# **ANS Call For Papers**

## **2015 ANS Annual Meeting**

June 7–11, 2015 • San Antonio, TX • Grand Hyatt San Antonio Nuclear Technology: An Essential Part of the Solution

#### Summary Deadline: January 9, 2015 CALL FOR PAPERS

#### Conference Chairs:

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 (prorated) in the TRANSACTIONS. Authors should be prepared to provide their purchase order numbers when submitting their summaries electronically.

#### Required Template and Guidelines for Transactions Summary Preparation

www.ans.org/pubs/transactions

#### Submit a Summary

www.ans.org/meetings

#### Transactions Coordinator

Ellen Leitschuh Tel: 708/579-8253 Fax: 708/352-8313 eleitschuh@ans.org

#### **Information Services**

Joe Koblich, Director Tel: 708/579-8237 Fax: 708/352-8274

General Chair Dale Klein, University of Texas, Austin

Assistant General Chair Steven R. Biegalski, University of Texas, Austin

**Technical Program Chair** Jeffery R. Brault, *Argonne National Lab* 

#### Assistant Technical Program Chair

Peter F. Caracappa, *Rensselaer Polytechnic Institute* Piyush Sabharwall, *Idaho National Laboratory* 

#### Deadlines: No Exceptions

SUBMISSION OF SUMMARIES: October 1, 2014–January 9, 2015

AUTHOR NOTIFICATION OF ACCEPTANCE: *By February 24, 2015* 

REVISED SUMMARIES DUE: *March 11, 2015* 

#### **Format**

Authors are now REQUIRED to use the ANS Template and Guidelines for TRANSACTIONS Summary Preparation provided on the ANS Web site. Summaries must be submitted electronically using Adobe Acrobat (PDF) files and 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.

## **2015 ANS Annual Meeting**

#### 2015 Annual Meeting: Session Titles by Division

#### 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)

- Numerical Optimization in Medical Physics and Nuclear Engineering
- 3b. Biology and Medicine: General

## 4. Decommissioning and Environmental Sciences (DESD)

- 4a. Solid Waste Management (P)
- 4b. Cooling Water Sources for Nuclear Power (P)
- 4c. Recent Developments in Hydrogen Produced through Nuclear Power (P)
- 4d. Decommissioning and Environmental Sciences: General

## 5. Education, Training, and Workforce Development (ETWDD)

- 5a. Focus on Communications: Improving our Advocacy (P)
- 5b. Focus on Communications: Endorsing Nuclear Energy (P)
- 5c. Education and Training: General
- 5d. Training, Human Performance, and Workforce Development

#### 6. Fuel Cycle and Waste Management (FCWMD)

- 6a. Environmental Monitoring on Nuclear Sites: Aspect, Importance, and Challenges
- 6b. GTRI Status and Progress
- 6c. Advanced Fuel Cycle Technologies (focus on aqueous)
- 6d. Fuel Cycle Simulators
- 6e. Recycle and Reuse of Used Nuclear Fuel Resources
- 6f. Updated Status on Used Fuel Disposition (P)
- 6g. Decision Making and Metrics for Fuel Cycle RD&D
- 6h. University Research in Fuel Cycles and Waste Management
- 6i. Hybrid Energy: Combining Nuclear and Other Energy Sources
- 6j. Fuel Cycle and Waste Management: General
- 6k. Cyclus User's Tutorial
- 6l. Cyclus Archetype Developers Tutorial
- 7. Fusion Energy (FED)
- 7a. Fusion Energy General
- 8. Human Factors, Instrumentation, and Controls (HFICD)
- 8a. Human Factors, Instrumentation, and Controls: General

#### 9. Isotopes and Radiation (IRD)

- 9a. Innovations in Radiation Detectors: New Designs, Improvements, and Applications
- 9b. New Research and Education Developments at the Nuclear Science and Engineering Programs
- 9c. Isotopes and Radiation: General

#### 10. Materials Science and Technology (MSTD)

- 10a. Accident Tolerant Fuel
- 10b. Used Nuclear Fuel Disposition
- 10c. Structural Materials for Nuclear Applications
- 10d. Modeling and Simulation
- 10e. Nuclear Fuels
- 10f. Advanced Measurements and Instrumentation

#### 11. Mathematics and Computation (MCD)

- 11a. Uncertainty Quantification and Sensitivity Analysis Methods
- 11b. Current Issues in Computational Methods Roundtable (P)
- 11c. Transport Methods: General
- 11d. Computational Methods: General
- 11e. Mathematical Modeling: General

#### 12. Nuclear Criticality Safety (NCSD)

- 12a. ANS 8 Standards Forum
- 12b. Data, Analysis and Operations for Nuclear Criticality Safety
- 12c. Nuclear Fission Processes and Data

#### 13. Nuclear Installations Safety (NISD)

- 13a. Nuclear Safety Research at the Department of Energy
- 13b. Status of the DOE:NE aSMR PRA Program

