

## WM2024 Topic Listing

Theme: WM2024 – Marking 50 Years: Proud of Our Past, Poised for the Future

Listed below are the proposed topics for the Waste Management 2024 Symposium (WM2024). The topics are grouped by the nine primary WM tracks plus a tenth track for unassigned abstracts. If you can identify the relevant Track but not a specific topic for your subject, assign it to the primary track number as a non-specified abstract (1, 2, 3, 4, etc.). If the primary tracks do not cover your topic or you are unsure of the correct topic assignment, designate it for Topic #12.0. The Program Advisory Committee (PAC) Chair reassigns the abstracts in Topic #12.0 to the most appropriate topic listed in one of the other eleven tracks.

Track 1	Crosscutting Policies and Programs	(CPP)	Page 2
Track 2	High-Level Radioactive Wastes, Spent Nuclear Fuel/Used Nuclear Fuel (SNF/UNF) and Long-Lived Alpha/Transuranic Radioactive Waste	(HLW)	Page 12
Track 3	Low-Level, Intermediate Level, Mixed Waste, NORM, & TENORM	(LLW)	Page 18
Track 4	Nuclear Power Plant Waste & On-Site SNF/UNF Management	(NPP)	Page 21
Track 5	Packaging and Transportation	(PAT)	Page 23
Track 6	Decontamination & Decommissioning	(D&D)	Page 26
Track 7	Environmental Remediation	(ER)	Page 29
Track 8	Communications, Stakeholder & Indigenous Engagement and Professional Development	(CS&PD)	Page 33
Track 9	Special Topics and Multi-Track Cross Cutting Technology Topics	(ST)	Page 38
Track 10	Leveraging Science, Technology, Engineering & Math (STEM) Education for the Future	(STEM)	Page 44
Track 11	Advanced Nuclear Reactors for Electrical Power and Other Applications	(ANR)	Page 46
Track 12	Miscellaneous: Unassigned & Late Abstracts, & Non-Paper Posters	(MISC)	Page 49

The topics listed below fall into the following two main categories: Open – (Accepts abstracts from all authors and sources and does not have an “R” prefix) or Restricted – (For topics where only the designated Organizers solicit and pre-designate the abstracts or presenters.) These topics are prefixed with an “R” and are not open to all authors. Unless specifically directed by the Lead Organizer or an Organizer of that Topic, do not submit your abstract to a topic number with the prefix “R.”

Abstracts submitted for the topics listed below may result in four different types of sessions: Oral, Poster, Panel or Roundtable. Unless noted otherwise in the topic description or designated by the author, all the abstracts received are considered for an oral session but may be reviewed and assigned to another type of session.

- **Oral sessions** require an accompanying paper and typically include a 20-minute PowerPoint presentation with five additional minutes allotted for questions and answers for a total scheduled time of 25 minutes.
- **Poster sessions** require an accompanying paper, unless in Track 10, and require a poster displayed for 3-1/2 hours during the session. The author must be present at the poster during two periods, ½ hour period at the front and a one-hour period at the end.
- **Panel sessions** may or may not require a paper and the presentation type and length is specified by the Lead Organizer. The focus is to convey the latest information and promote discussion and debate among the panelists.
- **Roundtable sessions** may or may not require a paper and the presentations type and length is specified by the Lead Organizer. The focus is to promote extensive discussion with the audience and is a smaller audience than that for a panel.

**Track Co-Chair** – An experienced PAC member determined by PAC policies to co-manage a WM Track. One Co-chair is designated as the “Lead” for that year and communicates with the other Co-Chairs, the Lead Organizers and the PAC Chair on the Track’s status.

**Lead Organizer** - A PAC member who sponsors a Topic. The Lead Organizer provides guidance and direction to the Organizers and assures compliance with all PAC Policies and follows the Topic through session formation in September.

**Organizer** - A PAC or non-PAC member who receives prior approval of the appropriate Track Co-Chairs and/or PAC Chair to develop a WM Topic and assist in session and program development. The Organizer communicates frequently with the Lead Organizer. When someone accepts the position as Organizer or Lead Organizer for an oral or poster Topic that means that volunteer is agreeing to solicit at least three abstracts for the topic. Organizers and Lead Organizers should remind the author, when submitting their abstract online, to put the Organizer’s name if they were solicited and to submit their abstract by the deadline. WMS recognizes the most active Organizers.

For more information on any topic, contact either the relevant Organizers or Track Co-Chairs listed below or:

Gary Benda, WM2024 PAC Chair, V: 803-345-2170, [gbenda@wmarizona.org](mailto:gbenda@wmarizona.org)

Al Freitag, WM2024 Deputy PAC Chair, V: 914-475-1170, [afreitag@wmarizona.org](mailto:afreitag@wmarizona.org)

Acronyms approved for WM2024 abstracts, papers, posters and PowerPoint presentations are listed at the end of this document on page 49.

