



ANS

Winter Meeting & Expo

Joining Forces to Advance Nuclear

November 11-15, 2018 | Orlando, FL | Hilton Orlando Bonnet Creek

CALL FOR PAPERS

EXECUTIVE CHAIRS

General Chair

Daniel Churchman, Southern Nuclear Corporation

Technical Program Chair

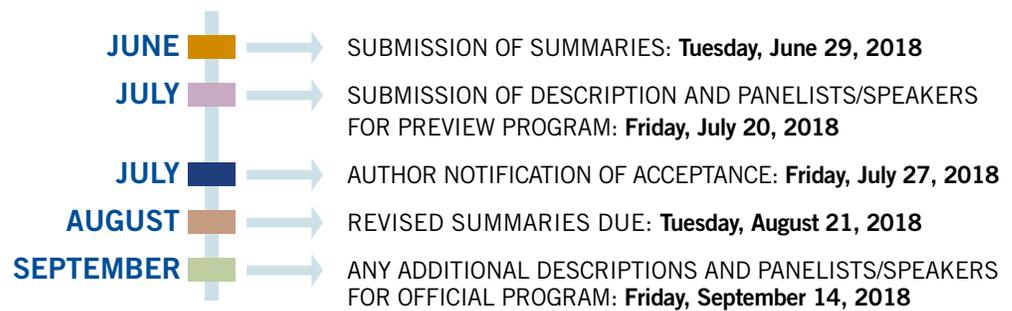
John Bess, Idaho National Laboratory

Assistant Technical Program Chairs

Gokul Vasudevamurthy, General Atomics

Robert Margolis, Florida Power and Light

SUMMARY DEADLINE: TUESDAY, JUNE 29, 2018



FORMAT

Authors are now REQUIRED to use the ANS Template and Guidelines for TRANSACTIONS Summary Preparation provided on the ANS Web site at www.ans.org/pubs/transactions. Summaries must be submitted electronically using Adobe Acrobat (PDF) files or original Microsoft Word documents and 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. It is the author's responsibility to protect classified or proprietary information.

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.

LENGTH

1. The minimum length is one full page.
2. The maximum length is four pages, including references, tables, and figures.
3. Limit title to ten words; limit listing authors to three or fewer if possible.

PAGE CHARGE

ANS charges \$100 per final printed page in the TRANSACTIONS. Authors should be prepared to provide their purchase order numbers when submitting their summaries electronically.

SUBMIT A SUMMARY

ans.org/meetings

TRANSACTIONS COORDINATOR

Ellen Leitschuh
708-579-8253
708-579-8313 Fax
eleitschuh@ans.org

INFORMATION SERVICES

Joe Koblich, Director
708-579-8237
708-579-8274 Fax



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SESSION TITLES BY DIVISION

(P) = Panel

1. **ACCELERATOR APPLICATIONS (AAD)**
 - 1a. Accelerator Applications: General
2. **AEROSPACE NUCLEAR SCIENCE AND TECHNOLOGY (ANSTD)**
 - 2a. Aerospace Nuclear Science and Technology: General
3. **BIOLOGY AND MEDICINE (BMD)**
 - 3a. Biology and Medicine: General
4. **DECOMMISSIONING AND ENVIRONMENTAL SCIENCES (DESD)**
 - 4a. Decommissioning and Environmental Sciences: General
5. **EDUCATION, TRAINING, AND WORKFORCE DEVELOPMENT (ETWDD)**
 - 5a. Education, Training and Workforce Development: General
 - 5b. Student Design Competition
 - 5c. Cutting Edge Techniques in Education, Training and Distance Education
 - 5d. Focus on Communication—I (P)
 - 5e. Focus on Communication—II (P)
 - 5f. Innovations in Nuclear Technology R&D Awards
 - 5g. Research by U.S. DOE NEUP Sponsored Students I, II
 - 5h. Best of ANS Student Conference
 - 5i. Professional Licensure in the Nuclear Industry Matters: It's NOT the Job You DO, It's How You DO the Job!
6. **FUEL CYCLE AND WASTE MANAGEMENT (FCWMD)**
 - 6a. Fuel Cycle and Waste Management: General
 - 6b. Progress in DOE's Nuclear Technology Research and Development Programs (P)
 - 6c. Recent Research Work on Cementitious Waste
 - 6d. Dry Storage Systems for SNF and HLW
 - 6e. Transportation of UNF/SNF to the Next Destination (P)
 - 6f. Safeguards Approaches and Technologies for Molten Salt Reactors
 - 6g. Used Fuel and High-Level Waste Management – The Long and Winding Road (P)
 - 6h. Molten Salt Electrochemical Properties
 - 6i. Molten Salt Reactors: Separations and Waste Processing
 - 6j. Fuel Cycle Analysis
 - 6k. Grand Challenges of Closing the Fuel Cycle: How did we get there? Historical, Economic and Regulatory Challenges (P)
 - 6l. International Research Towards Key Improvements within the Closed Fuel Cycle (P)
7. **FUSION ENERGY (FED)**

