

Martha H. Conklin
School of Engineering
University of California, Merced
Merced, California 95306

Office: 209-724-4349
Fax: 209-724-2912
Email: mconklin@ucmerced.edu
Mobile: 209-658-6349

RESEARCH INTERESTS

Transport of nutrients and contaminants in natural waters, surface water/shallow groundwater interactions, biogeochemistry, chemical processes in snow, K-12 environmental education.

EDUCATION

Ph.D. 1986 Environmental Engineering Science, California Institute of Technology
M.S. 1980 Environmental Engineering Science, California Institute of Technology
B.A. 1976 Physics, Mount Holyoke College

EMPLOYMENT

2003-present: Professor, School of Engineering, University of California, Merced
1987-2003: Department of Hydrology and Water Resources, University of Arizona (Assistant Research Hydrologist 1987-89, Research Assistant Professor 1989-90, Assistant Professor 1990-1996, Associate Professor 1996-2002, Professor 2002-2003).
1986-87: Associate Engineer, Environ Corp., Washington, D.C.
1979-86: Graduate Research Assistant, California Institute of Technology.
1976-79: Air Quality Scientist, Environmental Research & Technology, Concord, Massachusetts.

OTHER APPOINTMENTS

1998-1999: Fellow, Udall Center for Studies in Public Policy, University of Arizona.
1994-2003: Investigator, Center for Toxicology, University of Arizona.
1994-2003: Member, Interdisciplinary Committee for Global Change, University of Arizona.
2003-2006: Committee on River Science at the USGS, National Research Council

PROFESSIONAL ACTIVITIES

1999-2002: Associate Editor, *Water Resources Research*.
1997-2001: Horton Research Grant Committee and Publications Committee, Hydrology Section, American Geophysical Union
2000: Chair, Ed. Search Committee, *Water Resources Research*, American Geophysical Union.
2003: Editor Search Committee, *Water Resources Research*, American Geophysical Union.
2005- 2008: Hydrology Section Award Committee, American Geophysical Union
2006: Chair, CUASHI Education Committee

SELECTED PUBLICATIONS

Morrill, J.C., R.C. Bales and M.H. Conklin, Estimating Stream Temperature from Air Temperature: Implications for Future Water Quality, *Journal of Environmental Engineering*, 131, 139, 2005.
J.W. Harvey, M.H. Conklin and R.S. Koelsch. Predicting changes in hydrologic retention in an evolving semi-arid alluvial stream, *Advances in Water Resources*, **26**, 939-950, 2003.
J. Choi, J.W. Harvey and M.H. Conklin. Characterizing multiple timescales of stream and storage zone interaction that affect solute fate and transport in drainage basins. *Water Resources*

- Research*, 36(6), 1511-1518, 2000.
- J. Choi, M.H. Conklin, R.C. Bales, R.A. Sommerfeld. Experimental investigation of SO₂ uptake in snow. *Atmospheric Environment*, 34: 793-801, 2000
- J. Choi, S.M. Hulseapple, M.H. Conklin and J.W. Harvey. Modeling CO₂ degassing in stream aquifer system. *Journal of Hydrology*, 209: 297-310, 1998.
- J.E. Villinski, J.E. Sifers and M.H. Conklin, The effects of reaction-product formation on the reductive dissolution of MnO₂ by Fe(II). *Environmental Science and Technology*, **37**, 5589-5596, 2003.
- Morfin, O., M.H. Conklin, T.L. Corley, J.B. Hiskey, and J. Ruiz (2003). The use of Pb isotopes, total metals analysis and total metals ratios to characterize Pb transport and fate in an interrupted stream, Aravaipa Creek, SE Arizona. *Hydrometallurgy 2003, Proceedings of the 5th International Symposium in Honor of Professor Ian Ritchie* C.A. Young, A.M. Alfantazi, C.G. Anderson, A. James, D.B. Dreisinger, and B. Harris (Eds.), The Minerals, Metals, and Materials Society, Warrendale, PA.
- N. Melitas, M. Conklin and J. Farrell. Electrochemical study of arsenate and water reduction on iron media used for arsenic removal from potable water. *Environmental Science and Technology*, 36, 3188-3193, 2002.
- J. Villinski, P.A. O'Day, T.L. Corley and M.H. Conklin. In situ spectroscopic and solution analyses of the reductive dissolution of MnO₂ by Fe(II). *Environmental Science Technology*, 35, 1157-1163, 2001.
- J.T. Kay, M. H. Conklin, C.C. Fuller and P.A. O'Day. Processes of nickel and cobalt uptake by a manganese oxide forming sediment in Pinal Creek, Globe Mining District, Arizona. *Environmental Science and Technology*, 35, 4719-4725, 2001.

SYNERGISTIC ACTIVITIES

GLOBE (www.GLOBE.gov): developed & tested hydrology protocols, provide support to schools
 Developing Outreach Program for Sierra Nevada Hydrologic Observatory (2003-pres): Developing a network of schools and citizen scientists to take water quality measurements along the Merced River (participating organizations: Upper Merced River Watershed Council, Yosemite Institute, Oakhurst High School, Kingsburg High School).
 Community and school presentations: e.g. 2005 Upper Merced River Watershed Council River Day, Challenger Learning Center Saturday Lecture Series, Merced Irrigation District Interactive Watershed Tour Board member, Yosemite Institute (4-12 grade environmental program)(2006-pres)

STUDENTS & POSTDOCS

Ph.D.: Glenn Shaw (current), Robert Bruant, Chunming Yu, Ingrid Padilla, Jungyill Choi, David Quanrud, John Villinski
M.S.: A. Condon, H. Gilbert, J. Hamblen, O. Morfin, E. Robbins, J.T. Kay, R.G. Koelsch, P.L. Chipello, B.A. Enright, Y.T. Hashimoto, J.C. Marble, J.A.K. Silva, S.D. Lookingbill, H.J. Huth, P.R.S. Navarro, H. Flinchbaugh, E.C. Cole, B.B. Bailey, G. Bota, S.M. Hulseapple, H.L. Grahn, W. Bao, B. Hong, C. Yu, J. Narusawa, T.M. Meyer, P.E. Mariner, M.J. Waterbury, P.A. Roberts, J. Vandewater, E.E. Hopkins, T.A. Runyon, Y. Cao, J.H. Davis, G.P. Brooks
Postdoctoral: F. Liu (current), Jean Morrill, John Villinski, Sarah May

COLLABORATORS & OTHER INFORMATION

Graduate Advisor: Michael Hoffman
Current Collaborators: Jean Moran (LLNL), Gregory Nims (LLNL), Mark Conrad (LBL), Roger Bales (UCM)