Arianne A. Bazilio, Ph.D.

Environmental Science Program and Department of Chemistry, Trinity College
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EDUCATION

Ph.D. (2017)	Environmental Engineering, University of Massachusetts-Amherst, Conferred February 2018 Dissertation: *The Role of Manganese Oxide in the Formation of Disinfection Byproducts in Drinking Water Treatment* Advisor: John E. Tobiason
M.S. (2013)	Environmental Engineering, University of Massachusetts-Amherst, Amherst, MA
B.S. (2009)	Chemical and Biological Engineering, minor in Mathematics New York University, Tandon School of Engineering Formerly Polytechnic University, Brooklyn, NY

PROFESSIONAL POSITIONS

2018 – Present	Assistant Professor, Environmental Science Program and Department of Chemistry, Trinity College, Hartford, CT
2017 – 2018	Postdoctoral Fellow, Department of Civil and Environmental Engineering, University of Texas at San Antonio, San Antonio, TX
2016 – 2017	Visiting Instructor, Department of Chemistry, Bates College, Lewiston, ME
2015	Instructor, College of Engineering, University of Massachusetts-Amherst, Amherst, MA
2010 – 2016	Graduate Research Assistant, Department of Civil and Environmental Engineering, University of Massachusetts-Amherst, Amherst, MA
2009 – 2010	Environmental Engineering Intern, Research & Regulatory Planning Section, Bureau of Wastewater Treatment, New York City Department of Environmental Protection, Corona, NY
2005 – 2008	Teaching Assistant, General Engineering, New York University, Brooklyn, NY

FELLOWSHIPS, HONORS AND AWARDS

2015 New England Water Works Association Joseph A. Murphy Scholarship
2014 American Association of University Women International Fellowship
2012 Bernard B. Berger Award for Academic Excellence and Commitment to Research in Environmental Engineering, University of Massachusetts Amherst
2010 Perrell Fellowship, Environmental and Water Resources Engineering, University of Massachusetts Amherst
2006 Dr. Joseph Jacobs Scholarship, NYU Tandon School of Engineering

PUBLICATIONS AND PRESENTATIONS

Scientific Peer Reviewed Publications

Bazilio, A.A.; Kamniski, G.S.; Larsen, Y.; Mai, X.; Tobiason, J.E. Implementation of a Second-Stage Contactor for Manganese Removal. *Journal American Water Works Association* **2016**, *108*, E606-E614.

Tobiason, J.E.; Bazilio, A.; Goodwill, J.; Mai, X.; Nguyen, C. Manganese Removal from Drinking Water Sources. *Current Pollution Reports* **2016**, *2*,168-177.

Other Peer Reviewed Publications

Bazilio, A.; Ryan, A.; Welborn, J. Science Café: An Affordable, Easy- to- Implement Model that Introduces Young Girls to STEM Related Topics, Careers and Role Models. *Science Scope* **2016**, *40*, 14-17.

Journal Publications In Preparation

Bazilio, A.; Wu, C.; Park, C.; Reckhow, D.A. Tentative Title: Biodegradation of Disinfection Byproducts by Microorganisms in Real Drinking Water Distribution Systems.

Reports

Reckhow, D.A., Park, C., Wu, C., Bazilio, A, Yu, Y, Srinivasan, V, Mitch, W, Skadsen, J, 2016. Fate of Non-Regulated Disinfection By-Products in Distribution Systems, Report #4242, Water Research Foundation, Denver CO.

Conference Oral Presentations (presenter name underlined)

Bazilio, A., Mai, X., Nguyen, C., Tobiason, J.E, "Impact of Manganese Oxide-coated Granular Filter Media on Disinfection Byproduct Formation", American Chemical Society 256th National Meeting, Boston, MA, August 19-23, 2018 (Accepted)

Bazilio, A., Tobiason, J.E, Mai, X., "Manganese Removal and Disinfection Byproduct Formation: The Full and Bench Scale", AWWA Annual Conference, Chicago, IL, June 19 - 22, 2016

Bazilio, A., Tobiason, J.E, "Manganese Removal and Disinfection Byproduct Formation", American Chemical Society 250th National Meeting, Boston, MA, August 16-20, 2015

Tobiason, J.E., Kamniski, G., Bazilio, A. and Goodwill, J., "High-Rate Post Filter Contactors for Mn Removal: From Research to Full-Scale", New England Water Works Association 133rd Annual Conference, Rockport, ME, September 21-24, 2014

