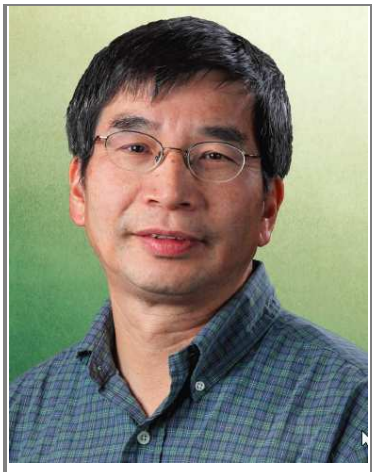
Yifeng Wang



Yifeng Wang, Ph.D.

Biography

Dr. Yifeng Wang grew up in a small village in Zhejiang Province, China. He is a graduate of Zhejiang University (B.S. in Geology), Nanjing University (MS in Geochemistry), and Indiana University (Ph.D. in Geochemistry). He and his wife have one child. Yifeng came to the United States in March 1988.

Yifeng is a Distinguished Member of Staff at Sandia National Laboratories (Sandia) in Research & Development, Science and Engineering, Geosciences. He is a technical lead or principal investigator for projects related to nuclear waste disposal, shale gas research, carbon sequestration and storage, and environmental nanomaterial development.

Yifeng's career began at Georgia Institute of Technology in 1993, where he spent 1.5 years as a postdoctoral fellow, working on biogeochemistry of aquatic sediments. He developed the first multicomponent, coupled reactive transport model for simulating biogeochemical processes in marine sediments.

In 1995, he joined Sandia as a Senior Member of Technical Staff and began work on geologic disposal of radioactive waste. As principal investigator of the near-field chemistry and gas generation programs for the Department of Energy (DOE) Waste Isolation Pilot Plant (WIPP), he developed an innovative method of using magnesium oxide (MgO) to control near-field chemistry and absorb carbon dioxide. He also performed pioneering work on the potential application of nanostructured materials in nuclear waste management.

As a Principal Member of Technical Staff from 2000 to 2010, he started working on the Yucca Mountain (YM) Repository Program. He was a member of the Independent Validation Review Team for the YM project, and he served on the DOE In-Depth Review Team for the YM Engineered Barrier System. Yifeng was first to demonstrate the effect of nanopore confinement on mineral-water interface chemistry.

In 2011, Yifeng was nominated and appointed to Distinguished Member of Research & Development Staff, specializing in Geosciences. Currently, he is the technical lead for the DOE Used Fuel Disposition (UFD) Natural System Evaluation Work Package and the principal investigator of a Laboratory Directed Research & Development project on shale gas disposition and release. He coordinates dozens of Research & Development staff across eight national laboratories and universities for the UFD project. He has published over 80 peer-reviewed publications and has six issued or pending U.S. patents. He is the editor-in-chief of American Institute of Mathematical Science's Environmental Science.