Sponsoring embedded topical meeting—23rd Topical Meeting on the Technology of Fusion Energy (TOFE)
8. **HUMAN FACTORS, INSTRUMENTATION, AND CONTROLS (HFICD)**
 - 8a. General Topics in Instrumentation and Control
 - 8b. General Topics in Human Factors and Human Machine Interface
 - 8c. Preview of the 2019 NPIC/HMIT Topical Meeting
 - 8d. Cybersecurity Guidance and Practices (P)
9. **ISOTOPES AND RADIATION (IRD)**
 - 9a. Isotopes and Radiation: General
 - 9b. Development of Advanced In-Core Sensors for Fuel Systems R&D
10. **MATERIALS SCIENCE AND TECHNOLOGY (MSTD)**
 - 10a. Challenges and Opportunities with Accelerated Qualification of LWR ATF Cladding and Fuel Materials
 - 10b. Fuels and Materials for Molten Salt Reactors
 - 10c. Fuels and Materials for Small Modular Reactors
 - 10d. Nuclear Fuels
 - 10e. Accident Tolerant Fuels
 - 10f. Nuclear Fuels and Materials in Fast Reactors
 - 10g. Nuclear Science User Facilities
 - 10h. Advanced Measurement Techniques
 - 10i. Post-Irradiation Examination
 - 10j. Advanced Manufacturing
 - 10k. Transient Fuel Performance
11. **MATHEMATICS AND COMPUTATION (MCD)**
 - 11a. Current Issues in Computational Methods—Roundtable (P)
 - 11b. Transport Methods
 - 11c. Computational Methods
 - 11d. Mathematical Modeling
 - 11e. Uncertainty Quantification and Sensitivity Analysis
12. **NUCLEAR CRITICALITY SAFETY (NCSD)**
 - 12a. ANS-8 Standards Forum (P)
 - 12b. NCS Implementation Programs (P)
 - 12c. Impacts to Criticality Safety from Recent Revisions to DOE Standards (P)
 - 12d. New Code Developments for Nuclear Criticality Safety Applications
 - 12e. ENDF/B-VIII.0: Evaluation and Validation (P)
 - 12f. Critical and Subcritical Experiments
 - 12g. Membership Challenge Activity Debrief and Solution Discussion (P)
 - 12h. Recent Nuclear Criticality Safety Program Technical Accomplishments
 - 12i. Data, Analysis and Operations in Nuclear Criticality Safety
 - 12j. Hand Calculation Methodology and Use (P)
13. **NUCLEAR INSTALLATIONS SAFETY (NISD)**
 - 13a. Nuclear Installations Safety: General
 - 13b. Expediting the Licensing and Deployment of Advanced Reactors (P)
 - 13c. Emergent Topics in Consensus Standards
 - 13d. Current Topics in Probabilistic Risk Analysis
14. **NUCLEAR NONPROLIFERATION POLICY (NNPD)**
 - 14a. Nuclear Nonproliferation Policy: General
 - 14b. Specialty Fuel for Space/Defense Reactors: Discussion on Performance Specifications and Nonproliferation Policy (P)
 - 14c. Current Events in Nuclear Nonproliferation (P)
 - 14d. Eighty Years with Nuclear Fission
 - 14e. Eighty Years with Nuclear Fission (P)
15. **OPERATIONS AND POWER (OPD)**
 - 15a. Operations and Power: General
 - 15b. Nuclear Cogeneration for Sustainable Development (P)
 - 15c. New Nuclear Construction Around the World—Status Report (P)
 - 15d. Hybrid Energy Systems (P)
 - 15e. Energy Storage Systems (P)
 - 15f. Advanced/Gen-IV Reactors
 - 15g. Underway on Nuclear Power: A Retrospective (P)
 - 15h. Results from the Nuclear Futures Discussion on Community Engagement (P)
16. **RADIATION PROTECTION AND SHIELDING (RPSD)**
 - 16a. Radiation Protection and Shielding: General
 - 16b. Radiation Protection and Shielding – Roundtable (P)
 - 16c. Ethics in Nuclear Engineering and Design (P)
17. **REACTOR PHYSICS (RPD)**
 - 17a. Reactor Physics: General
 - 17b. Reactor Analysis Methods
 - 17c. Data Analytics in Support of Safety and Security
 - 17d. Reactor Physics in Test and Research Reactors
 - 17e. Application and Challenges in CFD-Neutronics Coupling
 - 17f. Current Issues in LWR Core Design and Reactor Engineering Support (P)
18. **ROBOTICS AND REMOTE SYSTEMS (RRSD)**
 - 18a. Robotics and Remote Systems: General
19. **THERMAL HYDRAULICS (THD)**

