide Nanocrystals into Porous Networks: Formation of InP Gels and Aerogels	Asha Hitihami- Mudiyanselage	Wayne State University	Stephanie Brock
P13	Synthesis of AlScMo ₃ O ₁₂ Negative Thermal Expansion Material With Mixed State Occupancy in the A ₂ M ₃ O ₁₂ Family	Alyssa Leright	Alma College and University of Toledo	Cora Lind
P14	Development of a Convenient Method for the Synthesis of Palladium Hydride Complexes	Anubendu Adhikary	University of Cincinnati	Hairong Guan
P15	Aqueous Phase Organometallic Catalysis Using Ruthenium-Modified Myoglobin	Kathryn Craigo	University of Michigan	Nicolai Lehnert
P16	The Synthesis, Characterization and Electrochemistry of H ₂ -Producing Di-iron Electrocatalysts containing 5-atom Bridges	Richard Hulme	Oakland University	Greg Felton

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P17	Electrocatalytic Reduction of Carbon Dioxide by M(bpy)(CO) ₃ X Compounds (M = Re, Mn)	Daniel Kurtz	Oakland University	Greg Felton
P18	Synthesis, Characterization and Electrochemistry of Chlorinated Aromatic [FeFe]Hydrogenase-inspired Electrocatalysts	Joseph McCormick	Oakland University	Greg Felton
P19	Metallapyrimidines and Metallapyrimidiniums from Oxidative Addition of Pyrazolate N-N Bonds to Niobium(III), Niobium(IV), and Tantalum(IV) Metal Centers and Assessment of their Aromatic Character	Hiran Perera	Wayne State University	Chuck Winter
P20	Creation of Peptide Amphiphiles for Passive Tumor Targeting	Eric Dobson	The Ohio State University	Josh Goldberger
P21	Base-Free, Acceptorless Dehydrogenation of Primary and Secondary Alcohols Catalyzed by Ru(II) Hydride Complex	Timothy Tseng	University of Michigan	Nathaniel Szymczak
P22	The Interaction of Heme and Non-Heme Iron Nitrosyls: Modeling the Reactivity of Bacterial Nitric Oxide Reductase	Timothy Berto	University of Michigan	Nicolai Lehnert
P23	Dimensional Reduction of Layered Metal Chalcogenides and Manipulation of Electronic States through Li Intercalation	Tianyang Li	The Ohio State University	Joshua Goldberger
P24	Synthesis and Characterization of Indium Gallium Molybdate (InGaMo ₃ O ₁₂)	Lindsay Young	University of Toledo	Cora Lind-Kovacs
P25	Non-hydrolytic Sol-Gel Synthesis of Copper Sulfides	Anne Soldat	University of Toledo	Cora Lind-Kovacs
P26	Towards Next Generation Materials Utilizing the Metal-Metal Multiple Bond	Christopher Durr	The Ohio State University	Malcolm Chisholm
P27	Development of First Row Transition Metal Complexes Containing 1,2,5-Triazapentadienyl Ligands for the Deposition of Metal Films by Atomic Layer Deposition	Lakmal Kalutarage	Wayne State University	Chuck Winter
P28	Effect of Substituent Groups on Redox and Amphiphilic Properties of Iron(III) Metallosurfactants	Lanka Wickramasinghe	Wayne State University	Cláudio Verani

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P29	Modeling the Key Intermediate in the Mechanism of CytochromeP45nor Using an Iron Bis-Picket Fence Porphyrin	Ashley McQuarters	University of Michigan	Nicolai Lehnert
P30	Ferrous Porphyrin Nitroxyl Complexes as Models for Intermediates in Cytochrome P450 Nitric Oxide Reductase	Lauren Goodrich	University of Michigan	Nicolai Lehnert
P31	Kinetics and Mapping of Cisplatin–RNA Reactions	Gayani Dedduwa Mudalige	Wayne State University	Christine Chow
P32	Towards Improved Hydrodesulfurization Catalysts: Synthesis And Characterization of Ni _{2-x} Co _x P Nanoparticles	Ruchira Liyanage	Wayne State University	Stephanie Brock
P33	Design and Synthesis of Ligands and Homobimetallic Complexes for the Activation of Heteroallenes	Jeff Beattie	Wayne State University	Stas Groysman
P34	Design of Ligands for Dinuclear Metal Complexes for the Activation of Carbon Dioxide and Carbon Disulfide	Amarnath Bheemaraju	Wayne State University	Stas Groysman
P35	Design of Alkoxide-Ligated Low-Coordinate Metal Centers for C-H Bond Activation and Functionalization	James Bellow	Wayne State University	Stas Groysman
P36	Photo-assisted Catalysts Growth and Water Splitting on TiO ₂ Using Molecular Precursors	Rony Khnayzer	Bowling Green State University	Felix Castellano
P37	Photophysics of a Series of Ruthenium-Sulfur Macrocycles Towards Water Oxidation	Ryan Thomas	Wayne State University	Cláudo Verani and John Endicott
P38	Design of Mononuclear and Heterobimetallic Bis(Imino) Pyridine Complexes for CO ₂ Splitting and Functionalization	Blake Reed	Wayne State University	Stas Groysman
P39	Towards Metastability Control in β-Manganese Arsenide Nanoparticles: Substitution of Mn by Fe	Roshini Pimmachcharige	Wayne State University	Stephanie Brock
P40	Stabilized Photocatalytic Hydrogen Generation using a Ru(II) Sensitizer and an Alternative Sacrificial Electron Donor	Babatunde Olaiya	Bowling Green State University	Felix Castellano
P41	Utility of Nickel-Pincer Hydride Complexes in Alkyne Reduction	Gleason Wilson	University of Cincinnati	Hairong Guan