## **1 - CROSSCUTTING POLICIES AND PROGRAMS**

Ray Clark, US EPA (Lead Co-Chair), V: 202-343-9198, [clark.ray@epa.gov](mailto:clark.ray@epa.gov)

Craig Michaluk, Atomic Energy of Canada Limited (Co-Chair), V: +1 204-470-1665, [cmichaluk@aecl.ca](mailto:cmichaluk@aecl.ca)

Eric Knox, Amentum (Co-Chair), V: +5712322897, [eric.knox@amentum.com](mailto:eric.knox@amentum.com)

This Track includes overall crosscutting policies and major programs. Similar topics that are not Track crosscutting and thus specific to a single waste type (e.g. HLW, SNF, LLW, etc.) or program (e.g. ER, D&D, etc.) should be submitted to the specific Track for that waste type or program. Presentations of waste management programs and policies at the national, multi-national and international level are particularly encouraged. Other potential crosscutting or general topics include crosscutting regulatory issues, contracting, legal aspects, permitting (licensing) and compliance activities, criteria and standards development, privatization issues, legislation, enforcement agency and state issues (including multiparty agreements), interface, and other high-level crosscutting issues that involve multiple waste types/programs or Tracks.

### **1.0 Crosscutting Policies and Programs - Non-specified Abstracts**

#### **Lead Organizer:**

Ray Clark, US EPA, V: 202-343-9198, [clark.ray@epa.gov](mailto:clark.ray@epa.gov)

### **1.1 Crosscutting Policies and Programs - Posters**

#### **Lead Organizer:**

Ray Clark, US EPA, V: 202-343-9198, [clark.ray@epa.gov](mailto:clark.ray@epa.gov)

### **1.2 WM2024 Featured Theme - 50 Years Celebrating Success: Building our Future Through Innovation**

This topic includes solicited presentations/papers that demonstrate the WMS featured theme "Celebrating Success: Building our Future Through Innovation". Abstracts received may be assigned to this or other related topics.

#### **Lead Organizer:**

Gary Benda, WM Symposia, Inc., V: +1 803-317-1116, [gbenda@wmsym.org](mailto:gbenda@wmsym.org)

### **1.3 Student Poster Competition: Future Industry Leaders**

This topic focuses on all subjects that the annual WMS addresses, but as a non-paper student poster session. The goal of the Topic is to expose the industry to the next generation of young professionals that will lead us in the future. Students will have the opportunity to discuss their work and career goals with professionals in the industry. Students are encouraged to submit a full paper to the conference, though a summary is acceptable. The topic will be judged separately from other poster topics and awards for the best student posters will be conferred. Coordination with Track 8 is imperative for this topic.

#### **Lead Organizer:**

Robert O. Berry, Foxfire Scientific Inc, V: +44 161 292 7990, [berry@foxfirescientific.com](mailto:berry@foxfirescientific.com)

#### **Additional Organizers:**

Leonel Lagos, Applied Research Center - FIU, V: 305-348-1810, [lagosl@fiu.edu](mailto:lagosl@fiu.edu)

### **1.4 Worldwide Regulatory and Oversight Programs for Waste Management - Challenges and Solutions\***

This topic considers presentations on new and/or updated local and national regulatory, oversight, and guidance programs for the management and/or disposal of all types of radioactive wastes. While waste management and disposal programs are being initiated, in development, or in progress, the various authorities are concerned with developing or amending guidance, standards, and regulations to establish limits or guidelines to limit impacts on humans and the environment from management, treatment and disposal programs. Also included are programs designed to track or project impacts from those programs and improve oversight or regulatory frameworks as well as describing ways countries work together to share knowledge on licensing and regulation of nuclear waste storage and disposal.

#### **Lead Organizer:**

Ray Clark, US EPA, V: 202-343-9198, [clark.ray@epa.gov](mailto:clark.ray@epa.gov)

#### **Additional Organizers:**

Leonel Lagos, Applied Research Center - FIU, V: 305-348-1810, [lagosl@fiu.edu](mailto:lagosl@fiu.edu)

Rob Seifert, US DOE HQ, V: 301-250-5239, [robert.seifert@em.doe.gov](mailto:robert.seifert@em.doe.gov)  
Christine Wipfli, US Department of Defense (DOD), V: +1 603-710-8288, [cmwipfli@gmail.com](mailto:cmwipfli@gmail.com)

### **1.5 Worldwide Perspectives of Radioactive Waste Management - Challenges and Solutions\***

This topic accepts abstracts on a cross-section of views from national programs for long-term solutions to the management of radioactive waste (HLW, SNF/UNF, TRU waste, and LLW/ILW) from past, current, and future sources including GEN III and GEN IV nuclear power plants. Such solutions may include long-term storage, deep geological disposal, partitioning, transmutation, or maintaining status quo.

#### **Lead Organizer:**

John Mathieson, Consultant, V: +44 7557 394896, [jmathieson@wmarizona.org](mailto:jmathieson@wmarizona.org)

#### **Additional Organizers:**

Eric Knox, Amentum, V: +5712322897, [eric.knox@amentum.com](mailto:eric.knox@amentum.com)

Craig Michaluk, Atomic Energy of Canada Limited, V: +1 204-470-1665, [cmichaluk@aecl.ca](mailto:cmichaluk@aecl.ca)

### **R1.1 Waste Management Symposium 2024 Plenary Session**

The plenary panel will focus on government and industry world leaders speaking on the pressing issues facing radioactive waste management in 2024 and beyond.

