

JOHN D. GILBERTSON
ASSOCIATE PROFESSOR
INORGANIC CHEMISTRY

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EDUCATION/EXPERIENCE:

Associate Professor, Inorganic Chemistry, Western Washington University	Sept. 2014-
Visiting Research Associate, University of California-Irvine	Oct. 2015-Apr. 2016
Assistant Professor, Inorganic Chemistry, Western Washington University	Sept. 2008-2014
Visiting Assistant Professor, Augustana College, Sioux Falls, SD	Aug 2007-May 2008
Postdoctoral Research Associate, Trinity University, San Antonio, TX	Aug 2005-Aug 2007 Advisor: Bert D. Chandler
Ph.D., Chemistry, University of Oregon, Eugene, OR. Dissertation: Binding and Activation of H ₂ and N ₂ : Investigations into the Reduction of N ₂ Utilizing H ₂ as the Reductant	Sept 2005 Advisor: David R. Tyler
Master of Science, Chemistry, University of Oregon, Eugene, OR	Sept 2002
Bachelor of Arts, Chemistry (<i>ACS Accredited</i>), Augustana College, Sioux Falls, SD	May 2001

TEACHING EXPERIENCE:

Classes Taught at Western Washington University

CHEM 121 (General Chemistry I) Lab Fall 2008, Spring 2013
CHEM 121 (General Chemistry I) Fall 2008/2009/2011/2012/2013/2014/2016
CHEM 123 (General Chemistry III) Lab, Spring 2011
CHEM 175 (Honors General Chemistry I) Fall 2018
CHEM 441 (Advanced Inorganic Chemistry) Winter 2009/2010/2011/2012/2013/2014/2015/2017/2018
CHEM 464 (Physical/Inorganic Lab I) Winter 2009, Fall 2009, Winter 2010/2011/2012/2013/2014/2015/2017
CHEM 465 (Physical/Inorganic Lab II) Spring 2009/2010/2011/2012/2013/2014/2015/2017/2018
CHEM 497/597R (Bioinorganic Chemistry) Fall 2010
CHEM 425u (Bioinorganic Chemistry) Spring 2012/2104, Winter 2018
CHEM 497/597R (The Chemistry of Renewable Energy) Spring 2013/2014, Fall 2014

EXTERNALLY FUNDED GRANTS (Total \$3,319,352):

“Bioinspired Movement of Protons and Electrons for Small Molecule Activation”, Henry Dreyfus Teacher Scholar, Dreyfus Foundation, **2017-2022**, \$60,000.

“Bioinspired Structure/Function Studies that Leverage Proton-Responsive Secondary Coordination Spheres and Ligand-Based Redox Sites.” National Institutes of Health, **2017-2020**, \$364,123.

“RUI: Engineering Nanoscale Disorder in Polymer-Semiconductor Nanocrystal Composites for Minimized Optical Losses.”, National Science Foundation, (co-PI) **2017-2020**, \$390,000.

MRI: Acquisition of a 500 MHz NMR for Faculty Research and Undergraduate Training at Western Washington University, (co-PI) **2015-2018**, \$529,900.

MRI: Acquisition of a Single Crystal X-Ray Diffractometer for Molecular Structure Analysis at Western Washington University, (co-PI) **2014-2017**, \$300,000.

“CAREER/SusChEM: Understanding and Utilization of the Secondary Coordination Sphere of Novel Biomimetic Catalysts for Small Molecule Activation”, Faculty Early Career Development Award, National Science Foundation, **2013-2018**, \$470,000.

“Homogeneous Fischer-Tropsch Catalysts for the Conversion of Syngas Into Higher Order Hydrocarbons”, ACS Petroleum Research Fund, **2013-2016**, \$65,000.

“Artificial Nanoscale Enzymes for CO₂ Reduction Catalysis”, SCIALOG, Research Corporation, (co-PI) **2011-2013**, \$100,000.

“Oriented Fluorophore Waveguides for Luminescent Solar Concentrators” CHE-DMR-DMS SOLAR, National Science Foundation, (co-PI) **2010-2013**, \$945,369.

“Protonation/Reduction of Dinitrogen by Fe Complexes Utilizing Ligands Containing H-Bond Directors in the Secondary Coordination Sphere” Single Investigator Cotrell College Science Award, Research Corporation, **2010-2012**, \$44,960.

