



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

## Global Nuclear Security: Technical Leadership for the Modern World

September 23-27, 2018 | Wilmington, NC, USA | Hotel Ballast

### Co-Sponsored by



## CALL FOR PAPERS

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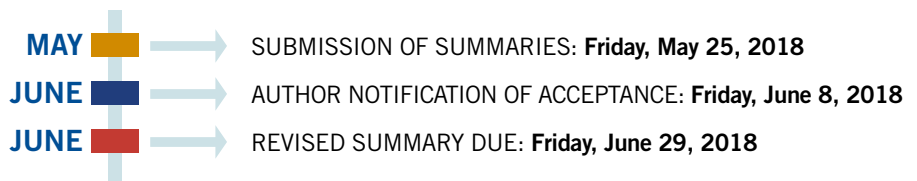
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### EXTENDED SUMMARY DEADLINE: FRIDAY, MAY 25, 2018



### 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.

### GUIDELINES FOR SUMMARIES

Please submit summaries describing work that is NEW, SIGNIFICANT, and RELEVANT to the nuclear industry. ANS will publish all accepted summaries in the Transactions. Papers are presented orally at the meeting, and presenters are expected to register for the meeting. Completed papers may be published elsewhere, but the summaries become the property of ANS. Under no circumstances should a summary or full paper be published in any other publication prior to presentation at the ANS meeting.

### REQUIRED TEMPLATE AND GUIDELINES FOR TRANSACTIONS SUMMARY PREPARATION DOCUMENT

[www.ans.org/pubs/transactions](http://www.ans.org/pubs/transactions)

### CONTACT

[ANTPC2018@gmail.com](mailto:ANTPC2018@gmail.com)

### SUBMIT A SUMMARY

[epsr.ans.org/meeting/?m=284](http://epsr.ans.org/meeting/?m=284)

### TRANSACTIONS COORDINATOR

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# ANS

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## TOPICS OF INTEREST

### 1. NUCLEAR MATERIAL CONTROL AND ACCOUNTABILITY

- Nondestructive and Destructive Assay Methods
- International Safeguards Verification Technology

### 2. 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

### 3. 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

### 4. 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

### 5. 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

### 6. 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

### 7. NONPROLIFERATION EDUCATION AND TRAINING

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

## MEETING ORGANIZERS

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