

# ANS<sup>®</sup> CALL FOR PAPERS

# 2026 ANS WINTER CONFERENCE

November 15-18, 2026 | Phoenix, AZ | Arizona Grand Resort & Spa

## EXECUTIVE CHAIRS

### Technical Program Chair:

Xiaodong Sun

### Assistant Technical Program Chairs:

Miltos Alamaniotis (Univ. Texas, San Antonio)

Igor Bolotnov (NCSU)

## IMPORTANT DEADLINES

**SUBMISSION OF SUMMARIES  
OR ABSTRACTS (NO EXTENSIONS)**  
Friday, June 26, 2026

**AUTHOR NOTIFICATION  
OF ACCEPTANCE**  
Monday, July 20, 2026

**REVISED SUMMARIES  
OR ABSTRACTS DUE**  
Friday, August 7, 2026

**SUBMIT A SUMMARY**  
<https://apps.ans.org/esr/event-wc2026/>



## PROGRAM SPECIALIST

Isabel Brinker

708-579-8290 | [epsr@ans.org](mailto:epsr@ans.org)

## GUIDELINES FOR SUBMISSION

Please submit summaries or abstracts describing work that is new, significant, and relevant to the nuclear industry. ANS will publish all accepted and presented summaries in the TRANSACTIONS. Submitted abstracts will not be published. Summaries and abstracts are presented orally at the conference, and presenters are expected to register for the conference. Non-U.S. attendees requesting a visa invitation letter: [registrar@ans.org](mailto:registrar@ans.org). Full papers based on summaries may be published elsewhere, but the summaries become the property of ANS. Under no circumstances should a summary or abstract be published in any other publication before presentation at the ANS conference. It is the author's responsibility to protect classified, export-controlled, or proprietary information. Submit your summary or abstract via the ANS Electronic Paper Submission and Review (EPSR) portal; see link on the left.

## SUMMARY FORMAT AND LENGTH

1. Use the ANS Template and Guidelines for TRANSACTIONS Summary Preparation provided on the [2026 Winter home page](#). Summaries that are not based on the ANS template will be rejected.
2. Summaries must be submitted as Adobe Acrobat PDF documents.
3. The minimum length is one full page.
4. The maximum length is four pages, including references, tables, and figures. Do not include a cover page. After you save your document as a PDF, verify that it is still four or fewer pages.
5. Do not use all capital letters for the title or any part of any authors' names. For the title of the summary, Capitalize the First Letter of Major Words. Author names should be First Name or Initial(s) followed by Last Name.
6. Limit title to ten words; limit listing of authors to three or fewer if possible.
7. The names of all authors should be entered into the Authors page in the EPSR. List the authors in the same order in which their names appear on the summary. The conference program will be derived from the information you enter into the EPSR.
8. In the EPSR, authors' affiliations should match the affiliation provided on the summary itself. If an author has multiple affiliations, enter the ONE that should be included in the program and TRANSACTIONS.
9. Do not use page numbers, headers, or footers. Do not save your PDF as "read only."
10. Keep the bottom margin clear so there is space for the ANS-applied footer and page number.

## ABSTRACT FORMAT

- All tracks and sessions at Winter 2026 will accept abstracts for presentation at the conference. Abstracts will NOT be published in TRANSACTIONS.
- Maximum of one page identifying title, authors, affiliations, and three paragraphs (total fewer than 500 words) describing high level content. The abstract template is on the Annual home page. Additionally, please follow these formatting/submittal guidelines:
- Do not use all capital letters for the title or any part of any authors' names. For the title of the abstract,
- Capitalize the First Letter of Major Words. Author names should be First Name or Initial(s) followed by Last Name.
- The names of all authors should be entered into the Authors page in the Electronic Paper Submission and Review (EPSR) system. List the authors in the same order in which their names appear in the abstract.
- Author information in the conference program is derived from the entries in the EPSR's Authors page.
- In the EPSR, authors' affiliations should match the affiliation provided in the abstract itself. If an author has multiple affiliations, enter the ONE that should be included in the program, assuming the abstract is accepted.
- If accepted, abstracts will result in a 20-minute presentation at the conference.

