

Biographical Summary

Yuxin Wu is currently a geological research scientist at the Lawrence Berkeley National Laboratory, where his research is focused on the investigation of geophysical methods, primarily complex resistivity or spectral induced polarization, for the characterization and monitoring of hydrological and biogeochemical perturbations in the subsurface. He received his BA in petrology, mineralogy and geochemistry and MS in Environmental sciences from Peking University (China), and PhD in Environmental Geophysics from Rutgers (New Jersey). Dr. Wu's current research topics include spectral electrical responses from mineral precipitation during remediation processes; investigation of geophysical imaging method for the monitoring of transformations during microbial enhanced hydrocarbon recovery under high pressure and monitoring of fracture emplacement and amendment delivery in both saturated and unsaturated zones. Dr. Wu is also interested in the monitoring of the fate and transport of engineered nano and micron particles, particularly Fe^0 , in the subsurface with geophysical methods.

Education

- Ph.D. 2007. Environmental Geophysics, Rutgers University, New Jersey.
- M.S. 2002. Environmental Science, Peking University, China.
- B.S. 1999. Mineralogy/Petrology/Geochemistry, Peking University, China.

Professional Experience

- 06/2008 – Present, research scientist, Lawrence Berkeley National Lab, Berkeley, CA
- 01/2007 – 05/2008, postdoctoral Research Associate, Idaho National Laboratory, Idaho Falls, ID.

Honors & awards

- 2005, dissertation Fellowship, Rutgers University
- 2001, Academic Excellence Award, Peking University
- 1999- 2002, Graduate Scholarship, Peking University

Synergistic Activities

- Member of American Geophysical Union, Geological society of America and Society of Exploration geophysicists.
- Reviewer for Environmental Science & Technology, Journal of Geophysical Research-Biogeosciences, Chemosphere, Geophysical Journal International.

Publications

- Wu, Y., Hubbard, S., Williams, K. and Ajo-Franklin, 2010, On the complex conductivity signatures of calcite precipitation, *J. Geophys. Res-Biogeosciences.*, doi:10.1029/2009JG001129, in press.
- Wu, Y., Versteeg, R., Slater, L. and LaBrecque, D., 2009, Calcite precipitation dominates the electrical signatures of zero valent iron columns under simulated field conditions, *Journal of Contaminant Hydrology*, Volume 106: 131-143.
- Wu, Y., Slater, L., Versteeg, R. and LaBrecque, D., 2008, A comparison of the low frequency electrical signatures of iron oxide versus calcite precipitation in granular zero valent iron columns, *Journal of Contaminant Hydrology*, volume 95 (3-4): 154-167.
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- Wu, Y., Slater, L., Korte, N., 2005, Effect of precipitation on low frequency electrical properties of zero valent iron columns, *Environmental Science & Technology*, 39 (23): 9197-9204.
- Slater, L., Choi, J., Wu, Y., 2005, Electrical Properties of Iron-sand Columns: Implications for induced polarization investigation and Performance Monitoring of Iron-wall Barriers, *Geophysics*, 70, 4, G87-G94.
- Song, Y., Zheng, G., Han, Y., Wu, Y., 2002, Environmental information from an archaeological site at Erlitou, Yanshi, Henan Province, *Archaeology*, Vol 12
- Wei C., Y. Wu., , Y. Ni, , B. Chen and S. Wang, 1999, Characteristics and Geological significance of the Eclogites from the Tongbai Mountains, Henan Province, *Chinese Science Bulletin*, Vol 44, No. 22, P2076-2079.