ROBERT P. HOUSER

Assistant Vice President for Research
& Sponsored Programs
Professor, Chemistry & Biochemistry

University of Northern Colorado
Kepner Hall 0025
Greeley, CO 80639

Office (970) 351-4390
Fax (970) 351-1934
robert.houser@unco.edu
www.unco.edu/research

EDUCATION

1996
Ph.D.
University of Minnesota, Minneapolis
Chemistry

1987
B.S.
Colorado State University, Fort Collins
Chemistry

ADMINISTRATION AND LEADERSHIP EXPERIENCE

2016-present
Assistant Vice President for Research & Sponsored Programs, University of Northern Colorado
Responsible for supporting and promoting the research, scholarship, and creative works of faculty, staff, and students at the University of Northern Colorado, and for the distribution of funds to support grant writing, research, scholarly initiatives, and creative works.

2014-2016
Assistant Vice President for Research & Executive Director of Sponsored Programs (acting),
University of Northern Colorado, Greeley, Colorado
Responsible for supporting and promoting the research, scholarship, and creative works of faculty, staff, and students at the University of Northern Colorado, and for the distribution of funds to support grant writing, research, scholarly initiatives, and creative works.

2012-2014
Associate Dean, College of Natural and Health Sciences, University of Northern Colorado, Greeley, Colorado
Faculty affairs including recruitment, retention, evaluation, and professional development; and research administration, providing leadership for the college's research and scholarly efforts.

2006-2010
Assistant Chair, Department of Chemistry and Biochemistry, University of Oklahoma, Norman, Oklahoma
Academic affairs including faculty teaching assignments, GTA and adjunct faculty hiring, enrollment and classroom scheduling, and management of teaching budget; supervision of 10 full-time professional staff.

2006-2009
OU Research Council (Council Chair 2008–2009), OU, Norman, Oklahoma
Advisory committee to the President, the Senior VP and Provost, the VP for Research, and the Faculty Senate; evaluation of faculty research proposals and allocation of funds; faculty research awards.

2006-2008
Committee "A" Departmental executive committee, Department of Chemistry and Biochemistry, OU
Annual faculty evaluations and evaluation of the Chair; departmental recommendations on promotion and tenure cases; and resolution of faculty complaints and disputes.

1987-1991
U.S. Army Officer, active duty, regular army
United States Army, Fort Riley, Kansas
Chemical Corps, Decontamination platoon leader, Smoke platoon leader; Infantry Battalion operations (S3) staff chemical officer.

ACADEMIC EXPERIENCE

2012-present
Professor (with tenure), Department of Chemistry and Biochemistry
University of Northern Colorado, Greeley, Colorado

2005-2012
Associate Professor (with tenure), Department of Chemistry and Biochemistry
University of Oklahoma, Norman, Oklahoma

1999-2005
Assistant Professor, Department of Chemistry and Biochemistry
University of Oklahoma, Norman, Oklahoma

1996-1999
Postdoctoral Research Fellow, Division of Chemistry and Chemical Engineering
California Institute of Technology, Pasadena, California
w/ Jacqueline K. Barton, Bioinorganic Chemistry, DNA

1992-1996
Graduate Research Assistant, Department of Chemistry
University of Minnesota, Minneapolis, Minnesota
w/ William B. Tolman, Inorganic Chemistry, Bioinorganic Modeling

1986-1987
Undergraduate Research Assistant, Department of Chemistry
Colorado State University, Fort Collins, Colorado
w/ Jack Norton, Inorganic Chemistry, Transition Metal Hydrides

AWARDS AND HONORS

University of Oklahoma Presidential International Travel Fellowship — 2005

NSF CAREER Award — 2001-2006

NRSA (NIH) Postdoctoral Fellowship — 1997-1999

Bronze Star (Persian Gulf War) — 1991

Army ROTC Distinguished Military Graduate & George C. Marshall Award — 1987

RESEARCH

RESEARCH SPECIALIZATION

Inorganic Chemistry, Bioinorganic Chemistry, Coordination Polymers
Synthetic inorganic chemistry; Models for copper enzymes in denitrifying bacteria; Models for binuclear iron centers in proteins and enzymes; Coordination polymers and metal-organic frameworks.

JOURNAL PUBLICATIONS (PEER REVIEWED)

(corresponding author(s) in bold)

1. Jozwiuk, A.; Myers, A. L.; Powell, D. R.; **Houser, R. P.** "Redox and Acid/Base Properties of Unsupported, Asymmetric Hydr(oxo)-Bridged Non-heme Diiron Complexes", *Dalton Trans.*, **2014**, *43*, 9740-9753.

2. **Houser, R. P.**; Wang, Z.; Powell, D. R.; Hubin, T. J. "Copper(I) and copper(II) complexes with pyrazine-containing pyridylalkylamide ligands N-(pyridin-2-ylmethyl) pyrazine-2-carboxamide and N-(2-(pyridin-2-yl)ethyl) pyrazine-2-carboxamide", *J. Coord. Chem.* **2013**, *66*, 4080-4092.

3. Pal Chaudhuri, U.; Shakya, R.; McClain, J. M.; Klein, E. L.; Powell, D. R.; Grohmann, A.; **Houser, R. P.** "Copper(II), iron(II), and manganese(II) complexes of 2-methyl-2-(2-pyridinyl)-1,3-propanediamine" *Polyhedron*, **2013**, *54*, 84-90.

4. Jozwiuk, A.; Wang, Z.; Powell, D. R.; **Houser, R. P.** "Copper(II) complexes of symmetric and unsymmetric bis(imine) ligands: Tuning the Cu(I)/Cu(II) redox couple" *Inorg. Chim. Acta*, **2013**, *394*, 415-422.

5. Shakya, R.; Wang, Z.; Powell, D. R.; **Houser, R. P.** "Tetra- vs. Pentadentate Coordination in Copper(II) Complexes of Pyridylbis(aminophenol) Ligands Depends on Nucleophilicity of Phenol Donors" *Inorg. Chem.*, **2011**, *50*, 11581-11591.

6. Yang, L.; Powell, D. R.; **Houser, R. P.** "Copper(II) coordination chemistry of 2-methyl-2-(2-pyridyl)-1,3-propandiol: Syntheses and structures of mono-, di-, and tricopper complexes" *Polyhedron*, **2010**, *29*, 1946-1955.

7. Wang, Z.; Powell, D. R.; **Houser, R. P.** "Bis{2-hydroxy-N-[2-(2-pyridyl)ethyl]- benzamide}copper(I) tetrafluoridoborate" *Acta Crystallogr. E*, **2010**, *E66*, m173.

8. Shakya, R.; Powell, D. R.; **Houser, R. P.** "Unsupported μ-Oxo- and μ-Hydroxo Iron(III) Dimers and Mononuclear Iron(III) Complexes with Pyridylbis(aminophenol) Ligands" *Eur. J. Inorg. Chem.*, **2009**, 5319-5327.

9. Wang, Z.; Powell, D. R.; **Houser, R. P.** "Syntheses and structures of a phenoxo-bridged copper(II) distorted cubane and related complexes with 2-hydroxy-*N*-(2-pyridylalkyl)benzamide ligands" *Inorg. Chem. Commun.*, **2009**, *12*, 511-514.

10. Yang, L.; Wang, Z.; Powell, D. R.; **Houser, R. P.** "$[Cu_{16}S_{10}]^{4-}$ and $[Cu_{12}S_8]^{4-}$ Clusters Containing μ_3- and μ_4-Sulfido Ligands" *Dalton Trans.*, **2009**, 4439-4441.

