

I. Personal Information

Contact

Olya S. Keen
Department of Civil and Environmental Engineering
University of North Carolina
9201 University City Blvd.
Charlotte, NC 28223
okeen@uncc.edu
(704) 687-5048

Education

Dec 2012 Ph.D. Civil/Environmental Engineering, University of Colorado – Boulder,
“Application of UV/H₂O₂ advanced oxidation for treatment of pharmaceuticals in
wastewater”, Advisor: Karl Linden

Dec 2008 B.S./ M.S. Civil/Environmental Engineering, University of South Florida
“Seepage rates in closed basins”, Advisor: Mahmood Nachabe

Professional Appointments

Jul 2013-Present Assistant Professor, Department of Civil and Environmental Engineering,
University of North Carolina – Charlotte

Jan 2013-Jun 2013 Visiting Assistant Professor, Department of Civil and Environmental
Engineering, University of North Carolina – Charlotte

II. Research

Research Interests

Emerging contaminants: detection, environmental effects, fate and transport, treatment processes,
analytical chemistry

Wastewater treatment and water reuse: advanced treatment processes, resource recovery

Ultraviolet and advanced oxidation applications: direct and indirect photolysis in natural and
engineered systems, UV and O₃ based advanced oxidation, photocatalysis

Externally Funded Research

Olya Keen (PI) United States Department of Agriculture (2017-2018) “Evaluating the effect of solid
waste disposal of pharmaceuticals on water resources and defining ways to minimize it” \$79,476

Olya Keen (PI) Charlotte Water (2017-2018) “Evaluation of the Mallard Creek wastewater
treatment plant UV system” \$33,286

Olya Keen (PI) North Carolina Sea Grant mini-grant (2016) “Effect of bromide on formation of
antibacterially active products during chlorination of water containing antibiotics” \$4,981

Olya Keen (PI), Mariya Munir (2016-2018) National Institute of Water Resources and US
Geological Survey, “The role of environmental buffers in potable water reuse” \$109,123

Regina Guyer (PI), Olya Keen (2015-2016) Mecklenburg County Land Use and Environmental
Services Agency, “Environmental services for Solid Waste Division” \$47,850

Olya Keen (PI), Regina Guyer (2015-2018) Charlotte Water, “Correlation of total organic carbon and biochemical oxygen demand parameters for wastewater monitoring and reporting: laboratory service and student experiential learning” \$258,111

Shubhashini Oza (PI), Olya Keen (2014-2015) Geosyntec Consultants, Inc., “Corrosion testing of 304L and 316L stainless steel” \$28,834

Craig Ogle (PI), John Daniels, Pinku Mukherjee, Jerry Troutman, Olya Keen (2013-2016) National Science Foundation, “MRI: HPLC/ESI-MS system for analysis of strategic chemical species” \$266,955

Internally Funded Research

Olya Keen (PI) Charlotte Research Scholars (2016) “Advanced treatment processes for contaminants of emerging concern in the environment” \$5,500

Olya Keen (PI), Milind Khire, Christopher Hardin (co-PIs) EPIC Seed Funding (2016) “Developing strategies for handling treatment of wastewater generated by the energy industry” \$20,000

Olya Keen (PI) Faculty Research Grant (2016-2017) “Potential of white rot fungus to be used for landfill treatment” \$6,000

Olya Keen (PI) Chancellor Diversity Challenge Fund (2015) Seminar on “Impostor Syndrome” \$5,000

Olya Keen (PI) Office of Technology Transfer Commercial Development Grant (2015) “Catalytic quenching of hydrogen peroxide in water treated with advanced oxidation processes” \$4,300

Olya Keen (PI) EPIC Associates grant (2014-2015) “Developing a treatment procedure for hydraulic fracturing flowback wastewater” \$6,500

Olya Keen (PI) Faculty research grant (2014-2015) “Transformation of antibiotic doxycycline during chlorination of wastewater” \$6,000

