

Technologies for Nonproliferation in a Changing World

Jean H. de Pruneda
Deputy Program Leader NA-22
NAI Directorate Office
P.O. Box 808, L 176
Lawrence Livermore National Laboratory

Recent world events call for the development of new technologies in response to current and projected threats to national security worldwide posed by the proliferation of weapons of mass destruction and the potential diversion of special nuclear material. As a result, many research and development efforts are in place at national laboratories and universities with the aim of developing technologies leading to prototype demonstrations of efficient and robust detection systems.

The invited presentation by Dr. Pruneda will discuss the main threats that the U.S. is facing and some of the proposed innovative systems and solutions that are being investigated in response to these threats. Areas needing further investigation are also identified and discussed, with emphasis on the programs of the Office of Defense Nuclear Nonproliferation NA-22 of DOE's National Nuclear Security Administration.

The second presentation of this special session is by Dr. Tim Valentine and will overview recent developments and remaining needs in the area of special nuclear material detection. The remainder of the session is comprised of technical presentations reporting progress on various fronts in this important area.