

CURRICULUM VITAE

LEE BLANEY

EDUCATION

Ph.D. 2011 The University of Texas at Austin, Civil Engineering
M.S. 2007 Lehigh University, Environmental Engineering
B.S. 2005 Lehigh University, Environmental Engineering

Experience in Higher Education

2017 – present University of Maryland Baltimore County, Associate Professor, Chemical, Biochemical and Environmental Engineering
2012 – present University System of Maryland, Marine-Estuarine-Environmental Sciences, Faculty, Environmental Chemistry
2011 – 2017 University of Maryland Baltimore County, Assistant Professor, Chemical, Biochemical and Environmental Engineering
2007 – 2011 University of Texas at Austin, Graduate Research Assistant, Environmental Engineering
2010 University of Texas at Austin, Instructor, Introduction to Chemistry for Engineering Students
2005 – 2007 Lehigh University, Graduate Research Assistant, Environmental Engineering
2003 – 2005 Lehigh University, Undergraduate Research Assistant, Environmental Engineering

Experience in Other than Higher Education

2007 Research Centre for Eco-Environmental Sciences (Beijing, China), Visiting Research Scientist, Environmental Engineering
2006 Bengal Engineering and Science University (Howrah, India), Visiting Research Scientist, Environmental Engineering
2004 Kenai Watershed Forum (Soldotna, AK), Intern, Environmental Engineering

Honors Received

2017 NSF CAREER Award
2017 Association of Environmental Engineering and Science Professors (AEESP) Award for Outstanding Teaching in Environmental Engineering and Science
2017 Selected as Young Observer to the IUPAC General Assembly (declined)
2016 AEESP Distinguished Service Award
2015 Donald Creighton Memorial Faculty Award

2015	Outstanding Reviewer, Science of the Total Environment
2007 – 2012	The University of Texas at Austin THRUST Fellowship
2006 – 2011	National Science Foundation Graduate Research Fellowship
2007 – 2008	The University of Texas at Austin University Fellowship
2007	National Science Foundation East Asia and Pacific Summer Institute Fellow
2007	US Environmental Protection Agency Phase II P3 Award
2007	National Academy of Engineering Grainger Challenge Silver Award
2006	Lehigh University Forum Research Grant
2006	The Windstar Foundation Environmental Studies Scholarship
2006	US Environmental Protection Agency Phase I P3 Award
2006	Pennsylvania Water and Environment Association Student Poster Award
2006	H&R Block Foundation Grant
2006	American Water Works Association Fresh Ideas Contest, First Place
2006	Pennsylvania American Water Works Association Fresh Ideas Contest, First Place
2005	Lehigh University Leadership Lehigh Award
2005	Lehigh University William's Prize for Writing
2005	Lehigh University President's Scholarship
2005 – 2007	Joseph Petraglia Community Spirit Award
2005	Mondialogo Engineering Award
2005	SustainUS Citizen Science Award
2004	US Environmental Protection Agency Phase I P3 Award

Research Support and/or Fellowships

#	YEAR	TOTAL	FUNDING AGENCY AND PROJECT TITLE	ROLE
-	pending	\$150,000	Air Force, Small Business Technology Transfer (STTR) program <i>Disposal of aqueous film-forming foam using hydrodynamic cavitation</i> Start: 10/21/2017 End: 07/21/2018	co-PI
-	pending	\$2,498,248	NSF, Innovations at the Nexus of Food, Energy, and Water Systems (INFEWS) program <i>FEWS/T3: Sustainable urban agriculture at the nexus of food-energy and water</i> Start: 08/15/2017 End: 08/14/2020	co-PI
-	pending	\$15,000	EPA, P3 Award program <i>Using Nutrient Extraction and Recovery Devices (NERDs) to generate a sustainable supply of phosphorus- and nitrogen-laden fertilizer from urine</i> Start: 08/01/2017 End: 07/30/2018	PI

#	YEAR	TOTAL	FUNDING AGENCY AND PROJECT TITLE	ROLE
27	2017	\$8,000	NSF, Environmental Sustainability program <i>GOALI: Sustainable phosphorus recovery from agricultural waste (REU supplement)</i> Start: 05/16/2017 End: 06/30/2018	PI
26	2017	\$311,347	NSF, INFEWS N/P/H2O and Environmental Engineering programs <i>INFEWS N/P/H2O: Development of sustainable Nutrient Extraction and Recovery Devices (NERDs) for municipal and agricultural wastewater</i> Start: 07/01/2017 End: 06/30/2020	PI
25	2017	\$500,000	NSF, CAREER Award <i>CAREER: Forensic analysis of dissolved organic matter, emerging contaminants, and toxicity to detect leaking sewers in urban streams</i> Start: 06/01/2017 End: 05/31/2022	PI
24	2016	\$1,117,096	NSF, Improving Undergraduate STEM Education program <i>Developing, implementing and evaluating a post-transfer pathways program for computing and engineering majors</i> Start: 09/01/2016 End: 08/31/2020	co-PI
23	2016	\$3,000	European Union, Erasmus Mobile+ program <i>Developing an educational and research partnership between UMBC and Faculdade de Engenharia da Universidade do Porto</i> Start: 09/30/2016 End: 10/09/2016	PI
22	2016	\$100,000	Maryland Industrial Partnerships with Maryland Department of Natural Resources, Manure-to-Energy program (<u>declined</u>) <i>Modified Phosphorus Extraction and Recovery System (PEARS) technology for rapid implementation on Maryland poultry farms</i> Start: 09/01/2016 End: 08/31/2018	PI
21	2016	\$599,977	NSF, Scholarships in Science, Technology, Engineering, and Mathematics program (added as co-PI in 2016) <i>A community of Transfer Scholars in Information Technology and Engineering (T-SITE)</i> Start: 03/01/2012 End: 02/28/2018	co-PI
20	2016	\$300,000	US-Israel Binational Agricultural Research and Development Fund <i>Closing the nutrient cycle through sustainable agricultural waste management</i> Start: 09/01/2016 End: 08/31/2018	co-PI
19	2016	\$40,000	UMBC, COEIT Strategic Plan Implementation Grant Program <i>Preliminary study of contaminants of emerging concern in Chesapeake Bay water, sediment, and oysters</i> Start: 01/01/2016 End: 05/31/2017	co-PI
18	2016	\$20,000	UMBC, Technology Catalyst Fund <i>Nutrient Extraction and Recovery Devices (NERDs)</i> Start: 01/01/2016 End: 12/31/2017	PI

#	YEAR	TOTAL	FUNDING AGENCY AND PROJECT TITLE	ROLE
17	2015	\$406,318	NSF, Environmental Chemical Sciences program <i>Photolysis of environmentally-relevant organometallic compounds in aqueous matrices</i> Start: 09/01/2015 End: 08/31/2018	PI
16	2015	\$13,512	USDA Forest Service Modification (extension) <i>Bioaccumulation of pharmaceutical and personal care products in crayfish of the Gwynns Falls watershed, Baltimore, Maryland</i> Start: 07/01/2014 End: 06/30/2019	co-PI
15	2015	\$330,000	NSF, Environmental Engineering program <i>Class-specific transformations of antibiotics in UV-based water/wastewater treatment processes</i> Start: 09/01/2015 End: 08/31/2018	PI
14	2015	\$351,594	NSF Environmental Sustainability Program <i>GOALI: Sustainable phosphorus recovery from agricultural waste</i> Start: 07/01/2015 End: 06/30/2018	PI
13	2015	\$48,060	NSF, Environmental Engineering program <i>Workshop: Natural organic matter and its impact on drinking water</i> Start: 02/15/2015 End: 01/31/2016	Participant
12	2014	\$2,826	Triea Technologies, LLC <i>Phosphorus recovery from swine manure</i> Start: 12/01/2014 End: 12/31/2014	PI
11	2014	\$1,500	UMBC, Undergraduate Research Assistantship Support Program <i>Phosphorus recovery from poultry litter</i> Start: 09/15/2014 End: 05/31/2015	PI
10	2014	\$1,500	Cary Institute (service agreement) <i>Water quality analysis for Lake Sunapee samples</i> Start: 08/22/2014 End: 08/21/2015	PI
9	2014	\$43,000	USDA Forest Service Modification <i>Bioaccumulation of pharmaceutical and personal care products in crayfish of the Gwynns Falls watershed, Baltimore, Maryland</i> Start: 07/01/2014 End: 06/30/2019	co-PI
8	2014	\$250,000	Maryland Industrial Partnerships with Maryland Department of Natural Resources, Manure-to-Energy Program <i>Development of a Phosphorus Extraction and Recovery System (PEARS)</i> Start: 09/01/2014 End: 12/31/2016	PI
7	2013	\$1,500	UMBC, Undergraduate Research Assistantship Support Program <i>Adsorption of moxifloxacin onto activated carbon</i> Start: 09/15/2013 End: 05/31/2014	PI
6	2013	\$2,300	UMBC, BreakingGround Initiative <i>Engineers Without Borders as a tool for motivating students and increasing civic engagement at home and abroad</i> Start: 09/01/2013 End: 05/31/2014	PI

#	YEAR	TOTAL	FUNDING AGENCY AND PROJECT TITLE	ROLE
5	2013	\$20,000	UMBC, Special Research Assistantship/ Initiative Support Program <i>Adsorption and degradation of fluoroquinolone antibiotics in bioreactors</i> Start: 06/01/2013 End: 05/31/2014	PI
4	2012	\$1,500	UMBC, Undergraduate Research Assistantship Support Program <i>Development of an HPLC method for detection of fluoroquinolones and UV-H₂O₂ treatment</i> Start: 09/15/2012 End: 05/31/2013	PI
3	2012	\$12,000	Waters Academic Grant program <i>Sampling of fluoroquinolone antibiotics in wastewater and identification of transformation products</i> Start: 11/01/2012 End: 05/31/2013	PI
2	2012	\$6,000	UMBC, Summer Faculty Fellowship <i>Environmental detection and water treatment of fluoroquinolones</i> Start: 06/01/2012 End: 08/31/2012	PI
1	2012	\$750	UMBC, Undergraduate Research Assistantship Support program <i>Treatment of tetracycline antibiotics by UV_{254nm}</i> Start: 01/01/2012 End: 05/31/2012	PI
TOTAL		\$4,391,780		

Student Awards, Scholarships, and Fellowships

- 2017 Daniel Ocasio, UMBC Valedictorian
- 2017 Kiranmayi Mangalgi, ACS-Maryland Travel Award
- 2017 Daniel Ocasio, Ford Foundation Fellowship
- 2017 Hollie Adejumo, ACS-Maryland Travel Award
- 2017 Daniel Ocasio, National GEM Consortium Fellowship
- 2016 Hollie Adejumo, Pfizer Society of Toxicology Undergraduate Student Travel Award
- 2016 Daniel Ocasio, Barry M. Goldwater Scholarship
- 2016 Nicholas Rogers, NSF Graduate Research Fellowship
- 2016 Savannah Steinly, UMBC Undergraduate Research Award
- 2016 Hannah Aris, UMBC Undergraduate Research Award
- 2016 Daniel Ocasio, UMBC Undergraduate Research Award
- 2016 Kiranmayi Mangalgi, Helena Gaifem, Utsav Shashvatt, Nicholas Rogers, Hollie Adejumo, Savannah Steinly, Hannah Aris – 1st place AEESP student video competition, “What do Environmental Engineers do?”. Video available at <https://www.youtube.com/watch?v=MUT8zya53Vg>
- 2016 Kiranmayi Mangalgi, 1st place UMBC Three Minute Thesis Competition, Graduate Research Conference
- 2016 Kiranmayi Mangalgi, Graduate Student Award in Environmental Chemistry, ACS Division of Environmental Chemistry
- 2016 Hollie Adejumo, American Chemical Society Environmental Chemistry Division, Undergraduate Award

