RENEE L. FALCONER

Department of Chemistry & Geochemistry
Colorado School of Mines, Golden, CO
rfalcone@mines.edu, 303-384-2110

Professional Experience

- 8/12 - : Teaching Professor, Dept. of Chemistry and Geochemistry, Colorado School of Mines, Golden, CO.
- 9/01 – 7/12 : Associate Professor, Dept. of Chemistry, Chatham University, Pittsburgh, PA
- 9/99 - 8/01: Environmental Chemist, US Environmental Protection Agency, National Exposure Research Laboratory, Research Triangle Park, NC
- 9/94 - 8/99: Assistant/Associate Professor, Department of Chemistry, Youngstown State University, Youngstown, OH
- 1992-1994: Contract Scientist, Atmospheric Environment Service, Environment Canada, Downsview, Ontario, Canada

Education

- Ph.D., 1994, Chemistry, University of South Carolina, Columbia, SC
- B.S., 1990, Chemistry, Grove City College, Grove City, PA

Relevant Teaching Experience

- Taught over thirty different courses/labs at three different institutions.
- Coordinated General Chemistry courses & laboratories, developed dozens of new labs, managed >20 TA's.
- Developing active learning general chemistry program ('studio' chemistry).
- Developed numerous new courses including Advanced Environmental Chemistry, General Education Science Laboratory incorporating various areas of science, two general education science courses for non-majors, graduate Environmental Science course for Masters of Arts in Teaching students and two different undergraduate environmental chemistry and environmental science courses for non-science majors.
- Re-designed Multicultural Engineering Program summer chemistry course.
- Research advisor for multiple undergraduates (chemistry, biology, environmental science, education) and several chemistry and biology masters' students at two different institutions.
- Developed/taught two outreach courses for high school students - 'Chemistry Lab for Homeschool High School Students', CSI Shadyside (summer course).
- Mentor for Environmental Careers Organization summer student and Hillsborough Elementary School's Career Shadowing Program while working at EPA.

Research Interests

- Use of active learning and student centered pedagogies in the general chemistry classroom and laboratories.
- Sampling and analytical methodology for determining sources, distribution and degradation of semi-volatile organic pollutants in outdoor and indoor environments.
- Analytical and environmental chemistry of chiral pollutants and their use as tracers of biogeochemical processes and transport/fate.
- Transport and deposition processes controlling the environmental fate of pesticides and organic pollutants.
- Laboratory and field determination of physicochemical properties of organic pollutants and their relation to environmental behavior.

Technical Experience

- Extensive experience in ultra-trace analysis methods and methods development for semi-volatile organic compounds such as pesticides, flame retardants and industrial pollutants, utilizing gas chromatography with electron capture detection and mass spectrometry.
- Use of chiral-phase gas chromatography for the analysis of chiral pesticides.
- Experienced in various collection methods for environmental samples including air, water, soil and biological tissues as well as indoor sampling techniques for air, house dust, toys, and skin residues.
- Proficient in use of various instrumentation including GC, GC-MS, AA, IR, Thermal desorption, etc.

Awards/Recognition

- Interviewed for TV news brief, ES&T, Audubon and Science News articles on research into pollutants in children's toys, February 2006, December 2005, June 2006 and December 2005.
- Interviewed for various articles on research into pesticides in organic produce, Science News, December 2005, ES&T news section, January 2006.
- Recognized in *Today's Chemist at Work* article as chiral pollutant expert, August 2003.
- Jane Burger Advising Award for Faculty, Chatham University, 2006.
- Superior Accomplishment Recognition Award, U.S. EPA, June 2001.
- Interviewed for ES&T Environmental News section as expert on chiral pollutant analysis, January 1996.
- Received YSU Research Professorship, 1998-99 academic year.
- 1994 IAGLR/Hydrolab Best Student Paper Award, International Association for Great Lakes Research.