11. Shakya, R.; Jozwiuk, A.; Powell, D. R.; **Houser, R. P. "**Synthesis and characterization of polynuclear copper(II) complexes with pyridylbis(phenol) ligands" *Inorg. Chem.*, **2009**, *48*, 4083-4088.

12. Pal Chaudhuri, U.; Powell, D. R.; **Houser, R. P.** "New examples of μ-η^2:η^2-disulfido dicopper(II,II) complexes with bis(tetramethylguanidine) ligands" *Inorg. Chim. Acta*, **2009**, *362*, 2371-2378.

13. Pal Chaudhuri, U.; Yang, L.; Whiteaker, L. R.; Mondal, A.; Fultz, M. R.; Powell, D. R.; **Houser, R. P.** "Mononuclear Copper Complexes of Pyridylmethylamide Ligands" *Polyhedron*, **2007**, *26,* 5420-5431.

14. Yang, L.; Powell, D. R.; Klein, E. L.; Grohmann, A.; **Houser, R. P.** "Delocalized Mixed-Valence Bi- and Trinuclear Complexes with Short Cu–Cu Bonds" *Inorg. Chem.*, **2007**, *46*, 6831-6833.

15. Pal Chaudhuri, U.; Whiteaker, L. R.; Mondal, A.; Klein, E. L.; Powell, D. R.; **Houser, R. P.** "Substituted Pyridylmethylamide Ligands and their Zinc Complexes" *Inorg. Chim. Acta*, **2007**, *360*, 3610-3618.

16. Yang, L.; Powell, D. R.; **Houser, R. P.** "Structural Variation in Copper(I) Complexes with Pyridylmethylamide Ligands: Structural Analysis with a New Four-Coordinate Geometry Index, τ_4*" Dalton Trans.*, **2007**, 955–964.

17. Yang, L.; **Houser, R. P.** "Copper(I) Coordination Chemistry of Pyridylmethylamide Ligands" *Inorg. Chem.,* **2006**, *45*, 9416–9422.

18. Whiteaker, L. R.; Pal Chaudhuri, U.; Powell, D. R.; **Houser, R. P.** "2-Phenyl-*N*-(2-pyridylmethyl)acetamide" *Acta Crystallogr. E*, **2006**, *E62*, o3337–o3338.

19. Whiteaker, L. R.; Pal Chaudhuri, U.; Powell, D. R.; **Houser, R. P.** "2,2,2-Triphenyl-*N*-(2-pyridylmethyl)acetamide" *Acta Crystallogr. E*, **2006**, *E62*, o3339–o3340.

20. Pal Chaudhuri, U.; Whiteaker, L. R.; Yang, L.; **Houser, R. P.** "Multinuclear copper complexes of pyridylmethylamide ligands" *Dalton Trans.*, **2006**, 1902–1908.

21. Michels, J. T.; O'Malley, B. G.; Klein, E. L.; Yang, L.; Grohmann, A.; **Houser, R. P.** "2-Methyl-*N*,*N*'-bis[2-(methylsulfanyl)ethyl]2-(2-pyridyl)-*N*,*N*'-ditosylpropane-1,3-diamine" *Acta Crystallogr. E*, **2005**, *E61*, o3834–o3836.

22. **Houser, R. P.**; Cheng, D. "Diaquatetrakis(1*H*-imidazole)copper(II) bis[tris(1*H*-imidazole)(pyridine-2,4,6-tricarboxylato-k^3*N*,*O*^{2}:*O*^{6}) cuprate(II)] dihydrate" *Acta Crystallogr. E*, **2005**, *E61*, m1649–m1651.

23. Klein, E. L.; Khan, M. A.; **Houser, R. P. "**Synthesis, Characterization, and Reactivity of New Copper(II) Complexes of 2-Methylthio-*N*-(2-pyridylmethyl)acetamide" *Inorg. Chem.,* **2004**, *43*, 7272–7274.

24. Mondal, A.; Li, Y.; Khan, M. A.; **Ross, J. H., Jr.**; **Houser, R. P.** "Supramolecular Copper Hydroxide Tennis Balls: Self-Assembly, Structures, and Magnetic Properties of Octanuclear $[Cu_8L_8(OH)_4]^{4+}$ Clusters (HL = *N*-(2-pyridylmethyl)acetamide)" *Inorg. Chem.,* **2004**, *43*, 7075–7082.

25. Cheng, D.; Khan, M. A.; **Houser, R. P.** "Structural Variability of Cobalt(II) Coordination Polymers: Three Polymorphs of $Co_3(TMA)_2$ [TMA = Trimesate, $C_6H_3(COO)_3^{3-}$]" *Cryst. Growth Des.,* **2004**, *4*, 599–604.

26. Mondal, A.; Klein, E. L.; Khan, M. A.; **Houser, R. P.** "TACN-Amino Acid Conjugates and Their Copper(II) Complexes" *Inorg. Chem.*, **2003**, *42*, 5462–5464.

27. Cheng, D.; Khan, M. A.; **Houser, R. P. "**Coordination Polymer Chains Derived from 1,2,4,5-Benzenetetracarboxylate and Transition Metals with Substituted Imidazole Co-Ligands" *Inorg. Chim. Acta*, **2003**, *351*, 242–250.

28. Cheng, D.; Khan, M. A.; **Houser, R. P.** "Copper(II) and Cobalt(II) Coordination Polymers with *N*-Methylimidazole and Bridging 1,2,4,5-Benzenetetracarboxylate: Coordination Number-Determined Sheet Topology" *J. Chem. Soc., Dalton Trans.*, **2002**, 4555–4560.

29. Cheng, D.; Khan, M. A.; **Houser, R. P.** "Novel Sandwich Coordination Polymers Composed of Cobalt(II), 1,2,4,5-Benzenetetracarboxylato Ligands and Homopiperazonium Cations" *Cryst. Growth Des.*, **2002**, *2*, 415–420.

30. Cheng, D.; Khan, M. A.; **Houser, R. P.** "Coordination Polymers Comprised of Copper(II), Trimesic Acid, and Imidazole: 3D Architecture Stabilized by Hydrogen-Bonding" *Inorg. Chem.*, **2001**, *40*, 6858–6859.

31. Stephens, J. C.; Khan, M. A.; **Houser, R. P.** "Copper(II) Acetate Complexes, $[CuL_m(OAc)_2]_n$ (L = $HNPPh_3$), Stable in the Solid State Either as a Dimer (*m* = 1, *n* = 2) or a Monomer (*m* = 2, *n* = 1)" *Inorg. Chem.,* **2001**, *40*, 5064–5065.

32. Copeland, K. D.; Fitzsimons, M. P.; Houser, R. P.; **Barton, J. K.** "DNA Hydrolysis and Oxidative Cleavage by Metal-Binding Peptides Tethered to Rhodium Intercalators" *Biochemistry*, **2002**, *41*, 343–356.

33. Houser, R. P.; Fitzsimons, M. P.; **Barton, J. K.** "Metal-Dependent Intramolecular Chiral Induction: The Zn^{2+} Complex of an Ethidium-Peptide Conjugate" *Inorg. Chem.*, **1999**, *38*, 1368–1370.

34. Berreau, L. M.; Mahapatra, S.; Halfen, J. A.; Houser, R. P.; Young, V. G. Jr.; **Tolman, W. B.** "Reactivity of Peroxo- and Bis(μ-oxo)dicopper Complexes with Catechols" *Angew. Chem., Int. Ed.*, **1999**, *38*, 207–210.

35. Gamelin, D. R.; Randall, D. W.; Hay, M. T.; Houser, R. P.; Mulder, T. C.; Canters, G. W.; de Vries, S.; Tolman, W. B.; Lu, Y.; **Solomon, E. I.** "Spectroscopy of Mixed-Valence Cu_A-Type Centers: Ligand-Field Control of Ground-State Properties Related to Electron Transfer" *J. Am. Chem. Soc.*, **1998**, *120*, 5246–5263.