- 2016 Daniel Ocasio, Research Experience for Undergraduates, University of California, Berkeley (Re-Inventing the Nation's Urban Water Infrastructure; David Sedlak)
- 2015 Hollie Adejumo, 1st place (poster), 18th Annual Undergraduate Research Symposium in the Chemical and Biological Sciences, UMBC
- 2015 Hollie Adejumo, United Negro College Fund (UNCF)-Merck Undergraduate Science Research Scholarship Award
- 2015 John Kemper, Utsav Shashvatt, Erin Stapleton, Mamatha Hopanna, Nicholas Rogers, Robert Burton. First place Chesapeake Water Environment Association Student Design Competition (\$1000 prize with \$4000 travel award to WEFTEC)
- 2015 Nicholas Rogers, UMBC Undergraduate Research Award
- 2015 Apurva Shah, UMBC Undergraduate Research Award (declined)
- 2015 Hollie Adejumo, UMBC Undergraduate Research Award
- 2015 Nicholas Rogers, Research Experience for Undergraduates, Carnegie Mellon University (Center for the Environmental Implications of Nanotechnology; Greg Lowry)
- 2015 Daniel Ocasio, Research Experience for Undergraduates, California Institute of Technology (WAVE Fellows program, Michael Hoffman)
- 2015 Nicholas Rogers, American Chemical Society Environmental Chemistry Division, Undergraduate Award
- 2014 Nicholas Rogers, 1st place (poster), 17th Annual Undergraduate Research Symposium in the Chemical and Biological Sciences, UMBC
- 2014 Ke He, 1st place in ACS poster competition for “Analytical Methods for Detecting and Prioritizing Contaminants of Concern” symposium at the Fall 2014 American Chemical Society meeting
- 2014 Elvis Andino, Trevor Needham, Eli Patmont, and James Sanders. First place Chesapeake Water Environment Association Student Design Competition (\$1000 prize with \$2000 travel award to WEFTEC)
- 2014 Jessica Lee, Research Experience for Undergraduates, Duke University (Center for the Environmental Implications of Nanotechnology; Mark Weisner)
- 2014 Hollie Adejumo, Research Experience for Undergraduates, Michigan State University (Summer Research Opportunities Program; Seungik Baek)
- 2014 Apurva Shah, Research Experience for Undergraduates, University of California, Berkeley (Amgen Scholars Program)
- 2014 Jessica Lee, American Chemical Society Environmental Chemistry Division, Undergraduate Award
- 2014 Jessica Lee, UMBC Undergraduate Research Award
- 2014 Hollie Adejumo, UMBC Undergraduate Research Award
- 2013 Sebastian Snowberger, UMBC Undergraduate Research Award
- 2013 Dalton Hughes, Hollie Adejumo, Madison Bondoc, Christopher Mullen, UMBC Undergraduate Research Award
- 2013 Robert Burton, Montgomery County Agricultural Center, Inc. Scholarship
- 2013 Sebastian Snowberger, Washington Suburban Sanitary Commission Joyce Starks Engineering Scholarship
- 2012 Dr. Asok Adak, University Grants Commission, Raman Post-doctoral Fellow program
- 2012 Robert Burton, UMBC Undergraduate Research Award

2012 Sebastian Snowberger, Washington Suburban Sanitary Commission Joyce Starks
Engineering Scholarship

Ph.D. Students

Advisor

Ethan Hain, Chemical and Biochemical Engineering, (in progress)

Dissertation: *Evaluation of the bioaccumulation and toxicity of contaminants of emerging concern in the Eastern oyster (Crassostrea virginica)*

Mamatha Hopanna, Environmental Engineering, (in progress)

Dissertation: *Photolysis of environmentally-relevant organometallic compounds in aqueous matrices*

Utsav Shashvatt, Environmental Engineering, (in progress)

Dissertation: *Development of sustainable Nutrient Extraction and Recovery Devices (NERDs) for municipal and agricultural wastewater*

Ke He, Chemical and Biochemical Engineering, (in progress)

Dissertation: *Occurrence and fate of antibiotics, estrogens, and UV-filters: Implication for ecotoxicological impacts*

Kiranmayi Mangalgi, Environmental Engineering, 2017

Dissertation: *Photolytic fate of antibiotics in UV-based engineered and natural systems*

Committee Member

Michael Battaglia, Chemical and Biochemical Engineering, (in progress)

Dissertation: *Development, Validation, and Field Deployment of New Technologies for the Measurement of Aerosol pH*

Sheniqa Brown, Chemical and Biochemical Engineering, (in progress)

Dissertation: *Fluorescently labeled periplasmic binding proteins as optical biosensors for the micromolar levels of glucose & glutamine in biomedical & bioprocess applications*

Payam Rezaei, Chemical and Biochemical Engineering, (in progress)

Dissertation: *Scalable chiral separation of single walled carbon nanotubes*

James Sanders, Environmental Engineering, (in progress)

Dissertation: *Monitoring and reducing the bioavailability of methylmercury in sediments*

Marwa El-Sayed, Environmental Engineering, (in progress)

Dissertation: *Investigating the formation of secondary organic aerosols in atmospheric liquid water*

Jenna Luek, MEES Program (University of Maryland Center for Environmental Science), (in progress)

Dissertation: *Ultrahigh resolution mass spectrometry of produced waters*

Hilda Fadeai, Environmental Engineering, (in progress)

Dissertation: *Measuring and modeling the effect of PCB bioavailability on accumulation in aquatic food chains*

Mehregan Jalalizadeh, Environmental Engineering, 2017

Dissertation: *Passive sampling: science and application*

Huan Xia, Environmental Engineering, 2017

Dissertation: *Measuring and reducing bioavailability of PAHs in soils*

Claudio Müller, Toxicology Program (University of Maryland Baltimore), 2015

Dissertation: *Advancing the capability of low and middle income Latin American countries in the evaluation of occupational exposures to hazardous drugs among health care workers*

Angele Kwimi, Civil and Environmental Engineering, 2013

Dissertation: *Interaction of As(III), As(V) and PO₄ with Fe oxide impregnated activated carbons: Modeling multisorbate adsorption using the surface complexation approach*

Master's Students

Advisor

Zachary Hopkins, Civil and Environmental Engineering, 2014

Thesis: *Transformation of UV-filters by ozone: Reaction kinetics and removal of UV absorbance*

Shreemal Perera, Civil and Environmental Engineering, 2013

Project: *Recovery of antibiotics from urine and wastewater streams*

Committee Member

Eli Patmont, Environmental Engineering, 2016

Thesis: *Passive sampling: science and application*

Bo Wang, Civil and Environmental Engineering, 2012

Thesis: *Polychlorinated biphenyls in fish from Maryland waters*

Undergraduate Students

Charles Portner, Chemical Engineering, 2017 – present

Project: *Building a fully automated and controllable pilot PEARS reactor*

Samina Musa, Chemical Engineering, 2017 – present

Project: *Scaling up the PEARS process chemistry for an automated pilot reactor*

Temitope Ibitoye, Chemical Engineering, Meyerhoff Scholars Program, 2016 – present

Project: *Determination of specific molar extinction coefficients for major classes of antibiotics*

Josh Benoit, Chemical Engineering, 2016 – present

Project: *Phosphorus recovery from NERDs*

Savannah Steinly, Chemical Engineering, CWIT Scholar, 2015 – present

Project: *Sunlight photolysis of organometallic chemicals*

Hannah Aris, Chemical Engineering, CWIT Scholar, 2015 – present

Project: *Struvite production from poultry litter for sustainable land management*

Daniel Ocasio, Chemical Engineering, Meyerhoff Scholar, National Hispanic Recognition Program Scholar, MARC U*STAR Scholar, 2015 – 2017

Project: *Photolysis of pharmaceuticals and dissolved organic matter in water*

Jason Hughes, Chemical Engineering, Meyerhoff Scholar, 2016

- Project: *Validation of the potency equivalents method for antimicrobial activity*
 Nicholas Rogers, Chemical Engineering, Howard Hughes Medical Institute Fellow, MARC U*STAR Scholar, 2014 – 2015
- Project: *Fluorescence excitation-emission matrices for urban waters*
 Hollie Adejumo, Chemical Engineering, Meyerhoff Scholars Program, Howard Hughes Medical Institute Fellow, 2013 – 2016
- Project: *Assessment of antimicrobial activity of water/wastewater streams containing antibiotics*
 Jessica Lee, Chemical Engineering, 2013 – 2015
- Project: *Adsorption, and desorption, of organoarsenicals to chicken litter in water*
 Kendall Dawkins, Chemical Engineering, Meyerhoff Scholars Program, Howard Hughes Medical Institute Fellow, 2013 – 2015
- Project: *Transformation of personal care products by ozone*
 Apurva Shah, Chemical Engineering, Meyerhoff Scholars Program, Howard Hughes Medical Institute Fellow, 2013 – 2015
- Project: *Adsorption of moxifloxacin, an emerging contaminant, to activated carbon*
 EWB-UMBC team (Hollie Adejumo, Madison Bondoc, Dalton Hughes), Chemical and Mechanical Engineering, Undergraduate Research Award, 2013 – 2014
- Project: *Development of a low-tech process for treating bacterial contaminants in an unprotected spring in Isongo, Kenya*
 Suraj Vyas, Interdisciplinary Studies, Undergraduate Thesis Project, 2013 – 2014
- Degree: *Water Resource Management and Policy*
 Sebastian Snowberger, Chemical Engineering, Undergraduate Research Assistantship Support, Undergraduate Research Award, 2012 – 2014
- Project: *Wastewater treatment of fluoroquinolone antibiotics using UV-based processes*
 Robert Burton, Chemical Engineering, Undergraduate Research Assistantship Support, Undergraduate Research Award, 2012 – 2013
- Project: *Treatment of tetracycline antibiotics in water using the UV-H₂O₂ process*
 Zachary Hopkins, Chemical Engineering, Independent Study (ENCH 468), 2012
- Project: *Transformation of tetracycline antibiotics by ozone*

Other Members of the Blaney Laboratory

- Chelsea Mikal, Mt. Hebron High School, Laboratory Intern, Summer 2017
 Project: *TBD*
- Ethan Hain, CBEE Departmental Rotation Program, Summer 2016
 Project: *Combined chemical and biochemical analysis of estrogenic hormones*
- Mamatha Hopanna, CBEE Departmental Rotation Program, Fall 2015
 Project: *LC-MS/MS analysis of organometallic compounds*
- Graham Rubin, The Park School, Laboratory Intern, Summer 2015
 Project: *Mapping the molar absorptivity of antibiotics across pH and wavelength*
- Rita Costa, Visiting BS/MS student, Spring/Summer 2015
 Project: *Cytotoxicity of 3T3 fibroblasts to environmentally-relevant pharmaceuticals*

Dr. Asok Adak, Post-doctoral Research Fellow, Summer 2013 – Summer 2014

Project: *Advanced oxidation of organoarsenicals in agricultural wastewater and identification of transformation products*

Ana Dulce Soares, Visiting BS/MS student, Spring/Summer 2014

Project: *Investigation of the lethal and sub-lethal effects of fluoroquinolone antibiotics on Escherichia coli and mixed cultures from wastewater treatment plants*

Michael Battaglia, CBEE Departmental Rotation Program, Fall 2013

Project: *Measuring the ability of antibiotics to inhibit native microorganisms from activated sludge*

Eric Lumsden, University of Maryland Baltimore, Department of Medicine, Toxicology Rotation Program, Summer 2013

Project: *Assessment of antimicrobial activity of fluoroquinolone antibiotics in different water matrices*

Adam Antoszewski, Catonsville High School, Laboratory Intern, Summer 2013

Project: *Organoarsenical absorbance spectrum analysis*

Claudio Müller, University of Maryland Baltimore, Department of Medicine, Toxicology Rotation Program, Spring 2012

Project: *Development of an HPLC-FLD method for rapid analysis of fluoroquinolone antibiotics*

PUBLICATIONS, PRESENTATIONS, AND CREATIVE ACHIEVEMENTS

Publications (corresponding author is underlined)

Works Submitted or In Preparation (corresponding author is underlined)

1. Mangalgi, K.P.; Blaney, L. Role of dissolved organic matter from poultry litter on photodegradation of poultry antibiotics. Submitted to *Environmental Science & Technology*
2. Das, I.; Mondal, B.; Koner, S.K.; Datta, P.; Blaney, L.; Adak, A. Direct photolysis and UV-H₂O₂ degradation of 2,4-dichlorophenoxy acetic acid: reaction kinetics and effects of water quality. Submitted to *Separation and Purification Technology*
3. Shashvatt, U.; Blaney, L. Nutrient recovery from poultry litter using CO₂-assisted extraction. In preparation for *Environmental Science & Technology*
4. He, K.; Timm, A.; Blaney, L. Bioaccumulation and stress responses of estrogenic hormones and UV-filters in red swamp crayfish (*Procambarus clarkii*). In preparation for *Environmental Science & Technology*

Peer-Reviewed Works

Journal Articles

1. Fu, Q.-L.; Blaney, L.; Zhou, D.-M. Natural degradation of roxarsone in contrasting soils: Degradation kinetics and transformation products. *Science of the Total Environment*, in press (accepted July 2, 2017).

