

Anna S. Larsen

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Current Position:	Assistant (2003-2009), Associate(2009) Professor at Department of Chemistry, Ithaca College
Education	
1997	Ph.D. Inorganic/Organometallic chemistry Utah State University Advisor: Professor John L. Hubbard; 3.96/4.0 GPA (top 5% of class) Dissertation: "Kinetic and thermodynamic studies of rhodium and ruthenium cyclopentadienyl nitrosyl complexes' reactivity"
1991	B.S./M.S. Organic Chemistry Moscow State University, Russia Advisor: Professors N.S. Zefirov and V.A. Palyulin; 3.85/4.0 GPA (top 10% of class) Thesis: "Synthesis and conformational analysis of 3,7-diazabicyclo[3.3.1]nonane derivatives"
Teaching Experience	
2003- present	Ithaca College TENURE-TRACK ASSISTANT PROFESSOR <ul style="list-style-type: none"> • Principles of Chemistry (lecture course for science majors, >100 students class) • Inorganic Chemistry Lectures (chemistry majors) • Environmental Chemistry Lectures (for non-science and environmental studies majors) • Organic Chemistry Laboratory • Advanced Inorganic/Organometallic Chemistry Laboratory (for chemistry majors) • Organometallic Chemistry Lectures (advanced class for chemistry seniors) • Undergraduate research advising and student participation in scientific conferences (National and Regional American Chemical Society meetings in Rochester (November 2004), San Diego (March 2005), San Francisco (September 2006), Chicago (2007), New Orleans and Philadelphia (2008), Salt Lake City (2009))
2001-2002	University of Washington LECTURER (CONCURRENT WITH POSTDOCTORAL RESEARCH ASSOCIATE APPOINTMENT) <ul style="list-style-type: none"> • General Chemistry Lectures (>200 science majors) • Inorganic Chemistry Lectures (>100 chemistry majors)
2000-2001	Seattle University VISITING ASSISTANT PROFESSOR <ul style="list-style-type: none"> • General Chemistry lectures and labs (30-40 science majors) • Quantitative Instrumental Analysis lectures and labs • Advanced Organometallic Chemistry lectures and labs • Directed research project working with three undergraduate students • Promoted undergraduate student participation in scientific conferences (co-authored student presentations at the Western ACS regional meeting, Murdock Foundation Undergraduate Research Conference, NCUR Conference, ACS Undergraduate Research Conference)
1999	University of California-Riverside LECTURER <ul style="list-style-type: none"> • Introductory General Chemistry Course for under-represented minority students

Teaching Experience (continued)

1996

Indiana Academy of Arts, Sciences and Math for Talented Youth

SUBSTITUTE TEACHER

- General Chemistry lectures and labs at Advanced Placement high school level

1991-1996

Utah State University

TEACHING ASSISTANT

- Instructed at all levels of undergraduate college chemistry: General (discussion sections), Analytical (lab), Organic (lab), Advanced Organometallic Synthetic Chemistry lab
- Trained new users on two state-of-the-art high-field NMR spectrometers
- Maintained NMR spectrometers software and hardware for the Department of 50+ users

Research Experience

2003-present

Ithaca College

UNDERGRADUATE RESEARCH ADVISER

- Exploration of the low melting ionic solids with a team of 4 participating undergraduate students (on-going)
- Started a new project on organometallic chemistry of ruthenium carborane complexes with a chemistry junior student over the summer of 2004 (on-going)

2001-2003

University of Washington

RESEARCH ASSOCIATE (TEACHER-SCHOLAR)- Advisor: Professor James Mayer

- Kinetics of hydrocarbon oxidation by manganese dimers
- Rates of electron and electron-coupled proton transfer in iron complexes

1997-2000

University of Southern California and UC-Riverside

POSTDOCTORAL RESEARCH ASSOCIATE - Advisor: Professor Christopher A. Reed

- Investigated synthesis and structural properties of the novel acetylide-based polymeric materials: X-ray powder diffraction and IR-spectroscopy methods
- Performed synthetic and mechanistic studies with acetylide porphyrines complexes of tin:
- Synthesized and structurally characterized first ionic liquids based on non-coordinating carborane anions
- Supervised undergraduate and graduate students within the research group

1992-1996

Utah State University

RESEARCH ASSISTANT (Ph.D. Advisor: Professor John L. Hubbard)

