

Speaker Profile



Donald R. Baer, Laboratory Fellow

Pacific Northwest National Laboratory

Dr. Baer is a technical leader in the Interface Chemistry and Engineering (IC&E) group in the Chemical Sciences Directorate, Fundamental Sciences Division PNNL. He also serves as Co-Director of the PNNL/University of Washington Joint Institute for Nanoscience and Deputy Manager of the Laboratory Nanoscience and Nanotechnology Initiative. He has a Ph. D. in Physics from Cornell University and was part of a team responsible for developing the capabilities in the Interfacial and Nanoscale Sciences Facility of the Environmental Molecular Sciences Laboratory (EMSL), a user facility built at PNNL by the U.S. Department of Energy.

Contact Details

Organization Name:
Pacific Northwest
National Laboratory

Address:
Box 999 MS K8-95

Town, State
Richland, WA

Postal Code: 99352

Country: USA

Phone: 509 376 1609
Fax: 509 376 5106
Email:
Don.baer@pnl.gov

Website:
www.emsl.pnl.gov

Since joining PNNL in 1976, Dr. Baer has specialized in the use of surface sensitive techniques to study surface and interphase reactions and material surface chemistry. He specializes in adapting established and new surface sensitive methods to new or unusual problems and has more than 170 publications.

Part of the research focus of the EMSL has been the understanding of the properties of oxide and mineral surfaces and interfaces. Dr. Baer and the members of his technical group are using surface sensitive analysis methods to determine surface structure and chemistry at vacuum-solid and solution-solid interfaces of oxide and mineral surfaces and nanostructures. Research topics related to the storage and processing of waste, corrosion, environmental contaminant transport and the development and operation of chemical sensors are of particular interest.

Dr. Baer's other activities include a position as an Adjunct Professor of Physics at Washington State University and serving as Associate Editor for Surface Science Spectra. He is a member of the American Vacuum Society (AVS Fellow and past chair of Applied Surface Science Division), the American Physical Society, the Electrochemical Society, ASTM E42 Committee on Surface Analysis and serves as secretary of ISO TC 201 on Surface Chemistry SC 1.

D. Baer received the PNNL Directors Award for Excellence and a DOE Division of Materials Sciences Outstanding Scientific Accomplishment Award in 1992, the 2000 PNNL Fitzner-Eberhardt Award for contributions to science education and a 2001 Federal Laboratory Consortium Award for technology transfer. From 1984 to 1985 Dr. Baer was a Visiting Research Fellow in the Department of Materials Science and Engineering at the University of Surrey, Guildford, England.