

2nd Advances in Nuclear Nonproliferation Technology and Policy Conference (ANTPC) 2018

Global Nuclear Security: Technical Leadership for the Modern World



September 23-27th, 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 and Security by Design
- Nuclear Energy Leadership and Strengthening Global Security
- Safeguards for Advanced Fuel Cycles
- Regulatory Needs for Entrant Nuclear States
- Regulatory Issues for Advanced Reactors and 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 the Plant and Digital Instrumentation
- Cybersecurity of Data and Infrastructure
- 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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Summaries Due May 4, 2018

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Submission Logistics

Submission of Summaries: November 17, 2017–May 4, 2018
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Revised Summaries Due: June 29, 2018

Format

Authors are required to follow the “Guidelines for Transactions Summary Preparation” provided on the ANS website. Summaries must be submitted electronically in Adobe Acrobat (PDF) format via the ANS Electronic Paper Submission and Review System. Summaries not based on the ANS Template will be rejected.

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