The Institute of Nuclear Materials Management (INMM) recognized Karen Miller of the LANL's Safeguards Science and Technology with its 2014 Early Career Award for her accomplishments as a young professional in the field of nuclear materials management and for her leadership and contributions to the Institute. She received the award at the INMM 55th Annual Meeting in Atlanta.

Miller’s achievements

Miller first came to Los Alamos as an undergraduate student in 2003 and returned summers throughout graduate school before joining the Nuclear Nonproliferation Division as a full-time graduate research assistant in 2007. Upon her receipt of a doctorate in Nuclear Engineering from Texas A&M University, the Laboratory converted her to an R&D Scientist in 2010. Miller’s research focuses on detector development for international safeguards applications. Her most notable contributions to the field have been in the area of advanced detection systems for nondestructive assay of uranium enrichment in uranium hexafluoride (UF6) cylinders. A 2010 Science magazine article
featured the first of three systems that she has developed for a variety of UF6 cylinder measurement needs. A spinoff of this work also resulted in an update to the nuclear data for UF6. In addition to her research, she is a member of the Lab’s Postdoctoral Review Committee, mentors students, and teaches in the Laboratory safeguards training courses for International Atomic Energy Agency (IAEA) inspectors. Miller has over 40 publications and 11 invited presentations.

Miller joined the INMM as a student member in 2004. She was instrumental in forming the first Student Chapter of the INMM at Texas A&M University, and she served in several board positions for the Chapter, including as the President. As a student, she won the JD Williams Student Paper Award in 2010, the student paper competition at the 2009 INMM Workshop on Reducing the Risk from Radioactive and Nuclear Materials, and the student abstract competition at the 2005 Annual Meeting of the INMM Southwest Chapter. Miller remains an active member of the INMM, regularly presenting papers and serving as a session chair at its annual meetings.

About the Institute of Nuclear Materials Management

The INMM is a nonprofit, professional organization devoted to ensuring the safe, secure, and peaceful stewardship of nuclear materials for the benefit of mankind. Nuclear materials management involves the production, use, storage, transport, handling, protection, accounting and other essential aspects involved with the elements of the civilian nuclear fuel cycle, such as uranium and plutonium. The INMM has a worldwide membership of engineers, scientists, technicians, managers, policymakers, analysts, commercial vendors, educators, and students. The Institute gives the Early Career Award to recognize significant achievement in the field of nuclear materials management in the early years of an individual’s career.