Dr. John J. Szymanski

Dr. Szymanski is an executive advisor to the Principal Associate Director for Global Security at Los Alamos National Laboratory. From 2010 to May 2012 he was a member of the White House Office of Science and Technology Policy, where his portfolio included nuclear defense R&D, isotope supply, and national security space issues. Prior to joining the White House, Dr. Szymanski worked at Los Alamos as Program Director for Nuclear Nonproliferation, a portfolio of programs with funding exceeding $300M. Previously he was program manager for nuclear nonproliferation research and development. In the past he led several projects at Los Alamos, including the Multispectral Thermal Imager satellite and the Rapid Feature Identification Project (which produced the GENIE software). His research includes optical remote sensing of the earth, nuclear defense science and technology, and national-security policy issues. His technical experience includes the design and fabrication of high-speed digital electronics and radiation detectors, real-time data acquisition systems, algorithm development, applications of genetic algorithms, and large-scale simulations. Dr. Szymanski received his B.S., M.S., and PhD degrees in physics from Carnegie Mellon University, where his thesis research was in experimental nuclear physics. He continued working in nuclear physics research at Los Alamos National Laboratory and then as a faculty member at Indiana University. The Department of Energy, National Science Foundation, internal sources and other US Government agencies have funded his research. His activities have included the American Physical Society, INMM, IEEE and SPIE. He has organized workshops, several special conference sessions and served on many local and national committees. He is the author of 40 journal publications, many invited talks and numerous conference proceedings. His honors include an R&D 100 award, two Los Alamos Distinguished Performance awards, an INMM "support above and beyond" award, DOE/NNSA recognition for superior achievement, and several fellowships and teaching awards.