36. **Blackburn, N. J.**; de Vries, S.; Barr, M. E.; Houser, R. P.; Tolman, W. B.; Sanders, D.; Fee, J. A. "X-ray Absorption Studies on the Mixed-Valence and Fully Reduced Forms of the Soluble Cu_A Domains of Cytochrome *c* Oxidase" *J. Am. Chem. Soc.*, **1997**, *119*, 6135–6143.

37. Williams, K. R.; Gamelin, D. R.; LaCroix, L. B.; Houser, R. P.; Tolman, W. B.; Mulder, T. C.; de Vries, S.; **Hedman, B.**; **Hodgson, K. O.**; **Solomon, E. I.** "Influence of Copper-Sulfur Covalency and Copper-Copper Bonding on Valence Delocalization and Electron Transfer in the Cu_A Site of Cytochrome *c* Oxidase" *J. Am. Chem. Soc.,* **1997**, *119*, 613–614.

38. Houser, R. P.; Young, V. G. Jr.; **Tolman, W. B.** "A Thiolate-Bridged, Fully Delocalized Mixed-Valence Dicopper(I,II) Complex That Models the Cu_A Biological Electron-Transfer Site" *J. Am. Chem. Soc.*, **1996**, *118*, 2101–2102.

39. Houser, R. P.; Halfen, J. A.; Young, V. G. Jr.; Blackburn, N. J.; **Tolman, W. B.** "Structural Characterization of the First Example of a Bis(μ-thiolato)dicopper(II) Complex. Relevance to Proposals for the Electron Transfer Sites in Cytochrome *c* Oxidase and Nitrous Oxide Reductase" *J. Am. Chem. Soc.*, **1995**, *117*, 10745–10746.

40. Houser, R. P.; **Tolman, W. B. "**Mixed Valence, Tricopper(I,II,I) Complexes with Thiolate Bridges. Progress toward Synthetic Models of the Putative $\{Cu_2\}^{3+}$ Sites in Nitrous Oxide Reductase and Cytochrome *c* Oxidase" *Inorg. Chem.,* **1995**, *34*, 1632–1633.

41. LeCloux, D. D.; Tokar, C. J.; Osawa, M.; Houser, R. P.; Keyes, M. C.; **Tolman, W. B.** "Optically Active and C_3-Symmetrical Tris(Pyrazolyl)Hydroborate and Tris(Pyrazolyl)Phosphine Oxide Ligands - Synthesis and Structural Characterization" *Organometallics*, **1994**, *13*, 2855–2866.

42. Carrier, S. M.; Ruggiero, C. E.; Houser, R. P.; **Tolman, W. B.** "Synthesis, Structural Characterization, and Electrochemical Behavior of Copper(I) Complexes of Sterically Hindered Tris(3-tert-Butylpyrazolyl and 3,5-Diphenylpyrazolyl)Hydroborate Ligands" *Inorg. Chem.*, **1993**, *32*, 4889–4899.

CONTRIBUTED PAPERS — ORAL PRESENTATIONS

(corresponding author in bold; ‡presenting author)

1. ‡Krishna, L.; Collins, R. T.; Houser, R. P.; **Toberer, E. S.**; Tamboli, A. C. "Crystal growth and characterization of MgSiP2: A wide band gap semiconductor for non-linear optics" *20th American Conference on Crystal Growth and Epitaxy*, Big Sky, MT, August 2015.

2. ‡**Houser, R. P.** "Evolution of an idea born in my postdoc with Jackie Barton: From rhodium-peptide conjugates to Alzheimer's disease" *249th American Chemical Society National Meeting*, Denver, CO, March 2015.

3. ‡**Houser, R. P.**; Klein, E. L.; Pal Chaudhuri, U.; Powell, D. R.; Anderson, B. M.; Michels, J. T.; O'Malley, B. G. "Redox chemistry of copper(II) and thioether sulfur-containing polydentate ligands: A model of the oxidation of methionine in the Aβ peptide" *2012 Rocky Mountain Regional Meeting of the American Chemical Society*, Littleton, CO, October 2012.

4. Jozwiuk, A.; McClain, J. M.; Myers, A. L.; Shakya, R.; Wang, Z.; ‡**Houser, R. P.** "Mixed pyridyl/phenol ligands and their copper, iron, and manganese coordination chemistry" *242nd American Chemical Society National Meeting*, Denver, CO, August 2011.

5. ‡**Houser, R. P.** "Copper and iron coordination chemistry with pyridylamide and pyridylbis(amide) ligands: Progress towards modeling Cuz from nitrous oxide reductase, and non-heme diiron centers" *66th Southwest and 62nd Southeastern Regional Meeting of the American Chemical Society*, New Orleans, LA, December 2010.

6. ‡**Houser, R. P.** "Coordination chemistry of pyridylbis(aminophenol), pyridylbis(amidophenol), and pyridylbis(amidothioether) ligands: From copper clusters to oxo- and hydroxo-bridged iron dimers" *238th American Chemical Society National Meeting*, Washington, DC, August 2009.

7. ‡**Houser, R. P.** "Copper(I) sulfide clusters and complexes: Progress toward models of Cu_Z from nitrous oxide reductase" *237th American Chemical Society National Meeting*, Salt Lake City, UT, March 2009.

8. ‡Shakya, R.; **Houser, R. P.** "Unsupported hydroxo- and oxo-bridged binuclear iron(III) complexes of pyridyl bis(aminophenol) ligands" *237th American Chemical Society National Meeting*, Salt Lake City, UT, March 2009.

9. ‡Pal Chaudhiri, **Houser, R. P.** "Copper Complexes of 3-Methylthio-*N*-(3-pyridylmethyl)acetamide and 4-Methylthio-*N*-(3-pyridylmethyl)acetamide as Models for Copper Nitrite Reductase" *235th American Chemical Society National Meeting*, New Orleans, LA, April 2008.

10. ‡Pal Chaudhuri, U.; **Houser, R. P.** "Investigating the Coordination Chemistry of 3-Methylthio-*N*-(3-pyridylmethyl)acetamide and 4-Methylthio-*N*-(3-pyridylmethyl)acetamide as Models for Copper Nitrite Reductase" *53rd Oklahoma Pentasectional Meeting of the American Chemical Society*, Duncan, OK, March 2008.

11. ‡Yang, L.; **Houser, R. P.** "Model complexes of the Cu_Z center from nitrous oxide reductase" *234th American Chemical Society National Meeting*, Boston, MA, August 2007.

12. ‡**Houser, R. P.**; Yang, L.; Wang, Z. "Polynuclear copper(II) and mixed-valence copper complexes: Progress toward models of the Cu_Z catalytic cluster in nitrous oxide reductase" *233rd American Chemical Society National Meeting*, Chicago, IL, March 2007.

13. ‡**Houser, R. P.**; Klein, E. L.; Pal Chaudhuri, U.; Anderson, B. M. "Spontaneous Redox Between Copper(II) and a Thioether Ligand: Modeling the Oxidation of Methionine in Amyloid β of Alzheimer's Disease" *231st American Chemical Society National Meeting*, Atlanta, GA, March 2006.

14. ‡**Houser, R. P.**; Mondal, A.; Klein, E. L. "Octanuclear Copper(II) Clusters: Progress Toward Modeling the Cu_Z Cluster from Nitrous Oxide Reductase" *227th American Chemical Society National Meeting*, Anaheim, CA, March 2004.