2. He, K.; Timm, A.; Blaney, L. (2017). Simultaneous determination of estrogens and UV-filters in aquatic tissues by sonication assisted liquid extraction and liquid chromatography tandem mass spectrometry. *Journal of Chromatography A*, in press (doi: 10.1016/j.chroma.2017.06.039).
3. Mangalgi, K.P.; Timko, S.A.; Gonsior, M.; Blaney, L. (2017). PARAFAC modeling of irradiation- and oxidation-induced changes in fluorescent dissolved organic matter extracted from poultry litter. *Environmental Science & Technology*, in press (doi: 10.1021/acs.est.6b06589).
4. Hopkins, Z.; Snowberger, S.; Blaney, L. (2017). Ozonation of the oxybenzone, octinoxate, and octocrylene UV-filters: Reaction kinetics, absorbance characteristics, and transformation products. *Journal of Hazardous Materials* 338(15), 23-32.
5. Fu, Q.-L.; Blaney, L.; Zhou, D.-M. (2016). Phytotoxicity and uptake of roxarsone by wheat (*Triticum aestivum* L.) seedlings. *Environmental Pollution* 219, 210-218.
6. Snowberger, S.; Adejumo, H.A.; He, K.; Mangalgi, K.P.; Hopanna, M.; Soares, A.D.; Blaney, L. (2016). Direct photolysis of fluoroquinolone antibiotics at 253.7 nm: Specific reaction kinetics and formation of equally-potent fluoroquinolone antibiotics. *Environmental Science & Technology* 50(17), 9533-9542.
7. Fu, Q.-L.; He, J.-Z.; Blaney, L.; Zhou, D.-M. (2016). Sorption of roxarsone onto soils with different physicochemical properties. *Chemosphere* 159, 103-112.
8. Blaney, L.; Kandiah, R.; Ducoste, J.J.; Perlinger, J.A.; Bartelt-Hunt, S.L. (2016). Assessing the growth and demographics of environmental engineering students and faculty from 2005 to 2013. *Environmental Engineering Science* 33(8), 578-590.
9. Van Epps, A.; Blaney, L. (2016). Antibiotic residues in animal waste: Occurrence and degradation in conventional agricultural waste management practices. *Current Pollution Reports* 2(3), 135-155.
10. Hopkins, Z.; Blaney, L. (2016). An aggregate analysis of personal care products in the environment: Identifying the distribution of environmentally-relevant concentrations. *Environment International* 92-93, 301-316.
11. Fu, Q.-L.; He, J.-Z.; Blaney, L.; Zhou, D.-M. (2016). Binding of roxarsone to soil dissolved organic matter: Insights from multi-spectroscopic techniques. *Chemosphere* 155, 225-233.
12. Fu, Q.-L.; He, J.-Z.; Gong, H.; Blaney, L.; Zhou, D.-M. (2016). Extraction and speciation analysis of roxarsone and its metabolites from soils with different physicochemical properties. *Journal of Soils and Sediments* 16(5), 1557-1568.
13. Adak, A.; Mangalgi, K.; Lee, J.; Blaney, L. (2015). UV irradiation and UV-H₂O₂ advanced oxidation of the roxarsone and nitarosone organoarsenicals. *Water Research* 70(3), 74-85.
14. Mangalgi, K.P.; He, K.; Blaney, L. (2015). Emerging contaminants: A potential human health concern for sensitive populations. *PDA Journal of Pharmaceutical Science and Technology* 69(2), 1-4.
15. He, K.; Soares, A.D.; Adejumo, H.; McDiarmid, M.; Squibb, K.; Blaney, L. (2015). Detection of a wide variety of human and veterinary fluoroquinolone antibiotics in municipal wastewater and wastewater-impacted surface water. *Journal of Pharmaceutical and Biomedical Analysis* 106, 136-143.
16. Mangalgi, K.; Adak, A.; Blaney, L. (2015). Organoarsenicals in poultry litter: Detection, fate, and toxicity. *Environment International*, 75(2), 68-80.
17. He, K.; Blaney, L. (2015). Systematic optimization of an SPE with HPLC-FLD method for fluoroquinolone detection in wastewater. *Journal of Hazardous Materials* 282, 96-105.
18. Ramakrishnan, A.; Blaney, L.; Kao, J.; Tyagi, R.D.; Zhang, T.C.; Rao, S. (2015). Emerging contaminants in landfill leachate and their sustainable management. *Environmental Earth Sciences* 73, 1357-1368.

19. Hopkins, Z.; Blaney, L. (2014). A novel approach to modeling the reaction kinetics of tetracycline antibiotics with aqueous ozone. *Science of the Total Environment* 468-469(1), 337-344.
20. Sarkar, S.; Greenleaf, J.E.; Gupta, A.; Ghosh, D.; Blaney, L.M.; Bandyopadhyay, P.; Biswas, R.K.; Dutta, A.K.; SenGupta, A.K. (2010). Evolution of community-based arsenic removal systems in remote villages in West Bengal, India: Assessment of decade-long operation. *Water Research*. 44(19), 5813-5822.
21. Sarkar, S.; Blaney, L.M.; Gupta, A.; Ghosh, D.; SenGupta, A.K. (2008). Arsenic removal from groundwater and its safe containment in a rural environment: Validation of a sustainable approach. *Environmental Science & Technology* 42(12), 4268-4273.
22. Sarkar, S.; Blaney, L.M.; Gupta, A.; Ghosh, D.; SenGupta, A.K. (2007). Use of ArsenX^{np}, a hybrid anion exchanger, for arsenic removal in remote villages in the Indian subcontinent. *Reactive and Functional Polymers* 67(12), 1599-1611.
23. Blaney, L.M.; Cinar, S.; SenGupta, A.K. (2007). Hybrid anion exchanger for trace phosphate removal from water and wastewater. *Water Research* 41(7), 1603-1613.

Books

1. Hernandez-Maldonado, A.J.; Blaney, L. Contaminants of Emerging Concern (CECs) in Water and Wastewater: Advanced Treatment Processes. Elsevier, under contract (signed December 19, 2016), expected 2018.

Book Chapters

1. Shashvatt, U.; Aris, H.; Blaney, L. Evaluation of animal manure composition for protection of sensitive water supplies through nutrient recovery processes. Book chapter, in "Chemistry and Water: The Science Behind Sustaining the World's Most Crucial Resource" edited by Satinder Ahuja (Elsevier), 2016.
2. Van Epps, A.; Blaney, L. "Pharmaceuticals and personal care products in wastewater: Implications for urban water reuse" in *Handbook of Urban Water Reuse* edited by Saeid Eslamian. Francis and Taylor (CRC Group), 2015.
3. Blaney, L. "Ozone treatment of antibiotics in water" in *Water Reclamation and Sustainability*, edited by Satinder Ahuja. John Wiley & Sons, Inc., 2014.
4. Sarkar, S.; Gupta, A.; Blaney, L.M.; Greenleaf, J.E.; Ghosh, D.; Biswas, R.K.; SenGupta, A.K. "Community-based wellhead arsenic removal units in remote villages of West Bengal, India" in *Arsenic Contamination of Groundwater: Mechanism, Analysis, and Remediation* edited by Satinder Ahuja. John Wiley & Sons, Inc., 2008.

Conference Proceedings

1. Blaney, L.; Snowberger, S.; He, K. (2013). Determination of fluoroquinolone antibiotics in wastewater and transformation by UV and UV-H₂O₂ processes. *Proceedings of the Water Environment Federation* 2013(10), 5069-5077.
2. Tenorio, R.; Lawler, D.; Blaney, L. (2011). Water treatment of pharmaceuticals: Reaction kinetics of ifosfamide and cyclophosphamide with ozone and hydroxyl radicals. In *Proceedings of the Society of Hispanic Professional Engineers (SHPE) Conference*. Anaheim, CA, October 26-30, 2011.

3. Sarkar, S.; Gupta, A.; Deb, A.K.; Blaney, L.M.; SenGupta, A.K. Arsenic removal using well-head units in India: A sustainable solution. In *Proceedings of Bengal Engineering and Science University International Arsenic Conference*. Howrah, India, January 2007.

Non-Peer Reviewed Works

Dissertation/Thesis

1. Blaney, L.M. (2011). Oxidation of pharmaceuticals: Impact of natural organic matter on elimination of pharmacological activity. Ph.D. Dissertation, The University of Texas at Austin, Austin, TX.
2. Blaney, L.M. (2007). Removal of natural organic matter through employment of anion exchange fibers impregnated with hydrous ferric and zirconium oxide nanoparticles towards reduction of disinfection by-product formation potential in water treatment. M.S. Thesis, Lehigh University, Bethlehem, PA.

Other Published Works

1. Blaney, L. (2017). There's a new generation of water pollutants in your medicine cabinet. *The Conversation*, April 20, 2017
2. Hernandez-Maldonado, A.J.; Blaney, L. (2015). Advances in analysis, treatment technologies, and environmental fate of emerging contaminants. Editorial for special issue of *Journal of Hazardous Materials* 282, 1.
3. Blaney, L. (2014). The sustainability of phosphorus recovery from animal manure. White paper published by Triea Technologies, LLC.
4. Blaney, L. (2014). Letter to the editor on "Widening war over preservatives." *Chemical and Engineering News* 92(35), 4-6.
5. Blaney, L.M. (2010). Letter to the editor on "Blueprints for chemical control." *Chemical and Engineering News* 88(50), 4.
6. Blaney, L.M. (2008). Letter to the editor on "Treating sewage for drinking water." *Chemical and Engineering News* 86(12), 6-8.
7. Blaney, L.M.; SenGupta, A.K. (2007). Comment on "Arsenic removal from groundwater by household sand filters: Comparative field study, model calculations, and health benefits." *Environmental Science & Technology* 41(3), 1051-1052.
8. Blaney, L. (2007). Magnetite (Fe₃O₄): Properties, synthesis, and applications. *Lehigh Review* 2007(15), 33-81.
9. Blaney, L.M.; SenGupta, A.K. (2006). Comment on "Landfill-stimulated iron reduction and arsenic release at the Coakley superfund site (NH)". *Environmental Science & Technology* 40(12), 4037-4038.
10. Crewdson, C.; Ziemann, J.; Blaney, L. (2005). The Death of a Sea. *Lehigh Review* 2005(13), 119-132.