“Methanol Synthesis from CO₂ and H₂ Utilizing Bimetallic Nanoparticle Catalysts” Undergraduate New Investigator, American Chemical Society Petroleum Research Fund, **2009-2011**, \$50,000.

“Bimetallic Nanoparticle Catalysts Based on Copper for the Synthesis of Methanol from CO₂ and H₂” EMSL User Proposal, Pacific Northwest National Laboratories. **2010-2011**.

INTERNALLY FUNDED GRANTS (Total \$62,250):

“Bimetallic Nanoparticle Catalysts for the Conversion of Carbon Dioxide into Methanol Fuel” Summer Research Grant, Western Washington University, Summer **2009**, \$5,000.

“Secondary Coordination Sphere Enzyme Mimics” Project Development Award, Spring-Fall **2010**, \$44,250.

“CHEM464: Addressing the Global Energy Crisis” Summer Teaching Grant, Western Washington University, Summer **2012**, \$5,000.

“Bioinspired Catalysts for the Production of Usable Chemicals and Fuels” RSP Pilot Project, Western Washington University, **2012**, \$4000.

“Homogeneous Fischer-Tropsch Catalysts for the Conversion of Syngas Into Higher Order Hydrocarbons” RSP Pilot Project, Western Washington University, **2013**, \$4000.

PUBLICATIONS:

* denotes undergraduate author

denotes WWU undergraduate research student

Cheung, P. M. ^{.*}, Burns, K. T. ^{.*}; Kwon, Y. M. ^{.*}; Deshayee, M. Y. ^{.*}; Aguayo, K. J. ^{.*}, Oswald, V. F.; Seda, T., Zakharov, L. N.; Kowalczyk, T.; Gilbertson, J. D. Hemilabile Proton Relays and Redox-Activity Lead to {FeNO}^x and Significant Rate Enhancements in NO₂⁻ Reduction. *J. Am. Chem. Soc.* **2018**, *140*, 17040-17050.

Burns, K. T. ^{.*}; Marks, W. R. ^{.*}; Cheung, P. M. ^{.*}; Seda, T.; Zakharov, L. N.; Gilbertson, J. D. Uncoupled Redox-Inactive Lewis Acids in the Secondary Coordination Sphere Entice Ligand-Based Nitrite Reduction. *Inorg. Chem.* **2018**, *57*, 9601-9610. **Invited Article for Applications of Metal Complexes with Ligand-Centered Radicals Forum.**

Delgado, M.^{##}; Gilbertson, J. D. Ligand-Based Reduction of Nitrate to Nitric Oxide Utilizing a Proton-Responsive Secondary Coordination Sphere. *Chem. Commun.* **2017**, *53*, 11249-11252.

Kwon, Y.;^{##} Delgado, M.;^{##} Zakharov, L.; Seda, T.; Gilbertson, J. D. Nitrite Reduction by a Pyridinediimine Complex with a Proton-Responsive Secondary Coordination Sphere. *Chem. Commun.* **2016**, *52*, 11016-11019.

Hartle, M. D.; Delgado, M.;^{##} Gilbertson, J. D.; Pluth, M. D. Stabilization of a Zn(II) Hydrosulfido Complex Utilizing a Hydrogen-Bond Accepting Ligand. *Chem. Commun.* **2016**, *52*, 7680-7682.

Cheung, P. M.;^{##} Berger, R. F.; Zakharov, L. N.; Gilbertson, J. D. Square Planar Cu(I) Stabilized by a Pyridinediimine Ligand. *Chem. Commun.* **2016**, *52*, 4156-4159.

Delgado, M.^{##}; Ziegler, J. M.^{##}; Seda, T.; Zakharov, L. N.; Gilbertson, J. D. Pyridinediimine Iron Complexes with Pendant Redox-Inactive Metals Located in the Secondary Coordination Sphere. *Inorg. Chem.* **2016**, *55*, 555-557. **Article also published in virtual issue of *Organometallics: Undergraduate Research: Contributions To Organometallic Chemistry***

Delgado, M.^{##}; Sommer, S. K.^{##}; Swanson, S. P.^{##}; Berger, R. F.; Seda, T.; Zakharov, L. N.; Gilbertson, J. D. Probing the Protonation State and the Redox-Active Sites of Pendant Base Iron(II) and Zinc(II) Pyridinediimine Complexes. *Inorg. Chem.* **2015**, *54*, 7239-7248.