Professional Activities

- Twenty-nine peer reviewed publications in scientific journals.
- Over forty-five professional presentations at scientific conferences/workshops by self or students.
- Chair of nineteen platform sessions at national and international conferences.
- Member of the Program Committee for the 2015 Society of Environmental Toxicology and Chemistry Conference; Chair of the sub-committee on Student Activities.
- Invited speaker/participant in various workshops and symposiums.
- PI/Co-PI on eight successful external grant applications for both scientific research and pedagogy.
- Principle Investigator for four academic research contracts; manager of one government research contract.
- Reviewer for numerous journals including Environmental Science & Technology, Environmental Toxicology and Chemistry, Atmospheric Environment, Journal of Agricultural and Food Chemistry, Environmental Pollution, Environmental Chemistry, Journal of Environmental Quality and Geophysical Research Letters.
- ACS Penn-Ohio Border Section-Secretary: 1997-99; Executive Committee member: 1995-97.
- Attended CIEE Faculty Development Seminar in Uppsala, Sweden, 2011, Greater Expectations Institute (Assoc. of American Colleges and Universities) in Denver, CO, 2003 and the American Association for Higher Education Summer Academy, Vail, CO, 1998.
- Member of American Chemical Society and Society of Environmental Toxicology & Chemistry.

Community Service

- Presented chemistry demonstrations/experiments/magic shows for >85 K-12 classes.
- Involved in K-12 Teacher Training in science and engineering thru the Trefny Foundation at CSM.
- Judge for numerous science fairs.
- Organized activities between local Girl Scout troops and undergraduate chemistry majors including earning science badges and field trips.

- Co-organized hands-on labs for high school students in the "Women in Science Career Workshop", April 1998, April 1999.

Courses Taught

Introduction to Chemistry (for non-science majors)
Introduction to Chemistry Laboratory (for non-science majors)
Chemistry in Context (environmental chemistry for non-science majors)
Our Fragile Planet: A Scientific Perspective (science course for non-science majors)
First-year Science: Earth on the Balance
First-year Science Laboratory
Principles of Chemistry 1, 2
Principles of Chemistry Laboratory 1, 2
Chemistry for the Allied Health Sciences 1
Chemistry for the Allied Health Sciences Laboratory 1, 2
Environmental Chemistry (for environmental science/studies majors)
Applied Spectroscopy
Chemical-Instrumentation Interfacing
Chemical-Instrumentation Interfacing Laboratory
Chemical Instrumentation Laboratory 1, 2
Quantitative Analysis Laboratory 1, 2
Organic Chemistry Laboratory 1
Scientific Research Methods
Undergraduate Research
Special Topics in Environmental Chemistry (graduate)
Advanced Environmental Chemistry (undergraduate and graduate)
Advanced Analytical Chemistry (graduate)
Environmental Chemistry for Masters of Arts in Teaching
Graduate Thesis
Chatham Abroad: Russia, A Voyage of Discovery through Service
Chatham Abroad: Belize, Sustainability in a Developing Country
Freshman Success Seminar (CSM 101)

Publications

1. Hauser, E.; Dickhut, R.; Falconer, R.; Wozniak, A. **2013**. Improved method for quantifying the air-sea flux of volatile organic carbon. *Limnology and Oceanography: Methods*, 11:287-297.
2. Ulrich EM, Falconer RL. Chiral chlordane components in environmental matrices. In: Garrison, AW, Gan, J, Liu, W (Eds.). Chiral Pesticides: Stereoselectivity and Its Consequences. American Chemical Society, Washington, DC, **2011**; pp. 11-43, doi:10.1021/bk-2011-1085.ch002.
3. MacNeil, J.; Falconer, R. **2010**. When Learning the Hard Way Makes Learning Easy: Building Better Lab Note-Taking Skills. *J. Chem. Ed.,* 87(7), 703-704.
4. Meighan, M.; MacNeil, J.; Falconer R. **2008**. Determining the solubility product of $Fe(OH)_3$: an equilibrium study with environmental significance. *J. Chem. Ed*., 85, 254-255.
5. Bidleman, T.F.; Leone, A.D.; Falconer, R.L. **2003.** Vapor pressures and enthalpies of vaporization for toxaphene congeners. *J. Chem. Eng. Data*, 48, 1122-1127. Correction/addition 2006, 51, 1168.
6. Bidleman, T.F.; Leone, A.D.; Falconer, R.L.; Harner, T.; Jantunen, L.M.M.; Wiberg, K.; Helm, P.A.; Diamond, M.L.; Loo, B. "Air-Soil and Air-Water Exchange of Chiral Pesticides" in Pesticide Science: Environmental Fate and Effects. H. Yamamota & J. Coats, Eds., American Chemical Society Symposium Series, ACS, **2003**.

