Elizabeth C. Butler

Education

Ph.D. Environmental Engineering, University of Michigan, 1998
M.S. Civil Engineering, University of Maryland, 1991
B.S. Chemistry, University of Maryland, 1985

Professional Experience

8/99-Present	Associate (7/05-present) and Assistant Professor (8/99-6/05), School of Civil Engineering and Environmental Science, University of Oklahoma, Norman, Oklahoma
1/99-6/99	Research Fellow, Department of Civil and Environmental Engineering, University of Michigan, Ann Arbor, Michigan
1991-1998	Graduate Student Fellow and Research/Teaching Assistant, Department of Civil and Environmental Engineering, University of Michigan, Ann Arbor, Michigan
1986-1991	Environmental Scientist, Halliburton NUS Corporation (now Tetra Tech NUS, Inc.), Gaithersburg, Maryland
1985-1986	Junior Staff Scientist, Dynamac Corporation, Rockville, Maryland
1984-1985	Laboratory Technician, U. S. Department of Agriculture, Beltsville Agricultural Research Center, Beltsville, Maryland

Peer-Reviewed Journal Articles

1. Shao, H., Butler, E. C. (2009), The relative importance of abiotic and biotic transformation of carbon tetrachloride in anaerobic soils and sediments, *Soil Sed. Contam.* 18, 455-469.
2. Shao, H., Butler, E. C. (2009), The influence of soil minerals on the rates and products of abiotic transformation of carbon tetrachloride in anaerobic soils and sediments, *Environ. Sci. Technol.* 43, 1896-1901.
3. Liang, X., Philp, R. P., Butler, E. C. (2009), Kinetic and isotope analyses of tetrachloroethylene and trichloroethylene degradation by model Fe(II)-bearing minerals, *Chemosphere* 75, 63-69.
4. Dong, Y., Liang, X., Krumholz, L. R., Philp, R. P., Butler, E. C. (2009), The relative contributions of abiotic and microbial processes to the transformation of tetrachloroethylene and trichloroethylene in anaerobic microcosms, *Environ. Sci. Technol*. 43, 690-697.
5. Zhu, X., Nanny, M. A., Butler, E. C. (2008), Photocatalytic oxidation of aqueous ammonia in model gray waters, *Water Research* 42, 2736-2744.
6. Liang, X., Dong, Y., Kuder, T., Krumholz, L. R., Philp, R. P., Butler, E. C. (2007), Distinguishing abiotic and biotic transformation of tetrachloroethylene and trichloroethylene by stable carbon isotope fractionation, *Environ. Sci. Technol.* 41, 7094-7100.
7. Shao, H., Butler, E. C. (2007), The influence of iron and sulfur mineral fractions on carbon tetrachloride

8. Zhu, X., Nanny, M. A., Butler, E. C. (2007), Effect of inorganic anions on the titanium dioxide-based photocatalytic oxidation of aqueous ammonia and nitrite, *Journal of Photochemistry and Photobiology A: Chemistry* 185, 289-294.
9. Robberson, K. A., Waghe, A. B., Sabatini, D. A., Butler, E. C. (2006), Adsorption of the quinolone antibiotic nalidixic acid onto anion-exchange and neutral polymers, *Chemosphere* 63, 934-941.
10. Hanoch, R. J., Shao, H., Butler, E. C. (2006), Transformation of carbon tetrachloride by bisulfide treated goethite, hematite, magnetite, and kaolinite, *Chemosphere* 63, 323-334.
11. Zhu, X., Castleberry, S. R., Nanny, M. A., Butler, E. C. (2005), Effects of pH and catalyst concentration on photocatalytic oxidation of aqueous ammonia and nitrite in titanium dioxide suspensions, *Environ. Sci. Technol.* 39, 3784-3791.
12. Támara, M. L., Butler, E. C. (2004), Effects of iron purity and groundwater characteristics on rates and products in the degradation of carbon tetrachloride by iron metal, *Environ. Sci. Technol*. 38, 1866-1876.
13. Butler, E. C., Hayes, K. F. (2001), Factors influencing rates and products in the transformation of trichloroethylene by iron sulfide and iron metal, *Environ. Sci. Technol*. 35, 3884-3891.
14. Butler, E. C., Hayes, K. F. (2000), Kinetics of the transformation of halogenated aliphatic compounds by iron sulfide, *Environ. Sci. Technol*. 34, 422-429.
15. Butler, E. C., Hayes, K. F. (1999), Kinetics of the transformation of trichloroethylene and tetrachloroethylene by iron sulfide, *Environ. Sci. Technol*. 33, 2021-2027.
16. Butler, E. C., Hayes, K. F. (1998), Micellar solubilization of non-aqueous phase liquid contaminants by nonionic surfactant mixtures: Effects of sorption, partitioning, and mixing, *Water Research* 32, 1345-1354.
17. Butler, E. C., Hayes, K. F. (1998), Effects of solution composition and pH on the reductive dechlorination of hexachloroethane by iron sulfide, *Environ. Sci. Technol.* 32, 1276-1284.
18. Butler, E. C., Davis, A. P. (1993), Photocatalytic oxidation in aqueous titanium dioxide suspensions: The influence of dissolved transition metals, *J. Photochem. Photobiol. A: Chem*. 70, 273-283.

Honors and Awards

- University of Oklahoma College of Engineering Alumni Teaching Award (Fall 2008)
- *Environmental Science & Technology* Excellence in Review Award (2008)
- University of Oklahoma School of Civil Engineering and Environmental Science George W. Tauxe Outstanding Professor Award (2002)
- National Science Foundation CAREER Award (2001-2006)
- University of Oklahoma Junior Faculty Research Award (2001)