Ruth E. Richardson

 Dept: Civil and Environmental Engineering

 Title: Associate Professor

 Address: 317 Hollister Hall

 Phone: 607 255-3233

**Education**

* BS (Chemical Engineering), Manhattan College, 1994
* MS (Civil Engineering), University of California, Berkeley, 1995
* Ph D (Civil Engineering), University of California- Berkeley, 2001

**Selected Publications**

* Werner, Jeffrey J., A. Celeste Ptak, Ruth E. Richardson, G. Brian Rahm, Sheng Zhang. 2009. "Absolute quantification of Dehalococcoides proteins: Enzyme bioindicators of chlorinated ethene dehalorespiration." Environmental Microbiology 11: 2687-2697.
* Rowe, A. R., B. J. Lazar, R. M. Morris, Ruth E Richardson. 2008. "Characterization of a dechlorinating mixed culture: community structure and comparisons of gene expression in planktonic and biofloc-associated Dehalococcoides and Methanospirillum." Appl Environ Microbiol 74 (21): 6709-19.
* Richardson, Ruth E., B. G. Rahm, J. J Werner. 2008. "ENVR 93-CR-39 studies of Pd/D codeposition." Abstracts of Papers of the American Chemical Society 236.
* Werner, J. J., S. Zhang, Ruth E Richardson. 2008. "Session: Molecular Mechanics." Abstracts of Papers of the American Chemical Society 236.
* Rahm, B. G., Ruth E Richardson. 2008. "Dehalococcoides' gene transcripts as quantitative bioindicators of tetrachloroethene, trichloroethene, and cis-1,2-dichloroethene dehalorespiration rates." Environmental Science & Technology 42 (14): 5099-105.
* Rahm, B. G., Ruth E Richardson. 2008. "Correlation of respiratory gene expression levels and pseudo-steady-state PCE respiration rates in Dehalococcoides ethenogenes." Environmental Science & Technology 42 (2): 416-21.
* Morris, R M., J M. Fung, B G. Rahm, Sheng Zhang, D L. Freedman, Stephen H. Zinder, Ruth E Richardson. 2007. "Comparative proteomics of Dehalococcoides spp. reveals strain-specific peptides associated with activity." Applied and Environmental Microbiology 73: 320-326.
* Rahm, B. G., R. M. Morris, Ruth E Richardson. 2006. "Temporal expression of respiratory genes in an enrichment culture containing Dehalococcoides ethenogenes." Appl Environ Microbiol 72 (8): 5486-91.
* Morris, R M., S. Sowell, D. Barofsky, Stephen H. Zinder, Ruth E Richardson. 2006. "Transcription and mass-spectroscopic proteomic studies of electron transport oxidoreductases in Dehalococcoides ethenogenes." Environmental Microbiology 81: 1499-1509.
* Freeborn, R. A., K. A. West, V. K. Bhupathiraju, S. Chauhan, B. G. Rahm, Ruth E. Richardson, L Alvarez-Cohen. 2005. "Phylogenetic analysis of TCE-dechlorinating consortia enriched on a variety of electron donors." Environmental Science & Technology 39 (21): 8358-8368.
* Krusic, P. J., A. A. Marchione, F. Davidson, M. A. Kaiser, C. P. C. Kao, Ruth E. Richardson, M. Botelho, R. L. Waterland, R. C Buck. 2005. "Vapor pressure and intramolecular hydrogen bonding in fluorotelomer alcohols." Journal of Physical Chemistry A 109 (28): 6232-6241.
* Zheng, M., A. Jagota, E. D. Semke, B. A. Diner, R. S. Mclean, S. R. Lustig, Ruth E. Richardson, N. G Tassi. 2003. "DNA-assisted dispersion and separation of carbon nanotubes." Nature Materials 2 (5): 338-342.
* Richardson, Ruth E., C. A. James, V. K. Bhupathiraju, L Alvarez-Cohen. 2002. "Microbial activity in soils following steam treatment." Biodegradation 13 (4): 285-295.
* Richardson, Ruth E., V. K. Bhupathiraju, D. L. Song, T. A. Goulet, L Alvarez-Cohen. 2002. "Phylogenetic characterization of microbial communities that reductively dechlorinate TCE based upon a combination of molecular techniques." Environmental Science & Technology 36 (12): 2652-2662