Erickson, C. S.; Bradshaw, L. R.; McDowall, S. M.; Gilbertson, J. D.; Gamelin, D. R.; Patrick, D. L. Zero-Reabsorption Doped-Nanocrystal Luminescent Solar Concentrators. *ACS Nano* **2014**, *8*, 3461-3467.

Benjamin, W. E.^{##}; Veit, D. R.^{##}; Perkins, M. J.^{##}; Bain, E.^{##}; Scharnhorst, K.^{##}; McDowall, S.; Patrick, D. L.; Gilbertson, J. D. Sterically Engineered Perylene Dyes for High Efficiency Luminescent Solar Concentrators. *Chem. Mater.* **2014**, *26*, 1291-1293. **Article selected as Editor's Choice.**

Thammavongsy, Z.^{##}; Breuhuas-Alvarez, A. G.^{##}; LeDoux, M.^{##}; Seda, T.; Zakharov, L. N.; Gilbertson, J. D. Pyridinediimine Iron Dicarbonyl Complexes with Pendant Lewis Bases and Lewis Acids Located in the Secondary Coordination Sphere. *Eur. J. Inorg. Chem.* **2013**, 4008-4015. **Invited Article for Special Cluster Issue on Small Molecule Activation.**

Thammavongsy, Z.^{##}; Seda, T.; Zakharov, L. N.; Kaminsky, W.; Gilbertson, J. D. Ligand-Based Reduction of CO₂ and Subsequent Release of CO on Iron(II). *Inorg. Chem.* **2012**, *51*, 9168-9170.

Kendall, A. J.^{##}; Zakharov, L. N.; Gilbertson, J. D. Synthesis and Stabilization of a Monomeric Iron(II) Hydroxo Complex via Intramolecular Hydrogen Bonding in the Secondary Coordination Sphere. *Inorg. Chem.* **2010**, *49*, 8656-8658.

Chandler, B. D.; Long, C.; Gilbertson, J. D.; Pursell, C. J.; Vijayaraghavan, G.; Stevenson, K. J. Enhanced Oxygen Activation over Supported Bimetallic Au-Ni Catalysts. *J. Phys. Chem. C*, **2010**, *114*, 11498-11508.

Yau, S. H.; Varnavski, O.; Gilbertson, J. D.; Chandler, B. D.; Ramakrishna, G.; Goodson, T. An Ultrafast Optical Study of Small Gold Monolayer Protected Clusters: A Closer Look at Emission. *J. Phys. Chem. C*, **2010**, *114*, 15979-15985.

Long, C. G.; Gilbertson, J. D.; Vijayaraghavan, G.; Stevenson, K. J.; Chandler, B. D. Kinetic Characterization of Highly Active Supported Gold Catalysts from Monolayer Protected Clusters: An Experimental Michaelis-Menton Approach for Determining the Oxygen Binding Constant During CO Oxidation Catalysis. *J. Am. Chem. Soc.* **2008**, *130*, 10103-10115.

Chandler, B. D.; Gilbertson, J. G. "Dendrimer-Encapsulated Nanoparticles in Catalysis" Invited book chapter in "Nanoparticles and Catalysis" p229-160, **2008** (Didier Astruc, Ed.), Wiley-VCH, Germany.

Crump, C.*; Gilbertson, J. D.; Chandler, B. D. CO Oxidation and Toluene Hydrogenation by Pt/TiO₂ Catalysts Prepared from Dendrimer Encapsulated Nanoparticle Precursors. *Topics in Catalysis* **2008**, *49*, 233-240.

Gilbertson, J. D.; Vijayaraghaven, G.; Stevenson, K. J.; Chandler, B. D.; Air and Water Free Solid-Phase Synthesis of Soluble Nanoparticles with Anchored, Recyclable, Dendrimer Templates. *Langmuir* **2007**, *23*, 11239-11245.

Gilbertson, J. D.; Szymczak, N. K.; Crossland, J. L.; Miller, W. K.; Lyon, D. K.; Foxman, B. M.; Davis, J.*; Tyler, D. R.; Coordination Chemistry of H₂ and N₂ in Aqueous Solution. Reactivity and Mechanistic Studies using *trans*-Fe^{II}(P₂)₂X₂-type Complexes (P₂ = a Chelating, Water-Solubilizing Phosphine). *Inorg. Chem.* **2007**, *46*, 1205-1214.