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P42	Synthesis, Redox and Amphiphilic Properties of Water Oxidation Precatalyst [Ru(terpyridine)(phenanthroline)Cl]PF ₆	Dakshika Wanniarachchi	Wayne State University	Cláudio Verani
P43	Influence of Cryptand Structure on the Physical Properties of Eu ^{II} -Cryptates	Akhila Kuda-Wedagedara	Wayne State University	Matt Allen
P44	Metal Binding Studies Utilizing Lanthanide Triflate Salts and a Tripodal, Hexadentate Ligand	Shelby Maurice	University of Detroit Mercy	Mark Benvenuto
P45	Recent Developments in the Synthesis of Several Highly Multidentate Ligands Incorporating Diethylenetriamine, Triethylenetetraamine, or Spermine	Candice Kashat	University of Detroit Mercy	Mark Benvenuto
P46	The Synthesis and pH-Dependent Behavior of Re(CO) ₃ Conjugates Using Diimine Phenolic Ligands	Kullapa Chanawanno	University of Akron	Chris Ziegler
P47	Kinetic and Mechanistic Studies on the Reaction of the Reduced Vitamin B ₁₂ Complex Cob(II)alamin with Hydrogen Peroxide	Andrew Hunt	Kent State University	Nicola Brasch
P48	Heterobimetallic Complexes of Fe and Cu Featuring a Bridging Hydride: Potential Application in Homogeneous Water-Gas Shift Reaction	Arundhoti Chakraborty	University of Cincinnati	Hairong Guan
P49	Secondary Phosphine Oxide as an Effective Ligand for Nickel-Catalyzed Carbon-Sulfur Cross-Coupling Reactions	Nadeesha Wellala	University of Cincinnati	Hairong Guan
P50	Use of Ion-Tagged Indolyl Phosphines for Palladium-Catalyzed Cross-Coupling Reactions in Ionic Liquids	Adam Keith	University of Toledo	Mark Mason
P51	Bio-Inspired Earth Abundant Transition Metal Catalysts for the Reversible Oxidation of Dihydrogen	Shawn Eady	University of Michigan	Nicolai Lehnert
P52	Synthesis, Characterization, and Reactivity of Cisplatin Analogues	Xun Bao	Wayne State University	Christine Chow
P53	Surface Functionalization of Gallium Phosphide (111)B	Elizabeth Brown	University of Michigan	Stephen Maldonado