15. ‡Klein, E. L.; Khan, M. A.; **Houser, R. P.** "Synthetic Models of the Perturbed Type I Copper Center from Nitrite Reductase: Novel Thiolate/Thioether Copper(II) Complexes" *227th American Chemical Society National Meeting*, Anaheim, CA, March 2004.

16. ‡Cheng, D.; Xu, H.; **Houser, R. P.** "1D Coordination Polymers Composed of Copper(II), Trimesic Acid and Imidazole" *59th Southwest Regional Meeting of the American Chemical Society*, Oklahoma City, OK, October 2003.

17. ‡Klein, E. L.; **Houser, R. P.** "Modeling the Copper-Containing Nitrite Reductase Active Site: Synthesis and Characterization of Novel N2S(Thiolate)S(Thioether) Copper Complexes" *59th Southwest Regional Meeting of the American Chemical Society*, Oklahoma City, OK, October 2003.

18. ‡**Houser, R. P.**; Mondal, A.; Klein, E. L.; Khan, M. A. "Progress Toward Model Complexes of the Active Site in the Denitrifying Enzyme Nitrite Reductase"
225th American Chemical Society National Meeting, New Orleans, LA, March 2003.

19. ‡**Houser, R. P.**; Cheng, D.; Khan, M. A. "Unusual Topologies in Supramolecular Coordination Polymers Comprised of Transition Metals and Aromatic Carboxylates"
225th American Chemical Society National Meeting, New Orleans, LA, March 2003.

20. ‡**Houser, R. P.** "Design and Synthesis of Copper Complexes that Model Active Sites of the Denitrifying Enzymes Nitrite Reductase and Nitrous Oxide Reductase"
58th American Chemical Society Southwest Regional Meeting, Austin, TX, Nov 2002.

21. ‡Cheng, D.; **Houser, R. P.** "Copper(II), Zinc(II) and Cobalt(II) Coordination Polymers with Bridging 2,4,6-pyridinetricarboxylate" *58th American Chemical Society Southwest Regional Meeting*, Austin, TX, November 2002.

22. ‡**Houser, R. P.** "Coordination Polymers Containing Transition Metals and Aromatic Carboxylates: New Materials with Large Channels" *57th American Chemical Society Southwest Regional Meeting*, San Antonio, TX, October 2001.

23. ‡Houser, R. P.; Fitzsimons, M. P.; **Barton, J. K.**
"Hydrolytic Cleavage of DNA with Metallointercalator-Peptide Conjugates"
214th American Chemical Society National Meeting, Las Vegas, NV, September 1997.

24. ‡Houser, R. P.; Halfen, J. A.; Young, V. G. Jr.; Blackburn, N. J.; **Tolman, W. B.**
"Progress Towards a Model of the Mixed Valence Dicopper center in Nitrous Oxide Reductase" *210th American Chemical Society Nat'l Meeting*, Chicago, IL, August 1995.

CONTRIBUTED PAPERS — POSTERS

(corresponding author in bold; ‡presenting author)

1. ‡Wallace, M.; **Houser, R. P.** "Reduction of copper(II) by thioether sulfur: A synthetic model for the amyloid beta peptide" *249th American Chemical Society National Meeting*, Denver, CO, March 2015.

2. Jozwiuk, A.; Myers, A. L.; ‡**Houser, R. P.** "Asymmetric, Unsupported O(H)-Bridged Diiron Complexes" *Gordon Research Conference: Inorganic Chemistry*, Biddeford, ME, June 2014.

3. ‡Jozwiuk, A.; ‡Myers, A. L.; **Houser, R. P.** "Asymmetric, Unsupported O(H)-Bridged Diiron Complexes" *245th American Chemical Society National Meeting*, New Orleans, LA, April 2013.

4. ‡Jozwiuk, A.; ‡Myers, A. L.; **Houser, R. P.** "Asymmetric, Unsupported O(H)-Bridged Diiron Complexes" *2013 Oklahoma Pentasectional Meeting of the American Chemical Society*, Tulsa, OK, March 2013.

5. ‡**Houser, R. P.**; Jozwiuk, A.; McClain, J. M.; Myers, A. L.; Shakya, R.; Wang, Z.; Campbell, A. L. O. "Synthetic Modeling of Polynuclear Metal Centers in Biology: Ligand Design and Coordination Chemistry" *15th International Conference on Biological Inorganic Chemistry (ICBIC-15)*, Vancouver, BC, Canada, August 2011.

6. Shakya, R.; Wang, Z.; Jozwiuk, A.; Pal Chaudhuri, U.; Yang, L.; Klein, E.; Mondal, A.; ‡**Houser, R. P.** "Copper(II) and Iron(III) Coordination Chemistry with Pyidylamido and Pyridylbis(amino/imino/amido) Ligands: From Copper Clusters to Oxo- and Hydroxo-Bridged Diiron(III,III) Complexes" *Gordon Research Conference: Inorganic Chemistry*, Biddeford, ME, June 2009.

7. ‡McClain, J. M. II, **Houser, R. P.** "Synthesis and characterization of a cyclic, trinuclear copper(I)-thioacetamide hydrosulfide complex" *237th American Chemical Society National Meeting*, Salt Lake City, UT, March 2009.

8. ‡Wang, Z.; **Houser, R. P.** "Binuclear and tetranuclear copper(II) complexes with pyridylamidophenol ligands" *237th American Chemical Society National Meeting*, Salt Lake City, UT, March 2009.

9. ‡Yang, L.; **Houser, R. P.** "Model Complexes of the Cu_Z Center from Nitrous Oxide Reductase" *235th American Chemical Society National Meeting*, New Orleans, LA, April 2008.

10. ‡Son, M. J.; Pal Chadhuri, U.; **Houser, R. P.** "Copper Complexes of *N*-(3-pyridylmethyl)-acetamide" *235th American Chemical Society National Meeting*, New Orleans, LA, April 2008.

11. ‡Yang, L.; **Houser, R. P.** "Progress Towards Model Complexes of the Cu_Z Center from Nitrous Oxide Reductase" *53rd Oklahoma Pentasectional Meeting of the American Chemical Society*, Duncan, OK, March 2008.

12. Yang, L.; Wang, Z.; ‡**Houser, R. P.** "Mixed-Valence Copper Trimers and Copper Sulfide Clusters: Models for the Cu_Z center in Nitrous Oxide Reductase" *Gordon Research Conference: Inorganic Chemistry*, Newport, RI, July 2007.

13. ‡Whiteaker, L. R.; Pal Chaudhuri, U.; **Houser, R. P.** "Zinc(II) complexes of pyridyl-substituted mono- and bis(guanidine) ligands" *233rd American Chemical Society National Meeting*, Chicago, IL, March 2007.

14. ‡Pal Chaudhuri, U.; Whiteaker, L. R.; **Houser, R. P.** "Copper complexes of a new family of alkylguanidine derivatives of 2-(aminomethyl)pyridine and 2-methyl-2-(2-pyridinyl)-1,3-propanediamine" *233rd American Chemical Society National Meeting*, Chicago, IL, March 2007.

9. ‡**Houser, R. P.** "Copper Coordination Chemistry with Pyridylmethylamide and Pyridylbis(methylamide) Ligands: Bioinorganic Modeling from Denitrification to Alzheimer's Disease" *Gordon Research Conference: Inorganic Chemistry*, Newport, RI, July 2006.

10. ‡Yang, L.; Pal Chaudhuri, U.; Whiteaker, L. R.; **Houser, R. P.** "Progress Towards Model Complexes of the Cu-Z Center from Nitrous Oxide Reductase" *231st American Chemical Society National Meeting*, Atlanta, GA, March 2006.