## CONTENT

1. Introduction: State the purpose of the work.
2. Description of the actual work: Must be new and significant.
3. Results: Discuss their significance.
4. References: If any, must be closely related published works. Minimize the number of references.
5. Do not present a bibliographical listing.
6. If a disclaimer is required (e.g., related to the author's employer), it is the author's responsibility to include the disclaimer in the summary as either an end-of-summary note (preferred) or footnote. Please ensure such footnotes do not interfere with the bottom margin, and do not format disclaimers as headers or footers.

## EXECUTIVE SESSIONS

Would you like to propose and arrange an Executive Session? If so, please submit via the Executive Track in the Electronic Paper Submission and Review (EPSR) system. Executive Sessions take a broader look at developments in nuclear science and technology and their impact on policy and markets. Nem nihilicitum dita, conte iae noc rei

## SESSION TITLES BY DIVISION

(P) = Panel

### 1. ACCELERATOR APPLICATIONS (AAD)

- 1a. Isotope Production and Medical Applications
- 1b. Accelerator Facilities and Technology Development
- 1c. Radiation Effects and Related Applications
- 1d. Accelerator Applications in Industry and Security
- 1e. AI-Driven Accelerator Research, Teaching and Operations

### 2. AEROSPACE NUCLEAR SCIENCE AND TECHNOLOGY (ANSTD)

- 2a. Aerospace Nuclear Science and Technology: General

### 3. DECOMMISSIONING AND ENVIRONMENTAL SCIENCES (DESD)

- 3a. Decommissioning and Environmental Sciences: General
- 3b. Messaging to Match the Environment (P)
- 3c. Nuclear Maritime (P)

### 4. EDUCATION, TRAINING, AND WORKFORCE DEVELOPMENT (ETWDD)

- 4a. Education, Training, and Workforce Development: General
- 4b. Office of Nuclear Energy Supported Student Presentations
- 4c. Distinguished Early Career Program for Early Career Faculty
- 4d. Innovations in Nuclear Research and Development Student Competition
- 4e. ANS Student Design Competition

### 5. FUEL CYCLE AND WASTE MANAGEMENT (FCWMD)

- 5a. Fuel Cycle and Waste Management: General
- 5b. Aerosol Source Terms Estimation and Transport
- 5c. University Research in Fuel Cycle and Waste Management
- 5d. Molten Salt Fuel Chemistry
- 5e. Advances in Fuel Recycle
- 5f. Automation and AI/ML Applications in Fuel Cycle and Waste Management
- 5g. Advanced Reactor Fuel Back-End Management and Disposition
- 5h. Innovative Methods in SNF Disposal R&D
- 5i. Scientific and Technical Advances in SNF Storage and Transportation
- 5j. Advances in Advanced Reactor Fuel Fabrication and Qualification (P)
- 5k. Center for Used Fuel Research: Mission, Priorities, and Impact (P)
- 5l. Domestic Fuel and Supply Chain Development: Progress, Gaps, and the Path Forward (P)

### 6. FUSION ENERGY (FED)

- 6a. Fusion Materials
- 6b. Blanket and Fuel Cycle
- 6c. Fusion Neutronics
- 6d. Advances in Fusion Technology and Supply Chain
- 6e. Fusion Policy and Safety
- 6f. Fusion Modeling and Simulation
- 6g. Fusion Education and Workforce Development

