American Nuclear Society: 2013 Annual Meeting • June 16–20, 2013
Atlanta, Georgia • Hyatt Regency Atlanta Hotel

SUMMARY DEADLINE: January 11, 2013

CALL FOR PAPERS

"Next Generation Nuclear Energy: Prospects and Challenges"

Conference Chairs

General Chair
Stephen Kuczynski, *CEO, Southern Nuclear Co (Southern Co. Subsidiary)*

Technical Program Chair
Sedat Goluoglu, *University of Florida*

Assistant Technical Program Chairs
Mark D. DeHart, *Idaho National Laboratory*
Jeff Brault, *Shaw Group*

DEADLINES: NO EXCEPTIONS

Submission of Summaries: October 1, 2012–January 11, 2013
Author Notification of Acceptance: By February 25, 2013
Revised Summaries Due: March 12, 2013

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

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2013 Annual Meeting: Session Titles by Division

1. Accelerator Applications (AAD)
1a. Radiation Transport, Protection and Shielding at Accelerator Facilities(RPSD)

2. Aerospace Nuclear Science and Technology (ANST)
2a. Aerospace Nuclear Science and Technology: General

3. Biology and Medicine (BMD)
3a. Biology and Medicine: General

3b. New Horizons in Medical Health Physics

4. Decommissioning, Decontamination, and Reutilization (DDRD)
4a. Department of Energy Decommissioning Projects–Panel

4b. Hanford Decommissioning and Decontamination Projects–Panel

4c. Small Modular Reactors—Impact of Designing in D&D Criteria–Panel

4d. International Decommissioning and Decontamination–Panel

4e. Hot Topics and Emerging Issues–Panel

5. Education, Training, and Workforce Development (ETWDD)
5a. Experiences of Women in Nuclear–Panel

5b. Communicating for New Nuclear Facilities–Panel

5c. Communicating for Science–Panel

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

5e. Education, Training, and Workforce Development: General

5f. Training, Human Performance, and Workforce Development

5g. Stem Education Outreach to K-12 Schools–Panel

5h. University Infrastructure Needs–Panel

5i. Recent Developments in Nuclear Security and Safeguards–Panel

6. Environmental Sciences (ESD)
6a. Environmental Sciences: General

7. Fuel Cycle and Waste Management (FCWMD)
7a. Advanced Fuel Cycle Cost Basis Report Update

7b. U.S. Plutonium Disposition Program: Eliminating Weapons Plutonium by Irradiating it as Mox Fuel

7c. Economic Uranium Recovery from Seawater

7d. Advances in Electrochemical Separation Methods

7e. Volatility Based Separation Processes

7f. Hybrid Energy: Combining Nuclear and Other Energy Sources

7g. Fuel Cycle and Waste Management: General

7h. What is Next for UF6 Tails Management–Panel

7i. Fuel Cycle Simulators and Systems Analysis

8. Human Factors, Instrumentation, and Controls (HFICD)
8a. Advanced Measurement Technologies for Current and New-Generation Reactors

8b. Novel Control Methods and Technologies

8c. Diagnostic and Prognostic Technologies and Applications

8d. Innovative Human Interface Technologies

8e. Advances in Human Factors Engineering

8f. Human Factors, Instrumentation, and Controls: General— I

8g. Human Factors, Instrumentation, and Controls: General—II

9. Isotopes and Radiation (IRD)
9a. Radiation Detection for Nonproliferation Application

9b. Reactor Instrumentation and Neutron Beam Instrumentation for Research Reactors

9c. Nuclear Chemistry and Radiochemistry

9d. Isotopes and Radiation: General

10. Materials Science and Technology (MSTD)
10a. Accident Tolerant Fuels

10b. Thermal Properties of Irradiated Materials

10c. Corrosion by Advanced Coolants

10d. Nuclear Fuels and Materials

10e. Advanced Measurement Techniques

10f. Materials Issues for Storage of Used Nuclear Fuel

11. Mathematics and Computation (MCD)
11a. Transport Methods: General

11b. Computational Methods: General

11c. Mathematical Modeling: General

11d. Uncertainty Quantification and Sensitivity Analysis Methods

11e. Current Issues in Computational Methods–Roundtable

12. Nuclear Criticality Safety (NCSD)
12a. Data, Analysis, and Operations for Nuclear Criticality Safety

12b. Nuclear Criticality Safety Standards–Forum

12c. Fire Protection and Nuclear Criticality Safety, Achieving Both

13. Nuclear Installations Safety (NISD)
13a. Emerging Issues in Nuclear Facility Safety

13b. Commercial-Grade Dedication of Software

13c. Flagship Elements of the NRC Division of Risk Analysis R&D Program–Panel

13d. NRC 50.54(f) Generic Letter on NTTF Recommendation 2.3, Seismic Walkdowns

13e. NRC 50.54(f) Generic Letter on NTTF Recommendation 2.1, Flooding Hazard Assessment

