

CURRICULUM VITAE
KERI C. HORNBUCKLE

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Professional Appointments

Associate Dean for Academic Programs (2010-present) College of Engineering, University of Iowa
Chair (2007-2010) Dept. Civil and Environmental Engineering, University of Iowa
Professor (2007-present) Dept. Civil and Environmental Engineering, University of Iowa
Visiting Professor (2007) Department of Applied Environmental Science (ITM) and Department of Environmental Chemistry, Stockholm University, Stockholm Sweden
Associate Professor (2001- 2007) Dept. Civil and Environmental Engineering, University of Iowa
Assistant Professor (1998- 2001) Dept. Civil and Environmental Engineering, University of Iowa
Research Engineer (1998-present) IIHR-Hydrosience and Engineering, University of Iowa
Assistant Professor (1995-1998) Department of Civil, Structural and Environmental Engineering, State University of New York at Buffalo

Education

Ph.D. (Environmental Engineering and Science) January 1996. University of Minnesota, Minneapolis,
Bachelor of Arts (Chemistry) May 1987. Grinnell College, Grinnell, Iowa.

Fellowships

2012-2013 Executive Leadership in Academic Technology and Engineering (ELATE) Fellow
2007-2010 Robert and Virginia Wheeler Faculty Fellow of Engineering
1999, 2000 Old Gold Summer Fellowship, University of Iowa
1994-1995 Doctoral Dissertation Fellow, University of Minnesota
1991-1992 Charles S. Mott / International Association of Great Lakes Research Fellow
1986 University of Leiden Research Fellow. University of Leiden, The Netherlands

Honors, Prizes, Awards and Nominations

The Faculty Excellence Award for Research, College of Engineering (2013)
Keynote Speaker, PCB Workshop, Visby, Sweden, NIEHS (2010)
Guest co-Editor, *Environmental Science & Technology* Special Focus Issue: PCB Sources, Exposures and Toxicities, American Chemical Society (2010)
Distinguished Achievement Award, Committee on the Celebration of Excellence among Women, University of Iowa (2009)
Iowa Women of Innovation (Nominated), Technology Association of Iowa. (2009)
University of Iowa Career Development Award (to work at Stockholm University, Sweden, 2007)
IAGLR Appreciation Award, International Association for Great Lakes Research (2006)
Collegiate Teaching Award, College of Engineering (Nominated, 2005)
Distinguished Service Award, Association of Environmental Engineering and Science Professors (2003)
Excellence in Review Award, American Chemical Society, *Environmental Science & Technology* (2003)
Early Faculty Career (CAREER) Award, National Science Foundation (1997)
Engineering Education Scholar, National Science Foundation (1996)
Postdoctoral Award (declined), NSF/NATO (1995)
Best Student Paper Award, Environmental Division of the American Chemical Society (1993)

University Affiliations (University of Iowa)

Center for Global and Regional Environmental Research (CGRER)

IIHR- Hydrosience and Engineering

Interdisciplinary Graduate Program in Human Toxicology

Department of Occupational and Environmental Health, secondary faculty appointment (2005-present)

SERVICE

University Service

2013-present	Chair, Seven-Year Review of the College of Liberal Arts and Sciences
2012-present	University of Iowa Arts Advancement Committee
2011-present	Executive Committee, Grand Challenges Scholars Program
2010-present	Conference Committee: UI Health Sciences & Engineering Women Faculty Dev. Conf.
2011-present	Presidential Scholars Selection Committee
2011-2012	College of Engineering Strategic Planning Executive Committee
2011	Program Review Committee, Applied Math and Computational Science
2010-2011	Provost Search Committee
2010-2011	Program Review Committee, Faculty Scholar and Global Scholar award
2010-present	Honors Scholarship Selector, University of Iowa Honors Program.
2009-present	U of IA Patent Advisory Committee, Office of the Vice President for Research
2009	Committee, proposal to President Mason for cluster hire in Water Sustainability
2009	Keynote Speaker, Belin-Blank Honors Recognition Event October 18, Iowa City
2009-2010	Chair, Search Committee for Associate Vice President for Diversity
2009-2010	Graduate Programs Assessment Task Force
2009-2010	Search Committee, Associate Provost for Faculty
2008-2009	Sustainability Curriculum Committee Member
2008	Review Committee, Regents Award for Faculty Excellence
2008	Executive Board of Iowa AGEP (Alliance in Graduate Education and Professoriate)
2007-present	Engineering Administrative Council (EAC) Member
2007-2008	Provost Search Committee
2003- 2004	Faculty Senate Member
2002- 2008	Center for the Health Effects of Environmental Contamination (CHEEC) Advisory.Board

