



ANS Call For Papers

2016 ANS Annual Meeting

June 12–16, 2016 • New Orleans, LA • Hyatt Regency

Nuclear Power: Leading the Supply of Clean, Carbon Free Energy

Summary Deadline: January 8, 2016

CALL FOR PAPERS

Conference Chairs:

General Chair

Donna Jacobs, *Entergy Corporation*

Technical Program Chair

Guillermo Daniel DelCul, *Oak Ridge National Laboratory*

Assistant Technical Program Chair

Kenneth J. Geelhood, *Pacific Northwest National Laboratory*

Media Chair

Mark Sullivan, *Entergy Communications*

Deadlines: No Exceptions

SUBMISSION OF SUMMARIES:

October 1, 2015–January 8, 2016

AUTHOR NOTIFICATION OF ACCEPTANCE:

By February 24, 2016

REVISED SUMMARIES DUE:

March 11, 2016

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 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 (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

2016 ANS Annual Meeting

2016 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)

- 3a. Biology and Medicine: General

4. Decommissioning and Environmental Sciences (DESD)

- 4a. Decommissioning and Environmental Sciences: General
- 4b. Cooling Water Sources for Nuclear Power (P)
- 4c. Update on the Progress and Lessons Learned from the Most Recent Fleet of Shutdown Commercial Nuclear Power Plants (P)

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

- 5a. Education, Training, and Workforce Development: General
- 5b. Focus on Communications: Communicating with Policy Makers (P)
- 5c. Focus on Communications: Meet the Media (P)

6. Fuel Cycle and Waste Management (FCWMD)

- 6a. Advanced Fuel Cycle Technology
- 6b. Fuel Cycle Analysis
- 6c. Heat Storage and Hybrid Energy Systems
- 6d. Recycle and Reuse of Used Nuclear Fuel Resources
- 6e. University Research in Fuel Cycle and Waste Management
- 6f. Consolidated Storage of Commercial Used Fuel
- 6g. The Waste Isolation Pilot Plant—On the Way to Recovery
- 6h. Fuel Cycle and Waste Management: General
- 6i. Economics and Cost Analysis of Spent Fuel Cycle
- 6j. Advances in Transportation Risk Assessment
- 6k. Tritium Management in the Nuclear Fuel Cycle

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. Isotopes and Radiation: General

10. Mathematics and Computation (MCD)

- 10a. Mathematics and Computation (MCD): General
- 10b. Uncertainty Quantification and Sensitivity Analysis Methods
- 10c. Transport Methods
- 10d. Current Issues in the Computational Methods Round Table (P)

11. Nuclear Criticality Safety (NCSD)

- 11a. Novel Equipment / Solutions to Criticality Safety Issues (Beyond Safe Geometry)
- 11b. ANS-8 Standards Forum
- 11c. Data, Analysis and Operations in Nuclear Criticality Safety
- 11d. Sharing of Good Industry Practices in Criticality Safety (P)
- 11e. The Impact of Chemistry in Nuclear Criticality Safety Evaluations (P)
- 11f. Criticality for Spent Fuel Pools and Transport Casks

12. Nuclear Installations Safety (NISD)

- 12a. Current Topics in Probabilistic Risk Analysis
- 12b. Emergent Topics in Consensus Standards
- 12c. Nuclear Safety and Quality Culture: Long Term Management
- 12d. Nuclear Installations Safety: General
- 12e. Emerging Issues with Digital in Nuclear Plant Safety System

13. Nuclear Nonproliferation Policy (NNPD)

- 13a. Nuclear Nonproliferation Policy (NNPD)

14. Operations and Power (OPD)

- 14a. Operations and Power (OPD): General
- 14b. Advanced/Gen-IV Reactors
- 14c. Cyber Security
- 14d. Cooling Water Intake (316B)

15. Radiation Protection and Shielding (RPSD)

- 15a. Radiation Protection and Shielding (RPSD)

16. Reactor Physics (RPD)

- 16a. Reactor Physics: General

17. Robotics and Remote Systems (RRSD)

- 17a. Robotics and Remote Systems: General

18. Thermal Hydraulics (THD)

- 18a. Thermal Hydraulics: General
Do not submit ATH 2016 papers to this session.

19. Young Members Group (YMG)

- 19a. An Overview of the 2015 NPT Review Conference
- 19b. Considerations for the Next 5 Years (P)
- 19c. Proposal Writing 101
- 19d. Industry Best Practices for Knowledge Transfer and Retention
- 19e. Nuclear Politics: Advocating and Communicating Nuclear Issues
- 19f. Ask the Public Policy Committee Anything

2016 ANS Annual Meeting

ANS 2016 Annual 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)

Lisa Marshall, lisa.marshall@ncsu.edu

Decommissioning and Environmental Sciences (ESD)

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

Fuel Cycle and Waste Management (FCWMD)

Jared A. Johnson, johnsonja@ornl.gov

Fusion Energy (FED)

Arnold Lumsdaine, lumsdainea@ornl.gov

Human Factors, Instrumentation, and Controls (HFICD)

Kathryn McCarthy, Kathryn.McCarthy@inl.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)

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

Nuclear Installations Safety (NISD)

Virginia Cleary-Ivanoff, vdcleary@gmail.com

Nuclear Nonproliferation Policy (NNPD)

Rian Bahran, Bahran@gmail.com

Operations and Power (OPD)

Piyush Sabharwall, Piyush.sabharwall@inl.gov

Radiation Protection and Shielding (RPSD)

Peter Caracappa, caracp3@rpi.edu

Reactor Physics (RPD)

Cristian Rabiti, cristian.rabiti@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)

Catherine Perego, peregocm@westinghouse.com

Jitesh Kuntawala, jiteshkuntawala@ufl.edu

Embedded Topical Meeting: Nuclear Fuels and Structural Materials for the Next Generation Nuclear Reactors (NFSM 2016)