#### **Lead Organizer:**

Gary Benda, WM Symposia, Inc., V: +1 803-317-1116, [gbenda@wmsym.org](mailto:gbenda@wmsym.org)

#### **Additional Organizers:**

Susan A. Walter, WM Symposia, Inc., V: 865-208-9714, [swalter@wmarizona.org](mailto:swalter@wmarizona.org)

Susan Stiger, Bechtel, V: 208-757-7395, [sgstiger@bechtel.com](mailto:sgstiger@bechtel.com)

### **R1.2 WM2024 Featured Theme - 50 Years Celebrating Success: Building our Future Through Innovation**

This session focuses on Celebrating Success: Building our Future Through Innovation. Panelists will discuss the 50 year theme.

#### **Lead Organizer:**

Gary Benda, WM Symposia, Inc., V: +1 803-317-1116, [gbenda@wmsym.org](mailto:gbenda@wmsym.org)

### **R1.3 a-b Panel: DOE EM Initiatives**

These sessions focus on themes and initiatives designated by DOE EM Headquarters.

#### **Lead Organizer:**

Kristen Ellis, US DOE, V: +1 202-586-5810, [kristen.ellis@hq.doe.gov](mailto:kristen.ellis@hq.doe.gov)

#### **Additional Organizers:**

Gary Benda, WM Symposia, Inc., V: +1 803-317-1116, [gbenda@wmsym.org](mailto:gbenda@wmsym.org)

Susan A. Walter, WM Symposia, Inc., V: 865-208-9714, [swalter@wmarizona.org](mailto:swalter@wmarizona.org)

Erik Olds, US DOE EM, V: 509-372-8656, [theodore.olds@em.doe.gov](mailto:theodore.olds@em.doe.gov)

### **R1.4 Panel: Hot Topics in US DOE Environmental Management**

This session focuses on Senior US DOE Managers from Washington, D.C. speaking on the pressing issues facing US DOE EM sites.

#### **Lead Organizer:**

Gary Benda, WM Symposia, Inc., V: +1 803-317-1116, [gbenda@wmsym.org](mailto:gbenda@wmsym.org)

#### **Additional Organizers:**

Martin Schneider, Longenecker & Associates, V: 202-360-5643, [mschneider@la-inc.com](mailto:mschneider@la-inc.com)

Kristen Ellis, US DOE, V: +1 202-586-5810, [kristen.ellis@hq.doe.gov](mailto:kristen.ellis@hq.doe.gov)

### **R1.5 DOE-EM Minority Serving Institutions Partnership Program (MSIPP) Posters**

This invited poster session focuses on students and interns in the DOE-EM Minority Serving Institutions Partnership Program (MSIPP).

**Lead Organizer:**

Vivian Holloway, Savannah River National Laboratory, V: +1 803-646-2670, [vivian.holloway@srnl.doe.gov](mailto:vivian.holloway@srnl.doe.gov)

**Additional Organizers:**

Andrew Fellingner, Savannah River National Laboratory, V: +1 803-507-5163, [a.fellinger@srnl.doe.gov](mailto:a.fellinger@srnl.doe.gov)

Mike Serrato, S&K Logistics Services, LLC, V: 803-725-5200, [michael.serrato@srs.gov](mailto:michael.serrato@srs.gov)

**R1.6 Panel: Energy Facility Contractors Group (EFCOG)**

This session will focus on a specific topic selected by EFCOG. EFCOG promotes excellence in all aspects of the operation, management, and integration of US DOE facilities in a safe, environmentally sound, efficient and cost-effective manner through the ongoing exchange of information on lessons learned. The purpose of this knowledge portal is to provide a vehicle to allow members to keep abreast of the latest news, issues, and events across the US DOE complex; for the sharing of innovative ideas and practices; and to collaborate virtually on the development and implementation of new processes and practices.

**Lead Organizer:**

John Longenecker, Longenecker & Associates, V: +1 702-493-5363, [jlongenecker@la-inc.com](mailto:jlongenecker@la-inc.com)

**Additional Organizers:**

Sandra Fairchild, UCOR, V: +8032958656, [sandra.fairchild@orcc.doe.gov](mailto:sandra.fairchild@orcc.doe.gov)

Martin Schneider, Longenecker & Associates, V: 202-360-5643, [mschneider@la-inc.com](mailto:mschneider@la-inc.com)

**R1.7 Roundtable: Waste Management - Energy Facilities Contractor Operating Group (EFCOG WM)**

This session focuses on the WM EFCOG working group and will meet to discuss a variety of issues of importance to US DOE waste management operations. The purpose of the WM EFCOG is to seek out and promote the best management and operating practices, cost effective technologies and disposal options for all waste streams generated at US DOE facilities whether destined for US DOE or commercial facilities. Each site representative will provide a radioactive waste management lessons learned briefing.

