Decommissioning Environmental Sciences and Remote Technology 2024 (DESD/RRSD 2024)

Revolutionizing Decommissioning with Robotics, Resiliency, and Digital Transformation

EMBEDDED IN THE 2024 ANS WINTER CONFERENCE AND EXPO

November 17 - 21 | Orlando, FL | Renaissance Orlando at SeaWorld

CALL FOR PAPERS

EXECUTIVE CHAIRS

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James Byrne (Byrne & Assoc., LLC)

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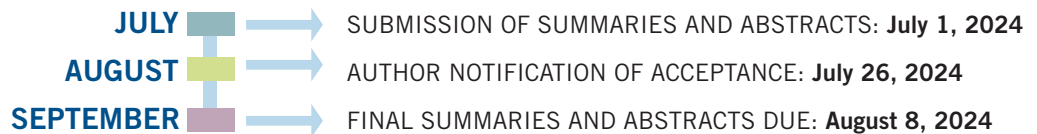Adam Carroll (Oak Ridge National Laboratory)
Leonel Lagos (Florida International University)
Wendell Chun (University of Denver)
Anamary Daniel (Inspection Experts, Inc.)
Yang Zhang (University of Michigan)

IMPORTANT DUE DATES

JULY → SUBMISSION OF SUMMARIES AND ABSTRACTS: **July 1, 2024**

AUGUST → AUTHOR NOTIFICATION OF ACCEPTANCE: **July 26, 2024**

SEPTEMBER → FINAL SUMMARIES AND ABSTRACTS DUE: **August 8, 2024**

CONFERENCE FOCUS

This conference is a joint venture between the ANS Decommissioning and Environmental Sciences Division (DESD) and Robotics and Remote Systems Division (RRSD). Authors are invited to participate in this event to exchange ideas and knowledge and to submit summaries and abstracts covering advances in DESD and RRSD topics listed in this announcement.

GUIDELINES FOR SUBMISSIONS

ANS will publish all accepted and presented summaries and abstracts in the conference proceedings if formatted to ANS guidelines. Accepted summaries and abstracts are presented orally at the conference, and presenters are expected to register for the conference.

There are two options for submittal, using the Electronic Paper Submission and Review (EPSR) system:

1) Summary/Standard-Length Presentation Option

Submit a summary to Tracks 1-5 in the EPSR system. If accepted, you will provide a standard-length presentation at the conference. Summaries should be a maximum of 4 pages; references and acknowledgements are counted as pages. There will be no page charges for summaries that are 4 or fewer pages. If an exception is made and a summary with more than 4 pages is accepted, page charges of $100/page will apply starting with p. 5. Submit your summary by July 1; you will not submit an abstract first.

2) Abstract/Lightning Talk Option

Submit a 1-page abstract only to Tracks 6-10 in the EPSR system. If accepted, you will provide a brief Lightning Talk at the conference. For this option, you will not submit a summary later. Note that Lightning Talks are short presentations, such as a 5 or 10-minute maximum presentation, as opposed to a 20-minute maximum for full presentations that are associated with summary submissions.

FORMAT AND LENGTH

1. Use the provided templates for summaries and abstracts.
2. Abstracts and summaries must be submitted as Adobe Acrobat PDF documents. After you save your document as a PDF, verify that it still meets the page-length requirements.
3. Limit title to ten words if possible.
4. Do not use all capital letters for the title or any part of any authors' names. For the title of the abstract or summary, Capitalize the First Letter of Major Words. Author names should be First Name or Initial(s) followed by Last Name.
5. The names of all authors should be entered into the Authors page in the EPSR. List the authors in the same order in which their names appear on the abstract or summary. The conference program will be derived from the information you enter into the EPSR.
6. In the EPSR, authors' affiliations should match the affiliation provided on the summary or abstract itself. If an author has multiple affiliations, enter the ONE that should be included in the program and in the conference proceedings, assuming the summary or abstract is accepted.
7. Do not use page numbers, headers, or footers. Do not save your PDF as "read only."
8. Keep the bottom margin clear so there is space for the ANS-applied footer and page number.
9. As the conference approaches, conference organizers will provide guidance on the Lightning Talks and summary presentations, including presentation templates and length.