- Synthesized and characterized reactive nitrosyl ruthenium and rhodium complexes
- Performed mechanistic studies of weak ligand exchange equilibria at ruthenium and rhodium coordination centers by multinuclear variable temperature NMR, FTIR, UV-vis
- Discovered stoichiometric and catalytic oxidation of alcohols and ethers by cyclopentadienyl nitrosyl ruthenium(IV) complexes and investigated reaction kinetics and mechanisms
- Developed novel NMR techniques for mechanistic studies in non-deuterated solvent systems

1988-1991

Moscow State University, Laboratory of Organic Synthesis

RESEARCH ASSISTANT (M.S. Advisor: Professor Vladimir A. Palyulin)

- Conducted multistep organic synthesis and characterization of biologically active 3,7-diazabicyclo[3.3.1]nonane derivatives
- Utilized molecular mechanics calculations for conformational analysis

Grants, Awards

- “Electrophilic Ruthenium complexes with non-coordinating carborane anions” *Cottrell College Award from the Research Corporation* (\$47 K for 2+ years, 2007)
- "Advancing Organometallic Catalysis via Incorporating Weakly-Coordinating Carborane Anions into Cationic Half-Sandwich Electrophilic Complexes" *American Chemical Society Petroleum Research fund* (\$35K for 2+ years, 2006).
- Co-P.I. to the *National Science Foundation Major Research Instrumentation Grant* proposal: Acquisition of an NMR Spectrometer to Support Undergraduate Research and Curriculum Reform 257K (2005)
- Ithaca College New Faculty Start-up Fund 20K for the period of September 2003-May 2004
- *ACS PRF grant for the Under-represented Minority Scholar Summer Fellowship* to Cole Lechleiter ('09) to support his 2008 summer research on ruthenium carborane organometallics studies (\$5000).
- *Dana internship* for the summer of 2008 to John Dymon to support his work with professor Maria Forsyth at Monash University (Australia) – electrochemical characterization of ionic liquids.
- In Spring of 2008 John Dymon ('10) was awarded the *Ithaca Fund grant* to support the presentation at the 235th ACS National Meeting, New Orleans.
- In Summer of 2007 the department purchased state-of-the-art double sized inert atmosphere camera with a -40C freezer (\$30K). This purchase has been made possible by major contributions from my Research Corporation grant and IC matching funds.
- *ACS PRF grant for the Under-represented Minority Scholar Summer Fellowship* to Jason Diaz ('08) for his research with me on ruthenium organometallics (\$5000) in summer of 2007.
- The *Ithaca Fund grant* to Ryan Wibby to support the presentation at the 233rd ACS National Meeting in Chicago in spring of 2007.
- In Fall of 2006 the department purchased modern economical and safe *system for the solvent purification* to replace outdated hazardous solvent distillation procedures for the four most commonly used solvents (\$25000). This purchase has been made possible by major contributions from my ACS PRF grant, the Chemistry Department and IC matching funds.
- In Fall 2006 Josh Masland ('06) was awarded the *Ithaca Fund grant* to support the presentation at the 232nd ACS National Meeting, San Francisco.
- In summer of 2006 Josh Masland carried on a *Dana internship* with professor Jim Mayer at the University of Washington, studying ruthenium complexes proton-coupled electron transfer.
- I have contributed as a principal co-investigator to the Major Research Instrumentation grant proposal submitted to National Science Foundation (co-authored by 8 faculty - two from Ithaca College and the rest from four Colleges in NY and PA (College Consortium) for the funds to purchase a new X-ray diffractometer.
- In Fall 2005 Josh Masland ('06) and I were awarded the *Ithaca Fund grant* for the purchase of the new equipment for the temperature sensitive experiments, used in carborane synthesis.
- *Faculty development sustainability grant* (summer 2005) for the development of the teaching module “Fuel Cell – Power of the Future”. This module is used in the Honors seminar program, in Environmental Chemistry, Environmental Biology and Principles of Chemistry classes.
- Seattle University Faculty Development Summer Research Award (supporting undergraduate research and travel to present research results at the ACS regional meeting in San Francisco in October, 2000)
- American Chemical Society Women Chemist Committee Travel Award (for traveling and presentation at the Inorganic Gordon Conference at Newport, Rhode Island, 1998)
- Outstanding Graduate Student Alumni Award (Utah State University, 1996)
- Multiple Utah State University Graduate Student Association Travel Awards used for travel/presentations at National and Regional ACS meetings (1992-1996)

