

BIOGRAPHY

John E. Kelly

ANS President 2018-2019

Dr. John E. Kelly recently retired from the U.S. Department of Energy where he was the Chief Technology Officer in the [Office of Nuclear Energy](#). He was responsible for establishing the strategic technical direction for the Office of Nuclear Energy's (NE's) research, development, demonstration, and deployment portfolios.

Prior to assuming the duties of Chief Technology Officer, he served as Deputy Assistant Secretary for Nuclear Reactor Technologies. His office was responsible for the civilian nuclear reactor research and development portfolio, which included programs on Small Modular Reactors, Light Water Reactors, and Generation IV reactors. Additional responsibilities included the design, development, and production of radioisotope power systems, principally for NASA missions.



In the international arena, Dr. Kelly chaired the [Generation IV International Forum](#) and former chair of the [International Atomic Energy Agency's](#) Standing Advisory Group on Nuclear Energy.

Prior to joining the Department of Energy in 2010, Dr. Kelly spent 30 years at [Sandia National Laboratories](#), where he was engaged in a broad spectrum of research programs in nuclear reactor safety, advanced nuclear energy technology, and national security.

In the reactor safety field, he led efforts to establish the scientific basis for assessing the risks of nuclear power plant operation and specifically those risks associated with potential severe accident scenarios. His research focused on core melt progression phenomena, which led to an improved understanding of the Three Mile Island accident and, more recently, the Fukushima Dai-Ichi accident.

In the advanced nuclear energy technology field, he led efforts to develop advanced concepts for space nuclear power, Generation IV reactors, and proliferation-resistant and safe fuel cycles. These research activities explored new technologies aimed at improving the safety and affordability of nuclear power. In the national security field, he led national efforts to evaluate the safety and technical viability of tritium production technologies.

Dr. Kelly received his B.S. in nuclear engineering from the University of Michigan-Ann Arbor and his Ph.D. in nuclear engineering from the Massachusetts Institute of Technology.