7. Bidleman, T.F.; Leone, A.D.; Falconer, R.L.; Harner, T.; Jantunen, L.M.M.; Wiberg, K.; Helm, P.A.; Diamond, M.L.; Loo, B. **2002**. Chiral pesticides in soil and water and exchange with the atmosphere. *The Scientific World*, 2, 357-373.
8. Leone A.D.; Amato S.J.; Falconer R.L. **2001**. Emission of chiral organochlorine pesticides from agricultural soils in the cornbelt region of the U.S. *Environ. Sci. Technol.*, 35, 4592-4596.
9. Falconer R.L.; Harner T.J. **2000**. Comparison of the octanol-air partition coefficient and liquid-phase vapor pressure as descriptors for particle/gas partitioning using laboratory and field data for PCBs and PCNs. *Atmos. Environ*., 34, 4043-4046.
10. Leone A.D.; Ulrich E.M.; Bodnar C.E.; Falconer R.L.; Hites R.A. **2000**. Organochlorine pesticide concentrations and enantiomer fractions for chlordane in indoor air. *Atmos. Environ*., 34, 4131-4138.
11. Bidleman T.F.; Falconer R.L. **1999**. Using enantiomers to trace pesticide emissions. *Environ. Sci. Technol*., 33, 206A-209A.
12. Bidleman T.F.; Falconer R.L. **1999**. Enantiomer ratios for apportioning two sources of chiral compounds. *Environ. Sci. Technol*., 33, 2299-2301.
13. Bidleman T.F.; Falconer R.L.; Harner T. "Particle/Gas Distributions of Semivolatile Organic Compounds: Field and Laboratory Experiments with Filtration Samplers" in Gas and Particle Phase Measurements of Atmospheric Organic Compounds. D. Lane, Ed., Gordon and Breech, Newark, NJ. **1999**; pp. 39-72.
14. Aigner E.J.; Leone A.D.; Falconer R.L. **1998**. Concentrations and enantiomeric ratios of organochlorine pesticides in soils from the U.S. cornbelt. *Environ. Sci. Technol.*, 32, 1162-1168.
15. Falconer R.L.; Leone A.D.; Bodnar C.; Wiberg K.; Bidleman T.F.; Jantunen L.M.; Harner T.J.; Parkhurst W.; Alegria H.; Brice K.; Su K. **1998**. Using enantiomeric ratios to determine sources of chlordane to ambient air. *Organohalogen Compds.*, 35, 331-334.
16. Harner T.J.; Jantunen L.M.; Bidleman T.F.; Falconer R.L.; Parkhurst W; Mackay D. **1998**. Volatilization of organochlorine pesticide residues from U.S. agricultural soils. *Organohalogen Compds*., 36, 397-400.
17. Bidleman T.F.; Jantunen L.M.; Wiberg K.; Harner T.; Brice K.; Su K.; Falconer R.L.; Leone A.D.; Aigner E.J.; Parkhurst W. **1998**. Soil as a source of Atmospheric Heptachlor Epoxide. *Environ. Sci. Technol*., 32, 1546-1548.
18. Bidleman T.F.; Jantunen L.M.; Harner T.; Wiberg K.; Wideman J.; Brice K.; Su K.; Falconer R.L.; Aigner E.J.; Leone A.D.; Ridal J.J.; Kerman B.; Finizio A.; Alegria H.; Parkhurst W.; Szeto S.Y. **1998**. Chiral pesticides as tracers of air-surface exchange. *Environ. Pollut.*, 102, 43-49.
19. Falconer R.L.; Bidleman T.F.; Szeto S.Y. **1997**. Chiral pesticides in soils of the Fraser Valley, British Columbia. *J. Agric. Food Chem.*, 45, 1946-1951.
20. Falconer R.L.; Bidleman T. F. "Field and Laboratory Investigations of Particle/Gas Distributions for Polychlorinated Biphenyls and Other Semivolatile Organic Compounds" in Atmospheric Deposition of Contaminants to the Great Lakes and Coastal Waters. J.E. Baker, Ed., SETAC, Pensacola, FL. **1997**; pp.151-170.
21. Bidleman T.F.; Jantunen L.M.; Harner T.; Wiberg K.; Wideman J.; Falconer R.L.; Aigner E.J.; Leone A.D.; Ridal J.J.; Kerman B.; Parkhurst W.; Finizio A.; Szeto S.Y. **1997**. Chiral pesticides as tracers of air-surface exchange. *Organohalogen Compd*., 31, 238-243.
22. Wiberg K.; Jantunen L.; Harner T.; Wideman J.; Bidleman T.; Brice K.; Su K.; Falconer R.; Leone A.; Parkhurst W.; Alegria H. **1997**. Chlordane enantiomers as source markers in ambient air. *Organohalogen Compd.*, 33, 209-213.
23. Falconer R.L.; Bidleman T.F.; Gregor D.J.; Semkin R.; Teixeira C. **1995**. Enantioselective breakdown of α-hexachlorocyclohexane in a small Arctic lake and its watershed. *Environ. Sci. Technol*., 29, 1297-1302.
24. Falconer R.L.; Bidleman T.F.; Gregor D.J. **1995**. Air-water gas exchange and evidence for metabolism of hexachlorocyclohexanes in Resolute Bay, N.W.T. *Sci. Total Environ*., 160/161, 65-74.

