

Thomas Nicholson

Tom Nicholson is a Senior Technical Advisor in the Division of Risk Analysis of the Office of Nuclear Regulatory Research within the U.S. Nuclear Regulatory Commission (U.S. NRC). He has served in the research office for 27 years, and has worked at the U.S. NRC for 33 years receiving numerous awards including the U.S. NRC Meritorious Service Award for Scientific Excellence. His earlier positions were as a senior hydrogeologist and hydrologist in the Offices of Nuclear Regulatory Research, Standards Development and Nuclear Reactor Regulation.

His principal responsibility is providing expert technical advice to NRC management and staff concerning radionuclide transport in the subsurface at NRC-licensed facilities. He has formulated and directed numerous research studies, as a senior project manager, involving estimation of extreme flood probabilities in watersheds; radionuclide transport in fractured rock; and integration of subsurface monitoring and modeling. He presently serves as chair of the *Work Group on Extreme Storm Event Work Group* under the *Federal Subcommittee on Hydrology* of the *Advisory Committee on Water Information (ACWI)*. He also co-chairs the *Federal Work Group on Uncertainty and Parameter Estimation* under the multi-agency *Memorandum of Understanding on Research in Multimedia Environmental Modeling*. He chairs two NRC Technical Advisory Groups involving ground-water and performance monitoring, and uncertainty assessment of environmental modeling. He is the NRC liaison to the *Water Science and Technology Board* of the National Academies of Sciences.

He holds a B.S. in geological sciences from Pennsylvania State University, and a M.S. in geology from Stanford University. At Stanford, he was a student of Professors Ray Linsley and Joseph Franzini in the hydrology program completing the core courses in hydrology. He is a certified professional hydrogeologist with the American Institute of Hydrology. He is an active member of the American Geophysical Union (AGU), Geological Society of America, International Association of Hydrological Sciences, National Ground-Water Association and the International Hydrogeologic Society.

His recent accomplishments include:

Organized and chaired the 2009 RIC session on subsurface characterization, modeling, monitoring and remediation of radionuclides.

Presented invited papers on: *Role of Modeling and Long-Term Monitoring in Decision-Making* at the **2009 DOE-EM Long-Term Monitoring (LTM) Technical Forum**, February 11, 2009 in Atlanta, GA; and *Mobility of Radionuclides in the Smear Zone* at the **Annual Meeting of the Soil Science Society of America**, November 4, 2009 in Pittsburg, PA.

Organized and co-chaired technical sessions at the 2009 Spring and Fall Meetings of AGU on environmental remediation and confirmatory monitoring in Toronto, Canada and San Francisco, CA, and presented invited papers.