



ANS National Meeting

2015 Winter Meeting and Technology Expo

November 8-12, 2015 • Washington, D.C. • Marriott Wardman Park

**“Nuclear: The Foundation of Sensible Policy
for Energy, Economy, and the Environment”**

EMBEDDED TOPICAL MEETINGS:

12th International Topical Meeting on Nuclear Applications of Accelerators (AccApp '15)
Young Professionals Congress 2015

Summary Deadline: July 3, 2015

Call for Papers

CONFERENCE CHAIRS

General Chair

Donald R. Hoffman, *EXCEL Services Corp.*

Technical Program Chair

James J. Byrne, *Byrne & Assoc.*

Assistant Technical Program Chairs

Sue Aggarwal, *NMNTI*

John Bess, *Idaho National Laboratory*

DEADLINES: NO EXCEPTIONS

SUBMISSION OF SUMMARIES:

April 1, 2015–July 3, 2015

AUTHOR NOTIFICATION OF ACCEPTANCE:

By July 28, 2015

REVISED SUMMARIES DUE:

August 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.

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: 708/579-8313
eleitschuh@ans.org

INFORMATION SERVICES

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

2015 ANS Winter Meeting and Nuclear Expo

2015 Winter 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)

3a. Nuclear Analytical Methods, Radiochemistry, and Metrology

3b. Biology and Medicine: General

4. Decommissioning and Environmental Sciences (DESD)

4a. Hot Topics and Emerging Issues

4b. Cooling Water Sources for Nuclear Power (P)

4c. Decommissioning Regulatory Requirements for Nuclear Power Plants (P)

4d. Preparing for Safe Store Lessons Learned (P)

4e. Decommissioning and Environmental Sciences: General

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

5a. Cutting Edge Techniques in Education, Training, and Distance Learning

5b. Research by U.S. DOE NEUP-Sponsored Students

5c. Innovations in Fuel Cycle Research—A Student Competition

5d. Student Design Competition

5e. Education and Training: General

5f. Kent W. Hamlin Memorial Session—Best of Conte 2015 (P)

5g. Focus on Communications: Meet the Media (P)

5h. Focus on Communications: Communicating with Policy Makers (P)

5i. Patents for Nuclear Professionals (P)

6. Fuel Cycle and Waste Management (FCWMD)

6a. Recycle and Reuse of Used Nuclear Fuel Resources

6b. Re-Establishing Plutonium-238 Production in the United States

6c. Integrated Spent Nuclear Fuel Management Analysis Capabilities

6d. Collaborative R&D for Future Nuclear Energy (P)

6e. International Perspective of Electrochemical Recycling (P)

6f. Fuel Cycle Simulators

6g. Public Perception of Risk: Strategies to Address the “Perception Gap” with Nuclear Technologies (P)

6h. Updates in Nuclear Waste Policy (P)

6i. International Cooperation in Nuclear Fuel Cycle Technology (P)

6j. Progress in U.S. DOE’s Fuel Cycle R&D Program (P)

6k. Rationalizing Recycling in a Non-Proliferation World: An ANS Public Policy Track (P)

6l. Updates on Nuclear Waste Repository Projects

6m. Fuel Cycle and Waste Management: General

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. Nuclear Techniques for Material Analysis

9b. Radiation Effects on Electronic Materials and Devices

9c. Advances in Radiation Detection and Measurement

9d. Isotopes and Radiation: General

10. Materials Science and Technology (MSTD)

10a. Accident Tolerant Fuel

10b. Used Nuclear Fuel Disposition

10c. Nuclear Structural Materials

10d. Overview of National Lab Facilities for Radioactive Material Characterization

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

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2015 Winter Meeting: Session Titles by Division

12. Nuclear Criticality Safety (NCSD)

- 12a. Special Panel Session—The Legacy of NCS Pioneer Joe Thomas (P)
- 12b. FY2014 Recent Nuclear Criticality Safety Program Technical Accomplishments
- 12c. NDA Issues Affecting Nuclear Criticality Safety (P)
- 12d. Nuclear Criticality Safety Standards Forum
- 12e. Data Analysis in Nuclear Criticality Safety

13. Nuclear Installations Safety (NISD)

- 13a. Advanced Small Modular Reactor PRA Research (P)
- 13b. State of the Art Reactor Consequences and Best Estimate Analyses
- 13c. Nexus Between Safety and Cyber Security
- 13d. Seismic Reviews of FLEX Equipment in Operating NPPs in Response to the NRC 50.54(f) Generic Letter on NTF Rec. 2.1
- 13e. Current Topics in Probabilistic Risk Analysis
- 13f. Emerging Issues in Nuclear Facility Safety
- 13g. Nuclear Installations Safety: General
- 13h. Advances in Non-LWR Safety
- 13i. Highlights From the NRC Regulatory Information Conference (RIC)
- 13j. Highlights from PSA-2015 and PSAM 12

14. Nuclear Nonproliferation Policy (NNPD)

- 14a. Nuclear Nonproliferation Policy [FCWMD, IRD, NISD, RPSD, YMG]
- 14b. Integration of Safety-Security-Safeguards (3S) in Nuclear Facilities: Examining the Synergies while Exploring the Differences (P)
- 14c. Addressing the Insider, Outsider, and Cyber Threats on Nuclear Security and Nonproliferation (P)
- 14d. University Education Programs in Nuclear Nonproliferation/Security
- 14e. Nuclear Industry Role in Nonproliferation Initiatives (P)
- 14f. International Session on Nuclear Nonproliferation Culture/Education (P)

15. Operations and Power (OPD)

- 15a. Small Modular Reactors
- 15b. New Nuclear Construction Around the World—Status Report (P)

