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David Chichester is a directorate fellow at Idaho National Laboratory where he works to develop nondestructive radiation measurement systems and methods for advanced nuclear energy projects, nuclear nonproliferation programs, nuclear counterproliferation projects, and nuclear forensics. His research broadly covers many aspects of radiation instrumentation, including simulation and modeling of radiation measurement systems. He currently oversees research projects dealing with: gamma-ray spectrometry, neutron activation analysis, and reactor metrology; high-rate, fast-neutron detection and imaging for transient nuclear

fuel research; fast-neutron spectrometry; active neutron interrogation for special nuclear material detection and characterization; high-activity actinide characterization via alpha spectrometry; and the use of infrasound for monitoring nuclear facilities. In addition to his research activities, Dr. Chichester serves as an instructor and subject matter expert in support of INL's radiological and nuclear training programs and provides training support for several organizations including the Department of Energy and the Department of Defense. He is a member of the DOE Forensics Operations (DFO) team, a multi-laboratory team which stands continuously ready to deploy within hours of a notification to support the ground collection of samples in the event of a nuclear detonation.

Prior to coming to INL, David worked at Sandia National Laboratories in Albuquerque, N.M., in the Neutron Generator Technology Department. While there he worked as a design engineer on projects related to the development of neutron generators and also worked to develop new diagnostic methods to support research, development, and manufacturing related to sealed-tube neutron generators. Before that he worked for Thermo Electron Corporation for four years, first as a design engineer working on the development of reactor power monitoring systems and bulk material analyzers, and then as manager of research and development for the company's neutron generator business.

David is a senior member of the Institute of Electrical and Electronics Engineers, IEEE, a senior member of the Institute of Nuclear Materials Management, and a regular member of the American Nuclear Society and Sigma Xi. Within IEEE he has served as a member of the Radiation Instrumentation Steering Committee and as a member of the Nuclear Science Symposium and Medical Imaging Conference (NSS/MIC) Joint Oversight Subcommittee (JOS). He is a life member of Phi Kappa Phi.

David earned a Bachelor of Science (B.S., 1993) degree in engineering physics and a Master of Science (M.S., 1995) degree in nuclear engineering, both from the University of Illinois. He earned a Doctor of Science (Sc.D., 2000) degree in nuclear engineering from the Massachusetts Institute of Technology, MIT.