Thursday, May 24, 2018

Dr. John Kelly

Incoming National ANS President

"Perspectives on the Future of Nuclear Power in the United States"

Monte Carlo Restaurant

3230 Old Forest Rd, Lynchburg, VA



Bio

Dr. Kelly is the President-Elect of the American Nuclear Society. He 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 research, development, demonstration, and deployment portfolios. Prior to assuming the duties of Chief Technology Officer, he was the 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. His office was also responsible for the design, development, and production of radioisotope power systems, principally for NASA missions. In the international arena, Dr. Kelly had previously chaired the Generation IV International Forum and 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. degree in nuclear engineering from the University of Michigan in 1976 and his Ph.D. in nuclear engineering from the Massachusetts Institute of Technology in 1980.

Topic

Currently there are dozens of Light Water Reactors (LWRs) under construction around the world. Most experts expect LWR technology to be the primary source of nuclear power well into the latter half of this century. At the same time there continues to be strong interest in moving to more advanced LWR technology (such as Small Modular Reactors) and Generation IV systems. The presentation will provide perspectives on the future of nuclear power in the United States and how the integration of LWR technology and Gen IV technology can lead to sustainable nuclear power. The presentation will also provide an overview of recent initiatives of the American Nuclear Society.

Schedule

Social Hour – 5:30 p.m. Dinner – 6:00 p.m. Presentation – 6:45 p.m. Adjourn – 8:00 p.m.

Cost

Dinner: \$30 (\$20 for students). Non-ANS members, add \$5. There will be a cash bar.

Reservations for the meeting needed to be made by 4 p.m. on Monday, May 21, 2018.