

## KAYLEIGH MILLERICK

### CV of Recent Activities

Assistant Professor  
Civil, Environmental & Construction Engineering  
Texas Tech University  
Lubbock, TX 79409

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### Professional Preparation

Florida State University, Civil Engineering, B.S., 2007  
University of Illinois at Urbana-Champaign, Environmental Engineering, M.S., 2009  
University of Illinois at Urbana-Champaign, Environmental Engineering, Ph.D., 2014  
University of Illinois at Urbana-Champaign, Environmental Engineering, Post Doctoral  
Researcher, 2014

### Academic Appointments

January 2015 to Present: Assistant Professor, Department of Civil, Environmental, &  
Construction Engineering, Texas Tech

### Non-Academic and Practical Experience

Site Manager, Petroleum Cleanup Section 1, Florida Department of Environmental Protection  
(Tallahassee, FL), 2006-2007  
Post Doctoral Researcher position was a joint appointment between the University of Illinois at  
Urbana-Champaign and the City of Moline Water Treatment Facility (Moline, IL)

### Peer-Reviewed Publications

1. Niedzwiecka, J.; Drew, S.; Schlautman, M.; Millerick, K.A.; Grubbs, E.; Tharayil, N.; Finneran, K.T. "Iron and electron shuttle mediated (bio)degradation of the military next generation insensitive munition 2,4-dinitroanisole (DNAN)" Accepted, *Environmental Science and Technology*, **2017**.
2. Millerick, K.A.; Johnston, J.; Finneran, K.T. "Photobiological Degradation of Cyclic Nitramines using *Rhodobacter sphaeroides*," *Chemosphere* **2016**, 159, 138-144.
3. Kwon, M.J.; Wei, N.; Millerick, K.A.; Popovic, J.; Finneran, K.T. "Clostridium geopurificans Strain MJ1 sp nov., A Strictly Anaerobic Bacterium that Grows via Fermentation and Reduces the Cyclic Nitramine Explosive Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)." *Current Microbiology* **2014**, 68, 743-750.
4. Reinauer, K.M.; Popovic, J.; Millerick, K.A.; Weber, C.D., K.A.; Kwon, M.J.; Wei, N.; Finneran, K.T. "*Hydrogenophaga carboriunda* sp. nov., a tertiary butyl alcohol-oxidizing, psychrotolerant aerobe derived from granular activated carbon (GAC)." *Current Microbiology* **2014**, 68, 510-517.
5. Millerick, K.A.; Drew, S.R.; Finneran, K.T. "Electron Shuttle-Mediated Biotransformation of RDX Adsorbed to Granular Activated Carbon (GAC)." *Environmental Science & Technology* **2013**, 47, 8743-8750.

## Conference and Invited Presentations

1. Pagnozzi, G., Reible, D.D., Millerick, K. *Influence of Capping Material Type upon Biodegradation of Polycyclic Aromatic Hydrocarbons in Sediments*. Oral presentation, Battelle Bioremediation Conference. Miami, FL: May 23, 2017.
2. Murray A., Yan, W., Millerick, K. *Assessment of Microbial Stress in Systems Containing Surface Sulfidated Fe(0) Particles*. Poster presentation, Texas Tech University Undergraduate Research Symposium. Lubbock, TX: March 30, 2017.
3. Pagnozzi, G., Reible, D.D., Millerick, K. *Effect of capping materials on naphthalene transformation in model bioactive capping systems*. Oral presentation, Battelle Sediments Conference. New Orleans, LA: January 10 2017.
4. Millerick, K. *Influence of GAC Surface Treatments on Microbe-Carbon Interactions*. Third International Symposium of Biotechnology Processes, The University of Guadalajara, Guadalajara, Mexico: November 11, 2016.
5. Redwan, A. M., Millerick, K. *Effect of surface treatment on GAC as an electron acceptor in microbial transformation reactions*. Poster Presentation, American Chemical Society, Philadelphia, PA: August 24, 2016.
6. Millerick, K. *Microbially-mediated transformations for water cleanup*. Oral presentation, Agriculture in Arid Areas Conference, Office of International Affairs, Texas Tech ICC, Lubbock, TX: November 5, 2015.

## Technical Reports

1. Pagnozzi, G.; Reible, D.D.; Millerick, K., *Bioactive Sediment Capping, Phase II: Degradation of Naphthalene under Different Terminal Electron Accepting Conditions in Different Sediment Capping Materials*. (Technical Report). Submitted October 2016.
2. Millerick, K.; Nguyen, T.; Liu, W.T. *Recommendations for the City of Moline's Drinking Water Plant: A Study from December 2013 to November 2014*. (Technical Report). Submitted January 30, 2015.

## Awards and Honors

1. Dr. Charles L. Burford Faculty Award for Superior Undergraduate Teaching. TTU Whitacre College of Engineering. (November 17, 2016).
2. ASCE ExCEED Fellow, American Society of Civil Engineers. (June 21, 2015).

## Service Activities

1. Faculty advisor of the Texas Tech chapter of Engineers Without Borders. We are developing a biological filter for implementation in a community in Panama, 2015 to present.
2. Outreach for Lubbock middle school and high school females: Examples include workshops at "Science – It's a Girl Thing!" and "Catch the Engineering Bug!", both at TTU, and hosting a high school female for five weeks in my laboratory.
3. Ad hoc reviewer for *Environmental Science and Technology*; *Journal of Hazardous Materials*; *New Biotechnology*; *Water Environment Research*; *Water, Air, & Soil Pollution*

## Current Membership in Professional Organizations

- Association of Environmental Engineering & Science Professors (AEESP, 2013 to present)
- American Water Works Association (AWWA, 2014 to present)
- American Chemical Society (ACS, 2010 to present)
- American Society of Civil Engineers (ASCE). Student (2004 to 2007) and Associate (2015 to present).