American Nuclear Society: 2008 Winter Meeting

November 9-13, 2008 • Reno, Nevada • Grand Sierra Hotel

"Nuclear Power—Ready, Steady, Go"

SUMMARY DEADLINE: JUNE 13, 2008

Call for Papers

Conference Chairs

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David J. Hill, *Idaho National Laboratory*

Technical Program Chair
Robert B. Hayes, *National Security Technologies*

Assistant Technical Program Chairs
Bojan Petrovic, *Georgia Institute of Technology*
David Anderson, *Electric Boat Corporation*

Deadlines: NO EXCEPTIONS

SUBMISSION OF SUMMARIES:	May 1, 2008–June 13, 2008
AUTHOR NOTIFICATION OF ACCEPTANCE:	By July 29, 2008
REVISED SUMMARIES DUE:	August 12, 2008

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 Submission 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. Use at least 450 words, excluding tables and figures.
2. Use no more than 900 words, including tables and figures.
3. Count tables and figures as 150 words each. Use no more than three tables or figures.
4. Limit title to ten words; limit listing authors to three or fewer if possible.
5. Exclude references from word count.

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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ANS 2008 Winter Meeting: Session Titles by Division

1. Accelerator Applications

1a. Accelerator Sources for Active Interrogation
1b. Experiments in Accelerator Applications
1c. Accelerator Applications: General
1d. Medical Applications of Accelerators
1e. Spallation Neutron Source Initial Operational Experience

2. Biology and Medicine

2a. Advances and Issues in Computational Phantom Modeling
2b. (Anti) Coincidence Instruments and Software for Activation Analysis and Other Applications
2c. Biology and Medicine: General

3. Decommissioning, Decontamination, and Reutilization

3a. Decommissioning and Decontamination of Commercial Nonreactor Facilities
3b. Decontamination via Source Term Reduction at Operating Reactors
3c. U.S. Department of Energy Site Cleanup
3d. Decommissioning, Decontamination, and Reutilization: General
3e. Hot Topics and Emerging Issues
3f. Planning Decommissioning into the Next Generation of Nuclear Power Plants

4. Education and Training

4a. Addressing Public Fear in Nuclear Communications
4b. Advocate Nuclear in Your Backyard
4c. Cutting Edge Techniques in Education, Training, and Distance Learning
4d. Education and Training: General
4e. Perspectives on Nuclear Engineering Education from Current Students and Recent Graduates
4f. Workforce Planning and Development

5. Environmental Sciences

5a. Contributions of Nuclear Science and Technology to Sustainable Development
5b. Environmental Aspects of the Next Generation Nuclear Plant (NGNP)
5c. Environmental Aspects of Transportation of Radioactive Materials
5d. Environmental Impact of Extreme Events
5e. Environmental Monitoring at Nuclear Facilities: Monitoring Results and Advances in Techniques
5f. Environmental Requirements/Siting Concerns for New Nuclear Power Facilities
5g. Environmental Sciences: General
5h. Implications of National Election Results on Nuclear Energy
5i. Renewable Energy—The Role of Nuclear Technology
5j. Use of Nuclear Energy for Hydrogen Production: Interface of Nuclear and Chemical Plants, Safety, Materials, and Storage
5k. Water Resource Issues for Nuclear Facilities

6. Fuel Cycle and Waste Management

6a. Advanced Head End Improvements for Processing Spent Nuclear Fuels
6b. Advanced Separation Technologies for Spent Nuclear Fuel or Radioactive Waste Treatment
6c. Fuel Cycle Waste Forms and Strategies
6d. Future Safeguards and Associated Policies for Enrichment Implementation and Reprocessing Plants—the Present through 2020
6e. Fuel Cycle and Waste Management: General
6f. Mixed Oxide Fuel Fabrication Facility: Construction Issues and Programmatic Changes
6g. Non-Proliferation Policy—Should the Non-Proliferation Treaty Further Restrict Non-Nuclear Weapons States from Having Civilian Fuel Cycle Facilities?
6h. Potential Recycle of Minor Actinides in Thermal Reactors
6i. Promoting and Sustaining a Nonproliferation Culture Through Education and Training: Sharing the Experience/Preparing the Future
6j. Recycle of Reusable Components in Spent Nuclear Fuel
6k. Status of Low-Level Waste Disposal in the U.S.
6l. The Potential for International Collaborations on Closed Fuel Cycle
6m. The U.S. Advanced Fuel Recycle Research Program: Pace and Direction
6n. Transportation of Radioactive Materials

7. Fusion Energy

7a. Fusion Energy: General

8. Human Factors

8a. Human Factors: General

9. Isotopes and Radiation

9a. Isotopes and Radiation: General
9b. Neutron Beam Techniques Applications at University Research Reactors
9c. Portable Neutron Sources
9d. Radiochemistry Research and Applications

