DAVID L. SEDLAK

Ph.D.

B.S.

June 1992

June 1986

EDUCATION

University of Wisconsin, Madison, Wisconsin Water Chemistry Cornell University, Ithaca, New York Environmental Science

EXPERIENCE

October 1994-Present: Molezemoff Chair Professor (2013-present), Professor (2004-2013), Associate Professor (2000-2004) and Assistant Professor (1994-2000), Department of Civil and Environmental Engineering, University of California, Berkeley <u>April 1992-June 1994</u>: Postdoctoral Fellow, Swiss Federal Institute for Environmental Science and Technology, Dübendorf, Switzerland July 1986-June 1988: Staff Scientist, ENVIRON Corporation, Princeton, New Jersey

MAJOR AWARDS

US National Academy of Engineering, Elected Member, 2016 Francqui Foundation Chair, Ghent University, 2015 Rydell Distinguished Visiting Professor, Gustavus Adolphus College, 2014 Athalie Richardson Irvine Clarke Prize for Excellence in Water Research, 2014 US National Academy of Engineering Gilbreth Lecturer, 2010 Fulbright Alumni Initiative Award, 2010 Fulbright Senior Scholar Award for Australia, 2003 Paul L. Busch Award for Innovation in Applied Water Quality Research, 2003 National Science Foundation CAREER Development Award, 1998

PROFESSIONAL AFFILIATIONS AND SERVICE (PARTIAL LIST)

Chair, Gordon Research Conference Environmental Sciences: Water, 2004 & 2012 Co-Director, Berkeley Water Center, 2010-present Deputy Director, ReNUWIt NSF Engineering Research Center, 2011-present Editor-in-Chief, *Environmental Science & Technology*, 2015-present Member, US EPA Science Advisory Board, Drinking Water Committee, 2002-2009 Member, US National Research Council Research Committee on Water Reuse, 2008-2012 Member, Potable Reuse Expert Panel, California Department of Public Health, 2014-2016 Member, Water Science & Technology Board, National Research Council, 2017-present

PUBLICATIONS (PARTIAL LIST)

- Liu H.Z., Bruton T.A. Li W., Van Buren J., Prasse C., Doyle F.M. and Sedlak D.L. (2016) oxidation of benzene by persulfate in the presence of Fe(III)- and Mn(IV)-containing oxides: stoichiometric efficiency and transformation products. *Environ. Sci. Technol.* 50: 890-898.
- Grebel J.E., Charbonnet J.A. and Sedlak D.L. (2016) Oxidation of organic contaminants by manganese oxide geomedia for passive urban stormwater treatment systems. *Water Research* 88: 481-491.

- Barazesh J.M., Prasse, C. and Sedlak D.L. (2016) Electrochemical transformation of trace organic contaminants in the presence of halide and carbonate ions. *Environ. Sci. Technol.* 50: 10143-10152.
- Prasse C., Wenk J., Jasper J.T., Ternes T.A. and Sedlak D.L. (2015) Co-occurrence of photochemical and microbiological transformation processes in open-water unit process wetlands. *Environ. Sci. Technol.* 49:14136-14145.
- Barazesh J.M., Hennebel T., Jasper J.T. and Sedlak D.L. (2015) Modular advanced oxidation process enabled by cathodic hydrogen peroxide production. *Environ. Sci. Technol.* 49: 7391-7399.
- Radjenovic J. and Sedlak D.L. (2015) Challenges and opportunities for electrochemical processes as next-generation technologies for the treatment of contaminated water. *Environ. Sci. Technol.* 49:11292-11302.
- Harris-Lovett S.R., Binz C., Sedlak D.L., Kiparsky M. and Truffer B. (2015) Beyond user acceptance: a legitimacy framework for potable water reuse in California. *Environ. Sci. Technol.* 49: 7552-7561.
- Barazesh J.M., Hennebel T., Jasper J.T. and Sedlak D.L. (2015) Modular advanced oxidation process enabled by cathodic hydrogen peroxide production. *Environ. Sci. Technol.* 49: 7391-7399.
- Jasper J.T., Jones Z.L., Sharp, J.O. and Sedlak D.L. (2014) Nitrate removal in shallow, open-water treatment wetlands. *Environ. Sci. Technol* 48: 11512-11520.
- Liu H.Z., Bruton T.A., Doyle F.M. and Sedlak D.L. (2014) In situ chemical oxidation of contaminated groundwater by persulfate: decomposition by Fe(III)- and Mn(IV)- containing oxides and aquifer materials. *Environ. Sci. Technol* 48: 10330-10336.
- Jasper J.T., Jones Z.L., Sharp J.O. and Sedlak D.L. (2014) Biotransformation of trace organic contaminants in open-water unit process treatment wetlands. *Environ. Sci. Technol* 48: 5136-5144.
- Houtz E.F., Higgins C.P., Field J.A. and Sedlak D.L. (2013) AFFF-derived perfluoroalkyl precursors in contaminated groundwater and soil. *Environ. Sci. Technol.* 46: 9342-9349.
- Houtz E.F. and Sedlak D.L. (2012) Oxidative conversion as a means of detecting precursors to perfluoroalkyl acids in urban runoff. *Environ. Sci. Technol* 46(17): 9342-9349.
- Agus E., Zhang L.F. and Sedlak D.L. (2012) A framework for identifying characteristic odor compounds in municipal wastewater effluent. *Water Research* 46(18): 5970-5980.
- Pham A.L.T., Doyle F.M. and Sedlak D.L. (2012) Inhibitory effect of dissolved silica on H₂O₂ decomposition by Iron(III) and Manganese(IV) oxides: implications for H₂O₂-based in situ chemical oxidation. *Environ. Sci. Technol* 46(2): 1055-1062.
- Agus E., Lim M.H., Zhang L. and Sedlak D.L. (2011) Odorous compounds in municipal wastewater effluent and potable water reuse systems. *Environ. Sci. Technol* 45(21): 9347-9355.
- Lee C., Kim J.Y., Lee W.I., Nelson K.L., Yoon J. and Sedlak D.L. (2008) Bactericidal effect of zero-valent iron nanoparticles on *Escherichia coli*. *Environ. Sci. Technol* 42(13): 4927-4933.
- Keenan C.R. and Sedlak D.L. (2008) Factors affecting the yield of oxidants from the reaction of nanoparticulate zero-valent iron and oxygen. *Environ. Sci. Technol* 42: 1262-1267.
- Fono L.J., Kolodziej E.P. and Sedlak D.L. (2006) Attenuation of wastewater-derived contaminants in an effluent-dominated river. *Environ. Sci. Technol.* 40: 7257-7262.