Presentations

Juried/Refereed Conference/Poster Presentations (presenting author is underlined)

1. Mangalgi, K.P.; Blaney, L. Poultry litter dissolved organic matter: PARAFAC analysis and role in photolysis of antibiotics. Association of Environmental Engineering and Science Professors Research and Education Conference (Ann Arbor, MI), Poster Presentation, June 22, 2017.
2. Mangalgi, K.P.; Timko, S.A.; Gonsior, M.; Blaney, L. (2017). PARAFAC modeling of irradiation- and oxidation-induced changes in fluorescent dissolved organic matter extracted from poultry litter. Association of Environmental Engineering and Science Professors Research and Education Conference (Ann Arbor, MI), Poster Presentation, June 21, 2017.
3. Blaney, L.; Kandiah, R.; Ducoste, J.J.; Perlinger, J.A.; Bartelt-Hunt, S.L. (2016). Association of Environmental Engineering and Science Professors Research and Education Conference (Ann Arbor, MI), June 22, 2017.
4. He, K.; Timm, A.; Blaney, L. Simultaneous determination of UV-filters and estrogens in aquatic invertebrates by modified QuEChERS extraction and liquid chromatography tandem mass spectrometry. The 13th Annual LC-MS/MS Workshop on Environmental and Food Safety (Buffalo, NY), June 12, 2017.
5. Ireland, D.; Rheingans, P.; Blaney, L.; Laberge, E.F.C.; Slaughter, G.; Spence, A. T-SITE: A UMBC Community of Transfer Scholars in Computing, Information Technology, and Engineering. 2017 ASEE Annual Conference & Exposition (Columbus, Ohio), Poster Presentation, June 26, 2017.
6. Mangalgi, K.P.; Blaney, L. Effect of agricultural dissolved organic matter on the photolytic fate of poultry antibiotics. Spring 2017 ACS National Meeting (San Francisco, CA), April 5, 2017.
7. Mangalgi, K.P.; Timko, S.; Gonsior, M.; Blaney, L. PARAFAC analysis of irradiation- and oxidation-induced changes in fluorescent dissolved organic matter extracted from poultry litter. Spring 2017 ACS National Meeting (San Francisco, CA), April 2, 2017.
8. Shashvatt, U.; Blaney, L. Application of the Donnan membrane principle for sustainable nutrient recovery. Spring 2017 ACS National Meeting (San Francisco, CA), April 6, 2017.
9. Sengupta, S.; Beaudry, J.; Shashvatt, U.; Blaney, L. Two-stage process for phosphorus extraction and recovery from agricultural waste. Spring 2017 ACS National Meeting (San Francisco, CA), April 6, 2017.
10. He, K.; Timm, A.; Blaney, L. Bioaccumulation and estrogenicity of hormones and UV-filters in *Procambarus clarkii*. Spring 2017 ACS National Meeting (San Francisco, CA), April 2, 2017.
11. Hopanna, M.; Steinly, S.; Blaney, L. Photolytic fate of organo-selenium and -tin chemicals and their carbon analogs in the natural environment. Spring 2017 ACS National Meeting (San Francisco, CA), Poster Presentation, April 5, 2017.
12. Shashvatt, U.; Benoit, J.; Aris, H.; Blaney, L. Recovering high-quality phosphorus- and nitrogen-laden fertilizers from poultry litter. Spring 2017 ACS National Meeting (San Francisco, CA), April 6, 2017.
13. He, K.; Rogers, N.; Blaney, L. Using fluorescent dissolved organic matter and contaminants of emerging concern to identify leaking wastewater collection systems. Spring 2017 ACS National Meeting (San Francisco, CA), April 2, 2017.
14. Ocasio, D.; Adejumo, H.; Mangalgi, K.P.; He, K.; Blaney, L. UV-driven antibiotic-to-antibiotic transformation pathways and kinetics of sulfonamides. Spring 2017 ACS National Meeting (San Francisco, CA), Poster Presentation, April 5, 2017.
15. Adejumo, H.A., He, K., Blaney, L. Impact of antibiotic contaminants on environmental microorganisms: antimicrobial activity and antimicrobial resistance in natural and engineered environments. Society of Toxicology 56th Annual Meeting and ToxExpo (Baltimore, MD). Poster Presentation. March 15, 2017.

16. Adejumo, H.; He, K.; Mangalgi, K.; Blaney, L. Identifying implications of antibiotics during ultraviolet disinfection: antimicrobial activity and antimicrobial resistance in wastewater treatment. Tri-Association Conference (Ocean City, MD), August 31, 2016.
17. Mangalgi, K.; Blaney, L. Photolytic fate of poultry antibiotics in agricultural wastewater. 252nd American Chemical Society Annual Meeting (Philadelphia, PA), Poster Presentation, August 24, 2016.
18. Hopkins, Z.R.; Snowberger, S.; Blaney, L. Ozonation of the oxybenzone, octinoxate, and octocrylene UV-filters: Reaction kinetics, absorbance characteristics, and transformation products. 252nd American Chemical Society Annual Meeting (Philadelphia, PA), August 21, 2016.
19. Blaney, L.; Mangalgi, K.P.; Adejumo, H.A.; Ocasio, D.; He, K. Transformation of fluoroquinolone, tetracycline, and sulfonamide antibiotics at 253.7 nm: Generation of antimicrobially active transformation products. Gordon Research Conference (Holderness, NH), Poster Presentation, June 26, 2016.
20. Mangalgi, K.P.; Adejumo, H.A.; Ocasio, D.; He, K.; Blaney, L. Transformation of fluoroquinolone, tetracycline, and sulfonamide antibiotics at 253.7 nm: Generation of antimicrobially active transformation products. 251st American Chemical Society Annual Meeting (San Diego, CA), March 14, 2016.
21. Shashvatt, U.; Rogers, N.; Aris, H.; Blaney, L. Recovering phosphorus from poultry litter: A step towards improving food security and protecting ecologically sensitive water bodies. 251st American Chemical Society Annual Meeting (San Diego, CA), March 14, 2016.
22. Adejumo, H.A.; He, K.; Blaney, L. Antimicrobial activity of fluoroquinolone, sulfonamide, and tetracycline antibiotics: Implications for environmental relevance. 251st American Chemical Society Annual Meeting (San Diego, CA), Poster Presentation, March 16, 2016.
23. He, K.; Timm, A.; Welty, C.; Blaney, L. Multi-residue analysis of contaminants of emerging concern (CECs) in water and tissue samples from a freshwater environment by modified QuEChERS extraction followed by SPE-LC-MS/MS. 251st American Chemical Society Annual Meeting (San Diego, CA), Poster Presentation, March 16, 2016.
24. He, K.; Timm, A.; Welty, C.; Blaney, L. Occurrence of estrogenic hormones and UV filters in an urban watershed in Baltimore, MD. 2015 Baltimore Ecosystem Study Annual Meeting (Baltimore, MD), October 20, 2015.
25. Adejumo, H.A.; He, K.; Blaney, L. Fluoroquinolone-resistant bacteria and gene distribution in a Maryland wastewater treatment plant and receiving water. Naval Academy Science and Engineering Conference (Annapolis, MD), November 8-10, 2015.
26. Shashvatt, U.; Blaney, L. Preventing nutrient influx into coastal watersheds by recovering nutrients from poultry litter. 2015 Geological Society of America Meeting (Baltimore, MD), Poster Presentation, November 4, 2015.
27. Mangalgi K.P.; Ocasio, D.; Adak, A.; Blaney, L. Role of dissolved organic matter on UV transformation of antibiotics in agriculture-impacted water supplies. International Water Association Natural Organic Matter 6 Conference (Malmo Sweden), September 10, 2015
28. Mangalgi K.P.; Rogers, N; Dawkins, K.; Ocasio, D.; Blaney, L. Characterizing effects of advanced oxidation on dissolved organic matter in agriculturally-impacted surface water using PARAFAC. International Water Association Natural Organic Matter 6 Conference (Malmo Sweden), Poster Presentation, September 8, 2015
29. Rogers, N.; He, K.; Welty, C.; Blaney, L. Using EEM analysis to identify and characterize the impacts of leaking wastewater infrastructure on urban water resources. International Water Association Natural Organic Matter 6 Conference (Malmo Sweden), Poster Presentation, September 8, 2015

30. Shashvatt, U.; Mangalgi, K.P.; Blaney, L. Recovering phosphorus from poultry litter: Impact of organic matter on recovery. 250th American Chemical Society Annual Meeting (Boston, MA), August 20, 2015.
31. He, K.; Timm, A.; Welty, C.; Blaney, L. Determination of antibiotics, estrogenic hormones, and UV filters in water, sediment, and crayfish from an urban watershed. 250th American Chemical Society Annual Meeting (Boston, MA), August 18, 2015.
32. Adak, A.; Mangalgi, K.P.; Lee, J.; Blaney, L. Transformation of organoarsenicals in water using the UV and UV-H₂O₂ systems. 250th American Chemical Society Annual Meeting (Boston, MA), August 18, 2015.
33. Mangalgi, K.P.; Shashvatt, U.; Blaney, L. Phosphorus recovery from poultry litter using a two-stage treatment process. Association of Environmental Engineering and Science Professors Research and Education Conference (New Haven, CT), June 15, 2015.
34. Kelly, J.; Rosi-Marshall, E.; Blaney, L. Effects of pharmaceuticals on benthic microbial communities within the Baltimore Ecosystem Study. Baltimore Ecosystem Study Long-Term Ecological Research Program Annual Meeting (Baltimore, MD), October 22-23, 2014.
35. Dawkins, K.; Hopkins, Z.; Blaney, L. Ozonation of oxybenzone in alkaline water. Annual Biomedical Research Conference for Minority Students (San Antonio, TX), Poster Presentation, November 15, 2014.
36. Blaney, L.; Mangalgi, K.; Adak, A. Treatment of agricultural wastewater containing organoarsenicals using UV-based processes. 2014 Tri-Association Conference (Ocean City, MD), August 28, 2014.
37. He, K.; Snowberger, S.; Blaney, L. Occurrence and elimination of fluoroquinolone antibiotics in an advanced water reclamation plant. 248th American Chemical Society Annual Meeting (San Francisco, CA), August 12, 2014.
38. Adak, A.; Mangalgi, K.; He, K.; Blaney, L. Photochemical UV-H₂O₂ system for oxidation of organoarsenicals in agricultural wastewater. 248th American Chemical Society Annual Meeting (San Francisco, CA), Poster Presentation, August 13, 2014.
39. He, K.; Blaney, L. Determination of fluoroquinolone antibiotics in wastewater by solid-phase extraction high performance liquid chromatography with fluorescence detection. 248th American Chemical Society Annual Meeting (San Francisco, CA), Poster Presentation, August 13, 2014.
40. Mangalgi, K.; Lee, J.; Blaney, L. Photodegradation of organoarsenicals in agricultural waste. 247th American Chemical Society Annual Meeting (Dallas, TX), March 17, 2014.
41. Mangalgi, K.; Lee, J.; Blaney, L. Development of a novel SPE-LC-ESI-MS/MS method for analysis of organoarsenicals in water. 247th American Chemical Society Annual Meeting (Dallas, TX), Poster Presentation, March 19, 2014.
42. Shah, A.; He, K.; Blaney, L. Moxifloxacin in wastewater: Detection and treatment using powdered activated carbon. Annual Biomedical Research Conference for Minority Students (Nashville, TN), Poster Presentation, November 16, 2013.
43. Snowberger, S.; He, K.; Blaney, L. UV-based treatment of fluoroquinolone antibiotics in wastewater. American Institute of Chemical Engineers Annual Meeting (San Diego, CA), November 11, 2013.
44. He, K.; Blaney, L. Detection of fluoroquinolone antibiotics in Maryland wastewater and surface water. Baltimore Ecosystem Study Long-Term Ecological Research Program Annual Meeting (Baltimore, MD), October 22, 2013.
45. Rosi-Marshall, E.J.; Bechtold, H.A.; Shogren, A.; Kelly, J.J.; Rojas, M.; Snow, D.; Blaney, L.; He, K. Occurrence and ecological effects of pharmaceuticals in BES streams. Baltimore

Ecosystem Study Long-Term Ecological Research Program Annual Meeting (Baltimore, MD), Poster presentation, October 22, 2013.

