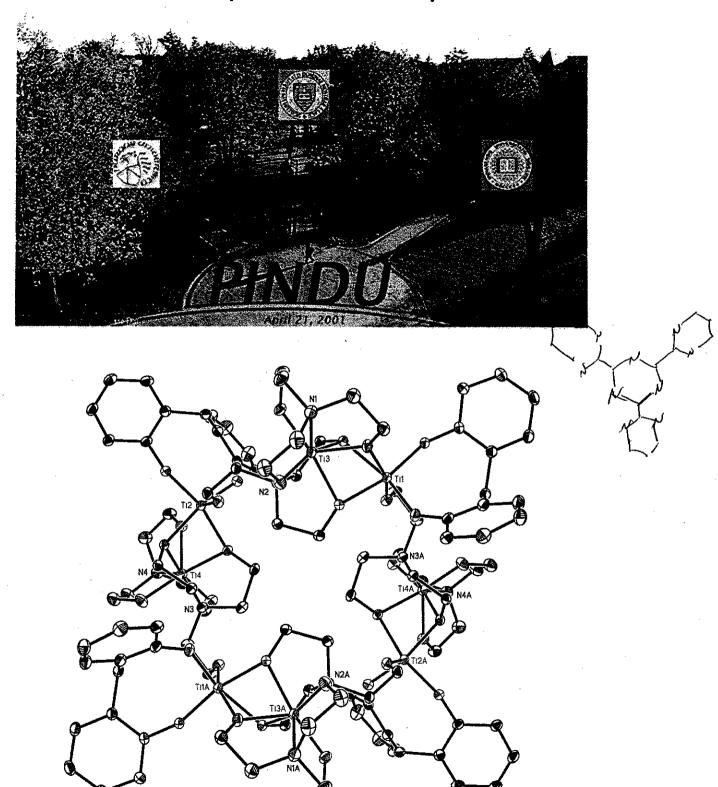
# The University of Notre Dame presents



# **Poster Titles**

- 1. What is Special about Arsenic? Self-centered Tetrahedra and Oligomeric Units in New Arsenic-Based Polar Intermetallics. Franck Gascoin and Slavi Sevov (ND)
- 2. Homogeneous Asymmetric Catalytic Hydrogenation of Prochiral Polysubstituted Olefins with Chiral Iridium Complexes. Jason C. Klein and Jillian M. Buriak (Purdue)
- 3. Synthesis of Rhodium and Iridium N-Heterocyclic Carbene Complexes.

  <u>Leslie D. Vazquez-Serrano</u> and Jillian Buriak (*Purdue*)
- 4. Chemistry of Cyclopentadienyl Titanium Aryloxides.

  Jongtaik Lee, Dana Tillison, Ian P. Rothwell, and Matt Thorn (Purdue)
- 5. Novel Titanatranes with Bulky Aryloxides: Synthesis, Structure, and Dynamics. Aaron G. Maestri and Seth N. Brown (ND)
- 6. An Inorganic Perspective of Bergman Cyclization Reactions. Pedro J. Benites, Diwan S. Rawat, and Jeffrey M. Zaleski (IU)
- 7. Mechanistic Studies of the Four Electron Reduction of cis/trans Azobenzene.

  Margaret R. Lentz, Jon S. Vilardo, Mark A. Lockwood, and Ian P. Rothwell (Purdue)
- 8. New Chiral Derivatives of the Group 4 and 5 Metals. Scott Shweiger, Matt Thorn, Ea-Ji-Ru Son, Scott Weinert, and Ian P. Rothwell (Purdue)
- 9. Synthesis, Structure and Reactivity of Pincer-ligated Ruthenium Hydrides. Lori A. Watson, Joseph N. Coalter III, and Kenneth G. Caulton (IU)
- 10. Coordination Modes of 2-(Inden-3-yl)-4,6-di-tert-butylphenol.

  Luke Turner, Matt Thorn, Ian P. Rothwell, and Robert Chesnut (Purdue)
- 11. Synthesis and Electrochemical Properties of the Mixed-Valence Complex [{(CN)<sub>2</sub>C=C(CN)<sub>2</sub>}{Ru(bpy)<sub>2</sub>Cl}<sub>4</sub>][PF<sub>6</sub>]<sub>4</sub>.

  <u>Jieying Jiao</u>, George Sun, and Thomas P. Fehlner (ND)
- 12. Investigation of the Gas Phase Ion Chemistry and Thermochemical Parameters of Phenyltrifluorosilane. Ian H. Krouse, Harvey A. Lardin, and Paul G. Wenthold (Purdue)
- 13. Reactions of [Re<sub>2</sub>Cl<sub>4</sub>(dppm)<sub>2</sub>] with MeLi, HCCH, and HCC(CH<sub>2</sub>)<sub>4</sub>CCH. Mani Ganesan, Phillip E. Fanwick, and Richard Walton (Purdue)
- 14. An Investigation into the Reaction of (Cp\*Ru)<sub>2</sub>B<sub>3</sub>H<sub>9</sub> with Co<sub>2</sub>(CO)<sub>8</sub>:

  Unexpected Results due to Solvent Effects. Antonio G. DiPasquale and Thomas P. Fehlner (ND)
- 15. Synthesis and Reactivity of Rhenium Complexes Supported by Diphosphinoamido Pincer Ligands.