- 15c. Advanced/Gen-IV Reactors
- 15d. Operations and Power: General
- 15e. Domestic New Nuclear Construction (P)
- 15f. Policy Issues for New Reactors (P)
- 15g. All Energy Forum (P)

16. Radiation Protection and Shielding (RPSD)

- 16a. Computational Tools for Radiation Protection and Shielding
- 16b. Radiation Protection and Shielding: General
- 16c. Radioactive Material Packages—Shielding and Radiation Protection
- 16d. Shielding Problems for Fusion Devices [FED]
- 16e. Radiation Protection and Shielding—Roundtable (P)

17. Reactor Physics (RPD)

- 17a. Student Design Projects in Nuclear Science and Technology (Poster) [ETWDD, RPD, ANSTD, AAD, FED]
- 17b. Compact Reactors for Terrestrial and Space Applications [AAD, ANSTD, OPD, THD]
- 17c. Advances in Fast Reactor Designs and Concepts
- 17d. Nuclear Data Experiments, Evaluations, and Benchmarks [AAD, NNPD]
- 17e. Reactor Physics Design, Validation, and Operating Experience
- 17f. Reactor Analysis Methods [MCD]
- 17g. Reactor Physics: General

18. Robotics and Remote Systems (RRSD)

- 18a. Robotics and Remote Systems: General

19. Thermal Hydraulics (THD)

- 19a. Two-Phase Flow
- 19b. Young Professional Thermal Hydraulics Research Competition
- 19c. Computational Thermal Hydraulics
- 19d. Computational Fluid Dynamics (CFD) V&V
- 19e. Experimental Thermal Hydraulics
- 19f. Thermal Hydraulics: General
- 19g. Thermal Hydraulics Education (P) [YMG]

20. Young Members Group (YMG)

- 20a. Young Members Group: General

2015 ANS Winter Meeting and Nuclear Expo

2015 Winter Meeting: Technical Divisions

Accelerator Applications (AAD)

Peter Hosemann, peterh@berkeley.edu

Aerospace Nuclear Science and Technology (ANST)

Robert O'Brien, robert.obrien@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)

Brooke Traynham, brooke.traynham@us.pwc.com

Fuel Cycle and Waste Management (FCWMD)

Jean-Francois Lucchini, lucchinijf@pvtnetworks.net

Fusion Energy (FED)

Arnold Lumsdaine, lumsdaine@ornl.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 (NCS)

Deborah A. Hill, Deborah.a.hill@nnl.co.uk

Nuclear Installations Safety (NISD)

Edward Blandford, edb@unm.edu

Nuclear Nonproliferation Policy (NNPD)

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)

Mark W. Noakes, noakesmw@ornl.gov

Thermal Hydraulics (THD)

Elia Merzari, pcchair@thd-ans.org

Young Members Group (YMG)

Brett Rampal, brett.rampal@gmail.com

Embedded Topical Meeting: 12th International Topical Meeting on Nuclear Applications of Accelerators (AccApp '15)

November 10-13, 2015 • Washington, D.C. • Marriott Wardman Park

EMBEDDED TOPICAL MEETING CHAIRS

General Cochairs

Philip Cole, *Idaho State University*

Ralf Kaiser, *International Atomic Energy Agency*

Bradley Micklich, *Argonne National Laboratory*

Technical Program Cochairs

Andrei Afanasev, *George Washington University*

Alexander Ryazanov, *Kurchatov Institute*

Alex C. Mueller, *CNRS and Paris South University*

Paper Deadlines

ABSTRACT SUBMISSION DEADLINE: June 12

AUTHORS' NOTIFICATION: July 28

FULL PAPERS DEADLINE: February 1, 2016

ABOUT THE MEETING

The purpose of these topical AccApp meetings is to present a world stage for discussing nuclear applications of particle accelerators. Meetings are focused on the production and utilization of accelerator-produced neutrons, photons, electrons, and other particles for scientific and industrial purposes;

production or destruction of radionuclides significant for energy, medicine, defense, or other endeavors; homeland security applications; as well as medical imaging, diagnostics, and therapeutic treatment.

SUBMIT ABSTRACTS

Authors are required to refer to the abstract template at http://www.ans.org/meetings/m_145. Authors will also submit their abstracts and full papers at this same location. An Abstract book will be distributed at the AccApp 2015 meeting.

TECHNICAL SESSIONS

1. Accelerator Facilities
2. Accelerator Design & Technology
3. Material Research with Accelerators
4. Accelerators in Life Sciences
5. Accelerators for Accelerator-Driven Systems
6. High-Power Accelerators and High Power Spallation Targets
7. Accelerators for Monitoring the Environment
8. Industrial Applications
9. Nuclear Data
10. Accelerator Production of Radioisotopes

Embedded Topical Meeting: Young Professionals Congress 2015

November 7, 2015 • Washington, D.C. • Marriott Wardman Park

EMBEDDED TOPICAL MEETING CHAIRS

General Cochairs

Elia Merzari, *Argonne National Laboratory*

Allison Miller, *Sandia National Laboratory*

Technical Program Chair

Brett D. Rampal, *NuScale Power, LLC*

Planned Panel Sessions

Keynote by Dr. Jose Reyes, *NuScale Power, LLC*

- Exchanging Ideas: How to Communicate Effectively
- Work-Life Balance

- Succeeding in the Industry
- Chasing After Particles: Nuclear Modeling and Simulation Codes and Their Applications
- Ruining Your Weekends – Proposal Writing 101
- Making a Difference at the Labs: A DOE, Congress and IAEA Perspective
- Nuclear Advocacy
- Getting the Most Out of ANS

Anyone interested in participating can contact Elia Merzari at emmerzari@anl.gov or Brett Rampal at brett.rampal@gmail.com.