46. He, K.; Snowberger, S.; Blaney, L. Determination of fluoroquinolone antibiotics in wastewater and transformation by UV and UV-H₂O₂ processes. 87th Annual Water Environment Federation Technical Exhibition and Conference (Chicago, IL), Special AEESP Session, October 9, 2013.
47. He, K.; Perera, S.; Blaney, L. Adsorption of antibiotics onto activated sludge solids and powdered activated carbon. 2013 Tri-Association Conference (Ocean City, MD), August 30, 2013.
48. Snowberger, S.; Burton, R.; Blaney, L. UV and UV-H₂O₂ treatment of fluoroquinolone and tetracycline antibiotics. 245th American Chemical Society Annual Meeting (New Orleans, LA), April 11, 2013.
49. Hopkins, Z.; Blaney, L. Ozonation of tetracycline antibiotics: reaction kinetics. 245th American Chemical Society Annual Meeting (New Orleans, LA), April 8, 2013.
50. He, K.; Blaney, L. Adsorption of fluoroquinolone antibiotics onto activated sludge: Implications for biological wastewater treatment. American Institute of Chemical Engineers (Pittsburgh, PA), Poster Presentation, October 31, 2012.
51. Hopkins, Z.; Blaney, L. Ozone treatment of tetracycline antibiotics: Transformation and removal in water/wastewater matrices. American Institute of Chemical Engineers (Pittsburgh, PA), Poster Presentation, October 31, 2012.
52. Snowberger, S.; Blaney, L. Wastewater treatment of fluoroquinolone antibiotics using the UV-H₂O₂ advanced oxidation process. American Institute of Chemical Engineers (Pittsburgh, PA), Poster Presentation, October 31, 2012.
53. Blaney, L.M. Integrating environmental engineering concepts into chemical engineering curricula. American Society for Engineering Education Chemical Engineering Summer School (Orono, ME), Poster Presentation, July 22, 2012.
54. Byrnes, J.R.; Blaney, L.; Katz, L.E.; Wammer, K.H. Effects of ozonation on the antibacterial activity of the macrolide roxithromycin. American Chemical Society National Meeting (San Diego, CA), Poster Presentation, March 26, 2012.
55. Tenorio, R.; Lawler, D.F.; Blaney, L. Water treatment of pharmaceuticals: Reaction kinetics of ifosfamide and cyclophosphamide with ozone and hydroxyl radicals. Society of Hispanic Professional Engineers National Conference (Anaheim, CA), October 27, 2011.
56. Blaney, L.M.; Lawler, D.F.; Katz, L.E. Oxidation of erythromycin with aqueous ozone: Impact of organic matter on percent transformation and elimination of antimicrobial activity. American Chemical Society National Meeting (Anaheim, CA), March 29, 2011.
57. Blaney, L.M.; Marron, C.A.; Katz, L.E.; Lawler, D. F. Eliminating antimicrobial activity: Impact of indirect/ direct water reuse organic matter matrices. International Water Association Leading Edge Technology Conference (Phoenix, AZ), June 3, 2010.
58. Marron, C.A.; Blaney, L.M.; Lawler, D.F.; Katz, L.E. Kinetics of ciprofloxacin degradation by ozonation: Effects of natural organic matter, carbonate, and pH. International Water Association Leading Edge Technology Conference (Phoenix, AZ), Poster Presentation, June 2, 2010.
59. Blaney, L.M.; Katz, L.E.; Lawler, D. F. Ozonation of two pharmacologically active compounds. American Chemical Society National Meeting (San Francisco, CA), March 23, 2010.
60. Blaney, L.M.; Katz, L.E.; Lawler, D. F. Advanced oxidation of pharmaceuticals: Treatment requirement as a function of residual pharmacological activity. Capital Area Chapter Texas American Water Works Association Annual Fall Seminar (Austin, TX), October 1, 2009.
61. Blaney, L.M.; Marron, C.A.; Katz, L.E.; Lawler, D. F. The impact of organic matter on advanced oxidation of pharmaceuticals and removal of residual pharmaceutical activity. American Chemical Society National Meeting (Washington, DC), August 19, 2009.

62. Blaney, L.M.; Lawler, D. F.; Katz, L.E. Ozonation of ciprofloxacin: Effect of organic matter on treatment efficiency, intermediate formation, and antibiotic activity. American Water Works Association Annual Convention and Exposition (San Diego CA), June 16, 2009.
63. Blaney, L.M.; Katz, L.E.; Lawler, D. F. Advanced oxidation of pharmaceuticals: Focusing on activity removal. American Water Works Association Research Symposium (Austin, TX), February 13, 2009.
64. Blaney, L.M.; Katz, L.E.; Lawler, D. F. Advanced oxidation of ciprofloxacin: Impact of organic matter and characterization of antibiotic activity. American Institute of Chemical Engineers Annual Meeting (Philadelphia, PA), November 18, 2008.
65. Blaney, L.M.; Sarkar, S.; Greenleaf, J.; Chatterjee, P.; Ghosh, D.; Alam, M.; Gupta, A.; SenGupta, A.K. Containment of highly concentrated arsenic-laden spent regenerant on the Indian subcontinent. US Environmental Protection Agency P3 Award (Washington, DC), Poster Presentation (Awarded Phase II funding), April 24-25, 2007.
66. Blaney, L.M.; SenGupta, A.K. Effective disposal of arsenic-laden wastes in developed and developing world settings. Pennsylvania Water and Environment Association Annual Conference (State College, PA), Poster Presentation, July 17, 2006.
67. Blaney, L.M.; Greenleaf, J.E.; SenGupta, A.K.; Sarkar, S.; Gupta, A.; Biswas, R.K. Arsenic crisis in Indian subcontinent: A *local* solution to a *global* problem. American Water Works Association Annual Convention and Exposition (San Antonio, TX) Fresh Ideas Poster Contest (1st place), June 14, 2006.
68. Blaney, L.M.; Greenleaf, J.E.; SenGupta, A.K.; Sarkar, S.; Gupta, A.; Biswas, R.K. Arsenic crisis in Indian subcontinent: A *local* solution to a *global* problem. Pennsylvania Section American Water Works Association 2006 Conference (Hershey, PA), Poster Presentation (1st place), April 26, 2006.
69. Blaney, L.M.; Greenleaf, J.; SenGupta, A.K. Synthesis of a polymeric hybrid ion exchanger with recovered iron(III) towards the removal of arsenic. US Environmental Protection Agency P3 Award (Washington, DC), Poster Presentation, May 16-17, 2005.
70. Blaney, L.M.; SenGupta, A.K. Reducing, reusing, and recycling on the *nano*-scale. The 13th Session of the United Nations Commission on Sustainable Development (New York, NY), April 20, 2005.

Non-Juried/Refereed Conference/Poster Presentations

1. Aris, H.; Shashvatt, U.; Benoit, J.; Blaney, L. Maximizing phosphorus recovery from chicken litter in a continuous process. UMBC Undergraduate Research and Creative Achievement Day (Baltimore, MD), Poster Presentation, April 26, 2017.
2. Ocasio, D.; Mangalgiri, K.; Ibitoye, T.; Blaney, L. UV-driven antibiotic-to-antibiotic transformation pathways and kinetics of sulfonamides. UMBC Undergraduate Research and Creative Achievement Day (Baltimore, MD), Poster Presentation, April 26, 2017.
3. Steinly, S.; Hopanna, M.; Mangalgiri, K.; Blaney, L. Direct and indirect photolysis of organometallic compounds. UMBC Undergraduate Research and Creative Achievement Day (Baltimore, MD), April 26, 2017.
4. Ibitoye, T.; Mangalgiri, K.P.; Blaney, L. Spectrophotometric determination of acid dissociation constants of antibiotics. UMBC 19th Summer Undergraduate Research Fest (Baltimore, MD), Poster Presentation, August 10, 2016.

5. He, K.; Timm, A.; Welty, C.; Blaney, L. Analysis of multiple estrogens and UV filters in biota tissue samples by a simple liquid extraction followed by SPE-LC-MS/MS. 38th UMBC Graduate Research Conference (Baltimore, MD), March 23, 2016.
6. Mangalgi, K.; Ocasio, D.; Adak, A.; Blaney, L. Role of dissolved organic matter on UV transformation of antibiotics in agriculture-impacted water. 38th UMBC Graduate Research Conference (Baltimore, MD), March 23, 2016.
7. Shashvatt, U., Roger, N., Aris, H., Benoit, J., Blaney, L., Development of an automated nutrient recovery process for recovering phosphorus from poultry litter. 38th Annual Graduate Research Conference (Baltimore, MD), March 23, 2016.
8. Hopanna, M.; Blaney, L. Development of novel LC-DAD-MS/MS analytical methods for organometallic chemicals. 38th UMBC Graduate Research Conference (Baltimore, MD), Poster Presentation, March 23, 2016.
9. Aris, H.; Shashvatt, U.; Benoit, J.; Blaney, L. Recovery of Nutrients from Chicken Litter to Create a Slow-release Fertilizer. UMBC Undergraduate Research and Creative Achievement Day (Baltimore, MD), April 27, 2016.
10. Ocasio, D.; Mangalgi, K.; Blaney, L. Photokinetic Determination of Environmentally Relevant Pharmaceuticals for UV-Based Applications in Treatment Facilities. UMBC Undergraduate Research and Creative Achievement Day (Baltimore, MD), April 27, 2016.
11. Steinly, S.; Hopanna, M.; Mangalgi, K.; Blaney, L. Mapping the Specific Molar Extinction Coefficients of Organometallic Compounds. UMBC Undergraduate Research and Creative Achievement Day (Baltimore, MD), April 27, 2016.
12. Mangalgi K.P.; Rogers, N; Dawkins, K.; Ocasio, D.; Blaney, L. Characterizing effects of advanced oxidation on dissolved organic matter in agriculturally-impacted surface water using PARAFAC. UMBC Research Forum (Baltimore, MD), Poster Presentation, October 30, 2015.
13. Adejumo, H.A.; He, K.; Blaney, L. Fluoroquinolone-resistant bacteria and gene distribution in a Maryland wastewater treatment plant and receiving water. 18th Annual Undergraduate Research Symposium in the Chemical and Biological Sciences (Baltimore, MD), Poster Presentation, October 3, 2015.
14. Adejumo, H.A.; He, K.; Blaney, L. Fluoroquinolone-resistant bacteria and gene distribution in a Maryland wastewater treatment plant and receiving water. UMBC Summer Undergraduate Research Fest (Baltimore, MD), Poster Presentation, August 5, 2015.
15. Rubin, G.; Mangalgi, K.P.; Blaney, L. pH-Dependent Absorbance Behavior of Antibiotic Pharmaceuticals. UMBC Summer Undergraduate Research Fest (Baltimore, MD), Poster Presentation, August 5, 2015.
16. Adejumo, H.A.; He, K.; Blaney, L. Occurrence and distribution of quinolone resistance in Baltimore wastewater. BEACON Center for the Study of Evolution in Action seminar, July 10, 2015.
17. Blaney, L.; Bartelt-Hunt, S.; Kandiah, R.; Niemeier, D. Assessing the growth and demographics of environmental engineering from 2005 to 2013. Association of Environmental Engineering and Science Professors Research and Education Conference (New Haven, CT), June 15, 2015.
18. Adejumo, H.A.; He, K.; Blaney, L. Occurrence and distribution of quinolone resistance in Baltimore wastewater. UMBC Undergraduate Research and Creative Achievement Day (Baltimore, MD), April 22, 2015.
19. Lee, J.; Blaney, L. Absorbance of pharmaceuticals exposed to ultraviolet (UV) light as a function of pH, treatment level, and wavelength. UMBC Undergraduate Research and Creative Achievement Day (Baltimore, MD), April 22, 2015.