Patents

1. Batoni, P., Keen, O., Krause, J. and Pagan, J. Radiation Delivery System for Advanced Oxidation Process, 62/088,807, Dec. 8th, 2014
2. Keen, O. Catalytic quenching of hydrogen peroxide in water after treatment with advanced oxidation processes, provisional patent: 160,266, May 12th, 2015; full patent: WO 2017/100335 A1, June 15th, 2017

Journal publications

1. Lambirth, K.C., Tsilimigras, M.C.B., Johnson, J., Al-shaer, A., Wynblatt, O., Sypholt, S., Brouwer, C., Clinton, S., **Keen, O.**, Redmond, M., Fodor, A. and Gibas, C. Antibiotics, bacterial community and resistome compositions in urban streams and wastewater reclamation facilities – The Urban Environmental Genomics Project (UEGP) (2018) *Environmental Science and Technology* (submitted)
2. Lucas, D. Petty, S., **Keen, O.**, Barlaz, M., Yazdani, R., Vijgen, J., Rhodes, J., Lindeman, A., Weber, R., Schlummer, M., and Blum A. Methods of responsibly managing end-of-life foams and plastics containing flame retardants: Part I (2017) *Environmental Engineering Science* (in press)
3. Lucas, D. Petty, S., **Keen, O.**, Yazdani, R., Vijgen, J., Rhodes, J., Lindeman, A., Weber, R., Schlummer, M., and Blum A. Methods of responsibly managing end-of-life foams and plastics containing flame retardants: Part II (2017) *Environmental Engineering Science* (in press)
4. **Keen, O.**, Bolton, J., Litter, M., Bircher, K. and Oppenlaender, T. Standard reporting of Electrical Energy per Order (E_{EO}) for UV/H₂O₂ reactors (2017) *Pure and Applied Chemistry* (in press)

5. Kennedy Neth, N. L., Carlin, C.M. and **Keen, O.S.** (2017) Doxycycline transformation and emergence of antibacterially active products during water disinfection with chlorine. *Environmental Science: Water Research and Technology* 3, 1086-1094
6. **Keen, O.S.** (2016) Characterization of ultraviolet-absorbing recalcitrant organics in landfill leachate for treatment process optimization. *Waste Management & Research* 35(3), 325-328
7. **Keen, O.S.**, Love, N.G., Aga, D.S. and Linden, K.G. (2015) Biodegradability of iopromide products after UV/H₂O₂ advanced oxidation. *Chemosphere* 144, 989-994
8. **Keen, O.S.**, Bell, K.Y., Cherchi, C., Finnegan, B.J., Mauter, M.S., Parker, A.M., Rosenblum, J.S., Stretz, H.A. (2014) Emerging pollutants – Part II: Treatment. *Water Environment Research* 86(10), 2036-2096
9. **Keen, O.S.**, Thurman, E.M., Ferrer, I. and Linden, K.G. (2014) Susceptibility of lamotrigine to degradation by hydroxyl radicals, ozone and direct photolysis in UVC range. *Chemosphere* 117, 316-323
10. **Keen, O.S.**, McKay, G., Mezyk, S.P., Linden, K.G. and Rosario-Ortiz, F. (2014) Identifying the factors that influence the reactivity of effluent organic matter with hydroxyl radicals. *Water Research* 50(1), 408-419
11. **Keen, O.S.** and Linden, K.G. (2013) Degradation of antibiotic activity during UV/H₂O₂ advanced oxidation and photolysis in wastewater effluent. *Environmental Science and Technology* 47(22), 13020-13030
12. **Keen, O.S.**, Thurman, E.M., Ferrer, I., Dotson, A.D. and Linden, K.G. (2013) Mechanism of dimer formation during UV photolysis of diclofenac. *Chemosphere* 93(9), 1948-1956
13. **Keen, O.S.** and Linden, K.G. (2013) Re-engineering artificial sweetener: Transforming sucralose residuals in water via advanced oxidation. *Environmental Science and Technology, Special Issue honoring Rene Schwartzbach* 47(13), 6799-6805
14. Bell, K.Y., Bandy, J., Finnegan, B.J., **Keen, O.**, Mauter, M.S., Parker, A.M., Sima, L.C. and Stretz, H.A. (2013) Emerging pollutants – Part II: Treatment. *Water Environment Research* 85(10), 2022-2071
15. **Keen, O.S.**, Dotson, A.D. and Linden, K.G. (2013) Evaluation of hydrogen peroxide quenching methods following an advanced oxidation process. *ASCE Journal of Environmental Engineering* 139(1), 137-140
16. Bell, K.Y., Bandy, J., Beck, S., **Keen, O.**, Kolankowsky, N., Parker, A.M., Linden, K. (2012) Emerging pollutants – Part II: Treatment. *Water Environment Research* 84(10), 1909-1940
17. **Keen, O.S.**, Love, N.G. and Linden, K.G. (2012) The role of effluent nitrate in trace organic chemical oxidation during UV disinfection. *Water Research* 46(16), 5224-5234 *****Best UV Paper of the Year Award by the International Ultraviolet Association*****
18. **Keen, O.S.**, Baik, S., Linden, K.G., Aga, D.S. and Love, N.G. (2012) Enhanced biodegradation of carbamazepine after UV/H₂O₂ advanced oxidation. *Environmental Science and Technology* 46(11), 6222-6227
19. Nachabe, M., **Martysevich, V.**** and Su, J. (2012) Stormwater runoff and deep groundwater drainage in two closed basins. *ASCE Journal of Hydrologic Engineering* 17(7), 823-828 (**maiden name)
20. Dotson, A.D., **Keen, V. S. (O.)**, and Linden, K.G. (2010) UV/H₂O₂ treatment of drinking water increases post-chlorination DBP formation. *Water Research* 44, 3703-3713