Korkosz, R.*; Gilbertson, J. D.; Prasifka, K.*; Chandler, B. D. Dendrimer Templates for Supported Au Catalysts. *Catalysis Today* **2007**, *122*, 370-377.

Chandler, B. D.; Gilbertson, J. D. "Dendrimer-Encapsulated Bimetallic Nanoparticles: Synthesis, Characterization, and Applications to Catalysis" Invited book chapter in "Dendrimer Catalysis" *Topics in Organometallic Chemistry*, vol. 21, p97-120, **2006** (Lutz Gade, Ed.), Springer, Heidelberg, Germany.

Gilbertson, J. D.; Weakley, T. J. R.; Han, F.; Wolcott, J. J.; Tyler, D. R. Synthesis of ROMP Monomers Containing Metal-Metal Bonds. *J. Inorg. Organomet. Polym. Mater.* **2006**, *15* (2005), 439-446.

Gilbertson, J. D.; Szymczak, N. K.; Tyler, D. R. Reduction of N₂ to Ammonia and Hydrazine Utilizing H₂ as the Reductant. *J. Am. Chem. Soc.* **2005**, *127*, 10184-10185.

Gilbertson, J. D.; Szymczak, N. K.; Tyler, D. R. H₂ Activation in Aqueous Solution: Formation of *trans*-[Fe(DMeOPrPE)₂H(H₂)]⁺ via the Heterolysis of H₂ in Water. *Inorg. Chem.* **2004**, *43*, 3341-3343.

Miller, W. K.; Gilbertson, J. D.; Leiva-Paredes, C.; Bernatis, P. .; Weakley, T. J. R.; Lyon, D. K.; Tyler, D. R. Precursors to Water-Soluble Dinitrogen Carriers. Synthesis of Water-Soluble Complexes of Iron(II) Containing Water-Soluble Chelating Phosphine Ligands of the Type 1,2-Bis(bis(hydroxyalkyl)phosphino)ethane. *Inorg. Chem.* **2002**, *41*, 5453.

Baxley, G T; Stiegman, A E; Nieckarz, G F; Weakley, T J; Tyler, D R; Gilbertson, J D. μ -Bis(diphenylphosphino)methane-P:P'-octacarbonyldimanganese(Mn-Mn) and its toluene hemisolvate. *Acta Cryst.* **2001**, C57, 1292.

PATENTS:

U.S. Patent Application No. 61/841,887, Phosphor-Containing Semiconductor-Nanocrystal-Based Luminescent Solar Concentrators, filed July 1, 2013.

PROFESSIONAL AFFILIATION(S):

American Chemical Society (ACS)
North American Catalysis Society (NACS)

HONORS/AWARDS:

Henry Dreyfus Teacher Scholar Award 2017
American Chemical Society Division of Inorganic Chemistry Undergraduate Research Award (Team) 2017
Research Corporation Cottrell Scholar (PUI Class) 2010.
National Science Foundation Faculty Early Career Development Award 2013.
Western Washington University Sustainability Award (AMSEC, SOLAR Team), Fa 2012.
Western Washington University Team Recognition Award (AMSEC), Fa 2010.

University of Oregon Doctoral Research Fellowship, Sept '05 (awarded but declined).

National Science Foundation IGERT Fellowship, Sept '02 - Sept '05.

Regional ACS Award, Sioux Valley Chapter, 1999.

Outstanding Laboratory Assistant, Augustana College, 1999.

Augustana Research and Artist's Fund, Summer 1998

PRESENTATIONS WHILE AT WESTERN:

* denotes presenter

denotes WWU research student

Gilbertson, John D.* *Shuttling Protons and Electrons via the Secondary Coordination Sphere for Anion Reduction. Invited Talk; F. Albert Cotton Award in Synthetic Inorganic Chemistry: Symposium in Honor of Andrew S. Borovik*, 255th ACS National Meeting & Exposition, New Orleans, LA, United States, March 18-22, 2018.

