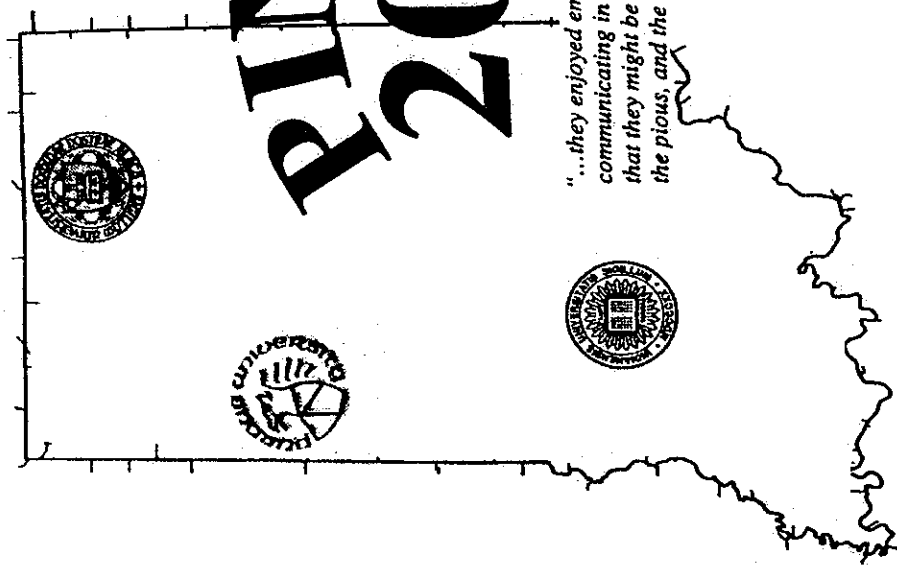


Six things belong to a chemist:
Working day and night,
Stoking the fire continuously,
Suffering smoke and fumes,
Injecting oneself,

Losing sight and health,
And finally perceiving success in a troubled heart.

From an anonymous satirical poem



"...they enjoyed employing figures of speech and communicating in symbols and analogies in order that they might be understood only by the prudent, the pious, and the enlightened."

Synesius

Morning Session

- 8:00- 8:55 **Welcome Reception – Room C127**
(Continental Breakfast and Hang Posters)
- Session Chair: Cristina Cañada
- 8:55-9:00 **Opening Remarks – Kenneth G. Caulton**
- 9:00-9:20 **Unprecedented C-O Bond Cleavage From Osmium Heterosubstituted Carbenes to Carbynes or Vinylidenes.**
German Ferrando, Helene Gerard, Odile Eisenstein, Kenneth G. Caulton.
Indiana University
- 9:20-9:40 **Multiple Emission from a Pyrene-Linked Platinum (II) Terpyridine Complex.**
Stephanie A. Bejune, Joseph F. Michalec and David R. McMillin.
Purdue University
- 9:40-10:00 **Clathrates of Group 14 Elements and Alkali Metals: An Exploration.**
Svilen Bobey and Slavi C. Sevov
University of Notre Dame
- 10:00-10:20 **Reactivity, or "Decomposition" of $[\text{Fe}_4\text{O}_2(\text{OAc})_7(\text{bpy})_2](\text{ClO}_4)$.**
Elisa J. Seddon, Kirsten Foltling, John C. Huffman and George Christou.
Indiana University
- 10:20-12:00 **Poster Session (Odd Numbers)**
- 12:00-1:30 **Lunch Break**

Afternoon Session

- 1:30-2:30 **Poster Session (Even Numbers)**
- Talks Resume
- Session Chair: Sean Seymore
- 2:30-2:50 **The Influence of Alkoxide and Thiolate Ligands on Structure and Reactivity of Molybdenum and Tungsten Complexes**
John C. Bollinger, Malcolm H. Chisholm, Ernest R. Davidson, John C. Huffman and Kristine B. Quinlan.
Indiana University
- 2:50-3:10 **Monomers and Dimers of Octa-substituted Silicon Phthalocyanine.**
Zhiyong Li and Marya Lieberman.
University of Notre Dame
- 3:10-3:30 **Metalloenediynes for Thermal and Photochemical Control of Bergman Cyclizations.**
Pedro. J. Benites, Susan. M. Lato, Andrew D. Ellington, and Jeffrey M. Zaleski.
Indiana University
- 3:30-3:50 **Synthesis and DNA Hairpin Binding Studies of bis-3-pyridyl porphyrin.**
Rebecca K. Wall, Alex H. Shelton and David R. McMillin and Keith Thomas.
Purdue University
- 3:50-4:30 **Rejection Collection and Closing Remarks**