Consulting

Polychlorinated biphenyls in the Norwegian Arctic. (2010 - 2011)
Fluorinated compounds released from Teflon manufacturing. (2006)
Technical Reviewer for the Hudson River Foundation (NYC). (March 2002)
Technical Reviewer for the Canadian Government. (2000)
Consultant for the Delta Institute (Chicago Illinois). (1999 - 2000)
Technical Reviewer for the U.S. Environmental Protection Agency. (July 2000)
Consultant to Limno Tech-LTI, Inc., Ann Arbor, MI. (March 1996)

Scientific and Professional Societies

American Chemical Society (ACS, 1985 - Present).
American Geophysical Union (AGU, 2004 - Present)
ASCE Journal of Environmental Engineering. (2006). Associate Editor (2006)
Association of Environmental Engineering and Science Professors (AEESP, 1995 - Present).

Board Member (2006 - 2009)
Chair, Internet Resources Committee (2009 - 2010)
Society for Environmental Toxicology and Chemistry (SETAC, 2000 - Present)
Women in Engineering Programs and Advocates (WEPAN, 2000 - Present)
International Association for Great Lakes Research (IAGLR, 1993 - Present).
Board Member (2002 - 2006)
Vice President / President / Past President (2003 - 2006)
Associate Editor (2001 - 2007), Journal of Great Lakes Research.

International Service

Conference Organizing and Program Committee Member, 4th International Conference on Occurrence, Fate, Effects, & Analysis of Emerging Contaminants in the Environment (EmCon2014). Iowa City, IA August 2014.
Conference Committee and Session Leader, 7th PCB Workshop 2012, Arcachon, France, (May 2012).
Opponent for the Ph.D. defense of Pernilla Bohlin (advisors Professors Bo Strandberg and Kevin Jones), Department of Occupational and Environmental Medicine, Sahlgrenska Academy at University of Gothenburg, Sweden. (2010).
Expert Reviewer for faculty search, Stockholm University, ITM- Applied Environmental Science (2010).
Conference Committee Member, 6th International PCB Workshop, Visby, Sweden, (2009 - 2010).
Co-Organizer, Special session honoring Steven J. Eisenreich at the International Association for Great Lakes Research annual meeting, Waterloo, Ontario. (May 2004).
Awards Committee Member. C.S. Mott / International Association for Great Lakes Research (IAGLR) dissertation fellowships (2001).
Workshop Organizer, presenter, and scientific advisor: "Using Models to Develop Air Toxics Reduction Strategies: Lake Michigan as A Test Case." Sponsored by the Lake Michigan Forum, the Delta Institute, and the International Joint Commission, Milwaukee, WI, (October 2000).
Organizer, Joint Workshop of the Delta Institute and the International Air Quality Advisory Board of the International Joint Commission: "The Use of Atmospheric Modeling in Policy Development". Ann Arbor, MI, (July 1999).
Member and Liaison to the Air Quality Advisory Board, the International Joint Commission Science Advisory Board. (1998 - 2002).