**Lead Organizer:**

Renee Echols, FireWater Associates, LLC, V: 865-599-4064, [rechols@firewaterllc.com](mailto:rechols@firewaterllc.com)

**Additional Organizers:**

Tammy Monday, AVANTech, V: 865-599-9605, [tmonday@avantechinc.com](mailto:tmonday@avantechinc.com)

Sonny Goldston, Consultant, V: +1 803-292-1079, [sonnygoldston@gmail.com](mailto:sonnygoldston@gmail.com)

Jeff England, NAC International, V: 770-605-3250, [jengland@nacintl.com](mailto:jengland@nacintl.com)

**R1.8 International Partnerships on Nuclear Energy & DOE Radwaste Cleanup – Engaging for Success**

This session focuses on the processes and timelines for International Partnerships on Nuclear Energy & DOE Radwaste Cleanup including the Municipalities

**Lead Organizer:**

Kara Colton, Energy Communities Alliance, V: +7038643520, [kara.colton@energyca.org](mailto:kara.colton@energyca.org)

**R1.9 a-b Panel: The IAEA Special Session for WM2024 - To Be Determined**

This session focuses on the WM2024 Special Session organized by the IAEA.

**Lead Organizer:**

Stefan Mayer, IAEA, V: 43-2600-22672, [s.mayer@iaea.org](mailto:s.mayer@iaea.org)

**Additional Organizers:**

Gary Benda, WM Symposia, Inc., V: +1 803-317-1116, [gbenda@wmsym.org](mailto:gbenda@wmsym.org)

Rebecca Robbins, IAEA, V: +43 2600 22659, [r.a.robbins@iaea.org](mailto:r.a.robbins@iaea.org)

**R1.10 Panel: The IAEA Special Session for WM2024 - TBD**

This session focuses on a special topic selected by IAEA for WM2024.

**Lead Organizer:**

Horst Monken Fernandes, IAEA, V: +43 699 16524673, [monkenhorst@yahoo.com.br](mailto:monkenhorst@yahoo.com.br)

**Additional Organizers:**

Gary Benda, WM Symposia, Inc., V: +1 803-317-1116, [gbenda@wmsym.org](mailto:gbenda@wmsym.org)

### **R1.11 Panel: International Perspectives: Achieving Support and Consent - Based Programs for Nuclear Waste Repositories**

This session focuses on providing international perspectives on consent- based program and support for permanent nuclear waste geological repositories. The panel discussion will address the ongoing efforts by the US DOE on Consent-Based siting and the panel will draw upon lessons learned from current US award contractors and Finland, UK, US DOE, as well as by IAEA. What approaches have been the most successful and what are the lessons learned for countries striving to develop nuclear waste disposal. The US experience in developing the Waste Isolation Pilot Project (WIPP) will be examined given its successful outcome and progress/status in the US since the Blue Ribbon Commission report will also be discussed. This featured WMS panel along the other concurrent sessions end with a grand finale Thursday reception. A networking event that you do not want to miss!!

**Lead Organizer:**

Larry Camper, Advoco Professional Services, LLC, V: 301-452-1758, [camp1020@comcast.net](mailto:camp1020@comcast.net)

**Additional Organizers:**

Gary Benda, WM Symposia, Inc., V: +1 803-317-1116, [gbenda@wmsym.org](mailto:gbenda@wmsym.org)

### **R1.12 Panel: US DOE EM Annual Business Opportunity Forum**

This session focuses on the US DOE voluntary partnering initiative established in 2010 allowing for a collaborative approach between the government and contractors to achieve results. Organized by the US DOE EM Office of Acquisition and Project Management, the Business Opportunity Forum is an outreach event that gives companies the chance to learn the latest news about opportunities and doing business with EM. The goal is ensuring an open dialogue with all those involved in doing business with EM. The forum will review the status of every major EM procurement under way and EM progress in awarding these contracts. It will also outline opportunities for contractors to receive information about upcoming procurement's and submit their qualification statements for consideration.

**Lead Organizer:**

Anne Marie Bird, US DOE Office of Environmental Management, V: +1 513-256-2141, [annemarie.bird@emcbc.doe.gov](mailto:annemarie.bird@emcbc.doe.gov)

**Additional Organizers:**

Aaron Deckard, US DOE, V: +5134469032, [aaron.deckard@emcbc.doe.gov](mailto:aaron.deckard@emcbc.doe.gov)

Gary Benda, WM Symposia, Inc., V: +1 803-317-1116, [gbenda@wmsym.org](mailto:gbenda@wmsym.org)

### **R1.13 A-B Panel: DOE Complex Wide Procurement and Contracting Opportunities**

This session focuses on procurement and contracting opportunities within the DOE Complex. Goods and services being considered for these procurements include: decontamination and decommissioning, remediation, transportation and disposal of radioactive waste, health physics, emergency response planning and training, lab services, R&D products, waste treatment, maintenance, A/E and professional consulting. This panel complements Topic R1.14 DOE EM Initiatives and Topic R1.12, US DOE Spring Forum. These panels are open to all WM participants, including Exhibitors.

