#### **Mark James Krzmarzick**

Associate Professor School of Civil and Environmental Engineering Oklahoma State University 405-744-9308 Mark.krzmarzick@okstate.edu

### (a) Professional Preparation

Oklahoma State University, Stillwater OK, Civil & Environmental Engineering	B.S. 2005
University of Minnesota, Minneapolis MN, Civil Engineering	M.S. 2008
University of Minnesota, Minneapolis MN, Civil Engineering	Ph.D. 2011
University of Minnesota, Minneapolis MN, Civil Engineering, Post Doc.	2011-2012
University of Hawaii, Honolulu HI, Civil & Environmental Eng. Visiting Scholar	2011-2012
University of Arizona, Tucson AZ, Chemical & Environmental Eng., Post Doc.	2012-2013

## (b) Appointments

- 2019-Present Associate Professor, School of Civil & Environmental Engineering, Oklahoma State University
- 2013-2019 Assistant Professor, School of Civil & Environmental Engineering, Oklahoma State University

#### (c) Products

#### (i) Related Products

- Lozano, T. M., A. L. McCutchan, & M. J. Krzmarzick. (2019) Hydraulic fracturing fluid compositions induce differential enrichment of soil bacterial communities. *Environmental Engineering Science*, 36:385-395.
- Krzmarzick, M. J., D. K. Taylor, X. Fu, & A. L. McCutchan. (2018) Diversity and niche of *Archaea* in bioremediation. *Archaea*, Article ID 3194108.
- Lim, M. L., M. D. Brooks, M. A. Boothe, & M. J. Krzmarzick. (2018) Novel bacterial diversity is enriched with chloroperoxidase-reacted organic matter under anaerobic conditions. *FEMS Microbiology Ecology* 94:fiy050
- Li, G., R. Sierra-Alvarez, D. Vilcherrez, S. Weiss, C. Gill, M. J. Krzmarzick, L. Abrell, & J. A. Field. (2016) Nitrate reverses severe nitrite inhibition of anaerobic ammonium oxidation (Anammox) activity in continuously-fed bioreactors. *Environmental Science & Technology* 50(19):10518-10526.
- Smith, B. J. K., M. A. Boothe, B. A. Fiddler, T. M. Lozano, R. K. Rahi & M. J. Krzmarzick. (2015) Enumeration of organohalide respirers in municipal wastewater anaerobic digesters. *Microbiology Insights* 8(S2):9-14.

## (ii) Other Significant Products

Fu, X., M. J. Krzmarzick. Trace metal concentrations impact the relative abundances of bacterial-sourced disinfection byproduct precursors. *Submitted, In Review*.

- Krzmarzick, M. J., R. Sierra, J. Chorover, R. Khatiwada, & J. A. Field. (2015)

  Biotransformation and degradation of the insensitive munition compound, 3-nitro-1,2,4-triazol-5-one (NTO), by soil bacterial communities. *Environmental Science and Technology* 49:5681-5688.
- Krzmarzick, M. J., H. R. Miller, T. Yan, & P. J. Novak. (2014) Novel *Firmicutes* group implicated in the dechlorination of two chlorinated xanthones, analogues of natural organochlorines. *Applied and Environmental Microbiology*, 80:1210-1218.
- Krzmarzick, M. J., P. J. McNamara, B. B. Crary, & P. J. Novak. (2013) Abundance and diversity of organohalide-respiring bacteria in lake sediments across a geographical sulfur gradient. *FEMS Microbiology Ecology* 84:248-258.
- Krzmarzick, M. J., B. B. Crary, J. J. Harding, O. O. Oyerinde, A. C. Leri, S. C. B. Myneni, & P. J. Novak. (2012) Natural niche for organohalide-respiring *Chloroflexi*. *Applied and Environmental Microbiology* 78:393-401.

# (d) Examples of Synergistic Activities

- i. Proposal Reviewer: Review Panel for National Science Foundation (NSF) programs (2014-2016, 2018-2019); Ad-hoc proposal reviewer for NSF programs (2015-2018); Ad-hoc proposal reviewer for New Jersey Water Resources Research Institute (2016); Ad-hoc proposal reviewer for Department of Defense programs (2017-2018).
- **ii.** Publications Committee Member of Association of Environmental Engineering and Science Professors (AEESP) (2015-present);
- **iii.** Faculty Mentor for First2Go, McNair Scholars Program, and OK LSAMP; Oklahoma State University programs to provide support for underrepresented students in STEM
- iv. Section Editor (Environmental Microbiology) for the journal Microbiology Insights
- v. Manuscript reviewer for 25 journals (48 manuscripts from 2013-2019)