

## JERALD L. SCHNOOR

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**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 at University of Iowa

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

### Professional Service

Editor-in-Chief, *Environmental Science and Technology*, Am. Chem. Soc., Oct. 2002-  
Co-Editor, *Environ. Science & Technol.*, Series Texts Monographs, John Wiley, 1992-  
Associate Editor, *Environmental Science and Technology*, Am. Chem. Soc., 1991-2000  
Board of Scientific Counselors, U.S. EPA, ORD, 1996-2000 (member); 2000-04 (chair)  
Water Science and Technology Board, National Research Council, 2000-05  
Science Advisory Board, Executive Committee Liaison, U.S. EPA, 2000-03  
NRC Workshop on Upper Mississippi River, Co-Chair w/ Congressman Ron Kind, 2001  
Stanford University, Chair of the Visiting Committee in CEE, 2001  
Advisory Boards, Johns Hopkins University and Indiana University, 1999-  
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  
Science Advisory Board, EPA South/Southwest HSRC, 1996-2000

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

President's Committee on Strategic Implementation, 1994-present  
CEE Department, Chair of Promotion and Tenure Committee (AFG), 1997-98  
UI Foundation, College of Engineering Development Board, 1997-present  
College of Engineering Building Fund Committee, Faculty Chair, 1996-98

### Professional Licensure

P.E. Active, Cert. No. 9702, Iowa; DEE, Board Certified Specialist, General Environ. Engr.

### Professional Societies

ASCE, ACS, WEF, AIChE, AWWA, AEESP, SETAC, AAAS

### **Research Interests**

Water Quality Modeling, Phytoremediation, Exposure Assessments, Greenhouse Gases and Sustainable Development

### **Consulting Experience**

Congressional Testimony; EPA Consultant; Unocal, Alcoa, Shell, Expert Witness, others

### **Selected Honors and Awards**

National Academy of Engineering, 1999-  
Walter J. Weber, Jr. Distinguished Lecturer, University of Michigan, 2004  
Garst Memorial Leadership Award, United Nations Association USA, 2003  
Hancher Finkbine Medallion, 2000  
Sigma Xi Distinguished Lecturer, 1999-2000  
John McClanahan Henske Distinguished Lecturer, Yale University, 2000  
T. H. Feng Distinguished Lecturer, U. Massachusetts, 2000  
Rudolph Hering Medal, Am. Society of Civil Engineers, 1998  
Association Environmental Engineering Professors, Distinguished Lecturer Award, 1998  
Best M.S. Thesis/Advisor Award in Nation (w/ Eric Aitchison), AEESP, 1998  
Distinguished Fellow Award, Iowa Academy of Science (highest honor), 1996  
Presidential Lecturer, University of Iowa, 1996  
Walter L. Huber Research Prize, American Society of Civil Engineers, 1985  
Best Paper Award, ASTM Aquatic Toxicology, 1980

### **Selected Publications** (Ed./Author of six books, co-author of >150 journal articles)

Schnoor, J.L., "Fate and Transport of Dieldrin in Coralville Reservoir", Science, Vol. 211, 1981, pp. 840-842.

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

Schnoor, J.L., Environmental Modeling, John Wiley and Sons, New York, 1996, 682 pp.

Dietz, A.C. and Schnoor, J.L., "Advances in Phytoremediation", Environ. Health Perspect., 109, Supplement 1, 2001, pp. 163-168.

Burken, J.G. and J.L. Schnoor, "Distribution and Volatilization of Organic Compounds Following Uptake by Hybrid Poplar Trees", Intl. J. of Phytoremediation, Vol. 2, 1999.

Dietz, A.C. and J.L. Schnoor, "Phytotoxicity of Chlorinated Aliphatics to Hybrid Poplar (Populus Deltoides x Nigra DN34)," Environmental Toxicology and Chemistry, Vol. 20, No. 2, 389-393, 2001.

Schnoor, J.L., "Degradation by Plants – Phytoremediation", Biotechnology, Vol. IIB, Wiley-VCH, Weinheim Germany, 2000.

Aitchison, E.W., Kelley, S.L., Alvarez, P.J.J., and J.L.Schnoor, "Phytoremediation of 1,4-Dioxane by Hybrid Poplar Trees, Water Environment Research, Vol. 72, No. 3, 313-321, 2000.

Hong, M.S., W.F. Farmayan, C.Y., I. Dortch, Chiang, S.K. McMillan, and J.L. Schnoor, "Phytoremediation of MTBE from a Groundwater Plume", Envir. Sci. Technol., Vol. 35, No. 6, 1231-1239, 2001.

Just, C.L. and Schnoor, J.L., "A Preparation Technique for Analysis of Explosives in Plant Tissues," International Journal of Phytoremediation, Vol. 2, No. 3, 255-267, 2000.

Van Aken, B., Schnoor, J.L., "Evidence of Perchlorate ( $\text{ClO}_4^-$ ) Reduction in Plant Tissues (Poplar Tree) Using Radio-labeled  $^{36}\text{ClO}_4^-$ ", Environ. Sci. Technol., 36:2783-2788, 2002.

Moon, J.M., Oh, B-T., Just, C.L., Schnoor, J.L., "Uptake and Leaching of Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine by Hybrid Poplar Trees", Environ. Sci. Technol., 36:4649-4655, 2002.

C. L. Just and J. L. Schnoor (2004). Phytophotolysis of Hexahydro-1,3,5-trinitro-1,3,5-triazine in leaves of reed canary grass. *Environ. Sci. Technol.*, 38(1):290-295.

M. P. Mezzari, B. Van Aken, J. M. Yoon, J. L. Schnoor (2004). Mathematical modeling of RDX and HMX metabolism in Poplar (*Populus deltoides x nigra* DN34) Tissue Culture. *Intl. J. Phytoremediation* 6 (4): 323-345.

B. Van Aken, C. M. Peres, S. Lafferty-Doty, J.M. Yoon, and J. L. Schnoor (2004). *Methylobacterium* sp. nov.: a new aerobic, pink-pigmented, facultatively methylotrophic bacterium from poplar trees (*Populus deltoides x nigra* DN34). *Intl. J. Systematic & Evolutionary Microbiology*, (in press).

B. Van Aken, J.M. Yoon, and J. L. Schnoor (2004). Biodegradation of nitro-substituted explosives TNT, RDX, and HMX by a phytosymbiotic *Methylobacterium* sp. associated with Poplar Tissues (*Populus deltoides x nigra* DN34). *Applied and Environmental Microbiology*, 70 (1): 508-517.

B. Van Aken, J.M. Yoon, C. L. Just, and J. L. Schnoor (2004). Metabolism and mineralization of hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX) inside poplar tissues (*Populus deltoides x nigra* DN34). *Env. Sci. Technol.*, (in review).

J. R. Mihelcic, J.C. Crittenden, M. J. Small, D.R. Shonnard, D.R. Hokanson, Q. Zhang, H. Chen, S.A. Sorby, V. U. James, J. W. Sutherland, J. L. Schnoor (2003). Sustainability science and engineering: the emergence of a new metadiscipline. *Environ. Sci. Technol.* 37(23): 5314-5324.