11. ‡Pal Chaudhuri, U.; Anderson, B. M.; Klein, E. L.; **Houser, R. P.** "Reduction of Copper(II) by a Thioether: Relevance to the β Amyloid Peptide (Aβ) of Alzheimer's Disease" *231st American Chemical Society National Meeting*, Atlanta, GA, March 2006.

12. ‡Whiteaker, L. R.; Pal Chaudhuri, U.; Yang, L.; **Houser, R. P.** "Pyridylmethylacetamide Ligands and their Hydrogen Bonding and Coordination Behavior" *231st American Chemical Society National Meeting*, Atlanta, GA, March 2006.

13. Klein, E. L.; Anderson, B. M.; Michels, J. T.; O'Malley, B. G.; Grohmann, A.; ‡**Houser, R. P.** "Spontaneous Redox Between Copper(II) and a Methionine Analog Relevant to Amyloid-β Oxidation and Alzheimer's Disease" *1st European Conference on Chemistry for Life Sciences*, Rimini, Italy, October 2005.

14. ‡Pal Chaudhuri, U.; Whiteaker L. R.; **Houser R. P.** "Copper and Zinc Complexes of Pyridylmethylamide Ligands –Synthesis, Characterization and DNA Cleavage Studies" *12th International Conference on Biological Inorganic Chemistry (ICBIC-12)*, Ann Arbor, MI, August 2005.

15. ‡Klein, E. L.; Grohmann, A.; **Houser, R. P.** "Copper(II) Reduction by Methylthioether Sulfur: Relevance to ROS Generation in Alzheimer's Disease β-Amyloid Peptides" *12th International Conference on Biological Inorganic Chemistry (ICBIC-12)*, Ann Arbor, MI, August 2005.

16. ‡Yang, L; Pal Chaudhuri, U. Whiteaker L. R.; **Houser R. P.** "Progress Towards Model Complexes of the Cu_Z Center from Nitrous Oxide Reductase" *12th International Conference on Biological Inorganic Chemistry (ICBIC-12)*, Ann Arbor, MI, August 2005.

17. ‡**Houser R. P.**; Click T. "Carnegie Initiative on the Doctorate 2004-2005 CID Activities" *Carnegie Initiative on the Doctorate Summer Convening*, Stanford, CA, Aug 2005.

18. Pal Chaudhuri, U.; Klein, E. L.; Mullin, S. A.; Whiteaker, L. R.; Yang, L.; ‡**Houser R. P.** "Synthesis and characterization of copper complexes with pyridylmethylamide ligands" *229th American Chemical Society National Meeting*, San Diego, CA, March 2005.

19. Cheng D.; ‡**Houser R. P.** "1D chains and 2D tiles from transition metals and 2,4,6-pyridinetricarboxylate" *229th American Chemical Society National Meeting*, San Diego, CA, March 2005.

20. ‡**Houser, R. P.**; Cheng, D.; Khan, M. A. "Unusual Topologies in Supramolecular Coordination Polymers Comprised of Transition Metals and Aromatic Carboxylates" *Gordon Research Conference: Inorganic Reaction Mechanisms*, Ventura, CA, Feb 2003.

21. ‡Klein, E. L.; Mondal, A.; **Houser, R. P.** "Design and Synthesis of Ligand-Peptide Conjugates and Their Metal Complexews as Metalloenzyme Site Models" *58th American Chemical Society Southwest Regional Meeting*, Austin, TX, Nov 2002.

22. ‡Mondal, A.; Klein, E. L.; **Houser, R. P.** "Synthesis and Characterization of Metallopeptides Derived from Ligand-Peptide Conjugates of TACN (1,4,7-triazacyclononane) and Amino Acids" *58th American Chemical Society Southwest Regional Meeting*, Austin, TX, November 2002.

23. ‡Klein, E. L.; Mondal, A.; **Houser, R. P.** "Design and Synthesis of Ligand-Peptide Conjugates and their Metal Complexes" *57th American Chemical Society Southwest Regional Meeting*, San Antonio, TX, October 2001.

24. ‡Cheng, D.; **Houser, R. P.** "Solids Containing Large Channels Synthesized from Metal Complexes of 1,3,5-Benzenetricarboxylate and 1,2,4,5-Benzenetetracarboxylate" *57th American Chemical Society Southwest Reg'l Meeting*, San Antonio, TX, Oct 2001.

25. Klein, E. L.; Mondal, A.; ‡**Houser, R. P.** "Transition metal complexes of ligand-peptide conjugates: Progress towards modeling Cu-NiR" *10th International Conference on Bioinorganic Chemistry (ICBIC-10)*, Florence, Italy, August 2001.

26. Cheng, D.; Stephens, J. C.; ‡**Houser, R. P.** "A mixed-valence copper cluster relevant to the Cu_Z catalytic site in nitrous oxide reductase" *10th International Conference on Bioinorganic Chemistry (ICBIC-10)*, Florence, Italy, August 2001.

27. ‡Klein, E. L.; Reese, R. D.; **Houser, R. P.** "Design and synthesis of ligand-peptide conjugates and their copper complexes: Models of the copper centers in nitrite reductase" *221st American Chemical Society Nat'l Meeting*, San Diego, CA, April 2001.

28. ‡Stephens, J. C.; Cheng, D.; Collins, S.; **Houser, R. P.** "Progress towards a structural model of the Cu_Z cluster in nitrous oxide reductase" *221st American Chemical Society National Meeting*, San Diego, CA, April 2001.

29. ‡**Houser, R. P.**; Cheng, D.; Stephens, J. C.; Collins, S. "Progress towards a structural model of the Cu_Z cluster in nitrous oxide reductase" *46th Oklahoma Pentasectional Meeting of the American Chemical Society*, Bartlesville, OK, March 2001.

30. Stephens, J. C.; Collins, S.; ‡**Houser, R. P.** "Progress towards a structural model of the Cu_Z cluster in nitrous oxide reductase" *52nd Southeast/56th Southwest Combined Regional Meeting of the American Chemical Society*, New Orleans, LA, December 2000.

31. ‡Houser, R. P.; Fitzsimons, M. P.; **Barton, J. K.** "Construction of metal-peptide conjugates targeted to DNA" *9th International Conference on Bioinorganic Chemistry (ICBIC-9)*, Minneapolis, MN, July 1999.

32. ‡Houser, R. P.; **Barton, J. K.** "Metal-Dependent Intramolecular Chiral Induction: The Zn2+ Complex of an Ethidium-Peptide Conjugate" *Gordon Research Conference: Inorganic Chemistry*, Newport, RI, July 1998.

33. ‡Houser, R. P.; **Barton, J. K.** "Metallointercalator-Peptide Conjugates that Contain Constrained α-Helical Peptides: Potential Artificial Nucleases" *Gordon Graduate Research Seminar: Bioinorganic Chemistry*, Ventura, CA, January 1998.

34. ‡Houser, R. P.; **Tolman, W. B.** "Models for the Cu_A Site in Cytochrome *c* Oxidase" *Gordon Graduate Research Seminar: Bioinorganic Chemistry*, Ventura, CA, January 1996.

35. ‡Houser, R. P.; Halfen, J. A.; Young, V. G. Jr.; Blackburn, N. J.; **Tolman, W. B.** A "Dicopper(II)-bis-μ-thiolato Complex Relevant to the Cu_A Sites in Cytochrome *c* Oxidase and N_2O Reductase" *Midwest Bioinorganic Summer Workshop*, Mpls, MN, June 1995.

36. ‡Houser, R. P.; **Tolman, W. B.** "A Mixed Valence Thiolate Bridged Tricopper Complex as a Model of the Mixed-Valence Copper Site in Nitrous Oxide Reductase" 208th American Chemical Society National Meeting, Washington, DC, August 1994.