Reports

1. Barlaz, M., Bellur, S., Blum, A., **Keen, O.**, Luedeka, R., Lindeman, A., Lukas, D., Petty, S., Rhodes, J., Riise, B., Schlummer, M., Vijgen, J., Weber, R., and Yazdani, R. (2016) Methods of

- responsibly disposing of end-of-life foams and plastics containing flame retardants. NSF Final Report for project 1500091
2. Linden K.G., **Keen, O.S.**, Love, N.G. and Aga, D. S. (2011) Demonstrating advanced oxidation coupled with biodegradation for removal of carbamazepine. WERF Final Report for project INFR6SG09

Book chapters

1. Ferrer, I., Writer, J.H., **Keen, O.S.**, Lester, Y., Padilla-Sanchez, J.A., Fernandez-Ramos, C. and Thurman, E.M. (2016) LC-TOF-MS for identification of environmental metabolites and degradation products. Comprehensive Analytical Chemistry 71
<http://dx.doi.org/10.1016/bs.coac.2016.01.005> (in press)
2. **Keen, O.S.**, Love, N.G. and Linden, K.G. (2013) Nitrate photochemistry in context of water reclamation. Chapter in Water Reclamation and Sustainability. Ed.Satinder Ahuja

Conference proceedings and trade journal publications

1. Keen, O. (2016) Challenges of antibiotics and antimicrobials in water resources. NC Currents, Winter 2016/17 issue, 50-51.
2. Keen M., Ruocco, R., Cooper I.A. and **Keen, O.S.** (2016) In search of brighter influent: Improving ultraviolet transmittance of biologically treated landfill leachate. Water Environment and Technology, May issue, 52-57.
3. Cooper, I.A. and **Keen, O.S.** (2014) Emerging issues in high strength leachate treatment. 29th Proceedings for International Conference on Solid Waste Technology and Management, Philadelphia, PA
4. Keen, M., Ruocco, R., Cooper, I. and **Keen, O.** (2014) Improving UV transmittance of biologically treated landfill leachate. Proceedings for WEFTEC, New Orleans, LA
*****Nominated for Best Conference Paper Award, top 4 out of over 1000 presented*****