Under-graduate Research Advising

- Fall2008-Summer '09: Shawn Eady ('10), John Dymon ('10)
- Spring/Summer '08: John Dymon ('10), Phil Byers ('08) – currently in Florida State University Ph.D. program, Shawn Eady ('10), Cole Lechleighter('10)
- Spring/summer '07: Jason Diaz('09), John Dymon ('10), Semeret Munie ('08) – now at Cornell University Ph.D. program,
- Fall '07: Ryan Wibby ('07), Katrina Brown ('08)
- Fall '06: Josh Masland ('06), Ryan Wibby ('07), Katrina Brown ('08)
- Summer '06: Ryan Wibby (Dana Intern); and KeLee Rich (supported by American Chemical Society Petroleum Research Fund) – currently at Ophthalmology School in Indianapolis, Josh Masland ('06) – sponsored external Dana internship with professor Jim Mayer at the University of Washington
- Spring '06: Matt Pearsall ('06) – currently employed in Vertex Inc (biopharmaceutical), Josh Masland ('06), KeLee Rich ('07)
- Fall '05: Jesse Kleingardner ('05) –currently in University of Rochester Ph.D. program, Matt Pearsall ('06), Matt Sprague ('05) – currently in Ph.D. Program in Caltech
- Summer 2005: Josh Masland (06), Jesse Kelingardner (06), Matt Pearsall – Research Experience for Undergraduates in SUNY Buffalo (Professor Phil Coppens group).
- Spring '05 Jesse Kleingardner ('05), Matt Pearsall (06), Matt Sprague ('05)
- Fall '04 Nathan Kozlowski ('06), Joseph Livingston ('06), Jesse Kleingardner ('05), Matt Pearsall (06), Matt Sprague ('05)
- Summer '04 Jesse Kleingardner ('05), Matt Pearsall (06)
- Spring '04 Jesse Kleingardner ('05), Matt Pearsall (06), Eric Leibensperger ('05) – currently in Ph.D. program in Harvard,
- Fall '03: Jesse Kleingardner ('05), Matt Pearsall (06), Eric Leibensperger ('05), Meredith Cummins ('06); Seattle University (2000-2001): Lisa Agostinelli ('01) and Karissa Pierce ('01) – both University of Wahsnigton Ph.Ds., Brooke Price – University of Washington M.D. program

Conferences, Meetings, Workshops Attended

1. 38th International Congress on Coordination Chemistry, Jerusalem, Israel, July 2008
2. 235th ACS National Meeting (New Orleans, LA, April 6-10, 2008), poster and invited symposium participant
3. Inorganic Reactions Mechanisms Gordon Research Conference (February 2007 Ventura CA); invited contributor, poster selected for oral presentation
4. Inorganic Chemistry Gordon Research Conference (July 2007 Salve Regina University, Newport, RI); supported by special Chair Fund
5. 232nd ACS National Meeting (San Francisco, CA, Sept. 10-14, 2006), poster
6. Inorganic Chemistry Gordon Research Conference (July 18-24, 2006 Salve Regina University, Newport, RI); invited to chair a section, supported by GRC Chair Fund
7. National Science Foundation workshop for Inorganic Chemistry (June 7-10 2006, Seattle, WA);- was accepted *among only 25 participants selected nationwide, and among only 2 participants from PUIs.*
8. 229th ACS National Meeting (San Diego, CA, March 13-17, 2005) talk
9. Inorganic Chemistry Gordon Research Conference (July 17-23 2005, Salve Regina University, Newport, RI), two posters – supported by GRC Chair Fund
10. Gordon Research Conference “Inorganic Reaction Mechanisms” in spring of 2003 (Ventura, CA), poster, supported by GRC Chair Fund
11. National American Chemical Society meetings in March 2004 (Anaheim, CA) and in August 2004 (Philadelphia, PA), poster
12. Northeast Regional ACS Meeting (Rochester, NY), poster
- 13-15. Mid-Atlantic Association of the Liberal Arts College Chemistry Teachers conferences (at the Juniata College, Juniata, PA, November 2004; Widener University, PA, October 2005; Ithaca College, October 2006), discussion participant and section leader
- 16-18. “Promoting Women Leaders in Science” workshops at the ACS Meetings in Anaheim, March 27, 2004; San Diego, March of 2005 (COACH Scholarship by Committee on the Advancement of Women Chemists); New Orleans, April 2008, discussion participant

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**Invited talks
given at
other
institutions:**

