

XIANGPING L. YIN

Environmental Sciences Division
Oak Ridge National Laboratory
P.O. Box 2008 MS6035
Oak Ridge, TN 37831-6035

Laboratory Technician
Phone: (865) 574-7826
FAX: (865) 576-3989
E-mail: yinx@ornl.gov

EDUCATION

1996 University of Tennessee M.S. Analytical Chemistry
1982 Nanjing Agricultural University, China B.S. Chemistry

PROFESSIONAL POSITIONS

2002 – Present Laboratory Technician, Subsurface Science, Environmental Sciences Division (ESD), Oak Ridge National Laboratory (ORNL). Laboratory support for subsurface SFA including all chemical analyses (IC and ICP) and total Hg and methyl Hg analyses. Performed experiments to quantify flow and kinetic transport of reactive contaminants in unsaturated soils from semi-arid regions. Other responsibilities include instrument operation, calibration and troubleshooting, sample preparation and analysis, method development, data analysis and report preparation.

2000 – 2002 Technologist in Radiochemistry, Teledyne Brown Engineering, Knoxville, TN. Responsibilities included operation, calibration, troubleshooting, and maintenance of the various alpha/beta radiocounting instruments and liquid scintillation spectrometry, loading and unloading radioactive samples for counting gross alpha/beta, and a variety of other nuclides, performing calculation of results, as well as monitoring counting system background and efficiencies. Responsibilities also included making the decision of sample recounting, sample counting time, checking data, and making all different nuclide standards for annual instrument calibrations and reporting.

1998 – 1999 Staff Chemist, S&ME, Inc. Knoxville, TN.

1994 – 1998 Laboratory Technician, ORNL.

SELECT RECENT PUBLICATIONS

Biswas, A., Brooks, S.C., Miller, C. L., Mosher, J. J., Yin, X.L., and Drake, M. M.. 2011. Bacterial growth phase influences methylmercury production by the sulfate-reducing bacterium *Desulfovibrio desulfuricans* ND132. *Science of the Total Environment* . 409 (2011), 3943-3948.

Tang, G., Mayes, M.A., Parker, J. C., Yin, X.L., Watson, D. B., and Jardine, P.M. 2009. Improving parameter estimation for column experiments by multi-model evaluation and comparison. *Journal of Hydrology* . 376, 567-578.

Mayes, M.A., Tang, G., Jardine, P.M., McKay, L.D., Yin, X.L, Pace, M.N., Parker, J. C., Zhang, F., Mehlorn, T., and Dansby-Sparks, R. 2009. Influence of Sedimentary Bedding on Reactive Transport Parameters Under Unsaturated Condition. *SSA*.

Pace, M.N., M.A. Mayes, P.M. Jardine, L.D. McKay, X.L. Yin, T.L. Mehlhorn, Q. Liu, and H. Gurleyuk. 2007. Transport of Sr^{2+} and SrEDTA^{2-} in partially-saturated and heterogeneous sediments. *J. Contamin. Hydrol.* 91:267-287.

Mayes, M.A., M.N. Pace, P.M. Jardine, S.E. Fendorf, N.D. Farrow, X.L. Yin, and J.M. Zachara. 2005. Coupled hydrological and geochemical processes governing the fate and transport of Sr and U in the Hanford vadose zone. pp. 229-250. IN: *ACS Symposium Series 904: Subsurface Contamination Remediation Accomplishments of the Environmental Management Science Program*, Zachry, T. and E. Berkey (eds.).

- Mayes, M.A., X.L. Yin, M.N. Pace, and P.M. Jardine. 2005. Rates and mechanisms of Co(II)EDTA²⁻ interactions with sediments from the Hanford site. pp. 278-296. IN: ACS Symposium Series 910: Biogeochemistry of Chelating Agents, Nowack, B. and J. Van Briesen (eds.).
- Jardine, P.M., M.A. Mayes, M.N. Pace, T.L. Mehlhorn, X.L. Yin, S.E. Fendorf, and C.S. Criddle. 2004. Exploring contaminant fate and transport processes at multiple scales. Gordon Research Conference. Plymouth, NH.
- Gu, B., L. Liang, M.J. Dickey, X. Yin, and S. Dai. 1998. Reductive precipitation of uranium (VI) by zero-valence iron. *Environ. Sci. Technol.* 32:3366-3373.
- Liang, L., B. Gu, and X. Yin. 1996. Removal of technetium-99 from contaminated groundwater with sorbents and reductive materials. *Sep. Technol.* 6:111-122.