**Lead Organizer:**

Vanessa Hatfield, Waseyabek Development Company, V: +1 706-726-2428, [vhatfield@wfedservices.com](mailto:vhatfield@wfedservices.com)

**Additional Organizers:**

Brittany Floyd, E2 Consulting Engineers, Inc., V: +1 803-642-5990, [Brittany.floyd@e2.com](mailto:Brittany.floyd@e2.com)

Paivi Nettamo, CDM Smith, V: +1 703-691-6500, [nettamopm@cdmsmith.com](mailto:nettamopm@cdmsmith.com)

Rob Staton, Akima, V: 8034131404, [rob.staton@akima.com](mailto:rob.staton@akima.com)

### **R1.14 Panel: US DOE Tier 1 End State Contracting and Task Order Implementation Status**

This session focuses on DOE Tier 1 End State Contracts. The panel includes perspectives from federal officials and industry representatives at Idaho, Oak Ridge and Savannah River which are executing DOE's End-State contracting model. This panel will provide an update on DOE's End-State contract model and share successful techniques and methods applied to task order negotiations and implementation, including challenges encountered and lessons learned post contract awards. The panel will be open to all WM participants, including Exhibitors.

**Lead Organizer:**

Cathy Hickey, Riemke Professional Solutions, Inc., V: 865-621-8494, [tryopt1@aol.com](mailto:tryopt1@aol.com)

**Additional Organizers:**

Susan Stiger, Bechtel, V: 208-757-7395, [sgstiger@bechtel.com](mailto:sgstiger@bechtel.com)

Angela Watmore, US DOE EM, V: 202-586-5000, [Angela.Watmore@em.doe.gov](mailto:Angela.Watmore@em.doe.gov)

### **R1.15 Panel: Tech Transfer & Commercialization: Innovative Solutions for Domestic and International Opportunities**

This session focuses on the connection between innovative solutions and the various industries looking for more efficient methods, products, and processes in Tech Transfer and Commercialization. This panel has interest across the entire conference base, whether they are encountering a challenge, introducing an innovative solution, or are the host that is trying to get from a pure research / Research, Development, Demonstration, Testing, and Evaluation solution to one that is commercially viable and robust enough for long term and/or high risk deployment scenarios and which will support greater chance of success and positive outcomes. The range of participants US and non-US national lab personnel; the US DOE and its worldwide counterparts; US and non-US participants from academia, industry, private organizations, national, local, State, and tribal governments, representation from several U.S. federal agencies, as well as researchers, students, and entrepreneurs.

#### **Lead Organizer:**

Ming Zhu, US DOE, V: 301-903-9240, [Ming.Zhu@em.doe.gov](mailto:Ming.Zhu@em.doe.gov)

#### **Additional Organizers:**

John Mathieson, Consultant, V: +44 7557 394896, [jmathieson@wmarizona.org](mailto:jmathieson@wmarizona.org)

### **R1.16 Strategies to Increase Efficiency, Reduce Cost, Accelerate Work, and Maintain Operational Excellence**

The session focuses on results-based project execution and ways to improve the effectiveness of operations while increasing efficiency and reducing cost. Panelists will discuss best practices and lessons learned from their sites and projects as they work within budgetary, resource and technological constraints. Panelists will include senior leadership from the US, the United Kingdom, and Canada.

#### **Lead Organizer:**

Judith Connell, Fluor, V: 509-531-4484, [Judy.Connell@fluor.gov](mailto:Judy.Connell@fluor.gov)

#### **Additional Organizers:**

Dennis Carr, Savannah River Nuclear Solutions, V: +1 803-952-8785, [dennis.carr@srs.gov](mailto:dennis.carr@srs.gov)

John Longenecker, Longenecker & Associates, V: +1 702-493-5363, [jlongenecker@la-inc.com](mailto:jlongenecker@la-inc.com)

### **R1.17 Panel: Collaboration Across Borders to Deliver Cleanup and Decommissioning Challenges**

This session focuses on the U.S., U.K., Canada, and France to discuss their international collaborative activities. Despite the challenges of the last couple years, joint progress has been made in areas such as sustainability, workforce development, and technology sharing. The panel will detail recent and upcoming collaboration opportunities that connect with the WM2024 theme.

#### **Lead Organizer:**

Ashley Furman, Longenecker & Associates, V: +1 919-888-1991, [afurman@la-inc.com](mailto:afurman@la-inc.com)

#### **Additional Organizers:**

John Mathieson, Consultant, V: +44 7557 394896, [jmathieson@wmarizona.org](mailto:jmathieson@wmarizona.org)

Laurie Judd, Longenecker & Associates, V: 202-841-2435, [ljudd@la-inc.com](mailto:ljudd@la-inc.com)

Joceline Nahigian, US DOE, V: +1 301-250-3409, [joceline.nahigian@hq.doe.gov](mailto:joceline.nahigian@hq.doe.gov)

### **R1.18 Panel: Emerging Middle East Nuclear States' Status and Plans**

This panel focuses on the status and plans of Middle Eastern nations for radioactive waste management. Many mid-east nations have made initial steps towards adding nuclear power to their energy portfolio. The panel allows these plans to be shared among the more mature nuclear waste management programs elsewhere around the world. The topic will contrast and compare the nations' different plans and allow participants to validate the pathways being taken.