National Service

Headwaters Council member, University of Minnesota Water Resources Center, St Paul, MN, Member. (2009 - Present).
NSF (unsolicited proposals, air pollution), Panel Reviewer. (2012).
Presentation and Discussion with Graduate student Women in Engineering, University of Wisconsin, Madison, (February 2011).
National Institute of Environmental Health Sciences (NIH Institute) panel review of the P30 NIEHS Center applications, (2009).
Workshop to consider emerging contaminants and potential chemicals for the Superfund Research Program (NIH), Tucson, AZ, Participant and co-author. (August 2009).
Conference Organizing Committee, Biennial Conference of the Association of Environmental Engineering and Science Professors (AEESP), Iowa City, Iowa. (July 2009).
Science Committee for the National Science Foundation's CLEANER Project (the Collaborative Large-scale Engineering Analysis Network for Environmental Research), (2005 - 2006).
National Science Foundation Bio/Environmental Eng. Proposal Review, Washington DC, Panelist. (February 2006).
U.S.EPA's Science Advisory Board. Produced report EPA-SAB-05-002: "EPA's Air Toxics Research Strategy and Air Toxics Multi-Year Plan. A review by the Air Toxics Research Strategy and Multi-

Year Plan Panel of the EPA Science Advisory Board.”, Panelist. (2003 - 2004).
 CH2M & Parsons PhD Dissertation Awards Committee, Association of Environmental Engineering and Science Professors, Chair. (2001 - 2003).
 Awards Committee, Research Fellowships, Society for Environmental Toxicology and Chemistry, (2000 - 2003).
 Awards committee, Society of Hispanic Professional Engineers Midwestern Expo. Iowa City, IA, (2003).
 26th Annual Midwest Environmental Chemistry Workshop, Iowa City, IA, Co-Organizer, with Michelle Scherer. (October 2003).
 National Science Foundation Unsolicited Grant Review Panelist. Washington DC, National, Panelist. (May 2003).
 Awards Committee, Society of Environmental Toxicology and Chemistry, (2000 - 2002).
 National Science Foundation’s CAREER Award Review Panelist. Washington DC, (1999 - December 2001).
 ASCE Environmental and Water Resources Design Conference. Williamsburg, Iowa. 37th annual “Aboard the USEPA Research Vessel Lake Guardian: Tracking Toxic organic chemicals in the Great Lakes”, (1999).
 Delta Institute’s Workshop on Atmospheric Deposition of Toxics, Integrating Science and Policy, Chicago, IL, (1999).
 Women in Science and Engineering Conference: Exploring Careers for the Next Century. “Turning Ideas Into Reality Environmental Engineering -- solutions to air pollution and other environmental problems”, Esterville, IA, Speaker with Kristi Schmidt and Jane Dorman. (1999).
 National Science Foundation’s Engineering Education Scholars Workshop. “Surviving and Thriving in the First Years.” Carnegie Mellon University. Pittsburgh, PA, (1998).
 Session Chair, Adirondacks and Beyond, a Conference to Explore Science and Policy Linkages. “Predictive Models for Air Quality Assessment and Ecological Effects”, Saratoga Springs, NY, N. (1997).
 Adirondacks and Beyond, a Conference to Explore Science and Policy Linkages. “Experiences from Promoting Science through Cooperation.”, Panelist. (November 1997).
 National Science Foundation’s Engineering Education Scholars Workshop. “Recollections from the First NSF Engineering Education Scholars Workshop.” Carnegie Mellon University, Panelist. (July 1997).
 Air and Waste management Association’s Conference on Atmospheric Deposition to the Great Waters, Niagara Fall, NY, Session Chair (October 1996).

State Service

Lake Michigan Atmospheric Deposition of Toxics Task Force, Lake Michigan Forum, Task Force Member. (2001 - Present).
 Air Quality Advisory Committee, Iowa Environmental Council, Member. (2009).
 Advisory board: UNI Summer Lakes study, University of Northern Iowa, Cedar Fall, IA, Member. (May 2000).

TEACHING

Classroom Teaching

Environmental Engineering: Natural Systems (Iowa) / Water Quality (SUNY) (1995-2004) Required junior level civil engineering course with laboratory sections, enrollment 50-100.
 Air Pollution Control Technology (1997, 2000-2006 SUNY and Iowa) Elective senior/MS level civil & environmental and chemical engineering course, enrollment 20-30.

Engineering Problem Solving I (2002-2005) Required first-year engineering course, enrollment ~400.
Environmental Processing of Organic Chemicals (2000, 2002) Ph.D. level environmental engineering course, enrollment 20-30.