Nakama-Fukuhara, Tiffany^{#*}; D'Amelio, Jack[#]; Kowalczyk, Timothy; Patrick, David; Gilbertson, John D. *Synthesis of Cofacial Perylene Bisimide Luminophores for Light Management*. 255th ACS National Meeting & Exposition, New Orleans, LA, United States, March 18-22, 2018.

Burns, Kyle T.^{#*}; Gilbertson, John D. *Enticing Anion Reduction with Lewis Acids in the Secondary Coordination Sphere of Iron (II) Pyridinediimine Complexes*. 255th ACS National Meeting & Exposition, New Orleans, LA, United States, March 18-22, 2018.

Cheung, Pui Man^{#*}; Gilbertson, John D. *Ligand-Based Reductions in Iron Pyridinediimine Complexes with Protonated Secondary Coordination Spheres*. 255th ACS National Meeting & Exposition, New Orleans, LA, United States, March 18-22, 2018.

Gilbertson, John D.* *Anion Reduction via the Secondary Coordination Influence*. Poster Presentation, Gordon Research Conference, Metals in Biology, Jan. 21st-26th, 2018.

Delgado, Mayra^{#*}; Kwon, Yubin M.[#]; Gilbertson, John D. *Nitrite Reduction by a PDI Complex with a Proton-Responsive Secondary Coordination Sphere*. 253rd ACS National Meeting & Exposition, San Francisco, CA, United States, April 2-6, 2017.

Cheung, Pui Man^{#*}; Berger, Robert; Gilbertson, John D. *Square Planar Copper (I) Complexes with Geometric Constraints Pertinent to Copper Proteins*. 253rd ACS National Meeting & Exposition, San Francisco, CA, United States, April 2-6, 2017.

Cheung, Pui Man^{#*}; Berger, Robert; Gilbertson, John D. *Rare and Unusual Square Planar Copper (I) Complexes*. 253rd ACS National Meeting & Exposition, San Francisco, CA, United States, April 2-6, 2017.

Burns, Kyle T.^{#*}; Delgado, Mayra[#]; Ziegler, Joshua M.[#]; Gilbertson, John D. *Iron (II) Pyridinediimine Complexes with Lewis Acids in the Secondary Coordination Sphere*. 253rd ACS National Meeting & Exposition, San Francisco, CA, United States, April 2-6, 2017.

Gilbertson, John D.* *Merging the Secondary Coordination Influence with Redox-Activity in Coordination Compounds*. Poster Presentation, Gordon Research Conference, Metals in Biology, Jan. 22nd-27th, 2017.

Gilbertson, John D.* *Merging the Secondary Coordination Influence with Redox-Activity in Coordination Compounds. Invited Talk; Inorganic Seminar*, Indiana University, Sep. 2nd, 2016.

Gilbertson, John D.* *Merging the Secondary Coordination Influence with Redox-Activity in Coordination Compounds. Invited Talk; Secondary Coordination Influences Symposium*, 252nd ACS National Meeting & Exposition, Philadelphia, PA, United States, August 22-26, 2016.

Gilbertson, John D.* *Redox-Active Ligands for the Transformation of Small Molecules*. **Invited Talk; Frontiers in Inorganic Chemistry**, 252st ACS National Meeting & Exposition, San Diego, CA, United States, March 13-17, 2016.

Gilbertson, John D.* *Pendant Lewis Acids and Bases in Fe(PDI)-type Complexes*. Poster Presentation, Gordon Research Conference, Metals in Biology, Jan. 24th-29th, 2016.

Gilbertson, John D.* *Production of C1 Sources via Reduction of CO₂ on Redox Active Iron Ligand Platforms*. **Invited Talk; Molecular Catalysts for Solar Fuels Symposium** 249th ACS National Meeting & Exposition, Denver, CO, United States, March 22-26, 2015.

Kwon, Yubin^{#*}; Adams[#], Jillian; Gilbertson, John D. *Pendant Base Groups in the Secondary Coordination Sphere of Pyridinediimine Compounds for Syngas Conversion*. Poster presentation, 249th ACS National Meeting & Exposition, Denver, CO, March 22–26, 2015.

Heiskanen, Satu K. ^{#*}; Ziegler, Joshua M. [#]; Rider, David A.; Gilbertson, John D. *Functionalization of Metal Oxide Surfaces for Photoelectrocatalysis of CO₂ Reduction*. Poster presentation, 249th ACS National Meeting & Exposition, Denver, CO, March 22–26, 2015.