#### **Lead Organizer:**

Eric Knox, Amentum, V: +5712322897, [eric.knox@amentum.com](mailto:eric.knox@amentum.com)

#### **Additional Organizers:**

John Mathieson, Consultant, V: +44 7557 394896, [jmathieson@wmarizona.org](mailto:jmathieson@wmarizona.org)

### **R1.19 Panel: Integrating Economic Redevelopment and Workforce Transition Into Site Closure Planning**

This session focuses on the need to consider post – closure impacts to the long-term site workforce and communities in DOE's approach to accelerated site cleanup and expedited reduction of long-term financial liabilities. At sites where Cold-War workers shifted from weapons production to the cleanup effort, a more holistic approach to the workforce transition Post-EM cleanup is needed. This holistic approach would include incentives for expedited closure, trade re-training, and a vision for future site commercial activities. The panel will also focus on the importance of the right workforce incentives that includes

appropriate training for displaced workers so that they can be integrated into a next job. Another key aspect of this discussion will be to re-assess the current and future land use opportunities related to land re-use concepts. By re-arranging cleanup sequencing is it possible to divest concepts.

**Lead Organizer:**

Eric Knox, Amentum, V: +5712322897, [eric.knox@amentum.com](mailto:eric.knox@amentum.com)

**Additional Organizers:**

Jennie Stults, Central Plateau Cleanup Company (CPCCo), V: +1 509-521-7471, [jennie.stults@amentum.com](mailto:jennie.stults@amentum.com)

Paul Longsworth, Westinghouse Government Services, V: +1 571-422-1403, [plongsworth@westinghousegovservices.com](mailto:plongsworth@westinghousegovservices.com)

**R1.20 Panel: Progress at Sellafield**

This session focuses on the progress and issues that Sellafield Ltd has faced over the past years since the change from a Parent Body Organization (PBO) to a subsidiary of the NDA. The panel will describe some of the many changes that have occurred such as the cessation of reprocessing and the transition into a conventional “clean up and decommissioning site”. Specific examples will be highlighted included progress in the most hazardous facilities in Europe (commonly known as the legacy ponds and silos) along with broad front decommissioning of some of the original facilities that were built in the 1950’S and 60’s. The panel will also describe the investment that has been made in making the site more resilient to adverse events and describe the change in approach to working in partnership with the supply chain for program and project delivery using alternative contractual mechanisms.

**Lead Organizer:**

Roger Cowton, Sellafield Ltd, V: +44 7739 301250, [roger.m.cowton@sellafieldsites.com](mailto:roger.m.cowton@sellafieldsites.com)

**Additional Organizers:**

John Mathieson, Consultant, V: +44 7557 394896, [jmathieson@wmarizona.org](mailto:jmathieson@wmarizona.org)

Fred Sheil, Sheil Consulting Ltd, V: +44 1900 821061, [fred@sheil.myzen.co.uk](mailto:fred@sheil.myzen.co.uk)

**R1.21 Panel: Update of the DOE Hanford Site**

This session focuses on the accomplishments and developments at the US DOE’s Hanford Site in Richland, WA. The session features the various representatives from the DOE Hanford Site including the DOE and its contractors.

**Lead Organizer:**

Tom Brouns, Pacific Northwest National Laboratory, V: 509-372-6265, [tom.brouns@pnnl.gov](mailto:tom.brouns@pnnl.gov)

**R1.22 Panel: Savannah River National Laboratory Regulatory Center of Excellence (RCE)**

This session focuses on the area of regulatory and technical needs for the US DOE that require or would benefit from support from US and Non-US National Labs.

**Lead Organizer:**

Rob Seifert, US DOE HQ, V: 301-250-5239, [robert.seifert@em.doe.gov](mailto:robert.seifert@em.doe.gov)

**Additional Organizers:**

Christine Gelles, Longenecker & Associates, V: 301 508 0177, [cgelles@la-inc.com](mailto:cgelles@la-inc.com)

Stephanie Jacobs, Savannah River National Laboratory, V: +1 803-522-4949, [stephanie.jacobs@srnl.doe.gov](mailto:stephanie.jacobs@srnl.doe.gov)

**R1.23 Panel: Update on the DOE Portsmouth, OH and Paducah, KY Sites**

This session focuses on the DOE’s Portsmouth/Paducah Project Office (PPPO), which is responsible for management and cleanup at the Portsmouth, Ohio and Paducah, Kentucky former Gaseous Diffusion Plant sites. Portsmouth is focused on initial phases of D&D of the plant – principally legacy structures and disposition of process gas equipment. Paducah is focused on soil and groundwater remediation while negotiating the change in operational status of the USEC-leased enrichment facilities and preparing for future D&D. Both sites are ramping up production at their DUF6 conversion plants. DOE recently announced negotiations for potential continued use of selected Paducah facilities and sale of some of its DUF6 inventory.