Environmental Engineering Graduate Seminar (frequently)

Civil & Environmental Engineering Sophomore Seminar (2008-2010)

Civil & Environmental Engineering Professional Seminar (2007-2010)

Engineering Honors Seminar (2011- present)

Research Mentoring

PhD Dissertation Supervision Total: 10 students (with student awards):

1. Wenxin Koh, "PCBs in Human Blood Serum" (Expected 2014).
2. Zachary Rodenburg, "Fragrances in Chicago air" (Expected 2014).
 - Iowa Superfund Basic Research Program Graduate Training Grant. (2010).
3. Rachel Marek, "PCBs and metabolites in human blood" (Expected 2013).
 - Best Poster Award in CEE, College of Engineering Research Open House. (2008).
 - Kersten fellowship. (2008).
 - Best Poster Award in CEE, College of Engineering Research Open House. (2010, 2013).
 - Graduate Assistantship in Area of National Need (GAANN Fellowship). (2011).
 - Fisher Fellowship. (2010).
 - Environmental Chemistry Division Best Student Paper Award, American Chemical Society. (2013).
4. Andres Martinez, "Release of Polychlorinated Biphenyl Congeners in a Contaminated Harbor and Canal" (2010). Current Position: Adjunct Assistant Professor and Assistant Research Scientist, IIHR-Hydrosience and Engineering, University of Iowa.
 - Iowa Superfund Basic Research Program Graduate Training Grant.
 - Best Poster Award in CEE, College of Engineering. (2009).
 - Best Student Paper Award, Division of Environmental Chemistry of the American Chemical Society. (2010).
5. Carolyn Persoon, "Spatial and Seasonal Trends of Atmospheric PCBs in Urban Areas Captured by Passive Sampling" (2010). Current Position: Environmental Engineer, Region 5, U.S. Environmental Protection Agency, Chicago.
 - Student Award, Division of Environmental Chemistry of the American Chemical Society. (2010).
 - Graduate Assistantship in Area of National Need (GAANN Fellowship). (2008).
6. Mark Weldon, "Agricultural Land Use and its Relationship to Nutrient Levels in Four Eastern Iowa River Systems" (2007). Current Position: Sustainability Engineer, PepsiCo, Cedar Rapids Iowa
 - Graduate Presidential Scholarship, University of Iowa. (2002).
 - Fisher fellowship. (2006).
7. Brian Boulanger, "Environmental Analytical Techniques and Fate of Perfluorinated Sulfonamides". (2004). Current Position: Associate Professor of Civil Engineering, Ohio Northern University
 - National Research Council Post Doctoral Fellowship, U.S. EPA in Cincinnati, OH.
 - Research Grant, Environmental Health Sciences Research Center (EHSRC). (2002).
 - Research Grant, Environmental Protection Agency, Region 5 (GLAD program). (2002).
 - Research Training Grant in Gene Expression and Bioremediation Fellowship, National Science Foundation. (2001).

8. Aaron Peck, "Sources, Fate, and Transport of Persistent Organic Pollutants in Iowa and Lake Michigan" (2004). Current Position: Environmental Business Specialists, LLC
- National Research Council postdoctoral fellowship, National Institutes of Standards and Technology.
 - Research Grant, Environmental Health Sciences Research Center (EHSRC). (2002).
 - Research Grant, Center for Health Effects of Environmental Contamination (CHEEC). (2002).
 - Fisher fellowship, University of Iowa. (2000).
 - The American Chemical Society's Graduate Student Award. (2001).
9. Sondra Miller, "The Effects of Large-Scale Episodic Sediment Resuspension of Persistent Organic Pollutants in Southern Lake Michigan" (2003). Current Position: Associate Professor of Civil Engineering, Boise State University
- C.S. Mott / IAGLR fellowship, International Association for Great Lakes Research. (2000).
 - Fisher fellowship. (2000).
 - International Institute for Applied Systems Analysis (IIASA) Young Scientists Summer Program.
 - Dissertation Fellowship, American Association of University Women Foundation. (2001).
10. Mark Green (co-advised with JV DePinto), "Geographic Information Based Modeling of Semi-Volatile Organic Compound Temporal and Spatial Variability" (2000). Current Position: President and CEO at Janus Systems Corporation, Williamsburg, NY.

