

## JERALD L. SCHNOOR

(ph 319-335-5649; fx -335-5660; email Jerald-schnoor@uiowa.edu)

**Title** Allen S. Henry Chair, Professor of Civil & Environmental Engineering;  
Co-Director, Center for Global and Regional Environmental Research;  
Professor of Public Health, Dept. Occupational and Environmental Health  
The University of Iowa, Iowa City, Iowa 52242

### Education

Iowa State University	B.S.	1972	Chemical Engineering
University of Texas	M.S.	1974	Environmental Health Engineering
University of Texas	PhD	1975	Civil (Environ.) Engineering
Manhattan College	Postdoc	1976	NSF-Environmental Modeling
Swiss Fed. Inst. Tech.	Visit Prof	1988	Aquatic Chemistry

### Professional Record in CEE Department

July 1983 – present	Professor, Dept. Civil & Environmental Engineering, UI
July 1980- June 1983	Associate Professor
Jan. 1977- June 1980	Assistant Professor

### Professional Service

Editor-in-Chief, *Environmental Science and Technology*, 2003-present  
Associate Editor, *Environmental Science and Technology*, 1990-2000  
Chair, NRC Committee on Science for EPA's Future, 2012  
Chair, NRC Committee on Water Implications of Biofuels Production in the U.S., 2007  
Chair, Iowa Climate Change Advisory Council, 2007-2010  
EPA Science Advisory Board, Member, 2006-2012  
National Advisory Environmental Health Sciences Council, NIEHS, 2007-2011  
Co-Editor, *Environ. Science & Technol.*, Series Texts and Monographs, John Wiley, 1992-2009  
Board of Scientific Counselors, U.S. EPA, ORD, 1996-2000 (member); 2000- 04(chair)  
Water Science and Technology Board, National Research Council, 2000-2004  
NRC Workshop on Upper Mississippi River, Co-Chair w/ Congressman Ron Kind, 2001  
Stanford University, Chair of the Visiting Committee in CEE, 2001  
Water Environment Federation, Research Council, 1997-2000  
Association Environmental Engineering and Science Professors, Secretary, 1996-1998  
Chair of Panel, Review of EPA's Arsenic in Drinking Water Research Plan, 1997  
NRC/NAS Watershed Management Panel for NYC, Member, 1997-1999

### University of Iowa and State Service (selected from last 5 years)

Iowa Climate Change Advisory Council, Chair, 2007-2010  
Chair, Water Sustainability Initiative, 2008-2013  
Presidential Search Committee, member, 2006  
Energy Conservation Advisory Council, Chair, 2004-2008  
Midwest Governors' Association, Midwestern Greenhouse Gas Accord Advisory Group, 2008  
Presidential Lecturer Selection Committee, member, 2000-2007  
Promotion and Tenure Clock Committee (ad-hoc), 2006-07  
College of Engineering Development Council, 1998-2008  
Faculty and Staff Fostering Inclusion (FSFI, College of Engineering), Co-Chair, 2004-2009  
UI Center for Human Rights, Board Member, 2004-2009  
Endowed Faculty Chairs Committee, Provost's Office 2005  
Mississippi River Symposium Planning Committee, 2005-06  
AGEP/GANN Mentoring Program, mentor to 3 minority students, 2004-2007

### Professional Licensure

P.E. Active, Cert. No. 9702, Iowa; Board Certified Specialist in Env Engr, BCEE

### Professional Societies

ASCE, WEF, AIChE, AWWA Life Member, AEESP, Iowa Groundwater Assoc.

### Research Interests

Phytoremediation, Water Quality, Climate Change and Sustainable Development

### Consulting Experience

Congressional Testimony; EPA Consultant; NIH (NIEHS) Consultant; Procter and Gamble Expert Advisory Panel

### Honors and Awards:

National Academy of Engineering, 1999-  
University of Texas, Distinguished Alumni Academy, Engineering 2011  
Clarke Prize, National Water Research Institute 2010  
Simon W. Freese Environmental Engineering Award and Lecture, ASCE 2010  
The University of Nebraska Williams Memorial Lecture, 1/13/10 2010  
SERD/ESTCP (DOD/EPA/DOE) Project of the Year Phytoremediation 2009  
Iowa United Nations Day Chair, Appointed by Governor Chester J. Culver 2009-10  
Minnesota Water Resources Conference, Keynote, 10/26/09 2009  
Associatn Environmental Engineering & Science Professors (AEESP), Keynote 2009  
International Water Association, Leading-Edge Technology Conf. Keynote 2009  
The University of Texas Distinguished Lecturer Award, College of Engineering 2009  
The Charles and Mary O'Melia Inaugural Lecture in Environmental Science 2008  
Johns Hopkins University  
University of Iowa President's Award for State Outreach & Public Engagement 2008  
National Academy of Engineering, Civil Engineering Peer Committee, 2008-2011  
The Student Conference on Global Challenges – Energy and Environment 2009  
Drexel University, Keynote Speaker  
Lawrence Berkeley National Laboratory, Distinguished Lecturer 2009  
Responding to Climate Change: Biofuels, Energy Security, and Options  
Am. Soc. Mass Spectrometry, Plenary Keynote, Philadelphia PA 2009  
Milton P. Gordon Lecturer, Founding Award, Intl. Phytotechnology Society 2007  
Edison Lecturer, University of Notre Dame 2007  
MIT Global Change Forum, Biofuels Opening Plenary 2008  
Innovations at the Interface Distinguished Lecturer, University of Georgia 2008  
Certificate of Appreciation, 25 Years Service, American Chemical Society 2008  
Energy Conservation Award, Iowa Dept of Natural Resources 2006  
Paper of the Year Award, *Human and Ecological Risk Assessment* 2006  
NSF CLEANER/WATERS Network Project Office, Co-Director 2005–2009  
Hancher Finkbine Medallion, Univ. of Iowa's Highest Honor 2000  
Sigma Xi Distinguished Lecturer 1999-2000  
Institute of Medicine (IOM) Roundtable on Rural and Agricultural America 2005  
Henske Distinguished Lecturer, Yale University 2000  
Feng Distinguished Lecturer, U. Massachusetts 2000  
Rudolph Hering Medal, Am. Society of Civil Engineers 1998  
Walter L. Huber Research Prize, American Society of Civil Engineers 1985  
Merit Awards, American Chemical Society, Environmental Division 1981, 1992  
Best Paper Award, ASTM Aquatic Toxicology 1980