**Lead Organizer:**

Yvette Cantrell, Portsmouth Paducah Project Office, V: 865-405-3199, [yvette.cantrell@pppo.gov](mailto:yvette.cantrell@pppo.gov)

**Additional Organizers:**

Kearney Ackermann, Atkins Nuclear Secured, V: 502-291-2006, [kearney.ackermann@atkinsglobalns.com](mailto:kearney.ackermann@atkinsglobalns.com)

### **R1.24 Panel: Environmental Cleanup in Oak Ridge, TN: A New Chapter**

This session focuses on the accomplishments of environmental cleanup at US DOE's Oak Ridge Reservation in Oak Ridge, Tennessee. The session features representatives from the DOE Oak Ridge Office of Environmental Management (OREM) and its contractors, UCOR and Isotek, in exploring the partnerships and performance excellence that have made the difference in achieving success. In this session, representatives from the DOE Office of Environmental Management and its contractors, UCOR and Isotek, will report on the past year of cleanup on the Oak Ridge Reservation and what's next for the program. Panelists will discuss critical projects and milestones ahead as well as strategic focus areas to achieve success.

#### **Lead Organizer:**

Sonya Johnson, UCOR, LLC, V: +1 702-219-1073, [Sonya.Johnson@orcc.doe.gov](mailto:Sonya.Johnson@orcc.doe.gov)

### **R1.25 Panel: The State of EPA Involvement on the DOE NPL Sites**

This session focuses on the perspectives of EPA staff with key roles in overseeing DOE federal facility NPL sites. Federal facility sites currently have about half of the total remedy decisions of entire Superfund program of sites on the National Priorities List (NPL). This is a mature cleanup program and these sites have complex issues remaining, and expensive remedies. Site specific decision making allows for flexibility, but can present consistency challenges. Remedy decisions should be based on risk and anticipated land use, and communities and stakeholders that live around the sites have a voice in the remedy decision.

#### **Lead Organizer:**

Stuart Walker, US EPA, V: 703-603-8748, [walker.stuart@epa.gov](mailto:walker.stuart@epa.gov)

#### **Additional Organizers:**

Jon Richards, US EPA REG 4, V: +4044311340, [richards.jon@epa.gov](mailto:richards.jon@epa.gov)

Jana Dawson, US EPA, V: +1 404-562-8329, [dawson.jana@epa.gov](mailto:dawson.jana@epa.gov)

### **R1.26 Panel: DOE EM Nuclear Safety Oversight Panel**

This session focuses on the DOE Office of Safety, Security, and Quality Assurance in providing nuclear and facility safety oversight for the EM field sites. Oversight activities are driven by requirements, observed trends, areas of concern and triggering events. In FY20, EM adjusted its oversight strategy to improve alignment with requirements and ensure timely and effective oversight of safety, security and quality assurance throughout the EM Complex. The EM Central Technical Authority (CTA) is responsible for maintaining operational awareness of the implementation of nuclear safety requirements and the staffing resources to fulfill nuclear safety responsibilities. This panel will discuss the lessons learned from CTA safety reviews performed in FY21-FY22, lessons learned from these reviews, and the strategy for future reviews.

#### **Lead Organizer:**

Amanda Anderson, US DOE, V: 240-702-5556, [amanda.anderson@em.doe.gov](mailto:amanda.anderson@em.doe.gov)

#### **Additional Organizers:**

Gary Benda, WM Symposia, Inc., V: +1 803-317-1116, [gbenda@wmsym.org](mailto:gbenda@wmsym.org)

### **R1.27 Panel: Discussion of Arctic Monitoring and Assessment Program**

This session focuses on the Arctic Monitoring and Assessment Program. As impact of global climate changes are observed, the nexus between climate change and radiation monitoring results are better understood, increased awareness is important.

#### **Lead Organizer:**

Eric Knox, Amentum, V: +5712322897, [eric.knox@amentum.com](mailto:eric.knox@amentum.com)

#### **Additional Organizers:**

Amanda Anderson, US DOE, V: 240-702-5556, [amanda.anderson@em.doe.gov](mailto:amanda.anderson@em.doe.gov)

John Mathieson, Consultant, V: +44 7557 394896, [jmathieson@wmarizona.org](mailto:jmathieson@wmarizona.org)

### **R1.28 Panel: Justice 40: Overview and Initiatives**

This session focuses on Justice 40. Justice 40 is an interconnected US government program effort to ensure that Federal agencies work with states, local governments, and local communities to provide benefits from Federal government investments in climate and clean energy to disadvantaged communities. The panel will provide discussion and insights on the potential impacts to local workforce needs, environmental justice to the community, research needs, and potential funding to the local area.

#### **Lead Organizer:**

Eric Knox, Amentum, V: +5712322897, [eric.knox@amentum.com](mailto:eric.knox@amentum.com)



**Additional Organizers:**

Nicole Nelson-Jean, US DOE EM, V: +1 202-586-5000, [Nicole.Nelson-Jean@em.doe.gov](mailto:Nicole.Nelson-Jean@em.doe.gov)

Lessie Price, Amentum, V: +1 803-761-2017, [Lessie.Price@amentum.com](mailto:Lessie.Price@amentum.com)

**R1.29 Panel: Cleanup Projects that Got It Right: Non-Technical Lessons**

The session focuses on non-technical lessons learned from (DOE and potentially NDA) projects that appear to have it right. This panel will focus on human resources efforts, training, public engagement, public private partnerships, site redevelopment and other non-technical aspects of project and mission success.