PhD Committee Membership Total: 24 students

MS Thesis Supervision Total: 13 students

Undergraduate Student Research Mentoring. Total: 29 students

Supervision of Postdoctoral Associates

Dingfei Hu, "Detection and characterization of polychlorinated biphenyls in urban air."

Izabela Kania-Korwel, "Iowa Superfund Research Program Analytical Core."

Andres Martinez. "PCBs in industrial sediments"

Meredith Gooding Lassiter, "Effects of Synthetic Must Fragrances on Freshwater Mussels."

Karin Norstrom, "Analytical Chemistry of PCBs and their Metabolites in Complex Matrices."

RESEARCH

Research Grants (Current)

Title: "Chicago as a Source of Air Toxics to Lake Michigan."

Project Director: Keri Hornbuckle, Co-Director: Ron Hites, Indiana University

Sponsor: Great Lakes National Program Office/ U.S. Environmental Protection Agency (GLNPO/ USEPA); 9/1/2010 to 8/30/2014.

Title: "MRI: Acquisition of Instrumentation (LC-MS/MS) for the Trace Analysis of Anthropogenic Organic Compounds and Their Metabolites in Various Complex Matrices"

Project Director: Guangshu Zhai, CoDirectors: Keri C. Hornbuckle; Jerry L Schnoor; Hans-Joachim Lehmler; Larry W Robertson.

Sponsor: National Science Foundation (NSF) Major Instrumentation Program; 9/1/2012 – 8/31/2013

Title: "Atmospheric Sources of PCB Congeners." A research project of the Iowa superfund basic research program, "Semi-volatile PCBs: Sources, Exposures, Toxicities." Larry Robertson, program PI
Project Director: Hornbuckle, K.C. (Project Leader) , G. Carmichael, and P. Thorne
Sponsor: NIESH/ NIH: US Department of Health & Human Services; 04/01/10 to 03/31/15

Title: "Analytical Core: Extraction, Detection, and Interpretation of PCB Congeners in Complex Matrices." A core facility of the Iowa superfund basic research program, "Semi-volatile PCBs: Sources, Exposures, Toxicities." Larry Robertson, program PI
Project Director: Hornbuckle, K.C. (Project Leader 75%); Lehmler, H.-J.
Sponsor: NIESH/ NIH: US Department of Health & Human Services; 04/01/10 to 03/31/15

Title: "Characterization of Exposures of Urban and Rural Cohorts to Airborne PCBs." A research project of the Iowa superfund basic research program, "Semi-volatile PCBs: Sources, Exposures, Toxicities." Larry Robertson, program PI
Project Director: Thorne, P. (Project Leader); Hornbuckle, K.C.
Sponsor: NIESH/ NIH: US Department of Health & Human Services; 04/01/10 to 03/31/15

Completed Grants:

Title: "Siloxanes in Chicago Air."
Project Director: Hornbuckle, K.C. and Stanier, C.
Sponsor: The Center for the Health Effects of Environmental Contamination (CHEEC)
06/2010-05/2011

Title: "SGER: Transport of Sediments and Pollutants into the Terrestrial Regions of a Small Urban-Industrial City: The June 2008 Flood of Cedar Rapids, Iowa"
Project Director: Keri Hornbuckle (PI) and Thanos Papanicolaou (co-PI)
Sponsor: National Science Foundation
8/1/08-01/31/10

Title: "A molecular microbiological search for active biphenyl dioxygenases in polychlorinated biphenyl-contaminated sediments"
Project Director: Tim Mattes (PI) and Keri Hornbuckle (co-PI)
Sponsor: Center for Health Effects of Environmental Contamination (CHEEC)
2008-2009.