25. Falconer R.L.; Bidleman T.F.; Cotham W.E. **1995**. Preferential sorption of non- and mono-ortho polychlorinated biphenyls to urban aerosols. *Environ. Sci. Technol*., 29, 1666-1673.
26. Bidleman T.F.; Falconer R.L.; Walla M.D. **1995**. Toxaphene and other organochlorine compounds in air and water at Resolute Bay, N.W.T., Canada. *Sci. Total Environ*., 160/161, 55-63.
27. Bidleman T.F.; Jantunen L.M.; Falconer R.L.; Barrie L.A.; Fellin P. **1995**. Decline of hexachlorocyclohexane in the Arctic atmosphere and reversal of air-sea gas exchange. *Geophys. Res. Letters*, 22, 219-222.
28. Falconer R.L.; Bidleman T.F. **1994**. Vapor pressures and predicted particle/gas distributions of polychlorinated biphenyl congeners as functions of temperature and ortho-chlorine substitution. *Atmos. Environ*., 28, 547-554.
29. Ngabe B.; Bidleman T.F.; Falconer R.L. **1993**. Base hydrolysis of α- and γ-hexachlorocyclohexanes. *Environ. Sci. Technol*., 27, 1930-1933.

Invited Presentations

R. Falconer, E Ulrich. "Chiral Chlordane Components in Environmental Matrices." Society of Environmental Toxicology and Chemistry Conference, Nashville, TN, November 2013.

R.L. Falconer. "Pesticide Enantiomers as Environmental Tracers". Invited Seminar Speaker, U.S. Geological Survey, Arvada, CO, July 1998.

R.L. Falconer. "Chemical Magic for Elementary Students". Invited Seminar Speaker, Penn-Ohio Border Section of the American Chemical Society, Youngstown State University, Youngstown, Ohio, October, 1997.

Professional Presentations

R. Falconer, N. Stambach, N. Hagan. "Earth, Energy and the Environment - what do they all have in common? US!". Society of Environmental Toxicology and Chemistry Conference, Vancouver, BC, Canada, November 2014.

M. Cochran, R. Falconer, R. Dickhut. "Persistent Organic Pollutants in Bluefin Tuna (*Thunnus thynnus*) from the western North Atlantic." Society of Environmental Toxicology and Chemistry Conference, New Orleans, LA, November 2009.

J. Luek, R. Dickhut, M. Cochran, R. Falconer, H. Kylin. "Persistent Organic Pollutants in Air over the Atlantic and Southern Oceans." Society of Environmental Toxicology and Chemistry Conference, New Orleans, LA, November 2009.

S. McMullen, R. Falconer. "Determining the efficacy of washing techniques for removing PBDEs and OC pesticides from children's stuffed toys." American Chemical Society National Conference, Salt Lake City, UT, March 2009.

