

James F. Miller, PhD
Argonne National Laboratory
9700 S. Cass Ave, Argonne, IL 60439
phone: (630) 252-3425 email: james.miller@anl.gov

Experience: Argonne National Laboratory (1976 – present)

Deputy Division Director, Energy Systems Division (2013-present)

Works with the Division Director to provide strategic planning, program development, and management for the Division's programs on Advanced Powertrain Research Facility, Engine Combustion and Emissions, EV-Grid Interoperability Center, Applied Materials, Materials Engineering Research Facility, Life-cycle Analyses, *GREET* Energy and Environment Modeling, and *Autonomie* Vehicle Simulations.

Senior Technical Advisor (2009-2012)

Assignment at DOE/HQ, providing strategic planning support for DOE's Battery Program in the Vehicle Technologies Office. Led efforts on DOE's *EV Everywhere Grand Challenge* and lead author for transportation electrification in the 2011 DOE Quadrennial Technology Review.

Associate Division Director, Chemical Technology Division (2000-2005)

Responsible for the technical and administrative direction of the Fuel Cell, Battery, and Basic/Applied Science Departments, representing over 80 full-time and 20 part-time technical staff members. Overall programmatic direction, line management, and fiscal responsibilities.

Director, Electrochemical Technology Program (1999-2008)

Coordinated Argonne's efforts on electrochemical technologies, including advanced batteries and fuel cells for transportation, stationary, and portable power applications, and hydrogen production and storage.

Department Head (1999-2000)

Responsible for all battery, fuel cell, and catalysis activities in the Chemical Technology Division. Includes programmatic direction, line management, and fiscal responsibilities. Led to substantial growth in the size and scope of activities within the department.

Group Leader, Fuel Cells for Transportation (1991-1998)

Technical support to the Department of Energy for fuel cell development activities. Member of the Partnership for a New Generation of Vehicles (PNGV) Fuel Cell Technical Team.

Group Leader, Battery Development Projects (1982-1991)

Technical analysis and assessment studies of advanced battery technologies. Responsible for technical management of Department of Energy contracts with industrial battery developers.

Assistant Physicist (1978-1982)

Research on advanced batteries for electric vehicles and stationary energy storage. Work included analysis of battery design and performance interactions, and modeling of electric vehicles.

Postdoctoral Appointee, Materials Science Division (1976-1978)

Conducted basic research on metal hydrides and physical properties of hydrogen in metals.

University of Illinois (1972-1976)

Graduate Research Assistant - Conducted thesis research on superconductivity of metal hydrides.

Professional Activities

Served on numerous advisory committees, including National Academy of Sciences Review Committee for NASA's Exploration Technology Development Program, National Research Council Committee on Wright Innovation Centers, NRC Review Committee for NASA's Low Emission Advanced Propulsion, FreedomCAR Fuel Cell Tech Team, ASME Fuel Cell Power Systems Committee, International Energy Agency (IEA) Advanced Fuel Cells for Transportation, and US Department of Energy Depleted Uranium R&D Uses Advisory Panel. Conference Chairman for the 2nd International Symposium on Hydrogen in Matter (ISOHIM-2).

Education

Ph.D. Physics, University of Illinois at Urbana-Champaign (1976)
M.S. Physics, University of Illinois at Urbana-Champaign (1973)
B.S. Physics, University of Missouri at Columbia (1971)
M.B.A. University of Chicago, Booth School of Business (1999)