INVITED CONFERENCE LECTURES

Carnegie Initiative on the Doctorate Summer Convening on Research, Stanford, CA, Aug 2005, Asking Questions and Developing a Line of Inquiry

National Science Foundation Workshop on Inorganic Chemistry, Leesburg, VA, June 2005, Reduction of Cu(II) by Thioether Sulfur: Relevance to β-Amyloid Peptide and Alzheimer's Disease

229th American Chemical Society National Meeting, San Diego, CA, March 2005
Modeling Copper Sites in Denitrifying Enzymes Nitrite Reductase and Nitrous Oxide Reductase

39th Midwest Regional Meeting of the American Chemical Society, Manhattan, KS, Oct 2004, Coordination Polymers with 2,4,6-Pyridinetricarboxylate: 1D Chains and 2D Tiles

INVITED LECTURES — COLLEGES AND UNIVERSITIES

Cameron University, February 2008

Oklahoma State University, September 2007

Creighton University, February 2006

Technische Universität Berlin, October 2005

University of Arkansas Pine Bluff, April 2005

Cameron University, March 2004

University of Utah, February 2004

Utah State University, February 2004

University of Utah, February 2004

Westfälische Wilhelms-Universität Münster, November 2003

Max Planck Institut fur Bioanorganische Chemie, November 2003

Technische Universität Berlin, November 2003

Texas A & M University, October 2003

University of Colorado, October 2003

Colorado State University, September 2003

University of Wyoming, September 2003

Trinity University, November 2001

Texas Lutheran University, November 2001

Southwestern Oklahoma State University, April 2001

University of Texas at Dallas, October 2000

RESEARCH FUNDING — EXTERNAL (*FUNDED PROJECTS)

National Science Foundation (Co-PI with PI Kay Ferrell)
Collaborative Research: Effective Practices for Describing Chemistry Images for Students Who are Blind or Have Low Vision
$190,041
submitted January 2015
not funded

*__National Science Foundation – Major Research Instrumentation__ (PI, Co-PIs: Robin Macaluso & Mike Mosher)
MRI: Acquisition of a Single Crystal X-Ray Diffractometer
$312,610 (includes 30% UNCO cost share)
*funded
*September 2014 — August 2017 (three years)

National Science Foundation (PI)
Copper-Thioether Sulfur Redox Chemistry
$280,260
submitted September 2013
not funded

Toyota Research Institute of North America (PI)
Copper Sulfide Compounds for the Reduction of NOx
$142,138
submitted October 2011
not funded

Oklahoma Center for the Advancement of Science – Oklahoma Health Research Program (PI)
Multifunctional Metal Chelators for Alzheimer's Disease
$135,000
submitted February 2011
not funded

National Science Foundation - Nanoelectronic Interdisciplinary Teams (Co-PI, PI: Samuel Lee, OU Electrical and Computer Engineering)
NEB: Lattice-Based Integrated-Signal Nanocellular Automata (LINA) Devices: Design and Fabrication
$2,000,000
submitted January 2011
not funded

National Science Foundation (PI)
Design and synthesis of copper sulfide models for the active site in nitrous oxide reductase
$598,240
submitted July 2009
not funded

National Science Foundation (PI)
Design and synthesis of copper sulfide models for the active site in nitrous oxide reductase
$549,077
submitted December 2008
not funded

American Chemical Society Petroleum Research Fund (PI)
PRF-AC: Modeling the Active Site of Particulate Methane Monooxygenase (pMMO)
$150,000
submitted November 2007
not funded

National Science Foundation - Special Projects: Undergraduate Programs (PI)
REU Site: Chemistry and Biochemistry at the University of Oklahoma
$415,520
submitted August 2006
not funded

*__National Science Foundation__ (PI)
Design and Synthesis of Models for Copper Enzymes in Denitrifying Bacteria
$401,000
*funded
*September 2006 – August 2009 (three years)

Alzheimer's Association (PI)
Role of copper and methionine in amyloid β-peptide-induced oxidative stress
$90,000
submitted January 2006
not funded

National Science Foundation - Special Projects: Undergraduate Programs (Co-PI, PI: Ralph Wheeler, OU Chemistry & Biochemistry)
REU Site: Chemistry and Biochemistry at the University of Oklahoma
$819,266
submitted September 2005
not funded

Oklahoma Center for the Advancement of Science – Oklahoma Health Research Program (PI)
Development of Artificial Metallonucleases
$131,933
submitted February 2004
not funded

American Chemical Society Petroleum Research Fund (PI)
PRF-AC: Ternary Coordination Polymers: Synthesis, Structural Characterization, Magnetic and Adsorption Property Studies
$80,000
submitted December 2003
not funded

National Science Foundation - Oklahoma Network for Nanostructured Materials (PI)
Synthesis and Characterization of Ternary Coordination Polymers: Nanostructures with Distinctive Physical, Magnetic and Electro-optical Properties
$50,000
submitted February 2003
not funded

*__Herman Frasch Foundation__ (PI)
Copper-Containing Enzymes in the Bacterial Denitrification Pathway: Synthesis of Inorganic Complexes that Model Nitrite Reductase and Nitrous Oxide Reductase
$200,000
*funded
*July 2002 – June 2007 (five years)

*__National Science Foundation – Major Research Instrumentation__ (Co-PI, PI: Brian Grady, OU Chemical/Biological/Materials Engineering)
Acquisition of X-ray Scattering Systems for the Characterization of Nanostructured Materials
$474,842 (direct costs only)
*funded
*August 2004 – July 2005 (one year)

U.S. Department of Defense, EPSCoR (PI)
Nanoporous Metal-Organic Coordination Polymers as Hosts for Adsorption
$314,300
submitted July 2001
not funded

*__National Science Foundation CAREER Award__ (PI)
Models for Metal Active Sites in Proteins
$435,000
*funded
*March 2001 – February 2007 (six years, including 1 yr no-cost extension)

*__American Chemical Society Petroleum Research Fund__ (PI)
PRF-G: Synthesis and Characterization of Functional Mimics of the Dicopper Center in Nitrite Reductase
$25,000
*funded
*September 2000 – August 2002 (two years)

RESEARCH FUNDING — INTERNAL

University of Northern Colorado – Summer Support Initiative
Reduction of Copper(II) by Thioether Sulfur: Understanding Oxidative Stress in Alzheimer's Disease, $3000, June-August 2013

University of Oklahoma Department of Chemistry & Biochemistry/Astellas (travel)
National ACS Meeting in Denver, $1100, August 2011

University of Oklahoma Office of the Vice President for Research (travel)
National ACS meeting in Denver, $534, April 2011

University of Oklahoma College of Arts & Sciences (travel)
National ACS meeting in Denver, $534, April 2011

University of Oklahoma College of Arts and Sciences Faculty Enrichment Grant
15th International Conference on Bioinorganic Chemistry (ICBIC-15), $1,200, August 2011

University of Oklahoma Ed Cline Faculty Development Award (travel)
15th International Conference on Bioinorganic Chemistry (ICBIC-15), $2,070, August 2011

University of Oklahoma Office of the Vice President for Research (travel)
Joint SW/SE Regional ACS meeting in New Orleans, LA, $414, December 2010

University of Oklahoma College of Arts & Sciences (travel)
Joint SW/SE Regional ACS meeting in New Orleans, LA, $414, December 2010

University of Oklahoma Office of the Vice President for Research (travel)
National ACS meeting in Washington D.C., $550, August 2009

University of Oklahoma College of Arts & Sciences (travel)
National ACS meeting in Washington D.C., $550, August 2009