III. Presentations

Invited talks

1. PENC Charlotte Seminar, Charlotte, NC “Contaminants of emerging concern in water and wastewater” November 15th, 2016
2. North American Hazardous Materials Management National Conference, Workshop, Portland, OR “Waste management in the U.S., landfills and flame retardants” October 10th, 2016
3. Virginia Institute of Technology, Civil and Environmental Engineering Department Seminar Blacksburg, VA, “UV-based technologies for treatment of pharmaceuticals in wastewater” October 6th, 2016
4. WateReuse Symposium, Workshop, Tampa, FL “Advanced oxidation upstream and downstream: UV/Cl₂ vs. UV/H₂O₂” September 11th, 2016
5. Memphis University, Chemistry Department Seminar, Memphis, TN “Emerging contaminants in the environment: sources, fate and treatment” September 23rd, 2016
6. Remote Lab Tech Day, Huntersville, NC, “Contaminants of emerging concern in water and wastewater” August 25, 2015
7. Clemson University, Clemson, SC, Environmental Engineering and Earth Sciences Department Seminar “UV-based technologies for treatment of pharmaceuticals in wastewater” April 4, 2014

8. North Carolina State University, Raleigh, NC, Civil and Environmental Engineering Department Seminar “UV-based technologies for treatment of pharmaceuticals in wastewater” December 6, 2013
9. University of North Carolina – Charlotte, Chemistry Department Seminar “UV-based technologies for treatment of pharmaceuticals in wastewater” October 14, 2013

Conference presentations - presenter underlined, #poster, *student advisee

1. **Keen, O.**, Bolton, J., Bircher, K. and Oppenlaender, T. (2016) Review of the proper application of the electrical energy per order (E_{EO}) parameter, IUVA World Congress, Vancouver, Canada
2. ***Gleason, J.** and **Keen, O.** (2016) Use of mineral catalysts for quenching H_2O_2 after advanced oxidation, IUVA World Congress, Vancouver, Canada
3. #**Keen, O.** (2015) Characterization of organic matter in landfill leachate for treatment process optimization. IWA NOM 6, Malmo, Sweden
4. #***Kennedy-Neth, N.** and **Keen, O.** (2015) Impact of organic matter on transformation products of doxycycline during water disinfection with chlorine. IWA NOM 6, Malmo, Sweden
5. ***Kennedy-Neth, N.** and **Keen, O.** (2015) Doxycycline transformation during water disinfection with chlorine. ACS, Denver, CO *****press-release by ACS*****
6. #**Oza, S.**, ***Simpson, T.**, ***Estby, M.**, **Selembo, G.** and **Keen, O.** (2015) Algae bioreactor coupled with anaerobic wastewater effluent: A closed system. WEFTEC, Washington, DC
7. **Keen, M.**, **Ruocco, R.**, **Cooper, I.** and **Keen, O.** (2014) Improving UV transmittance of biologically treated landfill leachate. WEFTEC, New Orleans, LA
8. **Keen, O.** and **Linden, K.** (2013) Re-engineering the artificial sweetener: sucralose transformation by hydroxyl radicals and its suitability as probe. IUVA World Congress, Las Vegas, NV
9. **Keen, O.** and **Linden, K.** (2013) Re-engineering the artificial sweetener: Oxidation of sucralose residuals by UV/ H_2O_2 advanced oxidation. ACS annual meeting, New Orleans, LA
10. **Keen, O.S.**, **McKay, G.**, **Mezyk, S.P.**, **Linden, K.G.** and **Rosario-Ortiz, F.** (2013) Identifying the factors that influence the reactivity of effluent organic matter with hydroxyl radicals. ACS annual meeting, New Orleans, LA
11. **Keen, O.**, **Love, N.** and **Linden, K.** (2012) The role of effluent nitrate in trace organic contaminant oxidation during UV disinfection. ACS annual meeting, Philadelphia, PA
12. **Keen, O.**, **Love, N.** and **Linden, K.** (2012) The role of effluent nitrate in trace organic contaminant oxidation during UV disinfection. IUVA World Congress, Washington, DC
13. **Keen, O.** and **Linden, K.** (2012) Degradation of antibacterial activity of antibiotics during UV/ H_2O_2 advanced oxidation. AWRA Emerging Contaminants, Denver, CO
14. **Keen, O.**, **Baik, S.**, **Linden, K.**, **Aga, D.** and **Love, N.** (2011) Enhanced biodegradation of carbamazepine after UV/ H_2O_2 advanced oxidation. WEFTEC, Los Angeles, CA
15. **Keen, O.**, **Baik, S.**, **Linden, K.**, **Aga, D.** and **Love, N.** (2011) Enhanced biodegradation of carbamazepine after UV/ H_2O_2 advanced oxidation. WERF Virtual Forum – online
16. **Keen, O.**, **Baik, S.**, **Linden, K.**, **Aga, D.** and **Love, N.** (2011) Enhanced biodegradation of carbamazepine after UV/ H_2O_2 advanced oxidation. International UV Association Conference, Toronto, Canada
17. **Keen, O.**, **Baik, S.**, **Linden, K.**, **Aga, D.** and **Love, N.** (2011) Enhanced biodegradation of pharmaceuticals after UV/ H_2O_2 advanced oxidation. American Chemical Society annual meeting, Denver, CO