- “Carborane cluster for ruthenium organometallic chemistry and low-melting ionics”
Invited lecture at St. Johns University, New York, NY, April 29, 2008
- “Carborane stabilized ruthenium complexes and boron-cluster based ionic melts”
Invited lecture at State University of New York in Albany Chemistry department, Albany, NY,
April 15, 2008
- “Carborane stabilized ruthenium complexes”
Invited lecture at the University of
Sheffield, UK, May 7, 2006

**Service:
To College
and wider
scientific
community,
Other
Professional
Activities**

- Ithaca College Organization Committee for Sigma Xi Society for Academic Excellence
in Science, Engineering and Math (2007-2008)
- Ithaca College Informational Technology Planning Committee (2004-2007)
- Ithaca College Informational Technology Faculty Sub-committee (2006)
- Ithaca College Leadership Fellowship Reviewing Panel (2007)
- Participating in the Person-to-Person Ithaca College recruiting program (2004, on-going)
- Participating in the “Minority students in sciences” recruiting program (2005, on-going)
- Ithaca College international student orientation (2005-2008)

- Referee/reviewer for Journals of Inorganic Chemistry, Organic Chemistry Letters,
Inorganic Communications Journals (paper manuscripts) and National Science
Foundation, ACS PRF and Research Corporation agencies (grant proposals)

- Invited reviewer of four General Chemistry and one Inorganic Chemistry textbooks
- Co-author of a new edition of the General Chemistry Study Guide (published 2004)

**Professional
Affiliations**

- American Chemical Society
- Council for Undergraduate Research
- Middle Atlantic Association of Liberal Arts Chemistry Teachers

LIST OF PUBLICATIONS AND PRESENTATIONS FOLLOWS.
LINKS TO RECENT PAPERS PDF FILES ARE AVAILABLE ON-LINE AT
<http://www.ithaca.edu/hs/depts/chemistry/facstaff/alarsen/>

PUBLICATIONS

(undergraduate co-authors names are underlined)

