



## ARC's Distinguished Lecture Series featuring

# Mansie Iyer, Ph.D.

## “Nuclear Forensics Expertise Development: Transferring Knowledge to the Next Generation”

**Research opportunities within nuclear forensics  
for undergraduate & graduate students, and faculty**

**September 28, 2016 | 2:00 PM | MMC | CP 107**

**This event is open to the public.**

This presentation will discuss the DNDO's National Technical Nuclear Forensics Center, with an emphasis on research opportunities within nuclear forensics for graduate and undergraduate students and faculty. This will include an overview of the NNFEDP and description of various opportunities including the new Nuclear Forensics Research Award, a competitive grant for Ph.D. candidates and principal investigators. Information for this, and other opportunities, can be found in the following link: [www.dhs.gov/national-technical-nuclear-forensics-center](http://www.dhs.gov/national-technical-nuclear-forensics-center)

In the event of a nuclear detonation in the United States (U.S.), the interdiction of a nuclear device, or the seizure of nuclear materials, there will be tremendous pressure to attribute the source of the material, establish responsibility, and ensure the prevention of another incident. Along with intelligence and law enforcement investigations, nuclear forensics is one of the three pillars supporting attribution. The field of nuclear forensics includes the collection, analysis, and evaluation of radiological or nuclear materials, devices, and debris after an event or interdiction. The Domestic Nuclear Detection Office has implemented an expertise development program in order to off-set these declines and sustain a workforce of educated and trained scientists skilled in areas needed for nuclear forensics. Since its inception in 2008, the National Nuclear Forensics Expertise Development Program (NNFEDP) addresses this challenge holistically, through support to undergraduate and graduate students, university faculty, as well as post-doctoral researchers at the national laboratories in fields which are directly relevant to nuclear forensics. In that time, the program has placed 51 Ph.D.'s directly into national laboratories and U.S. federal agencies, sustaining the technical expertise required to execute this critically important national security mission.

**Mansie Iyer** graduated from Florida International University with a PhD in Physics and is a recognized expert in nuclear detection, emergency response, and test planning and execution. She is a trusted advisor on nuclear issues to FBI, DTRA, and the Secret Service. Dr. Iyer has been an integral part of the Domestic Nuclear Detection Office (DNDO) and its Data Mining, Analysis and Modelling Cell (DMAMC). She currently leads the Analysis IPT within the DMAMC providing technical expertise, assists in the development and maintenance of quality assurance processes, and coordinates the development of novel techniques, tools, and other capabilities necessary to accelerate the delivery of analysis products as appropriate. She is also supporting Department of Energy's (DOE) Nuclear Smuggling Detection and Deterrence (NSDD) program as a senior technical advisor in their international nuclear forensics outreach, training and exercises and policy.