20. Rogers, N.; Blaney, L. Using excitation-emission matrix analysis to characterize the impact of leaking wastewater on urban water resources. UMBC Undergraduate Research and Creative Achievement Day (Baltimore, MD), April 22, 2015.
21. He, K.; Blaney, L. Simultaneous determination of antibiotics, estrogens, and UV filters in two subwatersheds near Baltimore. 37th UMBC Graduate Research Conference (Baltimore, MD), March 25, 2015.
22. Mangalgi, K.P.; Blaney, L. Fate of Antibiotics used in Poultry Industry in Phosphate Recovery Processes. 37th UMBC Graduate Research Conference (Baltimore, MD), March 25, 2015.
23. Rogers, N.; Blaney, L. FEEM characterization of surface waters along a rural-to-urban gradient in Baltimore. 17th Annual Undergraduate Research Symposium in the Chemical and Biological Sciences (Baltimore, MD), Poster Presentation, October 25, 2014.
24. Dawkins, K.; Hopkins, Z.; Blaney, L. Ozonation of oxybenzone in alkaline water. UMBC Summer Undergraduate Research Fest (Baltimore, MD), Poster Presentation, August 6, 2014.
25. Rogers, N.; Blaney, L. FEEM characterization of surface waters along a rural-to-urban gradient in Baltimore. UMBC Summer Undergraduate Research Fest (Baltimore, MD), Poster Presentation, August 6, 2014.
26. Snowberger, S.; He, K.; Soares, A.D.; Blaney, L. Identification of potent transformation products of fluoroquinolone antibiotics formed during water treatment. UMBC Undergraduate Research and Creative Achievement Day (Baltimore, MD), April 23, 2014.
27. Shah, A.; Blaney, L. Removal of moxifloxacin from wastewater by adsorption onto activated carbon. UMBC Undergraduate Research and Creative Achievement Day (Baltimore, MD), April 23, 2014.
28. Adejumo, H.; Bondoc, M.; Hughes, D.; Blaney, L. Evaluating the efficiency of low-tech processes in removing bacterial contaminants from drinking water supplies. UMBC Undergraduate Research and Creative Achievement Day (Baltimore, MD), April 23, 2014.
29. Adejumo, H., Blaney, L. Antimicrobial activity of fluoroquinolone antibiotics for UV-based wastewater treatment. UMBC Undergraduate Research and Creative Achievement Day (Baltimore, MD). Poster Presentation, April 23, 2014.
30. He, K.; Blaney, L. Adsorption and biodegradation of fluoroquinolone antibiotics in the activated sludge treatment. 36th UMBC Graduate Research Conference (Baltimore, MD), March 16, 2014.
31. Mangalgi, K.P.; Lee, J.; Blaney, L. Photodegradation of organoarsenicals in agricultural waste. 36th UMBC Graduate Research Conference (Baltimore, MD), March 16, 2014.
32. Hopkins, Z.R.; Blaney, L. Ozone treatment of oxybenzone: Transformation kinetics and removal of UV absorbance. 36th UMBC Graduate Research Conference (Baltimore, MD), Poster Presentation, March 16, 2014.
33. Shah, A., He, K.; Blaney, L. Moxifloxacin in wastewater: Detection and treatment using powdered activated carbon. UMBC Summer Undergraduate Research Fest (Baltimore, MD), Poster Presentation, August 7, 2013.
34. Burton, R.; Blaney, L. Removal of tetracycline antibiotics from water using the UV-H₂O₂ process. UMBC Undergraduate Research and Creative Achievement Day (Baltimore, MD), Poster Presentation, April 24, 2013.
35. Hopkins, Z.; Blaney, L. Ozone treatment of tetracycline antibiotics: Transformation and removal in water/wastewater matrices. UMBC Undergraduate Research and Creative Achievement Day (Baltimore, MD), Poster Presentation, April 24, 2013.
36. Snowberger, S.; Blaney, L. Wastewater treatment of fluoroquinolone antibiotics using UV-based processes. UMBC Undergraduate Research and Creative Achievement Day (Baltimore, MD), Poster Presentation, April 24, 2013.

37. Mullen, C.; Hughes, D.; Blaney, L. Development of a low-tech process for treating bacterial contaminants in an unprotected spring in Isongo, Kenya. UMBC Undergraduate Research and Creative Achievement Day (Baltimore, MD), Poster Presentation, April 24, 2013.
38. He, K.; Perera, S.; Blaney, L. Adsorption of fluoroquinolone antibiotics onto powdered activated carbon and activated sludge. 35th UMBC Graduate Research Conference (Baltimore, MD), February 20, 2013.
39. Blaney, L.M. Oxidation of pharmacologically active compounds: Impacts of organic matter and elimination of residual pharmacological activity. The University of Texas Environmental and Water Resources Engineering Seminar, January 27, 2011.
40. Blaney, L.M. Water For People: Inspiring sustainable development. The University of Texas Environmental and Water Resources Engineering Seminar, March 25, 2010.
41. Blaney, L.M.; Katz, L.E.; Lawler, D.F. Advanced oxidation of ciprofloxacin: impact of organic matter and characterization of antibiotic activity. The University of Texas Environmental and Water Resources Engineering Seminar, November 13, 2008.
42. Blaney, L.M. Removal of surrogate NOM compounds towards reduction of disinfection by-product formation potential in water treatment plants. M.S. Thesis Presentation (Lehigh University), May 7, 2007.
43. Blaney, L.M.; Greenleaf, J.E.; Sarkar, S.; Chatterjee, P.; SenGupta, A.K. Arsenic crisis in Indian subcontinent: A *local* solution to a *global* problem. Lehigh University Engineering Research Poster Competition (Bethlehem, PA), February 12, 2007.

Other Professional Presentations

Invited Lectures

1. Blaney, L. Antibiotic fate in photolytic processes: UV-254 treatment of wastewater and natural photolysis of agriculturally-impacted waters. Carnegie Mellon University (Pittsburgh, PA), November 10, 2017.
2. Blaney, L. Photolytic, photochemical, and photocatalytic oxidation of pharmaceuticals and personal care products in water and wastewater. Pontificia Universidad Católica del Ecuador PUCE (Quito, Ecuador), August 31, 2017.
3. Blaney, L. Antibiotic fate in photolytic processes: UV-254 treatment of wastewater and natural photolysis of agriculturally-impacted waters. University of Iowa (Iowa City, Iowa), March 3, 2017.
4. Blaney, L. Occurrence and fate of antibiotics in environmental and engineered water systems. Institute of Marine and Environmental Technology (Baltimore, MD), December 2, 2016.
5. Blaney, L. Occurrence and fate of antibiotics in environmental and engineered water systems. Department of Civil and Environmental Engineering Seminar, Villanova University (Villanova, PA), October 21, 2016.
6. Blaney, L. Antibiotics in the environment: Occurrence and fate in UV-based processes. Faculdade de Engenharia da Universidade do Porto (Porto, Portugal), October 6, 2016.
7. Blaney, L. Our environment is on drugs. UMBC GRIT-X 2016 (Baltimore, MD), September 17, 2016.
8. Blaney, L. Environmental engineering and water. UMBC Sustainability across disciplines workshop (Baltimore, MD), May 26, 2016.

9. Blaney, L. Emerging contaminants and resources: Environmental solutions to global problems. Department of Civil and Environmental Engineering, Lehigh University (Bethlehem, Pennsylvania), December 3, 2015.
10. Blaney, L. Antibiotics and hormones in the environment: The need for advanced wastewater treatment. UMBC MARC U*STAR/HHMI seminar (Baltimore, MD), October 27, 2015.
11. Blaney, L. Emerging contaminants and resources: Environmental solutions to global problems. Plenary speaker at the 18th Annual Undergraduate Research Symposium in the Chemical and Biological Sciences (Baltimore, MD), October 3, 2015.
12. Blaney, L. Environmental engineering and water. UMBC Sustainability across disciplines workshop (Baltimore, MD), June 1, 2015.
13. Blaney, L. Emerging contaminants and resources: Environmental-based solutions to new problems. Toxicology program, University of Maryland Eastern Shore (Princess Anne, MD), October 9, 2014.
14. Blaney, L. Removal and transformation of antibiotics in wastewater treatment plants: Lessons for environmental fate and transport of emerging contaminants. Department of Geography and Environmental Systems, UMBC (Baltimore, MD), September 24, 2014.
15. Blaney, L. The power of students to improve water, sanitation, and hygiene in the developing world. TEDxUMBC (Baltimore, MD), September 13, 2014.
16. Blaney, L. Environmental engineering and water. UMBC Sustainability across disciplines workshop (Baltimore, MD), June 5, 2014.
17. Blaney, L. Pharmaceuticals in water and wastewater: Analysis of trace concentrations and treatment with UV-based processes. Department of Civil Engineering, Indian Institute of Technology - Roorkee (Roorkee, India), January 19-20, 2014.
18. Blaney, L. UV-based processes for treatment of organoarsenicals in agricultural wastewater/runoff. American Chemical Society and Society of Chemical Industry sponsored Workshop on Sustainability and Water Quality: Remediation of Pesticides and Metal Contamination, University of Delhi (Delhi, India), January 15-18, 2014.
19. Blaney, L. Fluoroquinolone antibiotics in Maryland wastewater and surface water: Concerns and treatment options. Department of Geography and Environmental Engineering, Johns Hopkins University (Baltimore, MD), September 24, 2013.
20. Blaney, L. Wastewater treatment of pharmaceuticals. Chesapeake Biological Laboratory (Solomons, MD), July 8, 2013.
21. Blaney, L. Environmental engineering and sustainability. UMBC Sustainability Across the Disciplines Workshop (Baltimore, MD), June 6, 2013.
22. Blaney, L. Water is life: The UMBC Engineers Without Borders chapter conducts an assessment trip in Kenya. Center for Urban Environmental Research and Education (Baltimore, MD), April 5, 2013.
23. Blaney, L. Water treatment around the world. Masinde Muliro University of Science and Technology, Department of Chemistry (Kakamega, Kenya), January 22, 2013.
24. Blaney, L. Pharmaceuticals and personal care products in water: Analytical techniques and treatment options. Indo-US Workshop on Water Quality and Sustainability (Chennai, India), January 10, 2013.
25. Blaney, L.M. Pharmaceuticals in water: Innovative analytical techniques and advanced treatment processes. Symposium on the Chesapeake Bay, Human Health, and Eco-Toxicology (Baltimore, MD), May 15, 2012.
26. Blaney, L.M. Water treatment of pharmaceuticals: What are the major concerns? Lehigh University (Bethlehem, Pennsylvania), November 14, 2011.