Gilbertson, John D.* *The Chemistry of Pendant Lewis Acids and Bases in Fe(PDI)-type Complexes*. Poster Presentation, Gordon Research Conference, Metals in Biology, Jan. 25th-30th, 2015.

Gilbertson, John D. *What to do With CO₂?* **Invited Talk; Inorganic Seminar**, University of Oregon, Nov. 21st, 2014.

Veit, Darren^{#*}; Patrick, David R.; Gilbertson, John D. *Sterically Engineered Perylene Dyes for High Efficiency Oriented Fluorophore Luminescent Solar Concentrators*. 248th ACS National Meeting & Exposition, San Francisco, CA, United States, August 10-14, 2014.

Breuhau-Alvarez, Andrew G. ^{#*}; Adams, Jillian C. [#]; Gilbertson, John D. *Investigations into Homogeneous Reverse-Water Gas Shift Reaction by an Iron (II) Pyridinediimine/Metal Phosphine Catalyst System*. 248th ACS National Meeting & Exposition, San Francisco, CA, United States, August 10-14, 2014.

Gilbertson, John D. *What to do With CO₂?* **Invited Talk; Inorganic Seminar**, University of California, Irvine, Nov. 7th, 2013.

Veit, Darren R. ^{#*}; Benjamin, Willie E. [#]; Perkins, Matt[#]; Butler, Tristan P. [#]; Patrick, David L.; Gilbertson, John D. *Synthesis of Alignable Bathochromically Shifted Fluorophores and Their Application to Luminescent Solar Concentrators*. Poster Presentation, 245th ACS National Meeting & Exposition, New Orleans, LA, United States, April 7-11, 2013.

Thammavongsy, Zachary[#]; Seda, Takele; Gilbertson, John D.* *Ligand-based reduction of CO₂ and subsequent release of CO on iron(II): Investigations into the production of syngas from CO₂ and protons*. Oral Presentation, 245th ACS National Meeting & Exposition, New Orleans, LA, United States, April 7-11, 2013.

Thammavongsy, Zachary^{#*}; Seda, Takele; Kaminsky, Werner; Zakharov, Lev; Gilbertson, John; Breuhau, Andrew[#] *Production of CO gas from CO₂ on redox-active iron(II) complexes*. Poster Presentation, 245th ACS National Meeting & Exposition, New Orleans, LA, United States, April 7-11, 2013.

Thammavongsy, Zachary[#]; Gilbertson, John D.* *Investigations Into the Production of Syngas From CO₂ and Protons*. Poster Presentation, Gordon Research Conference, Inorganic Reaction Mechanisms, March 3rd- 8th, 2013. ****This poster was selected for a poster talk****.

Thammavongsy, Zachary[#]; Crockett, Brandon M.[#]; Gilbertson, John D.^{*} *Bioinspired Ligand Platforms Utilizing Pyridinediimine Ligands with Hydrogen Bond Donors/Acceptors in the Secondary Coordination Sphere*. Oral Presentation, 243rd ACS National Meeting, San Diego, CA, United States, March 25th-29th, 2012.

Thammavongsy, Zachary^{**}; Swanson, Seth P.[#]; Crockett, Brandon M.[#]; Gilbertson, John D. *Small Molecule Activation by Pyridinediimine Iron Complexes*. Poster Presentation, 243rd ACS National Meeting, San Diego, CA, United States, March 25th-29th, 2012.

Benjamin, Willie E.^{**}; Perkins, Matt J.^{**}; Patrick, David L.; Gilbertson, John D. *Synthesis of Alignable Fluorophores for Light Harvesting in Liquid Crystal and Polymeric Waveguides*. Poster Presentation, 243rd ACS National Meeting, San Diego, CA, United States, March 25th-29th, 2012.

Butler, Tristan^{**}; Bain, Edwin[#]; Westcott, Christopher[#]; Johnson, Brad L.; Leger, Janelle; Gilbertson, John D.; McDowall, Stephen; Patrick, David L. *Oriented Fluorophore Luminescent Solar Concentrators*. Poster Presentation, 243rd ACS National Meeting, San Diego, CA, United States, March 25th-29th, 2012.