### 7. HUMAN FACTORS, INSTRUMENTATION, AND CONTROLS (HFICD)

- 7a. Advances in Sensors and Instrumentation
- 7b. Advances in Human Factors Engineering
- 7c. Artificial Intelligence and Machine Learning for I&C and Human Factors
- 7d. Autonomous Control for Nuclear Plants
- 7e. Cybersecurity in Wireless Technologies, Digital I&C, Digital Twins, and Human Factors
- 7f. Digital Twins for Plant Operation and Maintenance
- 7g. Embedded Sensors and Additive Manufacturing for Nuclear Applications
- 7h. Human Reliability Analysis and Human-System Interface
- 7i. I&C for SMRs and Microreactors
- 7j. Human Factors for SMRs and Microreactors
- 7k. I&C for Space Nuclear
- 7l. I&C Regulations, Standards, Aging Management, and Guidelines
- 7m. Large Language Models and Foundation Models for Nuclear
- 7n. Online Monitoring, Diagnostics, and Prognostics
- 7o. Remote Monitoring and Operation of Nuclear Plants
- 7p. Risk-Informed Operation and Control
- 7q. Robotic and Drone Applications in Operation and Maintenance
- 7r. Structural Health Monitoring for Nuclear Plants
- 7s. Nuclear-Powered Data Centers: Installation and Operational Challenges (P)
- 7t. Regulation, V&V, and Ethical Considerations of AI for Nuclear (P)
- 7u. From R&D to Deployment: Implementing Advanced I&C and Human Factors Principles (P)
- 7v. Human Factors, Instrumentation, and Controls: General

### 8. ISOTOPES AND RADIATION (IRD)

- 8a. Isotopes and Radiation: General
- 8b. Neutron Flux Detection and In-Pile Instrumentation for Research Reactors, SMRs, and Microreactors
- 8c. Closing the Gap: Nuclear Forensics for Advanced Reactors and Emerging Threat Vectors

### 9. MATERIALS SCIENCE AND TECHNOLOGY (MSTD)

- 9a. Nuclear Fuels and Claddings
- 9b. Molten Salt Reactor Fuels and Materials
- 9c. Irradiation Experiments for Nuclear Materials and Fuels
- 9d. Advanced/Additive Manufacturing
- 9e. Environmental Degradation of Materials
- 9f. AI and ML Applications in Nuclear Materials Research
- 9g. High-Throughput Experimentation in Nuclear Materials
- 9h. Advanced Characterization and Simulation Techniques for Nuclear Materials
- 9i. Functional Materials for Fission Systems
- 9j. Universal Interatomic Potentials for Molten Salts & Nuclear Materials (P)

### 10. MATHEMATICS AND COMPUTATION (MCD)

- 10a. Transport Methods
- 10b. Computational Methods and Mathematical Modeling
- 10c. Uncertainty Quantification, Sensitivity Analysis, and Machine Learning
- 10d. Mathematics and Computation: General

### 11. NUCLEAR CRITICALITY SAFETY (NCSD)

- 11a. Data, Analysis and Operations in Nuclear Criticality Safety
- 11b. Critical and Subcritical Experiments
- 11c. Recent NCSP Technical Accomplishments
- 11d. Roadmap to High-Assay Low-Enriched Uranium (HALEU) Fuel for the Next-Generation Nuclear Reactors
- 11e. ANS 8 Standards Forum (P)
- 11f. Tom McLaughlin and his Impact on the Field (P)
- 11g. Roadmap to High-Assay Low-Enriched Uranium (HALEU) Fuel for the Next-Generation Nuclear Reactors (P)

### 12. NUCLEAR INSTALLATIONS SAFETY (NISD)

- 12a. Nuclear Installations Safety: General
- See ARS embedded topical for more sessions.

### 13. NUCLEAR NONPROLIFERATION POLICY (NNPD)

- 13a. Nuclear Nonproliferation Policy: General
- 13b. Science, Technology, and Policy Advances in Nuclear Safeguards
- 13c. Nuclear Arms Control: Export Control, Treaty Verification, and Disarmament
- 13d. Nuclear Security, Nuclear Forensics, and Physical Protection

### 14. OPERATIONS AND POWER (OPD)

- 14a. Operations and Power: General
- 14b. Advanced Nuclear Reactors and Power Systems
- 14c. Energy Storage Integration with Nuclear Power Plants
- 14d. Hybrid and Integrated Energy Systems
- 14e. Nuclear Energy Markets, Financing, and Economics
- See ICAPP embedded topical.

### 15. RADIATION PROTECTION AND SHIELDING (RPSD)

- 15a. Radiation Protection and Shielding: General

### 16. REACTOR PHYSICS (RPD)

- 16a. Reactor Analysis: General
- 16b. Reactor Physics Methods
- 16c. Advanced Reactor Analysis
- 16d. Advanced Reactor Methods

### 17. ROBOTICS AND REMOTE SYSTEMS (RRSD)

- 17a. Robotics and Remote Systems: General
- 17b. Robotics and Remote Systems (P)

### 18. THERMAL HYDRAULICS (THD)

- See ATH embedded topical.