18. **#Keen, O.** and Linden, K. (2011) Degradation of antibacterial activity of antibiotics during UV/H₂O₂ advanced oxidation. EPA STAR Fellows Conference, Washington, DC, September 19-20, 2011
19. **Keen, O.** and Linden, K. (2011) Degradation of antibacterial activity of erythromycin in wastewater by UV/H₂O₂ advanced oxidation. International Water Association Micropol and Ecohazard Conference, Sydney, Australia
20. **#Keen, O.,** Baik, S., **Stadler, L.,** Linden, K., Aga, D. and Love, N. (2011) Assessing the use of advanced oxidation and biofiltration to remove recalcitrant pharmaceuticals downstream of biological treatment. The 22nd Triennial Symposium on Advancements in Water & Wastewater 2011 Borchardt Conference, Ann Arbor, MI
21. **#Keen, O.S.,** Thurman, E. M., Ferrer, I., Dotson, A.D. and Linden, K.G. (2011) Degradation products of pharmaceutical diclofenac during UV photolysis. Annual Mass Spectrometry Workshop, Buffalo, NY
22. **Cotton, C.,** Jousset, S., Dotson, A., **Keen, O.,** Linden, K and Collins, J. (2010) Applying UV AOP at an existing WTP: Effects on disinfection strategy and DBP formation. American Water Works Association Water Quality Technology Conference, Savannah, GA
23. **#Keen, V. S. (O.),** Thurman, E. M., Ferrer, I., Dotson, A.D. and Linden, K.G. (2010) Degradation products of pharmaceutical diclofenac during UV photolysis. American Chemical Society annual meeting, San Francisco, CA
24. **Martysevich**, V.** and Nachabe, M. (2008) Seepage rates in closed basins. American Geophysical Society joint assembly, Ft.Lauderdale, FL (**maiden name)
25. **#Martysevich**, V.** and Nachabe, M. (2008) Seepage rates in closed basins. USF College of Engineering research symposium, Tampa, FL (**maiden name)
26. **Martysevich**, V.** and Nachabe, M. (2007) Quarterly report on estimation of seepage rates in closed basins. Meeting with Hillsborough County government, Tampa, FL (**maiden name)

IV. Teaching

Teaching Interests

Water and wastewater treatment and water reuse; Introduction to environmental engineering; Physical, chemical and biological processes in natural and engineered systems; environmental aquatic and organic chemistry; hydraulics and fluid mechanics

Classes Taught

Physical Processes in Environmental Engineering, CEGR 6243

Graduate level course, core for M.S. Environmental Engineering. Fate and transport of contaminants in natural systems and the application of the physical process principles (volatilization, adsorption, ion exchange and membrane separation) in environmental engineering.

Aquatic Chemistry, CEGR 6173

Graduate level elective. Covers acid/base chemistry in closed and open systems, precipitation/dissolution, complexation, redox chemistry, organic matter in aquatic systems, hydrolysis and photolysis.

Environmental Systems, INES 8102

Ph.D. level course. A big picture view of the environmental effects of infrastructure development.

