

Jennie Perey Saxe, Ph.D.

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Dr. Saxe is an Assistant Professor in the Department of Civil and Environmental Engineering, where she is largely focused on undergraduate instruction and advising. Dr. Saxe brings to the Department more than 13 years of experience with the U.S. Environmental Protection Agency (EPA) where she served in a variety of roles in EPA's Mid-Atlantic Regional Office, encompassing drinking water regulation, government relations, sustainability integration, and international and tribal affairs. During her time with EPA, she developed extensive experience in training and teaching, demonstrated leadership in collaboration and innovative approaches to engagement, and was recognized for her excellence in communication. A grounding in environmental engineering and public health disciplines gives Dr. Saxe a comprehensive perspective on approaching environmental problems.

EDUCATION

Ph.D., Civil (Environmental) Engineering January 2003

The University of Delaware, Department of Civil and Environmental Engineering, Newark, DE

Dissertation: Enhancing Biodegradability of Azo- and Nitroaromatic Compounds in Wastewater through Pretreatment with Zero-valent Iron

Advisor: Dr. Daniel K. Cha

M.A.S., Civil (Environmental) Engineering May 2000

The University of Delaware, Department of Civil and Environmental Engineering, Newark, DE

Thesis: Application of Fatty Acid Analysis to Wastewater Treatment Process Monitoring

Advisor: Dr. Daniel K. Cha

B.S.P.H., Environmental Science May 1998

The University of North Carolina at Chapel Hill, School of Public Health, Chapel Hill, NC

CURRENT POSITION

University of Delaware, Newark, DE (Sept 2017-present)

Assistant Professor, Department of Civil and Environmental Engineering

Undergraduate teaching and advising in environmental engineering. Courses include: CIEG434 (Air Pollution Control), CIEG436 (Processing, Recycling, and Management of Solid Waste), CIEG 445 (Industrial Ecology), CIEG 465 (Global Sustainable Engineering), and CIEG 331 (Environmental Engineering). Serves on the Department's Environmental Engineering Undergraduate Committee.

PROFESSIONAL HISTORY

U.S. Environmental Protection Agency Region III, Philadelphia, PA (Oct 2003-Aug 2017)

Office of Communications and Government Relations

Acting Government Relations Team Leader (Jan-Aug 2017) Led a team of government affairs specialists to develop strategic plans for interacting with elected officials in the mid-Atlantic states.

International and Tribal Affairs Liaison (Jun 2016-Aug 2017) Arranged environmental study tours for visiting delegations and supported Environmental Cooperation Mechanisms in Free Trade Agreements between the U.S. and other nations by developing training and technical assistance activities. Led tribal consultation activities and developed a culture of enhanced sensitivity to the need for tribal consultation on environmental decisions.

State and Congressional Liaison (Jan 2011-Mar 2013) Communicated routinely with elected officials on environmental matters affecting their districts. Worked across all environmental statutes to respond to inquiries and constituent concerns related to environmental regulations and sites or facilities of interest.

Water Protection Division

Water Policy Analyst (Mar 2013-Jun 2016) Sustainability coordinator for water programs, using innovative engagement strategies to identify areas for collaboration to achieve multiple environmental, societal, and economic benefits. Provided assistance to FEMA as the agency incorporated sustainability and climate change adaptation into community recovery activities under the National Disaster Recovery Framework.

Acting Deputy Associate Director (Dec 2014-Feb 2015) Enhanced awareness of EPA's water and wastewater infrastructure programs by writing blogs, editing articles for trade publications, and organizing press events.

Communications Coordinator (Feb 2014-Jun 2014) Wrote water-related communications materials, including press releases and desk statements, for senior executives and public affairs staff. Wrote, edited, and managed content on EPA's Healthy Waters for the Mid-Atlantic blog from 2014-2016.