  Oleg V. Ozerov and Kenneth Caulton (IU)
- 16. Oxygen Atom Transfer Between Late Metal Centers.

  Kevin C. Fortner, David S. Laitar, John Muldoon, and Seth N. Brown (ND)

# **Poster Titles**

- 17. An Interplay Between Delocalized and Localized Bonding in Some Novel Tin-based Structures with Mixed Alkali Metals. Svilen Bobev and Slavi Sevov (ND)
- 18. Transition Metal Phosphates and Borophosphates. Synthesis and Structural Characterization of the First Molybdenum Borophosphate. Eddy Dumas and Slavi C. Sevov (ND)
- 19. Functionalization of Porous Silicon with Symmetrical Dialkenyl and Dialkynyl Disulfides: An Approach to Tethering Metal Nanoparticles to Semiconducting Surfaces.

  J.M. Schmeltzer, Melissa V. Donnelly, and Jillian M. Buriak (Purdue)
- 20. IAN-Amines: The First Class of Axially Chiral β-Diketamines and their Promise in the Development of Non-Metallocene Polymerization Catalysts. Sarah B. Cortright and Jeffrey N. Johnston (IU)
- 21. Emission Studies of Copper Porphyrins Bound to DNA Hairpins.

  Stephanie A. Bejune, Patricia Lugo-Ponce, Meritxell Bach, and David R. McMillin (Purdue)
- 22. Characterization of Nickel(III)-Peptide Complexes. Brandon J. Green and Dale W. Margerum (Purdue)
- 23. Pulsed-Accelerated-Flow Studies of the Temperature Dependence of Fast Reactions. Robert Becker, Wenzel Bartlett, Qian Lin, and Dale W. Margerum (Purdue)
- 24. New Six-coordinate (Nitrosyl)iron(III) Porphyrinate Complexes. Graeme R. A. Wyllie and W. Robert Scheidt (ND)
- Lisa C. Bonaccorsi, and David R. McMillin (Purdue)
- 26. Synthesis and Characterization of Zirconium 10-Phosphonodecyl Disulfide Monolayers.

  Xuejun Wang and Marya Lieberman (ND)
- 27. Luminescence from Platinum(II), Palladium(II), Zinc(II), and Cadmium(II) Terpyridines.
  D. G. Cuttell, M. H. Wilson, S. A. Bejune, J. F. Michalec, and D. R. McMillin (Purdue)
- 28. Fluorescent Analogs of UDP-Glc: Unique Probes to Follow the Metallabiochemistry of Toxins A and B of C. difficile. Sudeep Bhattacharyay and Andrew L. Feig (IU)
- 29. Toxin Control by Dietary Minerals. Elizabeth E. Hamilton and Jonathan J. Wilker (Purdue)
- 30. Chemistry of Marine Adhesives. Mary J. Sever, David L. Linson, and Jonathan J. Wilker (Purdue)
- 31. Kinetics and Mechanism of Hypochlorous Acid Decomposition in the Presence of Bromide Ion. Kara E. Huff and Dale W. Margerum (Purdue)
- 32. Selective Adsorption of Molecular QCA candidates [{(acac)<sub>2</sub>Ru}<sub>2</sub>bptz]<sup>0,+1</sup> on Chemically Modified Surfaces. Bindhu Varughese, Sudha Chellamma, and Marya Lieberman (ND)
  - J. Toward the Implementation of Molecular Quantum-dot Cellular Automata (MQCA).

    Yuliang Wang, Sudha Chellamma, and Marya Lieberman (ND)

# **Schedule**

#### 8:00-9:00am

Welcome Reception and Poster Hanging, Stepan Hall Lobby

#### 9:00-9:10am

Opening Remarks, 123 Nieuwland Science Hall

#### 9:10-9:30am

"Electrochemical Application Toward the Formation and Patterning of Porous Semiconducting Materials"

Hee Cheul Choi and Jillian Buriak, Purdue University

#### 9:30-9:50am

"Computational Studies of Mixed-Valence Molecules for Use in Molecular Electronics"

<u>Sonja B. Braun-Sand</u> and Olaf Wiest, University of Notre Dame

#### 9:50-10:10am

"Metal Mediated Reactivity of Photochemically Generated Diradical Intermediates"

<u>Brian J. Kraft</u> and Jeffrey M. Zaleski, Indiana University

#### 10:10-10:30am

"Transition Metal Halides vs. Transition Metal Hydrides in the Formation of Metallaboranes"

Melanie A. Peldo and Thomas P. Fehlner, University of Notre Dame

# 10:30-12pm

Odd Numbers Poster Session, Stepan Lobby

#### 12-1:30pm

Lunch

#### 1:30-3:00pm

Even Numbers Poster Session, Stepan Lobby

## 3:00-3:20pm

"Mechanistic Features of a Copper-Catalyzed Aziridination"

Peng Wu, Andrei N. Vedernikov, and Kenneth G. Caulton, Indiana University

#### 3:20-3:40pm

"Asymmetrically Bridging Aryls of Iridium"

<u>John Muldoon</u> and Seth N. Brown, University of Notre Dame

#### 3:40-4:00pm

"Building on the Emission of Platinum (II) Terpyridine"

Jan A. Gertenbach, John S. Field, Raymond J. Haines, Jeffrey Moore, and David R.

McMillin, Purdue University

## 4:00pm

Concluding Remarks