Wastewater Treatment Design, CEGR 4242/5090

Upper level undergraduate/graduate elective. Design focused class discussing physical, chemical and biological treatment of wastewater. Introduction to Biowin process modeling software.

Introduction to Environmental Engineering, CEGR 3141

Junior level required undergraduate course. Introduction to environmental regulations, drinking water and wastewater treatment, air pollution control, stream ecology, and solid, radioactive and hazardous waste management.

Hydraulics and Hydrology, CEGR 3143

Junior level required undergraduate course. Basics of fluid mechanics and hydraulics.

Professional Engineering License Exam Review: Wastewater Treatment

Class offered by UNC Charlotte Continuing Education for engineering professionals planning to take a licensing exam

Teaching Evaluations

Consistently rank above average in all categories (5 = strongly agree, 4 = agree). Select comments are below:

“Best teacher I had this semester by far, cares about her students and how they do in her class.” (CEGR 3141, Fall 2013)

“Dr. Keen is one of the best instructors I have had at UNCC. I look forward to taking more of the classes that she offers.” (CEGR 3141, Fall 2013)

“Dr. Keen was very enthusiastic about helping us to understand the concepts in her class. She was always available and never seemed to mind spending extra time outside of class to help me understand the assignments. Overall I could not ask for a better professor for that class. After taking this class with her I hope to take more classes she teaches in the future.” (CEGR 3141, Fall 2013)

“Really good professor. Her class is more concerned with teaching students why certain things are important in environmental engineering rather than just going through example problems. She does a very good job of explaining things and is always available and willing to help students.” (CEGR 3141, Fall 2013)

“I thought this class was very challenging, but the subject matter made it that way. Dr. Keen did a good job in displaying the important information that we needed to know when dealing with the treatment of wastewater.” (Wastewater Treatment Design, Fall 2013)

“Great professor. Definitely broke down the material in a way that made it easier to understand. Very effective lectures.” (CEGR 3141, Fall 2014)

“Dr. Keen does a great job of covering material slowly and in detail without being redundant. She also provides the opportunity for questions to be asked several times throughout a class period. I like the fact that she is so open to questions being asked because it allows for me to clearly understand a concept before she continues to discuss it in more detail.” (CEGR 3141, Fall 2014)

“I appreciate how the professor puts the env. eng. concepts that we learn into historical, political, and even personal context. It grounds the concepts in the real world and shows why the knowledge/practices are important. I also appreciate the humor that the professor brings to the class.” (CEGR 3141, Fall 2014)

“Dr. Keen provided the class with fantastic notes that made understanding the course material easy and effective in learning. She has a great sense of humor and the class was over-all enjoyable.” (CEGR 3141, Fall 2014)

V. Miscellaneous

Scholarships and awards

2015	Graduate Teaching Award Nomination, UNCC College of Engineering
2014	Best Conference Paper Award by Water Environment Federation
2013	Best UV Paper of the Year Award by International Ultraviolet Association
2013	Best Student Presentation at IUVA World Congress
2011	ACS Graduate Student Award in Environmental Chemistry
2010-2012	EPA STAR Fellowship
2009-2013	CU Boulder Graduate Fellowship (replaced by EPA fellowship)
2008	Outstanding Graduate Award
2008	URS Scholarship
2007-2008	USF Graduate Fellowship
2007-2008	Wayne and Iris Echelberger Scholarship
2006-2007	HSA Environmental Inc. Scholarship
2005-2006	Mozelle Beverly Scholarship
2002-2003	Bayside Engineering Scholarship
2002	Dean's list of scholars with undeclared majors

Consulting

Civil and Environmental Consultants, Inc. Application of Fenton's process for treatment of biorecalcitrant UV absorbing organics in landfill leachate.

Civil and Environmental Consultants, Inc. Evaluation of UV/H₂O₂ advanced oxidation for treatment of target chemicals following a spill.

Catawba County Engineering Department. Maintenance of anaerobic reactors for potential use of digestate in composting mixture.