M. McGuirk, R. Falconer. "Levels of organochlorine pesticides in commercial potting soils." American Chemical Society National Conference, Salt Lake City, UT, March 2009 and Society of Environmental Toxicology and Chemistry Conference, Tampa, FL, November 2008.

E. Ulrich, R. Falconer. "Using enantiomer fractions of POPs to characterize contamination, degradation, and sources." Society of Environmental Toxicology and Chemistry Conference, Milwaukee, WI, November 2007.

J. Anderson, A. Yousef, R. Falconer. "The Comparative Efficacy of Produce Washes for Removing Organochlorine Pesticides from Produce." Society of Environmental Toxicology and Chemistry Conference, Milwaukee, WI, November 2007.

J. Burnett, A. New, R. Falconer. "Polybrominated Diphenyl Ethers and Organochlorine Pesticides in Children's Stuffed Toys." Society of Environmental Toxicology and Chemistry Conference, Milwaukee, WI, November 2007.

S. Dora, A. Palbus, R. Falconer. "Analysis of Chiral Organochlorine Pesticides and Polybrominated Diphenyl Ethers in Human Breast Milk." Society of Environmental Toxicology and Chemistry Conference, Montreal, Quebec, Canada, November 2006.

N. Hagan, R. Falconer. "Concentrations of PBDEs and Organochlorine Pesticides in Residential Indoor Air." Society of Environmental Toxicology and Chemistry Conference, Montreal, Quebec, Canada, November 2006.

C. Corbitt, R. Falconer. "Brominated Flame Retardants and Organochlorine Pesticides in Children's Stuffed Toys." Society of Environmental Toxicology and Chemistry Conference, Baltimore, Maryland, November 2005.

B. Wolensky, R. Falconer. "Organochlorine Pesticides in Carrots Grown Organically and Conventionally." Society of Environmental Toxicology and Chemistry Conference, Baltimore, Maryland, November 2005.

A. Trapp, R. Falconer. "Creating Environmental Science Activities Appropriate for Middle School Students." Society of Environmental Toxicology and Chemistry Conference, Baltimore, Maryland, November 2005.

J. MacNeil, R. Falconer. "Infusing Environmental Chemistry Throughout the Undergraduate Curriculum." Society of Environmental Toxicology and Chemistry Conference, Portland, Oregon, November 2004.

C. Corbitt, R. Falconer. "Organochlorine Pesticides in Commercially Available Potting Soils." Society of Environmental Toxicology and Chemistry Conference, Portland, Oregon, November 2004.

K. Willard, R. Falconer. "Importance of Various Sampling Parameters for Passive Sampling of Chlordane in Indoor Air." Society of Environmental Toxicology and Chemistry Conference, Portland, Oregon, November 2004.

T. Motley, R. Falconer. "Measurement of Chiral Pesticides in Vegetables Grown Organically, Traditionally and in a Controlled Enviroment." Society of Environmental Toxicology and Chemistry Conference, Portland, Oregon, November 2004.

R.L. Falconer. "Catching Pesticides 'Right'-handed: Using Enantiomers to Determine Pesticide Sources". 225th American Chemical Society National Meeting, New Orleans, LA, March, 2003.

T. Motley, R. Falconer. "Comparison of Active vs. Passive Samplers for Chiral Pesticides in Indoor Air." Society of Environmental Toxicology and Chemistry Conference, Austin, Texas, November, 2003.

L. Ganser, R. Falconer. "Atrazine in the Turtle Creek Watershed of Western Pennsylvania." Society of Environmental Toxicology and Chemistry Conference, Austin, Texas, November, 2003.

K.A. Haslett, R.L. Falconer. "Enantiomeric Composition of Chiral Pesticides in Soils from Three Midwestern States". 225th American Chemical Society National Meeting, New Orleans, LA, March, 2003.

A.M. Yingling, R.L. Falconer. "Enantiomeric Analysis of Chiral Pesticides in Indoor Air, Perimeter Soils and House Dust". 225th American Chemical Society National Meeting, New Orleans, LA, March, 2003.

M.R. Jacobs, R.L. Falconer. "Detection of Various Trace Metals in Hair Using Atomic Absorption Spectroscopy". 225th American Chemical Society National Meeting, New Orleans, LA, March, 2003.