June 12–16, 2016 • New Orleans, LA • Hyatt Regency

Embedded Topical Meeting Officials:

General Chairs

Heather J. MacLean Chichester, *Idaho National Laboratory*

Kurt A. Terrani, *Oak Ridge National Laboratory*

Program Chairs

Xianming (David) Bai, *Idaho National Laboratory*

Yong Yang, *University of Florida*

Paper Deadlines

SUBMISSION OF SUMMARIES:

October 1, 2015–January 8, 2016

AUTHOR NOTIFICATION OF ACCEPTANCE:

By February 24, 2016

REVISED SUMMARIES DUE:

March 11, 2016

Submit Summaries

Summaries must be submitted electronically using Adobe Acrobat (PDF) files or Microsoft Word documents and the ANS Electronic Submission System. Authors are required to use the ANS Template and "Guidelines for Transactions Summary Preparation" provided on the ANS web site.

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.

About the Meeting

NFSM 2016 will bring together a group of nuclear materials experts from industry, academia, and national laboratories to discuss current research and development in the nuclear fuel and core structural materials field. The meeting will cover a wide spectrum of experimental and modeling research related to fuels and core structural materials across various reactor platforms and throughout the fuel cycle. Experimental and modeling research activities within the following areas are particularly encouraged for submission to NFSM 2016:

Fabrication and Characteristics of Advanced Fuel Forms
Cladding Development for Fast and Thermal Reactors
Metallic and Ceramic Core Structural Component Development
Environmental Effects on Core Constituents in Fast and Thermal Reactors

Irradiation and PIE of Fuel and Core Structural Materials

In-Pile Behavior of Core Constituents

Fuel Performance Modeling and Analysis

Lifetime Management and Sustainability for LWRs

Used Fuel Management, Storage, and Reprocessing

Fuel and Core Materials Impact on Reactor Safety

Accident Tolerant Core Concepts

Summaries submitted to NFSM 2016 will be reviewed and published on a CD-ROM/online available at the meeting.

Publication of full papers in a special issue of *Journal of Nuclear Materials* is anticipated. A limited number of submissions are scheduled for oral presentations, while the majority of technical presentations of NFSM 2016 are planned to be held in a poster session to facilitate detailed discussions. At least one author is required to register for the topical meeting.

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Embedded Topical Meeting on Advances in Thermal Hydraulics—2016 (ATH '16)

June 12–16, 2016 • New Orleans, LA • Hyatt Regency

Embedded Topical Meeting Officials:

General Chairs

Fan Bill Cheung, *The Pennsylvania State University*

Michio Murase, *Chief Researcher, Institute of Nuclear Safety Systems*

Technical Program Chairs

David Aumiller, *Bettis Atomic Power Laboratory*

Seungjin Kim, *The Pennsylvania State University*

Simon Walker, *Professor, Imperial College*

Assistant Technical Program Chairs

Elia Merzari, *Argonne National Laboratory*

Xiaojing Liu, *Shanghai Jiao Tong University*

Important Dates

Draft Full-Length Paper Submission – January 15, 2016

Review Notification – February 15, 2016

Final Paper – March 15, 2016

Selected papers will be published in a special edition of Nuclear Technology

Submit Full Papers

Full papers must be submitted electronically using Adobe Acrobat (PDF) files or Microsoft Word documents and the ANS Electronic Submission System. Authors are required to use the full paper template at www.ans.org/meetings/c_1 under the ATH '16 Meeting.

Page Charges

Page charges will be \$20.00 per page under 14 pages and \$40.00 per page over 14 pages.

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ANS Thermal Hydraulics Division

About the Meeting

This embedded topical meeting is the third in a series organized by the Thermal Hydraulics Division consisting of peer-reviewed, full-length technical papers covering recent advances in thermal hydraulics. Authors and presenters are invited to participate in this event to exchange ideas and knowledge.

Conference Topics (Sessions for Paper Submittals)

Gas-Cooled Reactors

Two-Phase Flow and Heat Transfer Fundamentals

Boiling and Condensation Phenomena

Rod Bundle Thermal Hydraulics

DNS/LES Applications in Nuclear Engineering

Simulation of Wire-Wrapped Fuel Assemblies

Subchannel Analysis

Nuclear Reactor Core Thermal Hydraulics

Nuclear Reactor Plant Thermal Hydraulics and Safety

Code Development and Applications

Computational Methods, Modeling, Verification/Validation

Applications of Computational Methods to Nuclear Systems

Advanced Code Development and Validation/Verification/
Applications

Experimental Methods and Instrumentation

Severe Accidents, Phenomena, Modeling and Experiments

Combustion and Fires, Modeling and Experiments

Thermal Hydraulics in Accident Management

Operating LWRs Thermal Hydraulics and Safety

Thermal Hydraulics in Power Upgrading/Life Extension

Neutronics/Thermal-Hydraulics Coupling

Fluid-Structures and Materials Interactions

Sodium Cooled Fast Reactor Thermal Hydraulics

Next Generation LWR Thermal Hydraulics

Next Generation Gas-Cooled Reactor Thermal Hydraulics

Generation IV and Future Innovative Nuclear Reactors

Thermal Hydraulics

Nano-Fluid Science and Technology Applications to Nuclear
Systems

Micro-Channel Flow and Heat Transfer Phenomena

Thermal Hydraulics of Non-Electricity Generating Nuclear
Equipment

Thermal Hydraulics of Waste Management

Best Estimate LOCA

Paper acceptance will be based upon originality of the work, strictly implemented methods or models, quality of results, impact of the scientific advances to the field of thermal hydraulics, conclusions supported by data, proper citing of references, and use of correct grammar and spelling.