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P54	Transition Metal Complexes of α -Iminoalkoxide and α -Hydrazonoalkoxide as Precursors for Atomic Layer Deposition	Chad Palumbo	Wayne State University	Chuck Winter
P55	Poly(tetrazolyl)borate Ligands and their Coordination to the [K(18-crown-6)]Fragment: Formation of Tris(tetrazolyl)borates	Chris Snyder	Wayne State University	Chuck Winter
P56	Chemical Reagents to Study the Role of Metal-Associated Amyloid- β Species in Alzheimer's Disease	Yuzhong Liu	University of Michigan	Mi Hee Lim
P57	PbS Nanoparticle Incorporation in PbTe for Thermoelectrics	Derak James	Wayne State University	Stephanie Brock
P58	Probing Ligand Dissociation in Cobalt Complexes as a New Route for Proteasome Inhibition	Dajena Tomco	Wayne State University	Cláudio Verani
P59	3-Iminophosphine Palladium(II) Chloride as an Efficient New Aryl Amination Catalyst	Danielle Samblanet	University of Toledo	Joseph Schmidt
P60	Catalytic Hydrophosphination Using New Lanthanide Catalysts	Joseph Schmidt	University of Toledo	Joseph Schmidt
P61	Synthesis and Characterization of a New Series of Salen-Type Ligands and Their Copper(II) Complexes	Sunalee Gonawala	Wayne State University	Cláudio Verani
P62	Structure and Characterization of Mid to Late First Row Transition Metal Complexes of Bis(pyrazol-1-yl)acetate Ligands	Mark Zavada	Wayne State University	Chuck Winter
P63	Synthesis and Photophysical Characterization of Luminescent Cyclometalated Binuclear Platinum(II) Complexes	Arnab Chakraborty	Bowling Green State University	Felix Castellano
P64	Sequential Picosecond Isomerization in a Photochromic Ruthenium Sulfoxide Complex Triggered by 3-Color Pump-Pump-Probe Spectroscopy	Albert King	Ohio University	Jeff Rack
P65	A Simple Fluoro Substitution Inhibits Photoisomerization in Ruthenium Sulfoxide Molecular Switches	Komal Garg	Ohio University	Jeff Rack
P66	Investigation of a Ruthenium Bis-sulfoxide Photochrome Exhibiting Three Ground State Isomers	Jason Malizia	Ohio University	Jeff Rack

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P67	Photorefractive Liquid Crystalline Materials for Potential Application in Holographic, 3-D Information Storage	Ethan Cottrill	Ohio University	Jeff Rack
P68	Femtosecond Transient Absorption Anisotropy Study on Photochromic Ruthenium Sulfoxide Complexes	Lei Wang	Ohio University	Jeff Rack
P69	Photochromic Ruthenium Sulfoxide Polyurethanes Featuring Light to Mechanical Motion	Maksim Livshits	Ohio University	Jeff Rack
P70	Kinetic Studies on the Reaction of Nitrosylcobalamin with Dioxygen: Evidence for Formation of Peroxynitrito Intermediate	Harishchandra Subedi	Kent State University	Nicola Brasch
P71	Cooperative Behavior in CdSe Quantum Dot Assemblies as Probed by Single Particle Fluorescence Intermittency	Jessica Davis	Wayne State University	Stephanie Brock
P72	Half-Sandwich Scorpionates for Nitrene Transfer Catalysis	Shengwen Liang	Ohio University	Mike Jensen
P73	Pushmi-Pullyu: Dr. Dolittle Meets Ni(II) Spin Isomers	Haoshuang Wang	Ohio University	Mike Jensen
P74	Aerobic and Hydrolytic Decompositions of Bio-inspired Ni(II) Phenolate Complexes	Tapash Deb	Ohio University	Mike Jensen
P75	Electrochemical Hydrogen Evolution from p-Toluenesulfonic Acid in Dimethylsulfoxide Using $[(\kappa^2\text{-}2,2'\text{-bipyridyl})_2\text{Mo}\equiv\text{O}]^{+2}$	Emily Nelson	University of Michigan	Bart Bartlett
P76	Design and Synthesis of a Novel Photosensitive HNO Donor	Yang Zhou	Kent State University	Nicola Brasch
P77	Characterization of Mya Blue and Binding Modes of Indigo Species with Palygorskite	Matt Aharonov	Wayne State University	Cláudio Verani
P78	Synthesis and Characterization of Cobalt(III) Complexes of Pyridine Rich Ligands	Graceann Hardin	Wayne State University	Cláudio Verani
P79	The Gallium Analogue of Soluble Prussian Blue for Potential Biomedical Application	Murthi Kandanapitiye	Kent State University	Songping Huang
P80	Biocompatible Nanoparticles of Bismuth Tetrathiotungstate $\text{Bi}_2[\text{WS}_4]_3$ as a Potential CT Contrast Agents	Liu Yang	Kent State University	Songping Huang

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P81	De Novo Design of Metallopeptides: Obtaining Heterotrimeric Metal Binding Sites	Catherine Mocny	University of Michigan	Vince Pecoraro
P82	Using D-Amino Acid Substitutions in the Second Coordination Sphere of Designed Proteins to Control the Coordination Environment of a Bound Metal	Leela Ruckthong	University of Michigan	Vince Pecoraro
P83	<i>De Novo</i> Design of Metallopeptides to Understand the Redox Properties of a Type II Copper Center	Fangting Yu	University of Michigan	Vince Pecoraro