1. "Designing ionic liquids with boron cluster anions: alkyl pyridinium and imidazolium [nido C₂B₉H₁₁] and [closo-CB₁₁H₁₂] carborane salts" Dymon, J., Wibby, R., Kleingardner, J., Tanski, J.M., Guzei, I.A., Holbrey, J.D., Larsen, A.S. *Dalton Trans.* 2999 - 3006 (2008) **[publication 1]***- included in top 10 most accessed papers for the month of May 2008 on Dalton Transactions website
2. "Structure of the Di- μ -nitrosyl-bis [(eta-5-pentamethylcyclopentadienyl)ruthenium(0)](Ru—Ru) complex", Pearsall, M., Gembicky, M., Dominiak, P., Larsen, A., Coppens, P., *Acta Crystallographica Section E*, 2007, E63, m2596 **[publication 2]**
3. "(Glycol-[kappa]²O,O')nitrosyl([eta]⁵-pentamethylcyclopentadienyl) ruthenium(II) bis(trifluoromethanesulfonate)" Munie, S., Larsen, A. and Gembicky, M. *Acta Cryst.* (2008). E64, m293 **[publication 3]**
4. "A Weakly Coordinating Anion as a Tripodal 'Br₃'-Ligand for Platinum(IV): Structure of [(closo-CB₁₁H₆Br₆)PtMe₃]" De Crisci, A.G., Kleingardner, J., Lough, A.J., Larsen, A. and Fekl, U. *Can. J. Chem.* 87(1): 1–8 (2009) (was accepted for publication in April 2008) **[publication 4]**
5. "Hydrogen Atom Transfer from Iron(II)-tris[2,2'-bi(tetrahydropyrimidine)] to TEMPO: A Negative Enthalpy of Activation" Mader, E.A.; Larsen, A.S.; Mayer, J.M. *J. Am. Chem. Soc.* **2004**; 126 (26); 8066-8067 **[publication 5]**
6. "Non-Organometallic Mechanisms for C-H Bond Oxidation" Mayer, J., Larsen, A., Bryant, J., Wang, K., Lockwood, M., Rice, G., Won, T.-J. in ACS Symposium Series "Activation and Functionalization of C-H Bonds" 2003, edited by Karen Goldberg **[publication 6]**
7. "Electron and Hydrogen Atom Self-Exchange Reactions of Iron and Cobalt Coordination Complexes" Yoder, J.C.; Roth, J.P.; Gussenhoven, E.M.; Larsen, A.S.; Mayer, J.M. *J. Am. Chem. Soc.* 2003, 125, 2629-2640 **[publication 7]**
8. Book "Student Study Guide" (co-authored with Michael Goldfeld): supplement for the textbook "Chemistry: The Molecular Science" (Moore, Stanitski and Jurs), 2005, Thomson Learning, ISBN 0-534-49072-7 **[publication 8]**
9. "Hydrocarbon Oxidation by Bis- μ -Oxo Manganese Dimers: Electron Transfer, Hydride Transfer, And Hydrogen Atom Transfer Mechanisms" Larsen, A.S.; Wang, K.; Lockwood, M. A.; Rice, G.L.; Won, T.J.; Lovell, S.; Sadilek, M.; Tureček, F.; Mayer J.M. *J. Am. Chem. Soc.* 2002, 124; 10112-10123
10. "Molecular Structure of the Solvated Proton in Isolated Salts. Brønsted Acid Reagents, H(Solvent)²⁺, with Weakly Coordinating Anions" Stasko, D.; Hoffmann, S.; Kim, K.-C.; Fackler, N.L.P.; Larsen, A.S.; Drovetskaya, T.; Tham, F.S.; Reed, C.A.; Rickard, C.E.F.; Boyd, P.D.W.; Tsang, C.W.; Mak, T. C. W., Xie, Z. *J. Am. Chem. Soc.* **2002**, 124; 13869-13876
11. "Designing Ionic Liquids: Imidazolium Melts with Inert Carborane Anions" Larsen, A.S.; Holbrey, J. D.; Tham, F. S.; Reed, C. A. *J. Am. Chem. Soc.* **2000**, 122(30), 7264-7272.
12. "Aqueous Organometallic Chemistry of the Electrophilic [(Cp*(CH₃)₅)Ru(NO)]²⁺ Fragment" Svetlanova-Larsen, A.; Zoch, C.R.; Hubbard, J. L. *Organometallics*, **1996**, 15, 3076-87.
13. "An Evaluation of Triflate Displacement by Water in CH₂Cl₂ Solutions of *trans* [Rh(CO)(PPh₃)₂(OSO₂CF₃)]" Svetlanova-Larsen, A.; Hubbard, J.L. *Inorg Chem.* **1996**, 35 (10), 3073-76.
14. "Crystal and Molecular Structure of 1,5-Dimethyl-9,9-dioxy-3,7-diazabicyclo[3.3.1]nonane Dihydrochloride Dihydrate" Goncharov, A.V.; Potekhin, K.; Struchkov, Y.; Svetlanova (Larsen), A. Chemodanova, S.V.; Palyulin, V.; Zefirov, N. *Proc. Russ. Nat. Academy Sci.* **1992**, 285-287.
15. "Synthesis and Molecular Structure of 1,5-Dimethyl-3,7-di-tert-butyl-3,7-diazabicyclo[3.3.1]nonane-9-one" Potekhin, K., Levina, O., Struchkov, Y., Svetlanova (Larsen), A.; Idrisova, R.; Palyulin, V.; Zefirov, N. *J. Chem. Soc. Mendeleev Comm.* **1991**, 87-89.

*Publications ##1-7 are available as PDF files at
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SELECTED INVITED LECTURES, PRESENTATIONS AND ABSTRACT TITLES

(undergraduate student co-authors underlined)