R. Falconer, A. Yingling, K. Haslett. "Enantioselective Degradation of Chiral Pesticides in Air, Dust and Soil". Society of Environmental Toxicology and Chemistry Conference, Salt Lake City, UT, November, 2002.

R.L. Falconer, M.K. Morgan, A.D. Leone, L.M.M. Jantunen, T.F. Bidleman. "Occurrence of Chiral Pesticides in Human Breast Milk and Adipose Tissue". Society of Environmental Toxicology and Chemistry Conference, Baltimore, MD, November, 2001.

R. Falconer, M. Morgan, W. Garrison, A. Leone, T. Bidleman, L. Jantunen. "Chiral Pesticides: Occurrence and Significance". 43rd Rocky Mountain Conference on Analytical Chemistry, Denver, CO, July, 2001.

R.L. Falconer, R.G. Lewis, C.R. Fortune, F.T. Blanchard, A. Yau. "Translocation and Redistribution of Pesticides Applied in the Residential Environment". Society of Environmental Toxicology and Chemistry Conference, Nashville, TN, November, 2000.

R. Falconer, K. Wiberg, M. Tuttle, A. Leone, S. Amato, L. Jantunen. "Enantiomeric Ratios as Source Tracers of OC Pesticides in Great Lakes Air". Society of Environmental Toxicology and Chemistry Conference, Philadelphia, PA, November, 1999.

R.L. Falconer, A.D. Leone, C.E. Bodnar, E.M. Ulich, R.A. Hites, K. Wiberg, T.F. Bidleman, L.M. Jantunen, T.J. Harner. "Enantiomeric Ratios as Source Tracers of Chlordane in Ambient Air". American Chemical Society National Meeting, New Orleans, LA, August, 1999.

R. Falconer, M. Tuttle, S. Amato, A. Leone. "Using Enantiomers to Track Degradation and Volatilization of Organochlorine Pesticides from Cornbelt Soils". International Association of Great Lakes Research Conference, Cleveland, OH, May, 1999.

R.L. Falconer, A.D. Leone, C.E. Bodnar, E.M. Ulich, R.A. Hites, K. Wiberg, T.F. Bidleman, L.M. Jantunen, T.J. Harner. "Enantiomeric Ratios as Source Tracers of Chlordanes in Ambient Air". Invited Speaker for the ACS Award for Creative Advances in Environmental Science & Technology Symposium, American Chemical Society National Meeting, Anaheim, CA, March, 1999.

R. Falconer, A. Leone, C. Bodnar, K. Wiberg, T. Bidleman, L. Jantunen, T. Harner, W. Parkhurst, H. Alegria, K. Brice, K. Su. "Using Enantiomeric Ratios to Determine Sources of Chlordane to Ambient Air". 18th Symposium on Halogenated Environmental Organic Pollutants, Stockholm, Sweden, August, 1998.

C. Bodnar, A. Leone, R. Falconer, E. Ulrich, R. Hites. "The Use of Enantiomeric Ratios for Distinguishing Rural vs. Urban Sources of Chiral Pesticides to the Atmosphere". International Association of Great Lakes Research Conference, Hamilton, Ontario, May, 1998.

A.D. Leone, R.L. Falconer. "Enantiomeric Composition of Chiral Pesticides in Soils and Air from the Cornbelt Region". Society of Environmental Toxicology and Chemistry Conference, San Francisco, California, November, 1997.

R.L. Falconer, K. Wiberg, L. Jantunen, T. Harner, J. Wideman, T. Bidleman, K. Brice, K. Su, A. Leone, W. Parkhurst, H. Alegria. "Chlordane Enantiomers as Source Markers in Ambient Air". 17th International Symposium on Chlorinated Dioxins and Related Compounds, Indianapolis, Indiana, August 1997.

A.D. Leone, R.L. Falconer, T.F. Bidleman. "Enantiomeric Composition of Chiral Pesticides in Soils and Air from the Cornbelt Region". International Association of Great Lakes Research Conference, Buffalo, New York, June, 1997.