Title: "Atmospheric Sources of PCB Congeners." A research project of the Iowa superfund basic research program, "Semi-volatile PCBs: Sources, Exposures, Toxicities."
Project Director: Hornbuckle, K.C. (Project Leader) and Persky, V. (co-Project Leader)
Sponsor: NIESH/ NIH: US Department of Health & Human Services
04/01/06 to 03/31/10

Title: "Analytical Core: Extraction, Detection, and Interpretation of PCB Congeners in Complex Matrices." A core facility of the Iowa superfund basic research program, "Semi-volatile PCBs: Sources, Exposures, Toxicities." Larry Robertson, program PI
Project Director: Hornbuckle, K.C. (Project Leader); Lehmler, H.-J. (co-Project Leader); Just, C.J. (co-Project Leader)
Sponsor: NIESH/ NIH: US Department of Health & Human Services
04/01/06 to 03/31/10

Title: "Characterization of Exposures of Urban and Rural Cohorts to Airborne PCBs." A research project of the Iowa superfund basic research program, "Semi-volatile PCBs: Sources, Exposures, Toxicities." Larry Robertson, program PI
Project Director: Thorne, P. (Project Leader); Hornbuckle, K.C. (co-Project Leader)
Sponsor: NIESH/ NIH: US Department of Health & Human Services
04/01/06 to 03/31/10

Title: Prevalence and Control of Synthetic Musk Fragrances in Iowa Drinking Water.
Project Director: Keri Hornbuckle
Sponsor: Center for Health Effects of Environmental Contamination
1/2006 – 12/2006

Title: Fragrances in Iowa Drinking Water – IREU
Project Director: Keri Hornbuckle with William Wombacher (MS student)
Sponsor: VP office for Research
1/2006-6/2006

Title: Acquisition of Automated and High Sensitivity Instrumentation for the Analysis of Organic Compounds in Complex Matrices
Project Director: Keri Hornbuckle
Sponsor: National Science Foundation Major Research Instrumentation Program
7/2005 – 7/2007

Title: Supplement to "Acquisition of Automated and High Sensitivity Instrumentation for the Analysis of Organic Compounds in Complex Matrices"
Project Director: Keri Hornbuckle
Sponsor: National Science Foundation Major Research Instrumentation Program
7/2005 – 7/2007

Title: Exposure Assessment Facility Core, a core facility of the Environmental Health Sciences Research Center, Peter Thorne, Director
Project Director: Hornbuckle, K.C
Sponsor: National Institute for Environmental Health Sciences
4/2002-4/2004

Title: Development of a Passive Air Sampler for Measuring PCBs in Air
Project Director: Keri Hornbuckle, Co-PI: Hans-Joachim Lehmler
Sponsor: The Center for Health Effects of Environmental Contamination

Title: Development of a Strategy to Assess Health and Environmental Effects of Synthetic Musk Fragrances in the Mississippi River.
Project Director: Gooding, M (postdoc), Co-PI: Hornbuckle, KC, Ludwig, G.
Funding Source: VP for Research and External Affairs, Collaborative Interdisciplinary Projects.

Title: Enantioselective Enrichment of Chiral Polychlorinated Biphenyl (PCBs) Congeners in Complex Mixtures In Vivo
Project Director: Lehmler, H.J.; Co-Investigator: Hornbuckle, K.C.
Funding Source: EHSRC (Environmental Health Sciences Research Center)

Title: Air Dispersion Modeling of Confined Animal Feeding Operations

Project Director: O'Shaughnessy, P.; Co-Investigator: Hornbuckle, K.C.
Funding Source: EHSRC

Title: Synthetic Musk Fragrances in Great Lakes Sediments
Project Director: Hornbuckle, K.C. ;Co-Investigators: Boulanger, B. (Ph.D. student) And Schnoor, JS
Funding Source/Agency: CGRER
May 2003 – April 2004.

Title: Conceptual Network Design Studies for Iowa Hydrologic and Environmental Validation Site.
Project Director: Krajewski, W.; Co-Investigators: Eichinger, W., Hornbuckle, K.
Funding Source/Agency: Center for Global and Regional Environmental Research (CGRER)
January –December 2002.

Title: Pollutants of Emerging Concern in Iowa Air.
Project Director: Hornbuckle, K.C.; Co-Investigator: Peck, A.M. (Ph.D. student)
Funding Source/Agency: Center for Health Effects of Environmental Contamination (CHEEC).
January –December 2002.