University of Oklahoma Department of Chemistry & Biochemistry/Astellas (travel)
National ACS Meeting in Salt Lake City, $1700, March 2009

University of Oklahoma Office of the Vice President for Research (travel)
National ACS meeting in New Orleans, $724, April 2008

University of Oklahoma College of Arts & Sciences (travel)
National ACS meeting in New Orleans, $724, April 2008

University of Oklahoma College of Arts & Sciences Faculty Enrichment Grant
ChemDraw 11.0 Software Purchase, $620, October 2007

University of Oklahoma Office of the Vice President for Research (travel)
National ACS meeting in San Francisco, $500, September 2006

University of Oklahoma College of Arts & Sciences (travel)
National ACS meeting in San Fancisco, $500, September 2006

Department of Chemistry & Biochemistry Professional Development (travel)
National ACS Meeting in Atlanta, $800, March 2006

University of Oklahoma Presidential International Travel Fellowship (travel)
1st European Conference on Chemistry for Life Sciences in Rimini, Italy , $1000, October 2005

University of Oklahoma Office of the Vice President for Research (travel)
National ACS meeting in San Diego, $774, March 2005

University of Oklahoma College of Arts & Sciences (travel)
National ACS meeting in San Diego, $774, March 2005

University of Oklahoma Faculty Enrichment Grant
Models of Metal Active Sites in Denitrifying Bacteria, $999, May 2004 – August 2004

University of Oklahoma Office of the Vice President for Research (travel)
National ACS meeting in Anaheim, $451, March 2004

University of Oklahoma College of Arts & Sciences (travel)
National ACS meeting in Anaheim, $451, March 2004

University of Oklahoma Dugger Foundation (travel)
Gordon Conference on Inorganic Reaction Mechanisms, $864, February 2003

Department of Chemistry & Biochemistry Professional Development (travel)
National ACS Meeting in San Diego, $1,200, April 2001

University of Oklahoma Dugger Foundation (travel)
Gordon Conference on Metals in Biology, $955, January 2000

RESEARCH GROUP ADVISEES

University of Northern Colorado

Graduate Students

Ahmed Khalefah (jointly advised with Prof. Mike Mosher)	2015-present
Matt Wallace, M.S. 2015	2012-2015

Undergraduate Students

Ernest Baier	2013-2014
Brian Reynolds	2013-2014

High School Students

Chibuikem Nwizu	2013

University of Oklahoma

Postdoctoral Researchers

Dr. Rajendra Shakya	2007-2009
Dr. Urmila Chaudhuri	2004-2008
Dr. Deping Cheng	2001-2004
Dr. Arunendu Mondal	2001-2003

Graduate Students

Adam Campbell	2010-present
Anna Jozwiuk, Ph.D. 2013	2010-2013
Audrey Myers	2008-present
Mike McClain	2007-present
Zhaodong Wang, Ph.D. 2011	2005-2011
Lei Yang, Ph.D. 2008	2003-2008
Ryan Sprouse, M.S. (non-thesis) 2004	2002-2004
Hanhui Xu	2002-2004
*Hongfei X*i, M.S. (non-thesis) 2004	2001-2004
Eric Klein, Ph.D. 2006	2000-2006

Undergraduate Students

Matt Wallace	2011
Michelle Collins	2011
Kara Conrday	2011
Anna Jozwiuk (TU-Berlin exchange student)	2007-2008
Jessica Son	2007-2008
Matthew Fultz (honors student)	2006-2007
Brett Anderson (honors student)	2005-2007
Laura Whiteaker (honors student)	2004-2007
Niket Muni (honors student)	2004-2004
Scott Mullin (honors student)	2003-2005
Antony Rivers	2003-2003
Kimberly Yang (B.S. thesis 2004, honors student)	2002-2004
Matt Bauer (honors student)	2002-2004
Scott Nguyen (honors student)	2002-2002
Tracy Washington (honors student)	2002-2003
Brant Bennett	2001-2001
Kimberly Lin	2001-2001
Mark Howard (B.S. 2000)	2000-2000
Ryan Reese (B.S. thesis 2001, honors student)	2000-2001
Scott Collins	2000-2000
Jeremy Stephens (B.S. thesis 2002)	2000-2002
Eric Klein	1999-2000

High School Students

Amanda Stockton	2000-2000
Scott Mullin	2002-2002

PROFESSIONAL ASSOCIATIONS

1994–present
American Association for the Advancement of Science (AAAS)
Member

1994–present
American Chemical Society (ACS)
Member

2012–present
Council of Colleges of Arts and Sciences (CCAS)
Member

2014–present
National Council of University Research Administrators (NCURA)
Member

2014-present
Society of Research Administrators International (SRA International)
Member

PROFESSIONAL DEVELOPMENT ACTIVITIES

Research Integrity Officer (RIO) Boot Camp, HHS/ORI, Washington, DC — August 2016

NCURA Annual meeting, Washington, DC — August 2016

Prevention and Management of Misconduct Related Retractions, HHS/ORI, Fort Collins, CO — July 2016

Promoting the Responsible Conduct of Research for College and University Leaders, HSS/ORI, Marina del Rey, CA — April 2016

ACS Leadership Institute, Dallas, TX — January 2016

NCURA Region VI/VII Annual Meeting, Salt Lake City, UT — October 2015

SRA International 2014 Annual Meeting and Senior Executive Institute, San Diego, CA — October 2014

NSF Grants Workshop, Denver, CO — June 2014

NSF Grants Workshop, Arlington, VA — October 2012

CCAS New Deans Workshop, Minneapolis — July 2012

Foundations in Chemistry & Biochemistry: an Introductory Graduate Course, developed by CID Committee in 2006 and 2007, implemented Fall 2007/Spring 2008.

Carnegie Initiative on the Doctorate, University of Oklahoma — 2004-2006

Carnegie Initiative on the Doctorate: Summer Convening, Stanford, CA, August 2005

Faculty Discussion Group: Making Large Classes Interesting, Norman, OK, Spring 2001

New Faculty Professional Development Seminar, Norman, OK, Fall 1999

SERVICE

UNIVERSITY SERVICE

Mathematics and Science Teaching Institute (MAST) Advisory Board, University of Northern Colorado, 2015-present

Provost's Leadership Team, University of Northern Colorado, 2014-present

Digital Measures Steering Committee, University of Northern Colorado, 2014

HLC Criterion-5 Committee, University of Northern Colorado, 2012-2013

College of Arts and Sciences China Regional Advisory Committee, University of Oklahoma, 2011-2012

Coordinator for Departmental Move to New Chemistry Building, Department of Chemistry and Biochemistry, University of Oklahoma, 2010

Advisory Committee to the Vice President for Research (AC-VPR), University of Oklahoma, 2008-2010

Chair, OU Research Council, University of Oklahoma, 2008-2009

Assistant Chair, Department of Chemistry and Biochemistry, 2006-2010

New Building Committee, Department of Chemistry and Biochemistry, 2007-2010

OU Research Council, University of Oklahoma, 2006-2009

OU Faculty Senate Development Award Committee, University of Oklahoma, 2006-2009

Elected Member of Committee “A” (Departmental Exec. Committee), Department of Chemistry and Biochemistry, University of Oklahoma, 2006-2008

Honors College National Scholarship Selection Committee, University of Oklahoma, 2006-2008

Chair, Small Molecule X-ray Crystallography User Group, Department of Chemistry and Biochemistry, University of Oklahoma, 2004-2012

Graduate Committee, Department of Chemistry and Biochemistry, University of Oklahoma, 2004-2010

