Zane W. Bell

B.S. in Physics: Rensselaer Polytechnic Institute
M.S. in Physics: Rensselaer Polytechnic Institute, 1973
Ph.D. in Experimental Nuclear Physics: University of Illinois, 1979
M.S. in Electrical Engineering:University of Tennessee, 1986

- Senior Scientist at the Oak Ridge National Laboratory.
- Joined the staff at the Oak Ridge National Laboratory in 1979 shortly after obtaining his PhD.
- Performed measurements of neutron cross sections at ORELA (the Oak Ridge Electron Linear Accelerator).
- Developed fast timing electronics for nuclear measurements.
- Studied analog and digital pulse shape discrimination methods for distinguishing neutron events from gamma-ray events in liquid organic scintillators.

Dr. Bell has been engaged in nondestructive evaluation with ultrasound and filmless radiography, design and development of sensors for monitoring fissile material, design and development of nuclear instrumentation, development of neutron-detecting scintillators and semiconductors, as well as the design and implementation of computer systems. He has led project teams in the development of an instrument for neutron detection using boron-coated diodes and scintillators and has collaborated with Russian researchers at the Institute of Introscopy of the Tomsk Polytechnic University on the evaluation of a compact betatron as a photoneutron source. With researchers at the Kurchatov Institute (Moscow) and the All-Russian Scientific Research Institute of Experimental Physics (Sarov), he has collaborated on safeguards for nuclear material in storage.

Dr. Bell currently sits on the Radiation Detection Panel which is an advisory group to the U.S. Department of Energy. He is the author or co-author of 50 publications and oral presentations (3 invited) and 2 patents and serves as a senior editor for *IEEE Transactions on Nuclear Science.* Dr. Bell is a member of the APS, IEEE, and Sigma Xi.