

Curriculum Vitae

Name: Jason Stephen D'Acchioli
E-Mail: jdacchio@uwsp.edu
Phone Contact: 715-346-2297

Professional Interests

Computational inorganic chemistry; electrochemistry; organometallic chemistry; metal-metal multiple bonds; electronic materials; graduate education and reform; chemical education

Employment

Assistant Professor of Chemistry, University of Wisconsin—Stevens Point (July 2006 – present)

Education

1. *B.S., magna cum laude* (2000) Providence College – Providence, RI
2. *Sc.M.* (completed 2001, granted 2002) Brown University – Providence, RI (with D.A. Sweigart)
3. The Ohio State University – Columbus, OH Graduate Student (2001 – 2003)
Ph.D. Candidate (2003 – 2005, B.E. Bursten and M.H. Chisholm) *Ph.D.* Granted, December 2005
4. Postdoctoral Research Associate – (October 2005 – March 2006) Cornell University, R. Hoffmann
5. Postdoctoral Research Associate—(March 2006 – July 2006) Cornell University, F. DiSalvo

Research Skills

1. Electrochemical methods (cyclic voltammetry, bulk electrolysis, differential pulse voltammetry)
2. Synthesis of organometallic piano-stool complexes
3. Air sensitive synthetic methods utilizing Schlenk and dry-box techniques
4. Spectroscopic methods including UV-Vis, IR, NMR, and low temperature UV-Vis
5. Computational chemistry utilizing density functional theory (DFT)
6. Familiarity with various commercial computational software packages, including Gaussian, Turbomole, and ADF

Teaching Experience

1. *Departmental Chemistry Tutor*, Providence College (1998 – 2000)
2. *Graduate Teaching Associate (GTA), General Chemistry*, Brown University (Fall Semester 2000): Supervised a first semester general chemistry laboratory; delivered pre-lab lectures
3. *GTA, Organic Chemistry*, Brown University (Spring 2001): Supervised a second semester organic chemistry laboratory
4. *GTA, General Chemistry*, The Ohio State University (OSU) (Fall Quarter 2001 – Spring Quarter 2002): Supervised laboratory and recitation sections in the general chemistry sequence
5. *GTA, Inorganic Chemistry*, OSU (Fall Quarter 2002): Organized recitation sections of an inorganic chemistry course for senior undergraduate students; assisted in constructing problem sets and grading exams
6. *GTA, Honors General Chemistry*, OSU (Winter Quarter 2003): Supervised laboratory sections and recitations for a second quarter honors general chemistry course
7. *GTA, Inorganic Chemistry*, OSU (Fall Quarter 2003): See above
8. *GTA, Honors General Chemistry*, OSU (Spring Quarter 2005): Supervised laboratory sections and voluntary review sessions (open to entire class). Involved in teaching some lectures

Undergraduates Mentored

1. Benjamin Gamoke, spring 2007 – present
2. Brennan J. Walder, summer 2007 – present
3. Tracey Oudenhoven, fall 2007 – present
4. Steven Sill, spring 2008 – present

Publications

1. Zhang, X., Yu, K., Carpenter, G. B., Sweigart, D. A., Czech, P. T., and D'Acchioli, J. S., " η^2 -Binding of Styrenes to Pt(PPh₃)₂. The Effect of Precoordination of Manganese Tricarbonyl Cation to the Aromatic Ring", *Organometallics* **2000**, 19, 1201.
2. Watson, E. J., Virkaitis, K. L., Li, H., Nowak, A. J., D'Acchioli, J. S., Yu, K., Carpenter G. B., Chung, Y. K. and Sweigart, D. A., "The Synthesis of Bimetallic Manganese Tricarbonyl-Capped Metallocenes", *Chem. Commun.* **2001**, 457.

- Li, H., Yu, K., Watson, E. J., Virkaitis, K. L., D'Acchioli, J., Carpenter, G. B., Sweigart D. A., Czech P. T., Overly, K. R. and Coughlin F., "Models for Deep Hydrodesulfurization (HDS) of Alkylated Benzothiophenes. Reductive Cleavage of C-S Bonds Mediated by Precoordination of Manganese Tricarbonyl to the Carbocyclic Ring", *Organometallics* **2002**, 21, 1262.
- Chisholm, M.H., D'Acchioli, J.S., Pate, B.D., and Patmore, N.J. "The Cations $M_2(O_2C^tBu)_4^+$, where M = Mo and W, and $MoW(O_2CBu^t)_4^+$. Theoretical and Spectroscopic Investigations", *Inorg. Chem.* **2005**, 44, 1061.
- Chisholm, M.H., D'Acchioli, J.S., Hadad, C.M., Patmore, N.J. "Studies of Oxalate Bridged MM Quadruple Bonds and Their Radical Cations (M = Mo or W): On the Matter of Linkage Isomers", *Dalton* **2005**, 10, 1852.
- Bursten, B.E., Chisholm, M.H., D'Acchioli, J.S. "Oxalate Bridged Dinuclear M_2 Units: Dimers of Dimers, Cyclotetramers (Squares), and Extended Sheets (M = Mo, W, Tc, Re, Ru, and Rh)", *Inorg. Chem.* **2005**, 44, 5571.
- Chisholm, M.H., D'Acchioli, J.S., Hadad, C.M. " The Physical and Electronic Structure of M_2 Quadruply Bonded Complexes: A Density Functional Theory Study", *J. Cluster. Sci.* **2006**. Published online Tuesday, September 19th, 2006.
- Chisholm, M.H., D'Acchioli, J.S., Hadad, C.M., Patmore, N.J. "Concerning the Electronic Coupling of MoMo Quadruple Bonds Linked by 4,4'-azodibenzoate and t_{2g}^6 -Ru(II) Centers by 4,4'-azodiphenylamino Ligands", *Inorg. Chem.* **2006**, 45, 11035.
- Merino, G., Donald, K.J., D'Acchioli, J., Hoffmann, R. "The Many Ways to Have a Quintuple Bond", *J. Am. Chem. Soc.* **2007**, 129, 15295.