Posters

Indiana University

- 1) A Theoretical and Spectroscopic Investigation into the Nature of the Bonding in $(RO)_3M \equiv N$ Compounds, where M = Cr, Mo, W and R = H, CH₃, and CF₃ (Alkyl and Fluoroalkyl).
Malcolm H. Chisholm, Ernest R. Davidson, Andy R. Kidwell and Dennis L. Lichtenberger.
- 2) Synthesis, Structure and Characterization of New Dodecanuclear Manganese Clusters.
Colette Boskovic, Euan, K. Brechin, Kirsten Foltling, William E. Streib, John C. Bollinger, Jae Yoo, David N. Hendrickson, and George Christou.
- 4) Crystal Structure and Reactivity of the $Mn_4O_3(O_2CC_6H_5)_4(dbm)_3$ and $Mn_4O_3(O_2CC_6H_4p-Me)_4(dbm)_3$ Complexes.
Núria Aliaga, Sheyi Wang, Kirsten Foltling, and George Christou.
- 5) New Synthetic Methodologies for Mn-Carboxylate Clusters: Reactivity of a New $[Mn_4O_2]^{8+}$ System.
Sumit Bhaduri, Guillem Aromí, John C. Huffman and George Christou.
- 7) Synthesis and Reactivity of New Mn-Carboxylate Clusters: Selective Exchange of Chelating Ligands.
Cristina Cañada, John C. Huffman, George Christou.

- 8) Synthesis and Characterization of Mixed-Metal Polyoxometalates of Vanadium and Molybdenum.
Ming-Hsi Chiang, William E. Streib, and George Christou.
- 10) New Dinuclear and Tetranuclear Mn-Carboxylate Complexes with the *bis*-Bipyridine Ligand 1,2-*bis*(2,2'-bipyridine-6-yl)ethane.
E. Carolina Sañudo, Vincent A. Grillo, David N. Hendrickson, John C. Huffman, William E. Streib and George Christou.
- 11) The Self-Assembly of Dinuclear and Hexanuclear Iron (III) Oxide Complexes.
Elisa J. Seddon, Craig M. Grant, Kirsten Foltling, John C. Huffman and George Christou.
- 13) Single-Molecule Magnets (1). Magnetic Studies on $[Mn_{12}O_{12}(O_2CR)_{16}(H_2O)_4]$ Complexes and New Reactivity of Mixed-Carboxylate $[Mn_{12}O_{12}(O_2CR)_8(O_2CR')_8(H_2O)_3]$ Complexes.
Mònica Soler, Pau Artús, Kirsten Foltling, John C. Huffman, David N. Hendrickson and George Christou.
- 14) Single-Molecule Magnets (2). Synthesis, Characterization and Magnetism of New $[Mn_{12}O_{12}(O_2CR)_{16}(H_2O)_4]^z$ ($z = 0, 1-, 2-$) Complexes.
Mònica Soler, Swapan Chandra, Daniel Ruiz, Kirsten Foltling, John C. Huffman, David N. Hendrickson and George Christou.