SUBMIT A SUMMARY OR ABSTRACT

https://epsr.ans.org/meeting/?m=392

PROGRAM SPECIALIST

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DESD/RRSD 2024 TOPICS

HIGH-QUALITY SUMMARIES AND ABSTRACTS ARE SOLICITED FOR THE FOLLOWING TOPICS:
(all topics below are open for submittals for both standard-length presentations and Lightning Talks)

ROBOTICS AND REMOTE SYSTEMS DIVISION

1. ROBOTICS AND REMOTE SYSTEMS
- 1a. Robotics and Remote Systems for Surveillance in Hazardous Environments
- 1b. Nuclear Materials Handling
- 1c. Nuclear Plant Maintenance and Operations
- 1d. Robotics and Remote Systems for Nuclear Waste and Spent Fuel Management
- 1e. Robotics and Remote Systems for Nuclear Reactors
- 1f. Radiation Damage and Hardening
- 1g. Robotics for Extreme Environments

2. SPECIAL TOPICS
- 2a. Artificial Intelligence in Robotics and Remote Systems
- 2b. Telerobotics
- 2c. Robotic Digital Twin
- 2d. Robotics and Cybersecurity

RRSD/DESD COMBINED SESSIONS

3. SPECIAL TOPICS
- 3a. Robotics and Remote Systems for Decommissioning and Waste Disposal
- 3b. Robotics and Remote Systems for Environmental Remediation and Monitoring
- 3c. Remote Vessel Segmentation
- 3d. Nuclear Emergency Response
- 3e. Digital Transformation/Twin

DECOMISSIONING AND ENVIRONMENTAL SCIENCES DIVISION

4. ENVIRONMENTAL RESILIENCY
- 4a. Emerging (Non-Radiological) Compounds
- 4b. Sampling Methods/Techniques
- 4c. Groundwater Modeling and Investigations
- 4d. Integrating Site Closure (non-Rad) and License Termination (Rad) during Decommissioning
- 4e. Nuclear Innovation: Clean Energy Future (NICE Future): Progress on Key Activities for Advancing Policy and Technology
- 4f. Energy-Water Nexus: Nuclear Technology's Potential to Provide Clean Water with Clean Energy
- 4g. The Path Towards a Low-Carbon Sustainable Energy Supply System
- 4h. Meeting Targets for Reduction of CO_2 Emission without Causing Economic Damage
- 4i. Regulatory Framework for the Resumption of Operation for Decommissioning Power Reactors
- 4j. Environmental Social Governance
- 4k. Environmental Aspects of new Site Licensing
- 4l. Transitioning to Nuclear Marine Propulsion
- 4m. Uranium Mining Cleanup
- 4n. Emerging NEPA Issues/Concerns

5. DECOMMISSIONING (PLANNING, EXECUTION AND LESSONS LEARNED)
- 5a. Radiation Safety Challenges in Decommissioning
- 5b. U.S. Decommissioning (both DOE and Commercial)
- 5c. Innovative Technologies
- 5d. Regulatory Framework for Decommissioning
- 5e. Spent Fuel Disposition—Storage, Transportation and Disposal
- 5f. Safety and Safety Culture in Decommissioning
- 5g. Decommissioning Cost Estimating, Trust Fund Management and Use
- 5h. Decommissioning Security—Requirements and Innovative Techniques to Reduce Costs
- 5i. Training Programs and Materials
- 5j. MARSSIM/FSS/Characterization Challenges
- 5k. License Termination Plans
- 5l. International Decommissioning

Summary acceptance will be based upon originality of the work, strictly implemented methods or models, quality of results, conclusions supported by data, proper citing of references, use of correct grammar and spelling, and adherence to ANS formatting requirements.