Thammavongsy, Zachary[#]; Swanson, Seth, P.[#]; Crockett, Brandon, M.[#]; Gilbertson, John D.^{*} *Biomimetic complexes utilizing pyridinediimine ligands with hydrogen bond donors/acceptors in the secondary coordination sphere*. Poster Presentation, Gordon Research Conference, Metals in Biology, January 22nd- 27th, 2012.

Kendall, Alex J.[#]; Thammavongsy, Zach[#]; Swanson, Seth P.[#]; Gilbertson, John D.^{*} *Small Molecule Activation by Novel Biomimetic Complexes Utilizing Pyridinediimine Ligands with Hydrogen Bond Donors/Acceptors in the Secondary Coordination Sphere*. Poster Presentation, 15th International Conference of Biological Inorganic Chemistry, Vancouver, BC, Canada, August 7th – 12th, 2011.

Gilbertson, John D. *Investigation of a New Class of Ligands with Hydrogen Bond Donors/Acceptors in the Secondary Coordination Sphere*. **Invited Talk**, Inorganic Seminar, Pacific Northwest National Laboratory, April 11th, 2011.

Thammavongsy, Zachary[#]; Swanson, Seth, P.[#]; Crockett, Brandon, M.[#]; Gilbertson, John D.^{*} *Novel Biomimetic Complexes Utilizing Pyridinediimine Ligands with Hydrogen Bond Donors/Acceptors in the Secondary Coordination Sphere*. Gordon Research Conference, Metals in Biology, January 30th-Feb. 4th, 2011.

Kendall, Alex J.[#]; Sommers, Samantha K.[#]; Gilbertson, John D.^{*} *Investigation of a New Class of Ligands with Hydrogen Bond Donors/Acceptors in the Secondary Coordination Sphere*. Oral Presentation, 239th ACS National Meeting, San Francisco, CA, United States, March 21st-25th, 2010.

Kendall, Alex J.^{**}; Sommers, Samantha K.^{**}; Gilbertson, John D. *Novel Ligands with Hydrogen Bond Donors/Acceptors in the Secondary Coordination Sphere*. Poster Presentation, 239th ACS National Meeting, San Francisco, CA, United States, March 21st-25th, 2010

Halliday, Hannah S.^{**}; Butler, Tristan P.^{**}; Benjamin, William E.^{**}; Gilbertson, John D. *Dendrimer Encapsulated Mono- and Bimetallic Transition Metal Nanoparticles: Synthesis and Catalytic Applications*. Poster Presentation, 239th ACS National Meeting, San Francisco, CA, United States, March 21st-25th, 2010.

Gilbertson, John D. *Investigation of a New Class of Ligands with Hydrogen Bond Donors/Acceptors in the Secondary Coordination Sphere*. **Invited Talk**, Inorganic Seminar, University of Washington, April 20th, 2010.

Gilbertson, John D. *Investigation of a New Class of Ligands with Hydrogen Bond Donors/Acceptors in the Secondary Coordination Sphere*. Oral Presentation, 64th ACS Northwest Regional Meeting, Pacific Lutheran University, June 28th-July 1st, 2009.

Halliday, Hannah^{#*}; Gilbertson, John D. *Synthesis and Characterization of Dendrimer Encapsulated Transition Metal Nanoparticles*. Poster Presentation, 64th ACS Northwest Regional Meeting, Pacific Lutheran University, June 28th-July 1st, 2009.

Gilbertson, John D. *Synthesis of Mono- and Bimetallic Nanoparticle Catalysts Utilizing Solid Phase Dendrimer Templates*. Abstracts of Papers, Poster Presentation at 21st North American Meeting, North American Catalysis Society, San Francisco, CA, United States, June 7th-12th, 2009.

Halliday, Hannah^{#*}; Gilbertson, John D. *Synthesis and Characterization of Dendrimer Encapsulated Transition Metal nanoparticles*. Poster Presentation, ACS Undergraduate Research Symposium, University of Puget Sound, June 2009.

Gilbertson, John D. *The Synthesis and Characterization of Potential H-Bond Directors in the Secondary Coordination Sphere*. Invited Lecture, Froemke Lecture, Augustana College, April 17th 2009.

Pape, Casey^{#*}; Gilbertson, John D. *The Synthesis and Characterization of Potential H-Bond Directors in the Secondary Coordination Sphere*. Poster Presentation, 14th Murdock College Science Research Conference, Nov. 7th-8th, 2008.