13f. Progress in ANS Safety Standards for Advanced Reactors

13g. Next Generation Nuclear Plant Licensing Experience

13h. Where to with a Risk Management Regulatory Framework?–Panel

13i. Reactor License Renewal: Regulation–Panel

13j. Nuclear Installations Safety: General

2013 Annual Meeting: Session Titles by Division

13k. Impact of External Hazards on Nuclear Plant Safety

13l. Safety Oversight of Nuclear Facilities in Construction

13m. Balancing Resources Between Prevention and Mitigation–Panel

14. Nuclear Nonproliferation Technical Group (NNTG)

14a. International Safeguards for UF6 Containers

14b. Treaty Verification and Arms Control Technology Applications

14c. Recent Developments in Nuclear Safeguards Technology

14d. Human Capital Resource Issues for First-of-a-Kind New Builds—Proliferation Safeguards by Design

14e. Recent Developments with Nuclear Security and Safeguards

14f. Small Modular Reactors and Nuclear Nonproliferation Issues—International Cooperation and Expansion–Panel

14g. Proliferation—Myths and Realities–Panel

14h. Human Capital Resource Issues for First-of-a-Kind New Builds—Proliferation Safeguards by Design–Panel

14i. Center for International Strategy, Technology, and Policy, Sam Nunn School of International Affairs—the Road to Zero Phi–Panel

14j. Savannah River Site Plutonium Disposition Projects Update–Panel

15. Operations and Power (OPD)

15a. Small Modular Reactor Activities, Progress, Challenges–Panel

15b. Young Blood: Integration and Retention of the Next Generation–Panel

15c. Solving the Spent Fuel Dilemma–Panel

15d. Standardization in a Nonstandard World–Panel

15e. Fukushima—Evaluation and Impacts–Panel

15f. Operations and Power: General

15g. Advanced /Gen-IV Reactors

15h. Next Generation Nuclear Plant—Advances and Innovations

15i. The International Framework for Nuclear Energy Cooperation—Advances and Innovations

15j. Small Modular Reactors: Progression and Status

16. Radiation Protection and Shielding (RPSD)

16a. Radiation Protection and Shielding–Roundtable

16b. Radiation Protection and Shielding: General

16c. Computational Tools for Radiation Protection and Shielding

16d. Space Radiation Shielding Methods and Applications

16e. Reactor Dosimetry

16f. ADVANTG Tutorial: Automated Variance Reduction for MCNP

17. Reactor Physics (RPD)

17a. Fuel Cycle Design Optimization and Analysis

17b. Current Issues in LWR Core Design and Reactor Engineering Support–Panel

17c. Physics of Fluid-Fuel Systems

17d. Student Research in Reactor Physics

17e. Advanced Modeling and Simulation in Reactor Physics

17f. Reactor Physics Design, Validation, and Operating Experience

17g. Reactor Analysis Methods

17h. Reactor Physics: General

18. Robotics and Remote Systems (RRSD)

18a. Robotics and Remote Systems: General

19. Thermal Hydraulics (THD)

19a. Thermal Hydraulics in Severe Accidents

19b. General Two-Phase Flow

19c. Computational Thermal Hydraulics

19d. Visualizations in Thermal Hydraulics

19e. Spacer Grid Thermal Hydraulics

19f. Thermal Hydraulics in Fluoride-Salt-Cooled High-Temperature Reactors

19g. Thermal Hydraulics: General

19h. State of the Art in Modeling Fuel Rod Ballooning, Fuel Relocation and High Burnup Issues in LOCA Evaluation Models

20. Young Members Group (YMG)

20a. Young Members Group: General

ANS 2013 Annual Meeting: Technical Divisions

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