

Faculty Curriculum Vitae

NAME: William G. Rixey

POSITION/TITLE: Associate Professor

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EDUCATIONAL BACKGROUND/TRAINING

- Ph.D. Chemical Engineering, University of California, Berkeley, CA (December 1987)
 - Dissertation Title – Non-wet Adsorbents for the Selective Recovery of Polar Organic Solutes from Dilute Aqueous Solution.
- B.S. (High Honors) Chemical Engineering, Lehigh University, Bethlehem, PA (May 1977)

RELEVANT TEACHING EXPERIENCE

- *Associate Professor*, Department of Civil and Environmental Engineering, University of Houston, Houston, TX, 1999 –
- *Assistant Professor*, Department of Civil and Environmental Engineering, University of Houston, Houston, TX, 1993 – 1999
- *Research Assistant*, University of California, Berkeley, CA, 1983 – 1987

ACADEMIC SCHOLARSHIP/RESEARCH/CREATIVE ENDEAVORS

Areas of interest

- Impact of biofuels on water quality, particularly ethanol blended fuels
- Mobility of non-aqueous phase liquids (NAPLs) in porous media
- Phase equilibria and transport characteristics of organic chemicals in NAPL-aqueous systems
- Physical-chemical in-situ remediation processes

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Recent peer-reviewed publications

- Ma, J., Rixey, W.G., DeVaul, G.E., Stafford, B.P., and Alvarez, P.J.J. (2012), Methane Bioattenuation and Implications for Explosion Risk Reduction along the Groundwater to Soil Surface Pathway above a Plume of Dissolved Ethanol. *Environmental Science & Technology*, 46: 6013-6019.
- Ma, J., Xiu, Z., Monier, A. L., Mamonkina, I., Zhang, Y., He, Y., Stafford, B. P., Rixey, W. G. and Alvarez, P. J. (2011), Aesthetic Groundwater Quality Impacts from a Continuous Pilot-Scale Release of an Ethanol Blend. *Ground Water Monitoring & Remediation*, 31: 47-54.
- Stafford, B. P. and Rixey, W. G. (2011), Distribution of Fuel-Grade Ethanol near a Dynamic Water Table. *Ground Water Monitoring & Remediation*, 31: 55-60.
- He, X., Stafford, B. P. and Rixey, W. G. (2011), Ethanol-Enhanced Dissolution of a Residually Trapped Synthetic Gasoline Source. *Ground Water Monitoring & Remediation*, 31: 61-68.
- Stafford, B. P., N. L. Cápiro, P. J. J. Alvarez, and W. G. Rixey (2009), Pore Water Characteristics Following the Release of Neat Ethanol onto Pre-existing NAPL, *Ground Water Monitoring and Remediation*, 29, 93-104.
- Cápiro, N. L., M. L. B. Da Silva, B. P. Stafford, W. G. Rixey, and P. J. J. Alvarez (2008), Microbial community response to a release of neat ethanol onto residual hydrocarbons in a pilot-scale aquifer tank, *Environmental Microbiology*, 10, 2236-2244.
- Gomez, D. E., P. C. de Blanc, W. G. Rixey, P. B. Bedient, and P. J. J. Alvarez (2008), Modeling benzene plume elongation mechanisms exerted by ethanol using RT3D with a general substrate interaction module, *Water Resour. Res.*, 44, W05405, doi:10.1029/2007WR006184.
- Shim, Y., W. G. Rixey, and S. Chellam (2008), Influence of sorption on removal of tryptophan and phenylalanine during nanofiltration, *Journal of Membrane Science*, 323, 99-104.
- Cápiro, N. L., B. P. Stafford, W. G. Rixey, P. B. Bedient, and P. J. J. Alvarez (2007), Fuel-grade ethanol transport and impacts to groundwater in a pilot-scale aquifer tank, *Water Research*, 41, 656-664.