27. Blaney, L.M. Pharmaceuticals in the environment: Sources, concerns, and treatment options. Center for Urban Environmental Research and Education, University of Maryland Baltimore County (Baltimore, Maryland), October 14, 2011.
28. Blaney, L.M. Oxidation of pharmacologically active compounds: Impacts of organic matter and elimination of residual pharmacological activity. Syracuse University (Syracuse, New York), March 3, 2011.
29. Blaney, L.M. Oxidation of pharmacologically active compounds: Impacts of organic matter and elimination of residual pharmacological activity. University of Notre Dame (South Bend, Indiana), February 23, 2011.
30. Blaney, L.M. Oxidation of pharmacologically active compounds: Impacts of organic matter and elimination of residual pharmacological activity. Texas Tech University (Lubbock, Texas), February 15, 2011.
31. Blaney, L.M. Oxidation of pharmacologically active compounds: Impacts of organic matter and elimination of residual pharmacological activity. University of Maryland, Baltimore County (Baltimore, Maryland), February 11, 2011.
32. Blaney, L.M. Oxidation of pharmacologically active compounds: Impacts of organic matter and elimination of residual pharmacological activity. McMaster University (Hamilton, Ontario, Canada), February 3, 2011.
33. Blaney, L.M.; SenGupta, A.K. A sustainable solution to the arsenic crisis in the Indian subcontinent. Chinese Academy of Science, Research Centre for Eco-Environmental Science (Beijing, China), July 3, 2007.

Conference Panels

1. Blaney, L. Graduate Student Association, Writing Seminar. Organized by Renetta Tull (Associate Vice Provost for Graduate Student Professional Development & Postdoctoral Affairs) and PROMISE, April 27, 2016.
2. Blaney, L. Keynote panel on interdisciplinary collaboration in research and work. UMBC Graduate Research Conference (Baltimore, MD), March 25, 2015.
3. Blaney, L. Water and human health – what scientists and advocates need to know. Choose Clean Water Conference (Baltimore, MD), June 5, 2013.

UMBC Groups

1. Blaney, L. Provide access* to clean water: Defining appropriate problems and technologies. UMBC Grand Challenges symposium (Baltimore, MD), February 17, 2017.
2. Blaney, L. Emerging contaminants and resources: Environmental solutions to global problems. BUILD a Bridge to STEM seminar (Baltimore, MD), June 15, 2016.
3. Blaney, L. Meet the faculty: Lee Blaney. UMBC Chapter of the American Institute for Chemical Engineers (Baltimore, MD), November 23, 2015.
4. Blaney, L. UMBC Engineers Without Borders. Hilltop Society Meeting, November 7, 2014.
5. Blaney, L. UMBC Engineers Without Borders. UMBC President's Board of Visitors Meeting, November 7, 2013.
6. Hughes, D.; Blaney, L. Updates on the UMBC Engineers Without Borders water project in Isongo, Kenya. College of Engineering and Information Technology (COEIT) Advisory Board Meeting, April 26, 2013.

7. Blaney, L. Faculty profile: Lee Blaney. UMBC Chapter of the American Institute for Chemical Engineers (Baltimore, MD), March 11, 2013.
8. Blaney, L.; Wilding, D.; Hughes, D.; Mullen, C. Recap of Isongo Assessment Trip. President's Council, February 6, 2013.
9. Blaney, L. Faculty profile: Lee Blaney. UMBC Chapter of the American Institute for Chemical Engineers (Baltimore, MD), March 26, 2012.

Guest Lectures

1. Blaney, L. Grand Challenges: Educating Globally-Competent Engineers. Guest lecture in GCSP 302 (Instructor: Dr. Marie desJardins, Computer Science and Electrical Engineering), April 21, 2017.
2. Blaney, L. Emerging contaminants and resources: Environmental solutions to global problems. Guest lecture in CHEM 101H (Instructor: Dr. Ian Thorpe, UMBC), November 3, 2016.
3. Blaney, L. Providing access to clean water: The need for integrated solutions. Presented to ENME 489, Global Engineering (Instructor: Marc Zupan, Mechanical Engineering) from Porto, Portugal (classroom of Portuguese students and simultaneously video-conferenced to UMBC students), October 3, 2016.
4. Blaney, L. Providing access to clean water: The need for integrated solutions. Presented to Honors College (Instructor: Jodi Kelber-Kaye), September 26, 2016.
5. Blaney, L. Clean water and waste water treatment – Disinfection processes. Presented to MEES 698, Marine and Environmental Biotechnology (Instructor: J. Sook Chung, Institute of Marine and Environmental Technology), May 4, 2016.
6. Blaney, L. Providing access to clean water: The need for integrated solutions. Presented to ENME 489, Global Engineering (Instructor: Marc Zupan, Mechanical Engineering), December 7, 2015.
7. Blaney, L. Providing access to clean water: The need for integrated solutions. Presented to Honors College (Instructor: Jodi Kelber-Kaye), September 28, 2015.
8. Blaney, L. Global Engineering – Appropriate technologies for the developing world. Presented to ENME 489, Global Engineering (Instructor: Marc Zupan, Mechanical Engineering), November 17, 2014.
9. Blaney, L. PPCPs in wastewater – detection and treatment. Presented to ES 204 (Instructor: Birthe Kjellerup), Goucher College, March 6, 2014.
10. Blaney, L. The ‘pharmacokinetics’ of wastewater treatment. Presented to ENCH 484 (Instructor: Mariajose Castellanos), April 15, 2013.
11. Blaney, L. Appropriate technologies for the developing world – Water. Presented to Global Studies 101 (Instructor: Brigid Starkey, Political Science), November 21, 2013.
12. Blaney, L. Global Engineering – Appropriate technologies for the developing world. Presented to ENME 489, Global Engineering (Instructor: Marc Zupan, Mechanical Engineering), November 27, 2013.

News and Media

1. The Michigan Daily, “Speaker at environmental conference stresses need for better communication outside of research lab” by Shikha Patel, June 23, 2017. Available at: <https://www.michigandaily.com/section/news/aeesp-conference>

2. UMBC News article, “UMBC faculty research works to reduce pollution in waterways” by Megan Hanks, May 15, 2017. Available at: <http://news.umbc.edu/umbc-faculty-research-works-to-reduce-pollution-in-waterways/>
3. UMBC News article, “UMBC’s 2017 NSF Graduate Research Fellows prepare for groundbreaking careers, from environmental engineering to computer science” by Megan Hanks, May 12, 2017. Available at: <http://news.umbc.edu/umbcs-2017-nsf-graduate-research-fellows-prepare-for-groundbreaking-careers-from-environmental-engineering-to-computer-science/> (mention, cover photo)
4. UMBC News article, “Lee Blaney receives NSF CAREER Award to address contaminants of emerging concern in urban streams” by Megan Hanks, March 28, 2017. Available at: <http://news.umbc.edu/lee-blaney-receives-nsf-career-award-to-address-contaminants-of-emerging-concern-in-urban-streams/>
5. UMBC News article, “UMBC expands partnership with Portugal’s University of Porto” by Sara Hansen, November 11, 2016. Available at: <http://news.umbc.edu/umbc-expands-partnership-with-portugals-university-of-porto/>
6. Mentioned in “Thousands gather at UMBC for historic 50th anniversary celebration” by Dinah Winnick. Available at: <http://news.umbc.edu/thousands-gather-at-umbc-for-historic-50th-anniversary-celebration/>. Accessed on September 21, 2016.
7. Blaney, L. Our environment is on drugs. YouTube video of GRIT-X talk during UMBC 50th anniversary celebration. Available at: <https://www.youtube.com/watch?v=bvCTiTeKmg>. Accessed on October 28, 2016.
8. European Commission, Science for Environment Policy. “Aquatic life needs further protection from effects of personal care products.” Story about our article [Hopkins and Blaney, 2016]. Available at: http://ec.europa.eu/environment/integration/research/newsalert/pdf/aquatic_life_protection_effects_personal_care_products_470na5_en.pdf. Accessed on September 21, 2016.
9. Atlas of Science. “Active ingredients in personal care products detected throughout the environment.” Story about our article [Hopkins and Blaney, 2016]. Available at: <http://atlasofscience.org/active-ingredients-in-personal-care-products-detected-throughout-the-environment/>. Accessed on October 28, 2016.
10. United States Department of Agriculture. Featured Research Project of the Forest Service, Northern Research Station. “Pharmaceutical and Personal Care Products in the Waste Stream.” Available at: <http://www.nrs.fs.fed.us/featured/2016/07/#research>. Accessed on October 28, 2016.
11. United States Department of Agriculture. Featured Research Program in Urban Natural Resource Stewardship. “Bioaccumulation of Pharmaceutical and Personal Care Products (PPCPs) in Urban Aquatic Food Webs.” Available at: http://www.nrs.fs.fed.us/urban/water_air_quality/bioaccumulation_pharmaceuticals/. Accessed on October 28, 2016.
12. UMBC News article, “Lee Blaney’s lab reimagines chicken litter challenge as an opportunity for sustainable farming” by Megan Hanks, April 20, 2016. Available at: <http://news.umbc.edu/blaney-lab-reimagines-chicken-litter-challenge-as-an-opportunity-for-sustainable-farming/>
13. C&EN article, “How to get the good stuff out of chicken manure” by Michael Torrice. C&EN 94(16), 21-22. Available at: <http://cen.acs.org/articles/94/i16/stuff-chicken-manure.html>
14. Source for C&EN article on “Putting enzymes in a cage to clean up the environment”, March 15, 2016. Available at: <http://acssandiego2016.cenmag.org/putting-enzymes-in-a-cage-to-clean-up-the-environment/>

15. UMBC News article, "UMBC students explain what environmental engineers do in video for international competition" by Megan Hanks, February 10, 2016. Available at: <http://news.umbc.edu/umbc-students-explain-what-environmental-engineers-do-in-video-for-international-competition/>
16. UMBC News article, "Lee Blaney's sustainability-focused engineering research examines the potential impact and value of waste streams" by Megan Hanks, January 13, 2016. Available at: <http://news.umbc.edu/lee-blaney-s-sustainability-focused-engineering-research-assesses-the-potential-impact-and-value-of-waste-streams/>
17. UMBC News article, "UMBC students explain what environmental engineers do in video for international competition" by Megan Hanks, December 23, 2015. Available at: <http://news.umbc.edu/umbc-students-explain-what-environmental-engineers-do-in-video-for-international-competition/>
18. UMBC News article, "Lee Blaney explains how technology can transform pollutants in chicken manure into a valuable product" by Megan Hanks, November 10, 2015. Available at: <http://news.umbc.edu/lee-blaney-explains-how-technology-can-transform-pollutants-in-chicken-manure-into-a-valuable-product/>
19. Voice of America interview, June 11, 2015. Available at: <http://www.voanews.com/media/video/chicken-manure-waste-produce-global-environmental-pollution/3050561.html>
20. Students improving water, sanitation, and hygiene in the developing world. TEDxUMBC, September 13, 2014. Available at: <https://www.youtube.com/watch?v=f9hmIRdnTTg>
21. Video interview, "UMBC in the Loop" program, June 12, 2014. Available at: http://www.youtube.com/watch?v=WQeotEGp5K8&list=PLnj_pHJHgqkUzC6AnxIvitzDxsclVk32_&index=2
22. Video interview, Choose Clean Water Conference (Baltimore, MD), June 5, 2013. Available at: https://www.youtube.com/watch?v=oBtIH8L_phA&feature=youtu.be
23. UMBC BreakingGround article, "UMBC Engineering Students Foster Development of Clean Water in Kenya" by Lee Blaney, March 26, 2013. Available at: <https://umbcbreakingground.wordpress.com/2013/03/26/umbc-engineering-students-foster-development-of-clean-water-in-kenya/>

SERVICE TO THE DEPARTMENT, UNIVERSITY, PROFESSION, AND COMMUNITY

Service to the Department

Teaching

Fall 2017	ENCH 445, Separation Processes [<i># students TBD</i>]
Summer 2017	GES 400/600, Climate change impacts at forest-water nexus (Costa Rica field course) [12 students]
Spring 2017	ENCH 640, Advanced Chemical Reaction Kinetics [17 students]
Fall 2016	ENCH 310, Environmental Chemistry [12 students]
Spring 2016	ENCH 640, Advanced Chemical Reaction Kinetics [6 students]
	ENCH 446, Process Engineering Economics and Design II (co-taught with other CBEE faculty) [45 students]
	ENCH 468, Research Projects [1 student]