### 19. YOUNG MEMBERS GROUP (YMG)

- 19a. Bridging Generations in the Nuclear Workforce (P)
- 19b. Work-Life Balance in Nuclear (P)
- 19c. How I Built My Network (P)
- 19d. Mentorship in Action: Experiences From the ANS Mentor Match Program (P)
- 19e. Beyond Power: Nuclear Careers (P)
- 19f. Rad Talk (P)
- 19g. Making an Early Impact in Setting Nuclear Standards and Regulations (P)

## TECHNICAL DIVISION LEADERSHIP

**ACCELERATOR APPLICATIONS (AAD)**  
Yongqiang Wang, yqwang@lanl.gov

**AEROSPACE NUCLEAR SCIENCE AND TECHNOLOGY (ANSTD)**  
Dianne Ezell, Nora.Ezell@inl.gov

**DECOMMISSIONING AND ENVIRONMENTAL SCIENCES (DESD)**  
Dustin Miller, DMiller@TerranearPMC.com  
Jim Byrne, jbyrne4424@comcast.net

**EDUCATION, TRAINING, AND WORKFORCE DEVELOPMENT (ETWDD)**  
Kyle Hartig, hartig@mse.ufl.edu

**FUEL CYCLE AND WASTE MANAGEMENT (FCWMD)**  
Kaushik Banerjee, kaushik.banerjee@inl.gov

**FUSION ENERGY (FED)**  
Tommy Fuerst, Thomas.Fuerst@inl.gov  
Paul Humrickhouse, humrickhoup@ornl.gov  
Lauren Garrison, lgarrison@cfs.energy

**HUMAN FACTORS, INSTRUMENTATION, AND CONTROLS (HFICD)**  
Xingang Zhao, zzhao47@utk.edu

**ISOTOPES AND RADIATION (IRD)**  
Igor Jovanovic, ijov@berkeley.edu  
Kenan Unlu, K-unlu@psu.edu

**MATERIALS SCIENCE AND TECHNOLOGY (MSTD)**  
Jake Quincey, quinceyj@oregonstate.edu  
Kenneth Geelhood, Kenneth.Geelhood@pnnl.gov

**MATHEMATICS AND COMPUTATION (MCD)**  
Korosh Shirvan, kshirvan@mit.edu  
Majdi Radaideh, radaideh@umich.edu  
Kendra Long, keadyk@lanl.gov

**NUCLEAR CRITICALITY SAFETY (NCSD)**  
Ben Martin, benm15151@gmail.com  
Amy Van Der Vyver, amy.vandervyver@sellfieldsites.com

**NUCLEAR INSTALLATIONS SAFETY (NISD)**  
Yunfei Zhao, yzhao111@umd.edu  
Mihai A. Diaconeasa, madiacon@ncsu.edu

**NUCLEAR NONPROLIFERATION POLICY (NNPD)**  
Luis Ocampo Giraldo, luis.ocampogiraldo@nnsa.doe.gov  
Angela Di Fulvio, difulvio@illinois.edu  
Shikha Prasad, shikhapr@gmail.com

**OPERATIONS AND POWER (OPD)**  
W. Neal Mann, wmann@anl.gov

**RADIATION PROTECTION AND SHIELDING (RPSD)**  
Irina Popova, popovai@ornl.gov  
Tucker McClanahan, mcclanahantc@ornl.gov

**REACTOR PHYSICS (RPD)**  
Zeyun Wu, zwu@vcu.edu

**ROBOTICS AND REMOTE SYSTEMS (RRSD)**  
Adam Carroll, carrollaj@ornl.gov  
Young Park, ypark@anl.gov

**THERMAL HYDRAULICS (THD)**  
Izabela Gutowska, izabela.gutowska@oregonstate.edu  
Drew Ryan, Drew.Ryan1@unnp.gov

**YOUNG MEMBERS GROUP (YMG)**  
Anna Iskhakova, aishk@ksu.edu  
Fabiano Carvalho, fabiano.carvalho@asu.edu