R.L. Falconer, A.D. Leone, E.J. Aigner, T.F. Bidleman. "Enantiomeric Composition and Concentrations of Chiral Pesticides in Soils from the Cornbelt Region". Society of Environmental Toxicology and Chemistry Conference, Washington, D.C., November, 1996.

E.J. Aigner, R.L. Falconer, T.F. Bidleman. "Enantiomeric Composition of Chiral Pesticides in Soils from the Cornbelt Region". International Association of Great Lakes Research Conference, Toronto, Canada, May, 1996.

R.L. Falconer, T.F. Bidleman, S.Y. Szeto. "Enantiomeric Composition of Chiral Pesticides in Soils from British Columbia". Second Society of Environmental Toxicology and Chemistry World Congress, Vancouver, B.C., Canada, November, 1995.

R.L. Falconer, T.F. Bidleman, W. Cotham, D. Gregor. "Gas/particle Distributions of Coplanar PCBs in Urban Air" and "Enantioselective Breakdown of α-HCH in a Small Arctic Lake and Its Watershed". Society of Environmental Toxicology and Chemistry Conference, Denver, CO, November, 1994.

R.L. Falconer, T.F. Bidleman. "Gas-Particle Distributions of Coplanar PCBs in Air". International Association of Great Lakes Research Conference, Windsor, Ontario, Canada, June, 1994.

R.L. Falconer, T.F. Bidleman. "Air-Water Gas Exchange and Evidence for Metabolism of HCHs in Resolute Bay, N.W.T.". International Symposium on the Ecological Effects of Arctic Airborne Contaminants, Reykjavik, Iceland, October, 1993.

R.L. Falconer, T.F. Bidleman. "Vapor Pressures and Predicted Particle/Gas Distributions of PCB Congeners as Functions of Temperature and Ortho-chlorine Substitution". EPA/AWMA Symposium on Measurement of Toxic and Related Air Pollutants, Durham, NC, May 1993.

Funded Grants

G. Greivel, R. Falconer, H-P. Kuo, K. Callan, C. Rader, S. Decaluwe. "Collaborative Research: An Engineering University Partnering with a Teacher Preparation University to Produce Highly Qualified Secondary STEM Teachers". NSF, 2014.

R. Falconer. "Creation of an Active Learning Program in the General Chemistry Sequence". Trefny-CSM. 2014.

R. Dickhut, R. Falconer, R. Lohmann. "Collaborative Research: Persistent Organic Pollutants in the Antarctic Marine Food Web: Impact of Climate Change and Insights into the Feeding Ecology of Apex Predators". NSF-Office of Polar Programs. 2009.

R. Dickhut, H. Kyelin, R. Falconer. "The Atlantic Ocean and Western Antarctic Ice Sheet: Current Sources or Sinks for Atmospherically Transported Organic Contaminants?". National Science Foundation – Office of Polar Programs. Partially Funded. 2007.

H. Kingston, R. Somiari, R. Falconer. "Identification and Integration of the Biological and Chemical Signatures in Breast and Prostate Cancer". NSF, Partially funded. 2007.

R. Falconer, C. Stilts, J. MacNeil. Chemistry Education Grant from Hamilton Company. 2006.

C. Stilts, R. Falconer. "Russia: A Voyage of Discovery Thru Service". Service Learning Mini-Grant Program. 2006.

D.W. Mincey, R.L. Falconer, J. Dick, S. Martin. "Brownfields Investigations as an Integrated Approach to Sampling, Sample Preparation and Analysis". National Science Foundation. 1998.

J.A. Jackson, A.D. Hunter, S.M. Schildcrout, R.L. Falconer and T.R. Wagner, Y.S.U. "Integration of Automated GC-MS Into the Undergraduate Curriculum". National Science Foundation. 1997.

Committees – CSM only

Active Learning and Technology
Core Curriculum
FACTIR
CSM 101 Planning
Re-Imagine LAIS
Multicultural Engineering Program
Freshman Chemistry Curriculum

Current Research Collaborators

- Robert Reinhold, Wendy Adams, Christine Moroye, Univ. of Northern Colorado, Greeley, CO.
- Nicole Hagen, U.S. Environmental Protection Agency, Durham, NC.
- Terry Bidleman, Liisa Jantunen. Environment Canada, Ontario, Canada.