### Selected Publications (Ed./Author of six books, co-author of >175 journal articles)

McCutcheon, S.C., and J.L. Schnoor, Eds. 2003. *Phytoremediation—Transformation and Control of Contaminants*. New York: John Wiley & Sons. 987 pp.

Schnoor, J.L. 1996. *Environmental Modeling: Fate and Transport of Pollutants in Water, Air, and Soil*. New York: Wiley Interscience, 682 pp.

Schnoor, J.L., Ed., *Fate of Pesticides and Chemicals in the Environment*, Wiley Interscience, New York, Environmental Science and Technology Series, 1992, 436 pp.

Boulanger, B., J. Vargo, J.L. Schnoor, and K.C. Hornbuckle. "Detection of Perfluorooctant Surfactants in Great Lakes Water." *Environmental Science & Technology*, 38(15), 4064–4070, 2004.

Boulanger, B., Vargo, J., Schnoor, J.L., Hornbuckle, K.C. (2005). Evaluation of perfluorooctane surfactants in a wastewater treatment system and in a commercial surface protection product. *Environ. Sci. Technol.*, 39(15): 5524–5530, DOI: 10.1021/es050213u.

Boulanger, B., A.M. Peck, J.L. Schnoor, and K.C. Hornbuckle. "Mass Budget of Perfluorooctane Surfactant in Lake Ontario." *Environmental Science & Technology*, 39(1), 74–79, 2005.

Chen, B.L. and Schnoor, J.L. (2009). "Role of Suberin, Suberan, and Hemicellulose in Phenanthrene Sorption by Root Tissue Fractions of Switchgrass (*Panicum virgatum*) Seedlings." *Environmental Science & Technology* 43(11): 4130-4136, DOI: 10.1021/es803510u.

Liu, J.Y., Hu, D.F., and Schnoor, J.L. (2009). "In Vivo Biotransformation of 3,3',4,4'-Tetrachlorobiphenyl by Whole Plants-Poplars and Switchgrass." *Environmental Science & Technology* 43(19): 7503-7509, DOI: 10.1021/es901244h

El-Gendy, A.S., Svingos, S., Brice, D., Garretson, J.H., and Schnoor, J.L. (2009). "Assessments of the Efficacy of a Long-Term Application of a Phytoremediation System Using Hybrid Poplar Trees at Former Oil Tank Farm Sites." *Water Environment Research* 81(5): 486-498, DOI: 10.2175/106143008X357011.

Brentner, L.B., Mukherji, S.T., Walsh, S.A., Schnoor, J.L. (2010). "Localization of hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX) and 2,4,6-trinitrotoluene (TNT) in poplar and switchgrass plants using phosphor imager autoradiography." *Environ. Pollut.* 158(2): 470-475, DOI: 10/1016/j.envpol.2009.08.022.

Tanaka, S., Brentner, L.B., Merchie, K.M., Yoon, J.-M., Schnoor, J.L., and Van Aken, B. (2007). Analysis of gene expression in poplar trees (*Populus deltoids x nigra*, DN34) exposed to the toxic explosive hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX). *Intl. J. Phytoremediation* 9(1-3):15-30, DOI: 10.1080/15226510601139375.

Rentz, J.A., Alvarez, P.J., and Schnoor, J.L. (2008). Benzo[a]pyrene degradation by *Sphingomonas yanoikuyae* JAR02. *Environmental Pollution*, 151(3):669-677, DOI: 10.1016/j.envpol.2007.02.018.

Flokstra, B., Van Aken, B., Schnoor, J.L. (2008). Microtox<sup>®</sup> toxicity test: Detoxification of TNT and RDX contaminated solutions by poplar tissue cultures, *Chemosphere*, Volume 71 (10): 1970-1976, DOI:10.1016/j.chemosphere.2007.12.020.

Schnoor, J.L. (2008). Living with a Changing Water Environment, National Academy of Engineering of the National Academies, *The Bridge*, 38(3):46-54.

Liu, JY; Schnoor, JL. (2008). Uptake and translocation of lesser-chlorinated polychlorinated biphenyls (PCBs) in whole hybrid poplar plants after hydroponic exposure, *Chemosphere*, 73(10):1608-1616, DOI: 10.1016/j.chemosphere.2008.08.009.

Campbell, JE; Carmichael, GR; Chai, T, Mena-Carrasco, M; Tang, Y; Blake, DR; Blake, NJ; Vay, SA; Collatz, GJ; Baker, I; Berry, JA; Montzka, SA; Sweeney, C; Schnoor, JL; Stanier, CO. (2008). Photosynthetic Control of Atmospheric Carbonyl Sulfide During the Growing Season," *Science*, 322(5904): 1085-1088, DOI: 10.1126/science.1164015.