

JOHN J. QUINN

Geosciences and Information Technology Section
Environmental Science Division
Argonne National Laboratory

Education:

M.S. University of Minnesota, Hydrogeology, 1992
B.S.E. Purdue University, Geo-Engineering, 1988
B.S. Purdue University, Geology, 1987

Professional Experience:

1993-Present Hydrologist
Environmental Science Division
Argonne National Laboratory

Responsibilities primarily focus on groundwater and soil analyses for site characterization and feasibility studies at DOE and DOD sites. Study areas have involved various geologic settings, including glacial, karst, alluvial, and coastal plain environments. Tasks have included developing and calibrating three-dimensional groundwater flow models; designing optimized groundwater containment systems using linear programming techniques; performing contaminant transport modeling; evaluating natural attenuation and phytoremediation processes; estimating soil excavation volumes; analyzing aquifer test data; producing visualization of analytical, hydrogeological, and geological data; performing geostatistical analyses of soil and groundwater analytical results and geological and hydrogeological data; creating and updating project websites to promote communication among team members; and conducting field work, including project oversight, stratigraphic logging, well installation, and groundwater sampling. Sites have included Aberdeen Proving Ground, Maryland; Weldon Spring Site, Missouri; Joliet Army Ammunition Plant, Illinois; Argonne National Laboratory, Illinois; New York FUSRAP sites; Camp Ripley (National Guard) Minnesota; and Hohenfels Combat Maneuver Training Center, Germany.

Summary of Previous Experience:

1991-1993 Geological Engineer
Black and Veatch Waste Science, Inc., Chicago, Illinois

Performed CERCLA Screening Site Inspections and Expanded Site Inspections (environmental sampling; writing work plans, health and safety plans, and final reports; reconnaissance visits; field team leader; hazard ranking system evaluations). Performed RCRA Facility Assessments (writing Preliminary Assessment/Visual Site Inspections). Logged

stratigraphy and well construction information in support of RI. Reviewed a groundwater model for U.S. EPA. Provided field oversight for U.S. EPA at several Superfund sites.

1988-1991 Research Assistant and Teaching Assistant
Department of Geology and Geophysics
University of Minnesota, Minneapolis

This research included numerical modeling of groundwater flow, geostatistics, and glacial geology. Assisted in teaching physical geology and graduate-level hydrogeology courses.

Research Interests:

Hydrogeologic investigations
Groundwater modeling and optimization of remediation schemes
Geostatistical applications to environmental and geological studies
Phytoremediation and Natural Attenuation of groundwater and soil
Karst hydrology
Glacial geology and hydrogeology

Professional Activities:

Professional Engineer
Professional Geologist
National Ground Water Association
Geological Society of America

Publications:

Author or co-author of 10 journal articles and book chapters, and 75+ reports, conference proceedings and presentations, and university seminars.