- 16) Fluorination and Bromination studies of the Cobalt bis(Dicarbollide) anion, $\text{Co}(\text{B}_9\text{C}_2\text{H}_{11})_2$.
Alexander N. Gashfi, John C. Huffman, Aaron Edwards, Gabriella Szekeley, Allen R. Siedle, Jon A. Karty, James Reilly, Jerry Howe, Gapgoung Kong and Lee J. Todd.
- 17) Ring Opening Polymerization of Cyclic Ethers and Esters by Aluminum Catalyst Precursors.
Bjorn Antelmann, Malcolm H. Chisholm, J. C. Huffman, Suri S. Iyer, Diana Navarro and W. Simonsick.
- 19) Novel Hetero- and Homo-tris(pyrazolyl)hydroborato Zinr catalysts for Ring Opening Polymerization of L-lactide.
Malcolm H. Chisholm, John C. Huffman, Suri Iyer and Khamphée Phomphrai.
- 20) Room Temperature Cleavage of $\text{C}(\text{sp}^2)\text{-X}$ Bonds ($\text{X} = \text{H}$, Alkyl, Aryl, NR_2): Carbonyl or Isonitrile Abstraction from Formamides and Imines by $[\text{RuHCl}(\text{P}^i\text{Pr}_3)_2]$.
Joseph N. Coalter, III, John C. Huffman and Kenneth G. Caulton.
- 22) Magnetic Alignment of Some Metalloporphyrazine Liquid Crystals.
Malcolm H. Chisholm, Brian D. Pate and Jeffrey M. Zaleski.
- 23) Further Studies on the Substitutional Behavior of 1,2- $\text{Mo}_2\text{Br}_2(\text{CH}_2\text{SiMe}_3)_4$. Alkyl, Amide, Phosphide, Alkoxide and Thiolate for Bromide Exchange and Isomerizations of 1,1- and 1,2- $\text{Mo}_2\text{X}_2(\text{CH}_2\text{SiMe}_3)_4$ Compounds.
Malcolm H. Chisholm, Damon R. Click and John C. Huffman.
- 25) Structure and Reactivity of Pd-metalloenediynes: Synthesis, Thermal, and Photochemical reactivity.
Nicole S. Coalter, Pedro J. Benites, William E. Streib, Chris Hughes and Jeffrey M. Zaleski.
- 26) Unprecedented Methyl Transfer from Conventional Organolithium Bases: Facile C-C and C-Si Bond Cleavage by an Electrophilic Os(II) Nitrosyl Dihydride.
Dmitry V. Yandulov, John C. Huffman and Kenneth G. Caulton.
- 28) Mechanism of $\text{H}_2\text{C}=\text{CHF}$ modification by C-F bond cleavage using Cp_2ZrHCl .
Lori Watson, Kenneth Caulton
- 29) The synthesis and Reactivity of $\text{MHCl}(\text{CO})(\text{Phosphine})_2$: Effect of Lewis Acidity
Alexei V. Marchenko, John C. Huffman, M^a Carmen Puerta and Kenneth G. Caulton
- 31) Solid-Gas Reactivity of Transition-Metal beta-Diketonate Complexes.
Joel Southern and Kenneth G. Caulton.
- 33) Metalloenediynes for Thermal and Photochemical Control of Bergman Cyclizations.
Pedro J. Benites, Susan. M. Lato, Andrew D. Ellington, and Jeffrey M. Zaleski.

Purdue University

- 6) **A New Alkylidene with Aryloxide Ligation: Plausible Intermediate in Arene Hydrogenations.**
Scott Schweiger, M.M. Salberg, F.P. Fanwick and I.P. Rothwell.
- 12) **Delocalization and Rigidity Effects on Excited States for [Pt (2-(2'-pyridyl)-1,10 phenanthroline) Cl]⁺ and Derivatives.**
Jeffrey J. Moore and David R. McMillin,
- 18) **Binding of 5,10,15,20-tetrakis(4-N-methylpyridinyl) Porphyrin [H2T4] to DNA Hairpins.**
Keith E. Thomas and David R. McMillin.
- 24) **Reactivity of Mixed Phosphine-Acetate Complexes Containing [Re₂S₅+ Core.**
Jitendra K. Bera, Phillip E. Fanwick and Richard A. Walton.
- 30) **Dirhenium Chemistry of DppE.**
Shan-Ming Kuang, Phillip E. Fanwick and Richard A. Walton.

University of Notre Dame

- 3) **Novel Layered and Framework Uranyl Oxides and Oxyfluorides.**
Christopher L. Cahill, Sergey V. Krivovichev, Yaping Li and Peter C. Burns.
- 9) **Synthetic Approach and Surface Studies Toward the Development of Molecular QCA Cells.**
Yuliang Wang, Sudha Chellamma and Marya Lieberman.
- 15) **Formation and Function of Transition Metal Hydrides in the Synthesis of Metallaboranes.**
Melanie A. Peldo and Thomas P. Fehlner.
- 21) **Co-Catalyzed Air Oxidation using (mes)₃Ir=O.**
John Muldoon, Michael S. Wargoeki, Bridey R. Grant and Seth N. Brown.
- 27) **Above Ambient Spectroscopic, Mossbauer and Magnetic Susceptibility Studies of [Fe(OEP)NO] and [Fe(TPP)NO]: A Possible Spin State Transition?**
Graeme R.A. Wylie, Mary K. Ellison, Charles E. Schulz and W. Robert Scheidt.
- 32) **Anionic Bismuth Oligomers in the Solid State.**
Franck Gascoin and Slavi C. Sevov