1. "Alcohol reactivity with Electrophilic [RuCp*(NO)] complexes" A. Larsen, K. Rich, M. Pearsall, J. Diaz, M. Gembicky, P. Dominiak, P. Coppens, C. Zoch, J. Hubbard. Poster presentation at 38th International Conference on Coordination Chemistry, Jerusalem, Israel, July 2008.
2. "Carborane stabilized ruthenium complexes and boron-cluster based ionic melts" Larsen, Anna S.; Masland, Joshua David, Pearsall, Matthew, Kleingardner, Jesse; Dymon, John. Invited lecture at St. John University, Queens, NY, April 29, 2008
3. "Carborane stabilized ruthenium complexes and boron-cluster based ionic melts" Larsen, Anna S.; Masland, Joshua David, Pearsall, Matthew, Kleingardner, Jesse; Dymon, John. Invited lecture at State University of New York in Albany Chemistry department, Albany, NY, April 15, 2008
4. "Low-melting salts based on carborane cluster anions" Larsen, Anna, coauthored by John Dymon ('09), Ryan Wibby ('07) and Jesse Kleingardner ('06), poster presentation at Inorganic Chemistry Gordon Research Conference, Salve Regina University, Newport, Rhode Island, July 20-25, 2007.
5. "Mechanistic Studies of Alcohol Oxidation by ruthenium complexes" (both poster and oral presentation) Larsen, A. S., Rich, K., Hubbard, J.L., Gordon Research Conference on Inorganic Reactions Mechanisms, Ventura, CA, February 2007.
6. "Synthesis of ruthenium carborane complexes". Larsen, Anna S.; Masland, Joshua David. Presented at the National Science Foundation Workshop for Inorganic Chemistry, Seattle, Washington, June 2006
7. "Alcohol Oxidation by ruthenium complexes" Larsen, Anna S., Rich, K., Hubbard, J.L. Gordon Research Conference, Inorganic Chemistry, Salve Regina University, Newport, Rhode Island, July 2005-2006.
8. "Carborane stabilized ruthenium complexes" Larsen, Anna S.; Masland, Joshua David, Pearsall, Matthew. Invited lecture at the University of Sheffield, UK, May 7, 2006
9. "Synthesis of ruthenium carborane complexes by superacidic methyl abstraction". Larsen, Anna S.; Masland, Joshua David. Abstracts of Papers, 232nd ACS National Meeting, San Francisco, CA, United States, Sept. 10-14, 2006 (2006), CHED-281.
10. "Undergraduate projects at Ithaca College: carboranes in RuCp*(NO) chemistry and low melting ionics." (co-authored by Matt Sprague, Jesse Kleingardner and Joshua Masland) Gordon Research Conference, Inorganic Chemistry, Salve Regina University, Newport, Rhode Island, July 19-24, 2005 (poster presentation). [Presentation supported by GRC Chairs Fund.]

CO-AUTHORED PRESENTATIONS

(undergraduate co-authors names are underlined and noted if presenting):

1. "Approaching a novel carborane-stabilized pro-catalytic ruthenium system" Jason Diaz (presenting), Anna Larsen. Abstracts of Papers, 236th ACS National Meeting, Philadelphia, PA, August 18-21 (2008).
2. "Designing ionic liquids with boron cluster anions: Closo-carborane and ortho-carborane salts of N-alkyl pyridinium and N, N' - dialkyl imidazolium cations" Larsen, A., John J. Dymon, J. (presenting), Holbrey, J.D., Wibby, R., Kleingardner, J. Abstracts of Papers, 235th ACS National Meeting, New Orleans, LA, United States, April 5-10, 2008 (2008), INOR-270.
3. "Synthesis and characterization of low-melting salts: O-carborane anions with N-alkyl pyridinium and N,N-dialkyl imidazolium." Wibby, R. E. (presenting); Larsen, A. S.; Kleingardner, J.; Brown, K. Abstracts of Papers, 233rd ACS National Meeting, Chicago, IL, United States, March 25-29, 2007 (2007), CHED-1170.
4. "Hydrogen atom transfer reactions of coordination complexes". Mayer, James M. (presenting); Mader, Elizabeth A.; Wu, Adam; Waidmann, Christopher R.; Manner, Virginia W.; Larsen, Anna S. Abstracts of Papers, 232nd ACS National Meeting, San Francisco, CA, Sept. 10-14, 2006 (2006), INOR-3931..
5. "Unified molecular orbital images for the chemistry classroom" (co-authored by Matt Sprague, presenting) 229th National Meeting of the ACS, San Diego, CA, March 2005
6. "Synthesis and characterization of low-melting salts: N-alkyl pyridinium cations with derivatized carborane anions" (co-authored by Jesse Kleingardner, presenting) 229th National ACS Meeting, San Diego, CA, March 2005
7. "Synthesis and characterization of carborane cyclopentadienyl nitrosyl ruthenium complex" (co-authored by M. Pearsall, presenting) 229th National Meeting of the ACS, San Diego, CA, March 2005
8. "Low-melting Salts with Non-coordinating Carborane Anions" (co-authored by Jesse Kleingardner, presenting) 32nd Northeast Regional Meeting of the ACS, Rochester, NY, October 2004
9. "Electrophilic Metal Center and a Weakly-Coordinating Anion: a Promising Ruthenium Carborane Pro-catalyst?" (co-authored by Matthew Pearsall, presenting) 32nd ACS Northeast Regional Meeting Rochester, NY, October 2004.

(full list of presentations is available upon request, 30+ presentations total)

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