Title: Environmental Exposure Assessment of Perfluorooctane sulfonate in various environmental matrices
Project Director: Brian Boulanger (PhD student) and Jerald Schnoor; Co-Investigators: Keri Hornbuckle
Funding Source/Agency: Environmental Health Sciences Research Center (EHSRC-NEIHS)
January-December 2002.

Title: Ambient Air Quality in the Vicinity of Concentrated Animal Feeding Operations.
Project Director: Peter S. Thorne; Co-Investigators: Lester, Peck, Hornbuckle, Donham, O'Shaughnessy, Osterberg.
Funding Source/Agency: Environmental Health Sciences Research Center (EHSRC-NEIHS)
January-December 2002.

Title: Study of Organic Contaminants in Air and Water in Conjunction with Episodic Events - Great Lakes Experiment
Project Director: Hornbuckle, K.C.
Funding Source/Agency: U.S. Environmental Protection Agency, Great Lakes National Program Office
Jan. 1, 1998 to Feb 4. 2001.

Title: Dynamics of Gas-Phase Persistent Organic Chemicals: An Investigation of the Effect of Climate using a Controlled Chamber
Project Director: Hornbuckle, K.C.
Funding Source/Agency: National Science Foundation Faculty Early Career Development (CAREER)
Sept. 1, 1997 through Aug. 30, 2001

Publications:

Reviewed Articles in Technical Journals

57. Zhu, Y., Mapuskar, K. A., Marek, R. F., Wu, W., Lehmler, H.-J., Robertson, L. W., Hornbuckle, K. C., Spitz, D. R., Aykin-Burns, N. (In Press). A New Player in Environmentally Induced Oxidative Stress: Polychlorinated Biphenyl Congener, 3,3' dichlorobiphenyl (PCB11). *Toxicological Sciences*.

56. Yucius, R. A., Stanier, C. O., Hornbuckle, K. C. (2013). Cyclic Siloxanes in Air, Including Identification of High Levels in Chicago and Distinct Diurnal Variation. *Chemosphere*, 92(8), 905–910.
55. Marek, R. F., Martinez, A., Hornbuckle, K. C. (2013). Discovery of Hydroxylated Polychlorinated Biphenyls (OH-PCBs) in sediment from a Lake Michigan waterway and original commercial Aroclors. *Environmental Science & Technology*, 47, 8204–8210.
54. Martinez, A., O'Sullivan, C., Reible, D., Hornbuckle, K. C. (2013). Partitioning of PCB congeners in enriched black carbon sediment. *Environmental Pollution*, 182, 357–363.
53. Marek, R. F., Thorne, P. S., Wang, K., DeWall, J., Hornbuckle, K. C. (2013). PCBs and OH-PCBs in Serum from Children and Mothers in Urban and Rural U.S. Communities. *Environmental Science & Technology*, 47(7), 3353–3361.
52. Petrich, N. T., Spak, S. N., Carmichael, G. R., Hu, D., Martinez, A., Hornbuckle, K. C. (2013). Simulating and explaining passive air sampling rates for semi-volatile compounds on polyurethane foam passive samplers. *Environmental Science & Technology*, 47, 8591–8598.
51. Martinez, A., Erdman, N. R., Rodenburg, Z. L., Eastling, P. M., Hornbuckle, K. C. (2012). Spatial distribution of chlordanes and PCB congeners in soil in Cedar Rapids, Iowa, USA. *Environmental Pollution*, 161, 222–228.
50. Hu, X., Adamcakova-Dodd, A., Lehmler, H.-J., Hu, D., Hornbuckle, K. C., Thorne, P. S. (2012). Subchronic Inhalation Exposure Study Of An Airborne Polychlorinated Biphenyl Mixture Resembling The Chicago Ambient Air Congener Profile. *Environmental Science & Technology*, 46(17), 9653–9662.
49. Martinez, A., Hornbuckle, K. C. (2011). Record of PCB congeners, sorbents and potential toxicity in core samples in Indiana Harbor and Ship Canal. *Chemosphere*, 85(3), 542.
48. Hu, D., Martinez, A., Hornbuckle, K. C. (2011). Sedimentary records of non-Aroclor and Aroclor PCB mixtures in the Great Lakes. *Journal of Great Lakes Research*, 37(2), 359.
47. Ela, W. P., Sedlak, D. L., Barlaz, M. A., Henry, H. F., Muir, D. C. G., Swackhamer, D. L., Weber, E. J., Arnold, R. G., Ferguson, P. Lee, Field, J. A., Furlong, E. T., Giesy, J. P., Halden, R. U., Henry, T., Hites, R. A., Hornbuckle, K. C., Howard, P. H., Luthy, R. G., Meyer, A. K., Saez, A. Eduardo, vom Saal, F. S., Vulpe, C. D., Wiesner, M. R. (2011). Toward Identifying the Next Generation of Superfund and Hazardous Waste Site Contaminants. *Environmental Health Perspectives*, 119(1), 6.
46. Hu, D., Lehmler, H.-J., Martinez, A., Wang, K., Hornbuckle, K. C. (2010). Atmospheric PCB congeners across Chicago. *Atmospheric Environment*, 44(12), 1550.
45. Zhao, H. X., Adamcakova-Dodd, A., Hu, D., Hornbuckle, K. C., Just, C. L., Robertson, L. W., Thorne, P. S., Lehmler, H. -J. (2010). Development of a synthetic PCB mixture resembling the average polychlorinated biphenyl profile in Chicago air. *Environment International*, 36(8), 819.
44. Norstrom, K., Czub, G., McLachlan, M. S., Hu, D., Thorne, P. S., Hornbuckle, K. C. (2010).