#### 14. Nuclear Nonproliferation Technical Group (NNTG)

- 14a. Nuclear Nonproliferation Technical Group General [FCWMD, IRD, NISD, RPSD, YMG]
- 14b. Application of Radiation Detection Technologies to Meet Nonproliferation Goals and Objectives [IRD, RPSD] (P)
- 14c. Detector Applications in Support of Nonproliferation Policy
- 14d. Human Reliability in Nuclear and Radiological Systems, (P)
- 14e. Global Threat Reduction Initiative (GTRI) Accomplishments and Challenges [YMG] (P)
- 14f. New Developments on Nuclear Trade Agreements [OPD] (P)
- 14g. Nuclear Forensics: Application, Policy, and Challenges Associated with Global Security and Nuclear Nonproliferation [IRD, FCWMD] (P)
- 14h. Nuclear Nonproliferation Student Showcase—Poster Session [FCWMD, IRD, RPSD, YMG]

### **2015 ANS Annual Meeting**

#### 2015 Annual Meeting: Session Titles by Division

#### 15. Operations and Power (OPD)

- 15a. Breaking the Barrier Between Research and Implementation (P)
- 15b. New Nuclear Construction Around the World—Status Report (P)
- 15c. Advanced/Gen-IV Reactors
- 15d. Operations and Power: General

#### 16. <u>Radiation Protection and Shielding (RPSD)</u>

- 16a. Computational Tools for Radiation Protection and Shielding
- 16b. Best of RPSD 2014
- 16c. Background Radiation
- 16d. Radiation Protection and Shielding: General
- 16e. Radiation Protection and Shielding: Roundtable (P)

#### 17. <u>Reactor Physics (RPD)</u>

- 17a. Advanced Monte Carlo Methods for Reactor Physics Analysis [MCD]
- 17b. Progress in Student Research and Design Projects [AAD, ANSTD, ETWDD, FED]
- 17c. Small Modular Reactors (SMRs): Reactor Physics and Fuel Cycle [FCWMD]

- 17d. LWR Fuel Reliability
- 17e. Current Issues in LWR Core Design and Reactor Engineering Support (P)
- 17f. Reactor Physics Design, Validation, and Operating Experience
- 17g. Reactor Analysis Methods
- 17h. Reactor Physics: General

#### 18. <u>Robotics and Remote Systems (RRSD)</u>

18a. Robotics and Remote Systems: General

#### 19. Thermal Hydraulics (THD)

- 19a. Two-Phase Flow
- 19b. Thermal Hydraulics Education (P)
- 19c. Thermal Hydraulics in Non-traditional Nuclear Applications
- 19d. Computational Thermal Hydraulics
- 19e. Experimental Thermal-Hydraulics
- 19f. Advanced System Code Development and Analysis
- 19g. Computational Fluid Dynamics Verification and Validation
- 19h. Thermal-Hydraulics: General

#### 20. Young Members Group (YMG)

20a. Young Members Group: General

#### ANS 2015 Annual Meeting: Technical Divisions

Acceleration Applications (AAD) Erich Schneider, eschneider@mail.utexas.edu

Aerospace Nuclear Science and Technology (ANST) Martin Sattison, martin.sattison@inl.gov

Biology and Medicine (BMD) Rolf Zeisler, rolf.zeisler@nist.gov

Education, Training, and Workforce Development (ETWDD) John Bennion, john.bennion@ge.com

**Decommissioning and Environmental Sciences (ESD)** Jay Peters, jpeters@haleyaldrich.com

Fuel Cycle and Waste Management (FCWMD) Jean-Francois Lucchini, lucchinif@pvtnetworks.net

Fusion Energy (FED) Lee Cadwallader, lee.cadwallader@inl.gov

Human Factors, Instrumentation, and Controls (HFICD) Sacit Cetiner, cetinerms@ornl.gov

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) Ryan McClarren, rgm@tamu.edu

Nuclear Criticality Safety (NCSD) Allison Miller, admille@sandia.gov

Nuclear Installations Safety (NISD) Edward Blandford, edb@unm.edu

Nuclear Nonproliferation Technical Group (NNTG) Chris Robinson, robinsonrc@12doe.gov

Operations and Power (OPD) Gale Hauck, hauckge@westinghouse.com

Radiation Protection and Shielding (RPSD) Peter Caracappa, caracp3@rpi.edu

Reactor Physics (RPD) Alexander Stanculescu, Alexander.Stanculescu@inl.gov

Robotics and Remote Systems (RRSD) Carl Crane, carl.crane@gmail.com

Thermal Hydraulics (THD) Elia Merzari, pcchair@thd-ans.org

Young Members Group (YMG) Brett Rampal, bret.rampal@gmail.com

## **ANS Conference** 2015 Annual Meeting

Nuclear Technology: An Essential Part of the Solution

June 7-11, 2015 Grand Hyatt San Antonio San Antonio, TX