Yu, Y., Reckhow, D.A., Bazilio, A., "The Fate of Haloacetamides in Drinking Waters", AWWA Annual Conference, Boston, MA, June 2014

Tobiason, J.E., Kamniski, G., Bazilio, A. and Goodwill, J., "Evaluation of First-Year Performance of Full-Scale Second-Stage Contactors for Manganese Removal from Groundwater", AWWA Annual Conference, Boston, MA, June 2014

Bazilio, A., Park, C., Reckhow, D.A., "Biodegradation of Disinfection Byproducts in Drinking Water Distribution Systems," AWWA Annual Conference, Denver, CO, June 2013

Presentations – Invited

Bazilio, A., Dillingham, M.J, Ewing, H., "Relationship between Phosphorus and Metals in Lake Auburn", oral presentation, ACS Award for Research at an Undergraduate Institution: Symposium in honor of Maria Hepel, American Chemical Society 253rd National Meeting, San Francisco, California, April 2-6, 2017.

Bazilio, A., "Manganese Oxide as a Catalyst in Drinking Water Treatment", Cornell University, Environmental Processes seminar series, November, 2015.

Bazilio, A., "Drinking Water Treatment", AAUW Storrs-Willimantic CT Branch Meeting, 1st April, 2014.

COURSES

Bates College, Lewiston, ME

Department of Chemistry

- Atomic and Molecular Structure (lecture and lab) - CHEM 107A (Fall 2016)
- Analytical Spectroscopy and Electrochemistry - CHEM 223 (Fall 2016)
- Separation Science (lecture and lab) - CHEM 212 (Winter 2017)
- Advanced Chemical Measurement Laboratory (lecture and lab) - CHEM s37 (Short Term 2017)
- Phosphorus in Lake Auburn (independent study) - CHEM s50-A Short Term 2017)

University of Massachusetts Amherst, Amherst, MA

Department of Civil and Environmental Engineering

- Water Chemistry - CEE 680; Guest Lecturer (Instructor: David A. Reckhow, Spring 2016)
- Physical and Chemical Treatment Processes - CEE 672; Teaching Assistant (Instructor: John Tobiason; Spring 2014, 2015, 2016)

College of Engineering

- Freshman Seminar - ENGIN 191; Instructor (Fall 2015)

New York University, Tandon School of Engineering, Brooklyn NY

General Engineering

Introduction to Engineering & Design - EG 1003; Teaching Assistant (Fall 2005 to Fall 2008).

UNDERGRADUATE RESEARCH MENTEES

*co-mentor

- Alani Hall* - B.S. Civil & Environmental Engineering, University of Texas San Antonio, Anticipated graduation May 2021
- Andrea Mertins* - B.S. Civil & Environmental Engineering, University of Texas San Antonio, Anticipated graduation May 2020
- Crista Cerda * - B.S. Civil & Environmental Engineering, University of Texas San Antonio, Anticipated graduation May 2020
- Alexander Manjarres* - B.S. Civil & Environmental Engineering, University of Texas San Antonio, Anticipated graduation December 2019
- Phathutshedzo Rambau* – B.S. Chemistry, Bates College; Analysis of neonictonoids pesticides in honey and beeswax; Graduated May 2017
- Halie Lange* – B.S. Environmental Chemistry, Bates College; Nutrients in Lake Auburn, Maine; Graduated May 2017
- Kyle Zollo-Venecek – B.S. Chemistry, Bates College; The Relationship between Phosphorus, Iron, and Aluminum in Lake Auburn, Maine; Graduated May 2017

OUTREACH ACTIVITIES

- Organizer and Volunteer for a Water Treatment Demonstration for an All-Female STEM Group from Palacios Texas UTSA Visit (2018)
- Graduate Women in STEM Outreach Co-chair, University of Massachusetts (2014-2016)
- Organizer and Volunteer for Sound Bites (STEM) Café with Amherst Regional Middle school (2014- 2016)
- Organizer for Science Talks with Four Rivers Charter School of Greenfield MA (2015, 2016)
- Volunteer for UMass Women in Engineering and Computer Career Day for High School Girls (2015)
- Organizer and Volunteer for Workshops with Girls Inc. of Holyoke Eureka! students (2014 – 2015)
- Organizer and Volunteer for DNA extraction workshop with students from Springfield Urban League (2014)