Fall 2015	ENCH 310, Environmental Chemistry [10 students] ENCE 610, Environmental Chemistry [3 students]
Spring 2015	ENCH 446, Process Engineering Economics and Design II (co-taught with other CBEE faculty) [43 students] ENCH 648, Special Problems [1 student]
Fall 2014	ENCE 610, Environmental Chemistry [7 students]
Spring 2014	ENCH 412/ENCE 612, Environmental Physicochemical Processes [8/4 students] ENCH 446, Process Engineering Economics and Design II (co-taught with other CBEE faculty) [28 students] ENCH 468, Research Projects [1 student] ENCE 699, Environmental Independent Study [1 student] INDS 490, Interdisciplinary Studies: Capstone Project [1 student]
Fall 2013	ENCE 610, Environmental Chemistry [9 students] ENCH 648, Special Problems [1 student]
Spring 2013	ENCH 412/ENCE 612, Environmental Physicochemical Processes [5/2 students]
Fall 2012	ENCE 610, Environmental Chemistry [7 students] ENCE 699, Environmental Independent Study [1 student]
Spring 2012	ENCH 412/ENCE 612, Environmental Physicochemical Processes [18/7 students] ENCH 468, Research Projects [1 student]

Graduate Program Committee

2012 – 2015	Member, CBE Oral Qualifying Exam Committee
2011 – 2015	Member, CEE Oral Qualifying Exam Committee
2012 – 2015	Member, CBEE Graduate Admissions Sub-committee
2011 – 2015	Member, CBEE Graduate Program Committee
2012 – 2015	Member, CEE Written Qualifying Exam Committee (discontinued in 2015)
2012 – 2015	Member, CBE Written Qualifying Exam Committee (discontinued in 2015)
2013	Co-organizer, CEE Graduate Student Orientation
2012	Co-organizer, CEE Graduate Student Orientation

Undergraduate Program Committee

2016 – present	Advisor, Chemical Engineering (29 students)
2016 – present	Member, Gateway Subcommittee
2015 – present	Member, Awards Subcommittee

Other Committees

2017 – present	Chair, Assistant Professor Search Committee
2016 – present	Co-organizer, CBEE seminar series
2016 – present	Member, Workload Policy Committee

2015 – 2016	Member, Assistant Professor Search Committee
2014 – 2015	Member, Assistant Professor Search Committee (two positions)
2013 – 2014	Member, Assistant Professor Search Committee
2013	Member, Chairperson Search Committee
2011 – 2012	Member, Post-Doctoral Fellow Hiring Committee, Ghosh Laboratory

Service to the University

Mentoring

2016 – 2017	Mentor, Center for Women in Technology Scholars program Mentee: Megan Allison (Chemical Engineering)
2016	Mentor, BUILD a Bridge to STEM Summer Program
2015 – 2016	Mentor, Center for Women in Technology Scholars program Mentee: Tyler Boyle (Chemical Engineering)
2014 – 2015	Mentor, Center for Women in Technology Scholars program Mentee: Becca Glatt (Chemical Engineering)
2013 – 2014	Mentor, Center for Women in Technology Scholars program Mentee: Kourtney Rutkowski (Chemical Engineering, Environmental Engineering & Sustainability track)
2012 – 2014	Advisor, Interdisciplinary Studies (INDS) program Co-advisor for INDS student Suraj Vyas for a thesis titled, “Water Resource Management and Policy”
2012 – 2013	Mentor, Center for Women in Technology Scholars program Mentee: Holly Johnson (Mechanical Engineering)
2010 – 2011	Mentor, TREX program, The University of Texas at Austin
2010	Mentor, REU program, The University of Texas at Austin
2010	Mentor, GLUE program, The University of Texas at Austin

Leadership

2015 – present	Member, Goldwater scholarship selection committee (three CBEE students won Goldwater scholarships in 2016)
2015 – present	Member, HHMI/MARC U*STAR Steering Committee
2015 – present	Member, Center for Women in Technology Advisory Board
2015 – present	Member, COEIT Grand Challenges Scholars Program Faculty Advisory Board
2015 – present	Member, Quali Coeus Review Committee
2014 – present	Member, Shriver Center Faculty Advisory Board
2017	Member, Search Committee, Dean of College of Engineering and Information Technology
2013 – 2017	Member, Undergraduate Research Award Selection Committee
2016	Member, Search Committee, UMBC Director of Undergraduate Research

Advisor

2011 – present Advisor, UMBC Chapter of Engineers Without Borders
 2014 Advisor, BioChEGs (CBEE graduate student association)
 2014 Advisor, Chinese Student Association
 2012 Associate Member, UMBC Graduate Faculty

University Workshops

2016 Panelist, Undergraduate Research Award Workshop
 2015 Organizer/Presenter, How to Write an NSF Proposal workshop (invited by Dean Drake, Associate Vice President for Research, and Stan Jackson, Assistant Director of the Office for Sponsored Programs)
 2015 Panelist, Undergraduate Research Award Workshop
 2015 Panelist, Best of Center for Women in Technology Showcase
 2014 – 2015 Moderator, Undergraduate Research and Creative Achievement Day
 2012 Panelist, New Faculty Orientation Panel
 2011 Judge, Undergraduate Research Poster Exhibition, The University of Texas at Austin

Recruitment

2017 Meyerhoff Summer Bridge Program, Environmental Engineering Seminar and Laboratory Tour
 2016 Meyerhoff Summer Bridge Program, Environmental Engineering Introduction and Laboratory Tour
 2014 Member, UMBC recruitment team at the Southern Regional Educational Board Institute on Teaching and Mentoring (Atlanta, GA)
 2014 Panelist, UMBC recruitment event at Northeast High School (invitation from President Hrabowski; organized by Simon Stacey)
 2014 Interviewer, CWIT Scholar Selection Day
 2014 Sciences and Mathematics Academic Research Team, Carroll Community College, Laboratory Tour
 2013 Meyerhoff Summer Bridge Program, Environmental Engineering Introduction and Laboratory Tour
 2012 Mathematics Engineering Science Achievement (MESA) program, Johns Hopkins University Applied Physics Laboratory, Laboratory Tour

Professional Development

2016 Teaching Undergraduate Science (Hodges, 2015), Book Discussion
 2015 Advanced Media Training with Denise Graveline (invited by Dean Julia Ross)
 2014 Writing a Compelling Proposal for the Hrabowski Innovation Fund
 2013 Lunch with the Provost
 2013 Problem-Based Learning
 2012 Effective Instruction for STEM Disciplines (Mastascusa *et al.*, 2011)

2012	Teaching for Critical Thinking (Brookfield, 2012)
2012	Teaching Naked (Bowen, 2012), Book Discussion Session I
2012	Teaching Naked (Bowen, 2012), Book Discussion Session II
2011	Great Teachers Talking About Teaching
2011	New Faculty Members' Guide to Research and Funding
2011	Balancing Teaching and Research

Teaching Assistance

2008 – 2011	Teaching Assistant, The University of Texas at Austin Environmental Sampling and Analysis (CE 370K; Spring semesters) Physical / Chemical Treatment Processes (CE 385L; Fall semesters)
2005 – 2007	Teaching Assistant, Lehigh University Professional Development (CEE 203) Groundwater Hydrology and Contaminant Transport (CEE 323) Transportation Engineering (CEE 207) Engineering/Architectural Graphics and Design (CEE 10) Introduction to Engineering Practice (ENGR 5)

Service to the Profession

Editorship

2014 – present	Associate Editor, Current Pollution Reports, Springer
2015	Guest Associate Editor, Journal of Hazardous Materials, Special Issue on “Advances in Analysis, Treatment Technologies, and Environmental Fate of Emerging Contaminants”

Leadership

2016 – present	Co-chair, AEESP Membership and Demographics Committee
2014 – 2016	Chair, AEESP Membership and Demographics Committee
2013 – 2015	Member, Engineers Without Borders Faculty Leadership Council
2013 – 2014	Co-chair, AEESP Membership and Demographics Committee
2012 – 2013	Maryland State Representative, Engineers Without Borders USA
2010	Passed Fundamentals of Engineering Exam

Conferences and Workshops

2017	Co-chair and Presider, Spring ACS Symposium entitled, “Contaminants of Emerging Concern in Natural and Engineered Systems”
2017	Co-chair and Presider, Spring ACS Symposium entitled, “Advances in Resource Recovery and Conservation in Water Systems”
2017	Organizer and Judge for Environmental Chemistry Division Certificate of Merit competition, Spring ACS Meeting

2016	Co-chair and Presider, Fall ACS Symposium entitled, “Disinfection By-Products: What Have We Learned About Dissolved Organic Matter Precursors?”
2016	Co-chair and Presider, Spring ACS Symposium entitled, “Treatment of Contaminants of Emerging Concern and their Transformation Products”
2016	Judge for Environmental Chemistry Division Certificate of Merit competition, Spring and Fall ACS Meetings
2015	Organizer and Judge for Environmental Chemistry Division Certificate of Merit competition, Fall ACS Meeting
2014	Co-chair and Presider, Fall ACS Symposium entitled, “Occurrence, Detection, Fate and Removal of Pharmaceutical and Personal Care Products and Endocrine Disrupting Chemicals”
2014	Judge for Environmental Chemistry Division Certificate of Merit competition, Fall ACS Meeting
2014	Member, US Delegation to Joint Workshop on Remediation of Pesticides and Metal Contamination (Delhi, India), January 15-18, 2014
2013	Co-chair and Presider of Spring ACS Symposium entitled, “Occurrence, Detection, Fate and Removal of Pharmaceutical and Personal Care Products in Potable Water Sources”
2013	Judge for Environmental Chemistry Division Certificate of Merit competition, Spring ACS Meeting
2013	Member, US Delegation to NSF-sponsored Indo-US Workshop on Water Quality and Sustainability (Chennai, India), January 7-11, 2013
2010	Session Chair, Spring ACS Meeting for ‘General Geochemistry Papers’

Reviewer

Panels

Environmental Protection Agency
Environmental Research & Education Foundation
National Science Foundation
North Carolina Water Resources Research Institute

Journal articles

ACS Sustainable Chemistry & Engineering
Biotechnology and Bioengineering
Chemical Engineering Journal
Chemosphere
Compost Science & Utilization
Current Pollution Reports
Environmental Engineering Science
Environmental Pollution
Environmental Science & Technology
Environmental Science & Technology Letters
Environmental Science and Pollution Research

Industrial & Engineering Chemistry Research
Journal of Environmental Analytical Chemistry
Journal of Environmental Management
Journal of Environmental Quality
Journal of Environmental Science and Engineering
Journal of Hazardous Materials
PDA Journal of Pharmaceutical Science and Technology
Science of the Total Environment
Separation and Purification Technology
Trends in Environmental Analytical Chemistry
Water Research

Book chapters

Elsevier

Conference abstracts/papers

American Chemical Society
International Water Association

Organization memberships

American Chemical Society (ACS)
American Water Works Association (AWWA)
Association of Environmental Engineering and Science Professors (AEESP)
Chesapeake Water Environment Association (CWEA)
Engineers Without Borders (EWB)
International Water Association (IWA)
Water Environment Federation (WEF)

Service to the Community

2014 – present Red Cross certification for Adult First Aid/CPR/AED
2009 – 2011 Board of Directors, Wheatsville Food Coop (\$14m/year), Austin, TX
Secretary (2010 – 2011)
2010 Volunteer, Water For People, World Water Corps, Blantyre, Malawi
2008 – 2009 Volunteer, Engineers Without Borders, The University of Texas at Austin,
Limbe, Cameroon
2004 – 2007 Mentor, STAR Academies, Lehigh University