External exposure and bioaccumulation of PCBs in humans living in a contaminated urban environment. *Environment International*, 36(8), 855.

43. Martinez, A., Wang, K., Hornbuckle, K. C. (2010). Fate of PCB Congeners in an Industrial Harbor of Lake Michigan. *Environmental Science & Technology*, 44(8), 2803.
42. Hu, D., Hornbuckle, K. C. (2010). Inadvertent Polychlorinated Biphenyls in Commercial Paint Pigments. *Environmental Science & Technology*, 44(8), 2822.
41. Hornbuckle, K. C., Robertson, L. R. (2010). Polychlorinated Biphenyls (PCBs): Sources, Exposures, Toxicities: Environ Sci Technol. *Environmental Science & Technology*, 44, 2749-2751.
40. Martinez, A., Norstrom, K., Wang, K., Hornbuckle, K. C. (2010). Polychlorinated biphenyls in the surficial sediment of Indiana Harbor and Ship Canal, Lake Michigan. *Environment International*, 36(8), 849.
39. Miller, S. M., Hornbuckle, K. C. (2010). Spatial and temporal variations of persistent organic pollutants impacted by episodic sediment resuspension in southern Lake Michigan. *Journal of Great Lakes Research*, 36(2), 256.
38. Persoon, C., Peters, T. M., Kumar, N., Hornbuckle, K. C. (2010). Spatial Distribution of Airborne Polychlorinated Biphenyls in Cleveland, Ohio and Chicago, Illinois. *Environmental Science & Technology*, 44(8), 2797.
37. Correa, P. A., Lin, L., Just, C. L., Hu, D., Hornbuckle, K. C., Schnoor, J. L., Van Aken, B. (2010). The effects of individual PCB congeners on the soil bacterial community structure and the abundance of biphenyl dioxygenase genes. *Environment International*, 36(8), 901.
36. Hu, X., Adamcakova-Dodd, A., Lehmler, H.-J., Hu, D., Kania-Korwel, I., Hornbuckle, K. C., Thorne, P. S. (2010). Time Course of Congener Uptake and Elimination in Rats after Short-Term Inhalation Exposure to an Airborne Polychlorinated Biphenyl (PCB) Mixture. *Environmental Science & Technology*, 44(17), 6893.
35. Persoon, C., Hornbuckle, K. C. (2009). Calculation of passive sampling rates from both native PCBs and depuration compounds in indoor and outdoor environments. *Chemosphere*, 74(7), 917.
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33. Hu, D., Martinez, A., Hornbuckle, K. C. (2008). Discovery of Non-Aroclor PCB (3,3'-Dichlorobiphenyl) in Chicago Air. *Environmental Science & Technology*, 42(21), 7873.
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