

Alison M. Cupples - Biographical Sketch

Assistant Professor, Civil and Environmental Engineering, A129 Research Engineering Complex,
Michigan State University, East Lansing, MI 48842, Phone (517) 432 3370, cupplesa@egr.msu.edu,
<http://www.egr.msu.edu/~cupplesa/>

Professional Preparation

University of East Anglia (England)	Environmental Sciences	B.S., 1997
University of Illinois	Natural Resources and Environmental Sciences	M.S., 1999
Stanford University	Environmental Engineering and Science	Ph. D., 2003
USDA-ARS	Environmental Microbiology	Postdoctoral, 2003-2006

Appointments

1997-1999, Research Assistant, Natural Resources and Environmental Sciences, University of Illinois.
1999-2003, Research Assistant, Civil and Environmental Engineering, Stanford University.
2003-2006, Postdoctoral Fellow (microbiologist), USDA-ARS, Urbana, IL.
January 2006 – present, Assist. Prof., Civil and Environmental Engineering, Michigan State University.

Peer Reviewed Publications

- Cupples, A. M. 2008.** Real-time PCR quantification of *Dehalococcoides* populations: methods and applications. *Journal of Microbiological Methods*, 72: 1-11.
- Cupples, A. M., E. A. Shaffer, J. C. Chee-Sanford, and G. K. Sims. 2007.** DNA buoyant density shifts during ¹⁵N DNA stable isotope probing. *Microbiological Research*, 162: 328-334.
- Cupples, A. M. and G. K. Sims. 2007.** Identification of *in situ* 2,4-dichlorophenoxyacetic acid-degrading soil microorganisms using DNA-stable isotope probing, *Soil Biology and Biochemistry*, 39: 232-238.
- Cupples, A. M., R. A. Sanford, and G. K. Sims. 2005.** Dehalogenation of the herbicides bromoxynil (3,5-dibromo-4-hydroxybenzotrile) and ioxynil (3,5-diiodino-4-hydroxybenzotrile) by *Desulfotobacterium chlororespirans*. *Applied and Environmental Microbiology*. 71: 3741-3746.
- Cupples, A. M., A. M. Spormann and P. L. McCarty. 2004.** Comparative evaluation of chloroethene dechlorination to ethene by *Dehalococcoides*-like microorganisms. *Environmental Science and Technology*, 38: 4768-4774.
- Cupples, A. M., A. M. Spormann and P. L. McCarty. 2004.** Vinyl chloride and *cis*-dichloroethene dechlorination kinetics and microorganism growth under substrate limiting conditions. *Environmental Science and Technology*, 38: 1102-1107.
- Cupples, A. M., A. M. Spormann, and P. L. McCarty. 2003.** Growth of a *Dehalococcoides*-like microorganism on vinyl chloride and *cis*-dichloroethene as electron acceptors as determined by competitive PCR. *Applied and Environmental Microbiology*. 69: 953-959.
- Cupples, A. M., G. K. Sims, R. P. Hultgen and S. E. Hart. 2000.** Effect of soil conditions of the degradation of chloransulam-methyl. *Journal of Environmental Quality* 29: 786- 794.
- Sims, G. K. and **A. M. Cupples. 1999.** Factors controlling degradation of pesticides in soil. *Pesticide Science* 55: 598-601.
- David, M. B., **A. M. Cupples**, G. B. Lawrence, G. Shi, K. Vogt and P. M. Wargo. 1998. Effect of chronic nitrogen additions on soil nitrogen fractions in Red Spruce stands. *Water, Air and Soil Poll.* 105: 183-192.

Conference Proceedings and Book Reviews

Sims, G. K., R. P. Hultgren, **A. M. Cupples**, and R. J. Hudson. 2001. Role of ionization in bacterial uptake and soil sorption of agrochemicals. pp. 268-270 In Proc. 3rd Internat. Conf. on Groundwater Quality, Univ. of Sheffield, Sheffield, UK.

Hultgren, R. P., E. Elverson, **A. M. Cupples**, R. J. Hudson, and G. K. Sims. 2000. Bacterial uptake and soil sorption of ionizable agrochemicals. In Specialty Chemicals. Symp. Proc. Am. Chem. Soc. 40(1):192-194.

Cupples, A. M. (book review) Principles and Application of Soil Microbiology, 2nd Edition (edited by D. M. Sylvia, J. J. Fuhrmann, P. G. Hartel, and D. A. Zuberer). Journal of Environmental Quality, 30:731-732.

Teaching Experience

Michigan State University, Department of Civil and Environmental Engineering

- o CE 487 Microbiology for Environmental Health Engineers
- o CE 280 Principles of Environmental Engineering and Science

University of Illinois, Department of Natural Resources and Environmental Sciences, 2003

- o Guest lectures in soil microbiology.

Stanford University, Department of Civil and Environmental Engineering, 2001.

- o Teaching assistant for environmental microbiology (graduate & undergraduates).

Professional Society Membership

American Society for Microbiology, Soil Science Society of America, Association of Environmental Engineering and Science Professors, Center for Water Sciences (MSU).

Awards and Fellowships

Two USDA-ARS awards for superior research in environmental microbiology (2005 and 2006)

Research Assistantships, tuition & stipend, Stanford University (1999-2003), UIUC (1997-1999)

Graduate Fellowship, UIUC (1998-1999)

Alumni Award for Graduate Student Travel, UIUC (1998)

Advisees

I currently advise three graduate students (Ph.D) and a postdoctoral fellow:

Weimin Sun (Ph. D. Student)

Melissa Knapp (M.S. Student)

Indumathy Jayamani (M.S. Student)

Jong-Mun Cha (Postdoctoral Fellow)

Previous advisee (during postdoctoral fellowship):

Beth Shaffer (M.S.)