

Biography

Stephen A. McGuire, Ph.D.

Dr. McGuire received a Ph.D. in Nuclear Engineering from the University of Wisconsin in 1970. The American Board of Health Physics designated him as a Certified Health Physicist in 1976. After graduation he worked for Bechtel Corp. in nuclear power plant design and then taught postgraduate Nuclear Engineering at the Instituto Militar de Engenharia in Rio de Janeiro, Brazil.

He subsequently joined the U. S. Nuclear Regulatory Commission in 1972 as a Health Physicist. From 1972 until 1999 he worked as a health physicist at the NRC primarily developing regulations, regulatory guides, and NRC policy in the area of radiation protection. Since August 1999 he has been a Senior Emergency Response Coordinator with the Office of Nuclear Security and Incident Response, which operates the NRC's Emergency Operations Center.

His main responsibilities include being coordinator of the Protective Measures Team (which does dose assessments and determines appropriate protective actions), development of the RASCAL computer code used for estimating the offsite doses and consequences of accidental releases of radioactive materials, and other dose assessment activities.

Dr. McGuire is also an Adjunct Assistant Professor in the Department of Radiological Sciences at the Georgetown University School of Medicine where he gives occasional lectures and supervises graduate student thesis research.

Research activities

Dr. McGuire is currently engaged in applied research on: (1) the biological effects of exposure of the skin to high doses from hot particles, (2) particle losses in air sampling lines, (3) survey methodologies to demonstrate compliance with decommissioning criteria, and (4) dose modeling to predict doses from residual radioactivity at decommissioned sites.