

KARL W. FISCHER

Radiological Health Risk Section
Environmental Science Division
Argonne National Laboratory

Education:

M.Eng. University of Michigan, Radiological Health Engineering, 1996
B.S.E. University of Michigan, Nuclear Engineering, 1995

Professional Experience:

2008-Present Environmental Systems Engineer
Environmental Science Division
Argonne National Laboratory

Support radioactive material/waste management and response programs. Perform radiological impact and human health risk assessments. Participate in project planning and program development activities.

Summary of Previous Experience:

2005-2008 Scientist IV (Health Physicist)
Northrop Grumman Information Technology (NGIT)
Lorton, VA

Served as Deputy Program Manager for the Nuclear Test Personnel Review (NTPR) Program, Defense Threat Reduction Agency (DTRA), Department of Defense. Provided comprehensive Advisory & Assistance Services support of day-to-day program activities, including program administration and management, radiation dose reconstruction policy analysis and development, case management, contracting actions, and interagency relations. Responsible for creation and stewardship of external program communication and outreach, research and coordination of formal Agency responses to Congressional and interagency inquiries, technical/editorial review of contractor-generated technical basis documents for DTRA publication, technical support to the Congressionally mandated Veterans' Advisory Board on Dose Reconstruction, and Freedom of Information Act inquiry research. Accomplishments included proposal and implementation of improvements that contributed to the total clearance of pending Congressional inquiries in 2007; significant contributions to the successful award of a \$45M support contract; proposal and implementation of an initiative to discontinue radiation dose assessments for non-radiogenic medical conditions, enabling a 10% reduction of pending cases and a DTRA cost savings of \$0.5 million; co-authorship of or significant contributions to three other expedited case processing initiatives that significantly shortened case processing and enabled a cost savings of nearly \$15 million; and coordination of recruitment, screening/review, and selection of qualified staff on behalf of NGIT and the NTPR Program.

1997-2005 Division of Radiation Safety (DRS), Radiation Safety Operations Branch
National Institutes of Health
U.S. Department of Health and Human Services
Bethesda, MD

As a staff and senior health physicist, ensured radiological protection of personnel and compliance with regulations and policies governing the use of ionizing radiation at the federal government's premier biomedical research institution. Provided independent health physics oversight of laboratory operations and new/developing research protocols, including the NIH Cyclotron Facility and associated radiochemical synthesis and research laboratories. Responsible for radiation safety surveillance, consultation, and policy enforcement; training development and delivery; personnel and environmental effluent monitoring; intake/exposure and security investigations; waste stream analysis, minimization, and incident investigation; emergency and spill response; sealed source inventory and leak testing; decontamination/clearance of rooms and equipment; radioactive sample analysis and identification; and interview, selection, and orientation of new staff. Accomplishments included technical review of contract proposals in support of successful award of a \$5 million/year regulatory compliance support contract; streamlining of the monthly survey review and enforcement program for 2000 laboratories; participation in the redesign of the NIH Radiation Safety website; review of architectural documents for new facility design/construction, and various shielding assessments (PET and x-ray). Periodically functioned as Acting Branch Chief, providing day-to-day oversight of branch operations, coordinating incident response, and participating in policy development.

Research Interests:

Radiation health effects

Professional Activities:

Certified Health Physicist by the American Board of Health Physics (2004)
Health Physics Society
Baltimore-Washington Chapter of the Health Physics Society
Secretary (2003-2005) and Newsletter Editor (2005-2007)
American Nuclear Society (DC Section)