Certifications

- Professional Engineer (exam passed, license in process)
- Engineer in training, License No. 1100015412
- Certificate in College Teaching from Graduate Teacher Program at CU Boulder

Professional memberships

Apr 2012-Present	International Ultraviolet Association (IUVA)
May 2011-Present	International Water Association (IWA)
Feb 2011-Present	Water Environment Federation (WEF)
Jan 2010-Present	American Chemical Society (ACS)
Sept 2007-Present	American Water Works Association (AWWA)

Service

1. Volunteer tutor with I Have a Dream Foundation of Boulder (high school science) March 2009-Dec 2012
2. Conference organization
 - a. Abstract reviewer for International Ultraviolet Association World Congress 2013
 - b. Session Chair for Water Treatment Technologies Session at ASCE Shale Energy Engineering Conference, Pittsburgh, PA, July 21-23, 2014

- c. Session Chair for Natural Attenuation of Emerging Contaminants in Urban Water Cycle Session at ACS Annual Meeting, San Francisco, CA, August 10-14, 2014
 - d. Conference Organizer for International Ultraviolet Association Americas Regional Meeting in White Plains, NY, October 26-28, 2014
 - e. Session moderator for UV/Chlorine session at the International Ultraviolet Association World Congress in Vancouver, Canada, January 31-February 3, 2016
 - f. Workshop organizer on measuring algal activity and addressing the water quality effects at ACE'16, Chicago, IL, June 19, 2016
 - g. Session co-organizer and moderator for Disinfection By-Products and Natural Organic Matter: What Have We Learned at ACS Annual Meeting, Philadelphia, PA, August 21-24, 2016
 - h. Session moderator for Fate and Presence of Contaminants in Communities (II): 1,4-dioxane at AEESP conference in Ann Arbor, MI, June 20-22, 2017
3. Reviewer for journals
- a. Water Research
 - b. Environmental Science and Technology
 - c. Chemical Engineering Journal
 - d. Chemosphere
 - e. Journal of Hazardous Materials
 - f. PLoS ONE
 - g. Environmental Monitoring and Assessment
 - h. Ozone Science and Engineering
 - i. ASCE Journal of Environmental Engineering
 - j. Journal of Water Supply: Research and Technology – AQUA
 - k. Journal of Water, Sanitation and Hygiene for Development
 - l. Water, Air and Soil Pollution
4. Committee Service
- a. UNCC CEE Department
 - i. Graduate Committee
 - ii. Laboratory/Writing (Chair 10/2014-1/2016)
 - iii. Strategic Planning
 - b. UNCC College of Engineering
 - i. Advisor for Society of Women Engineers (5/2014-Present)
 - ii. Safety Committee (12/2014-2/2016)
 - c. National
 - i. Water Reuse and Resource Recovery Committee with North Carolina chapter of American Water Works Association (8/2013-7/2015)
 - ii. American Water Works Association, Chair of Organic Contaminants Research Committee (7/2015-Present)

Student advisees

Ph.D. Students

- 1. Nicole Kennedy Neth (1/2014-Present)
- 2. Xueying Wang (1/2015-Present)
- 3. Amirhossein Rezaei (1/2016-Present)

M.S. Students

- 1. Neil Hulland (8/2013-5/2015)

2. Justine Gleason (5/2015-8/2016)
3. Evan Forney (1/2016-8/2016)
4. Samaneh Zamanian (8/2015 – Present)
5. Daniel Burbes (9/2017 – Present)
6. Travis Curran (9/2017 – Present)
7. Dawn Salley (9/2017 – Present)

Undergraduate

1. Riska Zahrro (5/2014-4/2015)
2. Randy San (5/2014-8/2015)
3. Brittany House (5/2016-Present)
4. Chloe Prudhomme, exchange student from the University of Limoges (4/2017-6/2017)

High-school

1. Anna Mattapallil (Summer 2016)

Thesis committee

1. Dongwook Kim, 4/2014
2. Timothy Goforth, 4/2014
3. Michael Tassitino, 12/2014
4. Nathan Hampton, 5/2015
5. Ted Triantis, 7/2015
6. Nathan Madding, 6/2016
7. Qingyun Ping, Virginia Institute of Technology, 10/2016