10. Materials Science and Technology

10a. Advanced Fuels and Materials Characterization Methods
10b. Computational Modeling of Fuels and Material
10c. Fuel Performance
10d. Materials Science and Technology: General
10e. Reactor Fuels and Materials

11. Mathematics and Computation

11a. Computational Methods: General
11b. Current Issues in Computational Methods–Roundtable
11c. Mathematical Modeling: General
11d. Transport Methods: General

ANS 2008 Winter Meeting: Session Titles by Division

12. Nuclear Criticality Safety

12a. Data, Analysis, and Operations for Nuclear Criticality Safety
12b. Nuclear Criticality Safety: General
12c. Nuclear Criticality Safety Standards–Forum
12d. Nuclear Criticality Safety Standards Poster Session
12e. Recent Nuclear Criticality Safety–Related Events and Associated Lessons Learned
12f. Strengths, Weaknesses, Similarities, and Differences of Expert-Based and Compliance-Based Criticality Safety Programs
12g. Validation Methods

13. Nuclear Installations Safety

13a. Cost and Benefit of Main Streamline Isolation Valve Testing for Appendix J
13b. Current Issues in Reactor Safety
13c. Emerging Issues in Nuclear Facility Safety
13d. Nuclear Installations Safety: General
13e. Highlights of PSA '08
13f. Innovations in Probabilistic Risk Assessment
13g. Integration of the American Society of Mechanical Engineers and American Nuclear Society Probabilistic Risk Assessment Methodology Standards
13h. Modern Analyses and Experiments in Nuclear Facility Safety
13i. Safety in Design of Advanced Commercial Nuclear Reactors
13j. Safety in Design of Defense and Commercial Nuclear Facilities
13k. Safety Issues for the Yucca Mountain Surface Facilities
13l. Safety Lessons Learned from the Japanese Earthquake of June 2007
13m. Safety of CANDU-type Reactors
13n. Safety of Gas-Cooled Reactors
13o. Severe Reactor Accident Analysis

14. Operations and Power

14a. Advanced/Generation-IV Reactors
14b. Application of International Codes and Standards in New Nuclear Plants—Harmonization versus Reconciliation
14c. Highly Enriched Uranium to Low-Enriched Uranium Conversions of Research Reactors
14d. Highlights of the Utility Working Conference
14e. Introduction to 10CFR Part 21 Requirements and Their Application Under Part 52
14f. New Plant Siting Topics–Tutorial
14g. Nuclear Knowledge Management—Our Way to the Future
14h. Research Reactor: General
14i. The "50.59 Like Process" for New Reactors
14j. The Global Nuclear Energy Partnership—Advances and Innovations

15. Radiation Protection and Shielding

15a. Best of RPSD2008
15b. Computational Resources for Radiation Modeling
15c. Current Topics in Radiation Protection and Shielding–Roundtable
15d. Detection Technologies for Homeland Security Applications
15e. Dose Conversion Coefficients
15f. Introductory Monte Carlo Tutorial
15g. Radiation Protection and Shielding: General
15h. Recent Work with Gamma Ray Buildup Factors
15i. Deterministic versus Stochaistic Modeling Approaches in Radiation Transport and Shielding
15j. Attila Tutorial

16. Reactor Physics

16a. Benchmark of Design Code Systems Against Plant Measurements
16b. Boiling Water Reactor Stability
16c. Current Topics for Reactor Engineers
16d. Innovations in Reactor Core Design
16e. International Collaboration in Reactor Physics and Energy Technology Education
16f. Nuclear Data Uncertainty Needs
16g. Reactor Analysis Methods
16h. Reactor Physics Design, Validation, and Operating Experience
16i. Reactor Physics: General
16j. Use of Coupled Three-Dimensional Transport Theory and Depletion Methods in Reactor Physics

17. Robotics and Remote Systems

17a. Robotics and Remote Systems: General

18. Thermal Hydraulics

18a. Computational Thermal Hydraulics
18b. General Thermal Hydraulics
18c. General Two-Phase Flow
18d. NUTHOS-7 Highlights
18e. Thermal Hydraulics of High-Temperature Gas-Cooled Reactor Technology
18f. Young Professional Thermal-Hydraulics Research Competition

19. Aerospace Nuclear Science and Technology Technical Group

19a. Application of Nuclear Power in Space Environments
19b. Critical Technologies for Space Reactor Development
19c. Aerospace Nuclear Science and Technology: General
19d. Lessons Learned and Knowledge Retention with Applications in Space Nuclear Power
19e. Novel Fuel Concepts for Advanced Reactor Systems

ANS 2008 Winter Meeting: Technical Divisions

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