

# 2<sup>nd</sup> Advances in Nuclear Nonproliferation Technology and Policy Conference (ANTPC) 2018

Global Nuclear Security: Technical Leadership for the Modern World



September 23-27<sup>th</sup>, 2018

Hilton Wilmington Riverside • Wilmington, NC

Co-sponsored by the Nuclear Nonproliferation Policy Division, the Fuel Cycle and Waste Management Division, and ANS Wilmington Local Section

## Topics of Interest

### Nuclear Material Control and Accountability

- Nondestructive and Destructive Assay Methods
- International Safeguards Verification Technology

### Nonproliferation Policy: Present and Future

- Contemporary Practice of Nonproliferation Policy
- Arms Control Technologies
- Nuclear Security Culture
- Proliferation Resistance and Risk Assessment
- State-Level Concept
- Strategic Trade Agreements

### Analysis and Modeling Methods in Nonproliferation

- Detection using Advanced Data Science Methods
- Statistical Methods in Nonproliferation
- Validation and Verification Methods
- Sensitivity and Uncertainty Analysis
- Application of Codes
- Enhancements to Nuclear Data

### Nuclear Nonproliferation and the Fuel Cycle

- Safeguards-by-Design
- Nuclear Energy Leadership and Strengthening Global Security
- Safeguards for Advanced Fuel Cycles

### Challenges in Monitoring the Nuclear Fuel Cycle

- Enrichment Verification
- Reactor Operations Verification
- Plutonium Production Verification
- Spent Nuclear Fuel Verification and Storage
- Thorium and Alternative Fuel Cycles
- Weapons Useable Materials Minimization
- Security and Nonproliferation in Nuclear Fusion

### Nuclear Facilities and Infrastructure

- Security and Physical Protection
- Cybersecurity of Plant & Cloud Networking
- Integrated Design of Facility Safeguards Systems
- Packaging and Transportation
- Licensing and Construction of Nuclear Facilities and Interfaces with Safeguards

### Nonproliferation Education and Training

- Human Capital Development
- International Training and Education
- University and Academic Initiatives
- Social Media and Outreach

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American Nuclear Society

Summaries Due April 2, 2018  
Submission Instructions to Follow