



Ralph B. James, Ph.D.

Acting Associate Laboratory Director Science, Engineering and Energy Savannah River National Laboratory

EDUCATION

California Institute of Technology, Ph.D., Applied Physics

Georgia Institute of Technology, M.S., Physics

University of Tennessee at Knoxville, B.S., Engineering Physics

POSITION As Acting Associate Laboratory Director, Science, Engineering and Energy, Dr. Ralph James provides strategic leadership to SRNL programs in analytical development, materials science and technology, research and development engineering, and analytical laboratory area projects. Dr. James also serves as Chief Research Officer, assessing SRNL's core competencies and its growing Laboratory Directed Research and Development Program.

EXPERIENCE Ralph has over 35 years of experience in research and development in multiple fields, including nonproliferation, national security, environmental remediation, nuclear medicine, energy, and astrophysics. He previously worked as Associate Laboratory Director for Energy, Environment and National Security at the Brookhaven National Laboratory, where he led interdisciplinary teams of scientists and engineers focused on these mission areas. He was also the Principal Investigator on multiple projects connected to advances in semiconductor radiation detectors and instruments, including the development of crystal growth methods, materials analysis and characterization techniques, compact gamma cameras, low-noise electronics, and field-portable spectrometers. Ralph was also a Distinguished Member of Technical Staff and Project Manager at Sandia National Laboratories and a Eugene P. Wigner Fellow at Oak Ridge National Laboratory.

Ralph is an inventor with 25 patents on radiation detection, spectroscopy, and imaging and has over 640 scientific publications, six book chapters, and 15 invited review articles. He has edited 30 books on semiconductors for radiation sensing, spectroscopy, and medical imaging applications and has served as chairman of over 35 conferences devoted to radiation detection.

RECENT NOTEWORTHY Ralph has been awarded numerous international honors for his work on nuclear detection and imaging and has received six R&D100 Awards. He has also been named Discover Magazine's Innovator of the Year. Other honors include the Award of Excellence for lifetime achievements by the Society of Solid-State Chemists, the Gordon Battelle Award for Technology Innovation, and inductee into the Long Island Technology Hall of Fame. He is a Fellow of the IEEE, SPIE, APS, OSA, MRS, and AAAS societies and served as the President of SPIE.