Presentations

- Li, Huazhi; Watson, E. J.; Virkaitis, K. L.; Nowak, A. J.; Yu, K.; D'Acchioli, J. S.; Sweigart, D. A. "Synthesis and reactivity studies of bimetallic manganese tricarbonyl-capped metallocenes", Poster, 221st American Chemical Society Meeting (2001)
- Bursten, B.E.; Chisholm, M.H.; D'Acchioli, J.S. "M₂ units as a foundation for molecular materials: A theoretical investigation", Talk, 36th Annual ACS Central Regional Meeting; Indianapolis, IN (2004)
- Bursten, B.E.; Chisholm, M.H.; D'Acchioli, J.S. "M₂ units as a foundation for molecular materials: A theoretical investigation", Poster, Inorganic Gordon Research Conference; Newport, RI (2004)
- Chisholm, M.H.; D'Acchioli, J.S.; Hadad, C.M.; Patmore, N.J. "Linkage Isomerism in M₂ multiply bonded oxalate bridged complexes", Talk, 228th Annual American Chemical Society Meeting (2004)

5. D'Acchioli, J.S.; Gdula, R.; Vaida, V. "The CID: Experiments in Professional Development", Joint talk, 228th Annual American Chemical Society Meeting (2004)
6. D'Acchioli, J.S. "So Many Metals, So Little Time." Departmental Seminar, UWSP, March 2007.

Committees

1. Mack Award Committee: Banquet organizer; scheduling (2002 – 2005, OSU)
2. Departmental Safety Committee (2003 – 2005, OSU): Part of a team who helped to evaluate the safety and security of the Chemistry Department
3. Carnegie Initiative on the Doctorate (2003 – 2005, OSU): One of six graduate students representatives who, as part of a national endeavor, examined the state of graduate education at OSU
4. Departmental Seminar Committee (2004 – 2005, OSU): Graduate student representative who invited seminar speakers based on graduate student input
5. Graduate Student Faculty Hiring Committee (2004 – 2005, OSU): Organized a group of graduate students to listen to faculty candidates' research presentations, with the goal of evaluating them
6. Curriculum Development Committee (September 2007 – present, UWSP Chemistry Department)
7. UWSP Letters and Science Advisory Committee (Spring 2008)

Academic Awards and Honors

1. *Full Scholarship*, Providence College (1996 – 2000)
2. *Professor E.R. Boyko Scholarship*, for promising entering freshmen chemistry majors (1996 – 2000)
3. *CRC Press Award* for outstanding achievement by a student in Freshman Chemistry (1997)
4. *Renè Fortin Essay Contest winner*, Providence College, 1999, for an essay exploring the connection between Sir Humphrey Davey and William Wordsworth through their nitrous oxide experiments
5. *Father Hickey Science Award* for individual and academic excellence in Chemistry (2000)
6. *Highest Cumulative Four-Year Average* in Concentration subjects in a Chemistry Program (2000)
7. *Ohio Supercomputer Center graduate conference student achievement award* (2002)
8. *GAAN Fellow*, Brown University (2000 – 2001)
9. *GAAN Fellow*, The Ohio State University (2002 – 2003)
10. *Henne Research Competition*, The Ohio State University, honorable mention (2004)
11. Chair's, Dean's, and Vice Chancellor's Merit (2006-2007)
12. Chair's, Dean's, and Vice Chancellor's Merit (2007-2008)

Grants and Funding

1. IT Mini-Grant (UWSP): Grant for the integration of a graphics tablet as an electronic chalkboard. \$399, *Funded*.
2. IT Mini-Grant (UWSP) with R. Badger and M. Zach: "Integration of Laboratory Desktop Instrumentation Technology in the General Chemistry Curriculum." \$2630, *Funded*.
3. Research Corporation: Cottrell College Science Grant, "The synthesis and electronic structure of M_2 -containing organometallic complexes: A new frontier in metal-metal multiple bonding." \$44535.50, *Recommended for funding by all external reviewers; ultimately not funded*.

Other Professional Activities and Memberships of Professional Organizations

1. *American Chemical Society Student Affiliates, Providence College Chapter*, 1997 – 2000
2. Involved in service activities to the community, via bringing chemistry into local elementary schools
3. *American Chemical Society Member*, 2001 – present
4. *American Chemical Society Division of Inorganic Chemistry (DIC) Member*, 2001 – present
5. Peer reviewer, *Inorganic Chemistry* (2006 – present)
6. Peer reviewer, *Organometallics* (2006 – present)