Sponsoring embedded topical meeting – International Topical Meeting on Advances in Thermal Hydraulics 2018 (ATH)

2018 WINTER MEETING: TECHNICAL DIVISIONS

ACCELERATOR APPLICATIONS (AAD)
Peter Hosemann, peterh@berkeley.edu

AEROSPACE NUCLEAR SCIENCE AND TECHNOLOGY (ANSTD)
Robert O'Brien, robert.obrien@inl.gov

BIOLOGY AND MEDICINE (BMD)
Robert Greg Downing, Gregory.downing@nist.gov

DECOMMISSIONING AND ENVIRONMENTAL SCIENCES (DESD)
Dustin G. Miller, dmiller@chaseenv.com

EDUCATION, TRAINING, AND WORKFORCE DEVELOPMENT (ETWDD)
Lisa Marshall, lisamarshall@yahoo.com

FUEL CYCLE AND WASTE MANAGEMENT (FCWMD)
Stephanie Bruffey bruffeysh@ornl.gov

FUSION ENERGY (FED)
Arnold Lumsdaine, lumsdainea@ornl.gov

HUMAN FACTORS, INSTRUMENTATION, AND CONTROLS (HFICD)
Jamie Coble jcoble1@utk.edu

ISOTOPES AND RADIATION (IRD)
Kenan Unlu, K-unlu@psu.edu

MATERIALS SCIENCE AND TECHNOLOGY (MSTD)
Kenneth Geelhood, Kenneth.Geelhood@pnl.gov

MATHEMATICS AND COMPUTATION (MCD)
Steven P. Hamilton hamiltonsp@ornl.gov

NUCLEAR CRITICALITY SAFETY (NCSD)
Theresa Cutler, tcutler@lanl.gov

NUCLEAR INSTALLATIONS SAFETY (NISD)
Giri A Shukla, girija.shukla@nrc.gov

NUCLEAR NONPROLIFERATION POLICY (NNPD)
Kelsey Amundson kamundson5@gmail.com

OPERATIONS AND POWER (OPD)
Piyush Sabharwal, piyush.sabharwal@inl.gov

RADIATION PROTECTION AND SHIELDING (RPSD)
Dominic Napolitano, dnapolitano@enercon.com, Irina Popova, popovai@ornl.gov

REACTOR PHYSICS (RPD)
Cristian Rabiti, Cristian.rabiti@inl.gov

ROBOTICS AND REMOTE SYSTEMS (RRSD)
Mitch W. Pryor, mpryor@utexas.edu

THERMAL HYDRAULICS (THD)
Elia Merzari, pchair@thd-ans.org

YOUNG MEMBERS GROUP (YMG)
Nicolas E. Stauff, stauff@anl.gov.com, Alyse Scurlock, alysescurlock@duke-energy.com