Chair, Carnegie Initiative on the Doctorate (CID) Leadership Team, Department of Chemistry and Biochemistry, University of Oklahoma, 2004-2010

Recruiting Committee, Department of Chemistry and Biochemistry, University of Oklahoma, 2004-2006

Coordinator, Summer Research Experience for Undergraduates, Department of Chemistry and Biochemistry, University of Oklahoma, 2004-2005

Adopt-a-Faculty Program, University of Oklahoma, 2003-2005

English Assessment Program Panelist, University of Oklahoma, 2002-2011

Faculty-In-Residence Program, University of Oklahoma, 2002-2003

Henderson Scholars Program Mentor, University of Oklahoma, 2002-2003Student Organization Advisor (PLU), Department of Chemistry and Biochemistry, University of Oklahoma, 2001-2004

Faculty Marshal for College of Arts & Sciences Convocation, Department of Chemistry and Biochemistry, University of Oklahoma, 2000-2004

Seminar Committee, Department of Chemistry and Biochemistry, University of Oklahoma, 2000-2004

Host for Karcher/Barton & Divisional Seminar Speakers, Department of Chemistry and Biochemistry, University of Oklahoma, 2000-2011

General Chemistry Text Committee, Department of Chemistry and Biochemistry, University of Oklahoma, 2000-2002

Secretary at faculty meetings, Department of Chemistry and Biochemistry, University of Oklahoma, 1999-2000
Community/professional service

PROFESSIONAL SERVICE

2016 Chair-Elect, Colorado Section of the American Chemical Society

Session Co-Chair (Inorganic Chemistry) *Rocky Mountain Regional Meeting of the American Chemical Society*, Littleton, CO, October 2012

NSF proposal review panel, Chemistry Division (Synthesis), March 2011

Session Co-Chair (Coordination Chemistry: Synthesis, Characterization, and Applications) *242nd American Chemical Society National Meeting*, Denver, CO, August 2011

Organizer and Session Chair (Bioinorganic Chemistry) *66th SW and 62nd SE Regional Meeting of the American Chemical Society (ACS)*, New Orleans, LA, December 2010

Session Chair (Coordination Chemistry) *238th ACS National Meeting*, Washington, DC, August 2009

Session Chair (Coordination Chemistry: Applications) *237th ACS National Meeting*, Salt Lake City, UT, March 2009

Organizer and Session Chair (General Inorganic, Main Group Chemistry, Synthesis and Characterization of Materials) *235th ACS National Meeting*, New Orleans, LA, April 2008

Organizer and Session Chair (Bioinorganic Compound Design and Modeling; Inorganic Coordination Chemistry-Characterization and Applications; Inorganic Coordination Chemistry-Synthesis) *231st ACS National Meeting*, Atlanta, GA, March 2006

Session Chair (Bioinorganic Chemistry)
227th *ACS National Meeting*, Anaheim, CA, April 2004

Session Chair, *59th Southwest Regional Meeting of the ACS*, Oklahoma City, OK, October 2003

Journal and granting agency referee service:

Australian Journal of Chemistry
BBA – Proteins and Proteomics
Chemical Reviews
Crystal Engineering Communications
Crystal Growth and Design
Crystal Engineering Communications
Dalton Transactions
European Journal of Inorganic Chem.
Inorganic Chemistry
Inorganic Chemistry Communications
Inorganica Chimica Acta
J. Biological Inorganic Chemistry
Journal of Coordination Chemistry
Journal of Molecular Structure
J. American Chemical Society
New Journal of Chemistry
Langmuir
Polyhedron
Proc. Org. Reactions Catalysis Society
Supramolecular Chemistry

National Science Foundation (NSF)
Petroleum Research Fund (PRF)
U.S. Civilian Research and Development Foundation (CRDF) 2004 Moldovan-U.S. Bilateral Grants Program
PSC-CUNY (City University of New York granting program)

TEACHING

COURSES TAUGHT

Undergraduate Courses

University of Northern Colorado (2012-present)

Introductory Chemistry, Chem 103 (Fall 2013)

University of Oklahoma (1999-2012)

General Chemistry I, Chem 1315

Inorganic Chemistry, Chem 4333

Chemistry Capstone: Chemistry of the Environment, Chem 4923

Graduate Courses

University of Oklahoma (1999-2012)

Foundations in Chemistry and Biochemistry, Chem 5213/5313

Advanced Inorganic Chemistry, Chem 5233

Physical Inorganic Chemistry, Chem 5333

Special Topics in Inorganic Chemistry: Bioinorganic Chemistry, Chem 6863

Special Topics in Inorganic Chemistry: Copper in Metalloproteins and Medicine, Chem 6863

Inorganic Graduate Seminar, Chem 6850

DOCTORAL COMMITTEES

2015, James "Mike" McClain (OU), "Survey of Catalyst and Reductant Effects on Oxorhenium Catalyzed Deoxydehydration of Glycols", dissertation committee member

2013, Anna Jozwiuk (OU), "Imitating Nature: The Effects of Asymmetry and Strain on Copper and Iron Complexes with Schiff Base Ligands", dissertation co-director and committee co-chair

2012, Adam Warhausen (OU), "Synthesis, Characterization, Electrochemistry, and Spectroelectrochemistry of Group 8 Metalloporphyrin Complexes", dissertation committee member

2011, Zhaodong Wang (OU), "Copper chemistry of pyridylalkylbenzamide ligands: Modeling the Cu_Z center of N_2OR and coordination polymer chemistry", dissertation director and committee chair

2011, Sita Modali (OU), "Molecular mechanism of stimulation of ATP-binding cassette (ABC) type transporter MacB by the periplasmic membrane fusion protein MacA", dissertation committee member

2010, Penn Qiu (OU), "Synthesis, purification and assembly of gold and iron oxide nanoparticles", dissertation committee member

2010, Dipti Barman, (OU), "Ligand assisted copper catalyzed C-H aminations", dissertation committee member

2009, Stephen Crossley (OU), dissertation committee member

2009, Ruibo Li (OU), "Mechanistic investigation of additions to alkenes by using correlations", dissertation committee member

2008, Lei Yang (OU), "Synthesis and characterization of model complexes of the CuZ center from nitrous oxide reductase", dissertation director and committee chair

2008 Jason Moore (OU), "Host-guest complexation of cationic xanthene dyes with cucurbit[7]uril", dissertation committee member

2007, Jason Wickham (OU), dissertation committee member

2007 Nan Xu (OU), "Interactions of nitric oxide and nitrosamines with group 8 metalloporphyrins", dissertation committee member

2007, Zaki Zahran (OU), "A bioinorganic approach to the study of the interactions of nitrogen oxides with manganese porphyrins and manganese- and cobalt-reconstituted myoglobin", dissertation committee member

2006, Eric Klein (OU), "From Nitrite Reductase to Alzheimer's Disease: Design, Synthesis, and Reactivity of New Nitrogen-, Oxygen-, and Sulfur-Containing Ligands and their Copper Complexes", dissertation director and committee chair

1999-2006: at OU served as a member on > 15 doctoral committees, chaired one doctoral committee (Eric Klein, "From Nitrite reductase to Alzheimer's disease: Design, synthesis, and reactivity of new nitrogen-, oxygen-, and sulfur-containing ligands and their copper complexes", 2006)

MASTER'S COMMITTEES

2015, Matthew Wallace (UNCO), Master's committee member

2015, Jess Evans (UNCO), Master's committee member

2015, Josh Mikesell (UNCO), Master's committee member

2011, Jimmy Brown (OU), Master's committee member

2009, Kevin Pastoor (OU), Master's committee member

2007, Olajumoke Olowu (OU), Master's committee member

1999-2006: at OU served as a member on nine master's committees