Drinking Water Team Leader and Program Manager (Oct 2003-Jan 2011) Led a team of engineers and scientists evaluating drinking water monitoring data from water systems in Washington DC to ensure public health protection and compliance with federal drinking water regulations. Performed water treatment plant inspections and evaluated potential treatment changes. Tracked financial status of and prepared budget for the \$500,000/year program. Managed grant funding for Delaware's delegated drinking water program. Reviewed state regulations for radionuclides in drinking water to ensure compliance with federal requirements and provided technical assistance on radionuclides analysis and treatment to states and water utilities.

The University of Connecticut, Storrs, CT (Apr 2003-Sept 2003)

As a visiting scientist, collaborated with principal investigators to submit a proposal (Integrated Biotreatment Technology for Nitrogen-Rich Wastewaters in Advanced Life Support Systems) to NASA (NRA-03-OBPR-01).

The University of Delaware, Newark, DE (Mar 1999-May 2003)

Performed laboratory research; prepared manuscripts for peer review/publication; prepared reports to funding agency; presented research findings at international conferences. Instructed junior and senior environmental and chemical engineering students in water and wastewater treatment.

INVITED SPEAKER

University of Delaware: Society of Women Engineers Speed Mentoring (2015, 2016, 2017); Environmental Jobs Career Panel (2013, 2014); Department of Civil and Environmental Engineering, Practitioner-in-Residence (2012); Department of Civil and Environmental Engineering, Environmental and Water Resources Engineering Seminar Series (2006)

U.S. EPA: Women in Science and Engineering panelist for publishing seminar (2011); Office of Research and Development Webinar "Regional Perspective" Introduction (2010)

University of Pennsylvania: Safe Drinking Water Act Overview course (2010)

HONORS AND AWARDS

U.S. EPA: Region III Lorraine Urbiet Communicator of the Year Award (2013); Bronze Medal for Commendable Service (2010, 2012, 2014, 2016); Silver Medal for Superior Service (2011); Gold Medal for Exceptional Service (2005)

Battelle/URS: Winner, Student Paper Competition - Third International Conference on Remediation of Chlorinated and Recalcitrant Compounds (2002)

PUBLICATIONS AND CONFERENCE PROCEEDINGS

Refereed Publications (additional non-refereed conference proceedings/presentations not listed):

1. Impellitteri C, Saxe J.P., Schmitt E.C., and Young, K.R. (2011) A survey on the temporal and spatial distribution of perchlorate in the Potomac River. *J. Environ. Monit.*, 13, 2277-2283.
2. Saxe J.P., Lubenow B.L., Chiu P.C., Huang C.-P., and Cha D.K. (2006) Enhanced Biodegradation of Azo Dyes using an Integrated Elemental Iron Pretreatment-Activated Sludge System I: Evaluation of Integrated Treatment System Performance. *Water Env. Res.* 78, 19-25.
3. Saxe J.P., Lubenow B.L., Chiu P.C., Huang C.-P., and Cha D.K. (2006) Enhanced Biodegradation of Azo Dyes using an Integrated Elemental Iron -Activated Sludge System II: Effect of Physical Chemical Parameters. *Water Env. Res.* 78, 26-30.
4. Perey J.R., Chiu P.C., Huang C.-P. and Cha D.K. (2002) Zero Valent Iron Pretreatment for Enhancing the Biodegradability of Azo Dyes. *Water Env. Res.* 74,221-225.
5. Perey J.R., Oh S.-Y., Lubenow B.L., Cha D.K., Chiu P.C. and Huang C.-P. (2001) Enhancing Biodegradability of Refractory Aromatics: Pretreatment with Elemental Iron. in: *Ex Situ Biological Treatment Technologies: The Sixth International In Situ and On Site Bioremediation Symposium*. p. 149-155. Battelle Press, Columbus.

AFFILIATIONS, MEMBERSHIPS, VOLUNTEERING

American Society for Engineering Education: Member (2017-present)

Bodyworks Karate: Volunteer assistant instructor (2015-present)

Philly Reads: Volunteer reader (2016-2017)

University of Delaware: Women in Engineering (WIE) Mentoring Program (2007-2009)

Phi Sigma Pi National Honor Fraternity: Alpha Kappa Chapter President (1997-1998) and Corresponding Secretary (1996-1997)