**Lead Organizer:**

Eric Knox, Amentum, V: +5712322897, [eric.knox@amentum.com](mailto:eric.knox@amentum.com)

**Additional Organizers:**

Lisa Tharp-Bernard, Amentum, V: 803-292-5058, [lisa.tharp-bernard@amentum.com](mailto:lisa.tharp-bernard@amentum.com)

**R1.30 Panel: PREDIS (PRE-DISposal) European Waste Management Collaboration**

This session focuses on PREDIS (PRE-DISposal) and the multinational activities from over 40 organizations and 18 countries. It covers many areas ranging from treatment of metals and organic wastes through to the automation of waste stores. This session will also highlight other initiatives such as the SHARE decommissioning project.

**Lead Organizer:**

Anthony Banford, UK National Nuclear Laboratory, V: +44 7715 043778, [anthony.w.banford@uknnl.com](mailto:anthony.w.banford@uknnl.com)

**Additional Organizers:**

Erika Holt, VTT Technical Research Centre of Finland, V: +358 40 5931986, [erika.holt@vtt.fi](mailto:erika.holt@vtt.fi)

**R1.31 a-b Panel: DOE Legacy Management (LM) Initiatives**

These sessions focus on themes and initiatives designated by DOE Office of Legacy Management.

**Lead Organizer:**

Darina Castillo, US DOE, V: 720-377-3824, [Darina.Castillo@LM.DOE.gov](mailto:Darina.Castillo@LM.DOE.gov)

**Additional Organizers:**

Gary Benda, WM Symposia, Inc., V: +1 803-317-1116, [gbenda@wmsym.org](mailto:gbenda@wmsym.org)

**R1.32 US DOE OSDBU MPA & SCMC**

**Additional Organizers:**

Vanessa Hatfield, Waseyabek Development Company, V: +1 706-726-2428, [vhatfield@wfedservices.com](mailto:vhatfield@wfedservices.com)

**R1.33 EMCBC - The US DOE EM "Swiss Army Knife"**

**Lead Organizer:**

Cathy Hickey, Riemke Professional Solutions, Inc., V: 865-621-8494, [tryopt1@aol.com](mailto:tryopt1@aol.com)

**Additional Organizers:**

Melody Bell, US DOE, V: 240-751-3072, [melody.bell@emcbc.doe.gov](mailto:melody.bell@emcbc.doe.gov)

Aaron Deckard, US DOE, V: +5134469032, [aaron.deckard@emcbc.doe.gov](mailto:aaron.deckard@emcbc.doe.gov)

**R1.34 US DOE EMCBC Reverse Industry Day Implementation Input**

**Lead Organizer:**

Aaron Deckard, US DOE, V: +5134469032, [aaron.deckard@emcbc.doe.gov](mailto:aaron.deckard@emcbc.doe.gov)

**Additional Organizers:**

Cathy Hickey, Riemke Professional Solutions, Inc., V: 865-621-8494, [tryopt1@aol.com](mailto:tryopt1@aol.com)

**R1.35 Update of the DOE Savannah River Site**

This session focuses on the accomplishments and developments at the US DOE's Savannah River Site (SRS) in Aiken, SC. The session features the various representatives from the DOE SRS site including the DOE and its contractors.

**Lead Organizer:**

Amy Boyette, US DOE - Savannah River Operations Office, V: +1 803-952-6120, [amy.boyette@srs.gov](mailto:amy.boyette@srs.gov)

**Additional Organizers:**

Larry Ling, Savannah River Mission Completion, V: 803-208-0651, [L.Ling@Srs.Gov](mailto:L.Ling@Srs.Gov)

Connie Herman, Savannah River National Laboratory, V: 803-725-5306, [connie.herman@srnl.doe.gov](mailto:connie.herman@srnl.doe.gov)

**R1.36 Update of the DOE INL Site**

This session focuses on the accomplishments and developments at the US DOE's Idaho National Laboratory Site (INL) in Idaho Falls, ID. The session features the various representatives from the DOE INL site including the DOE and its contractors.

**Additional Organizers:**

Rick Demmer, MARCOM, V: 208-589-4858, [dcondude@gmail.com](mailto:dcondude@gmail.com)

Robert Miklos, Idaho National Laboratory, V: +1 208-881-8042, [robert.miklos@inl.gov](mailto:robert.miklos@inl.gov)

Ann Riedesel, Fluor, V: +1 208-569-6320, [ann.riedesel@fluorgov.com](mailto:ann.riedesel@fluorgov.com)

**R1.37 Update of the DOE West Valley Site**

This session focuses on the accomplishments and developments at the US DOE's West Valley (WVDP) in West Valley, NY. The session features the various representatives from the DOE WVDP site including the DOE and its contractors.

**Lead Organizer:**

Gary Benda, WM Symposia, Inc., V: +1 803-317-1116, [gbenda@wmsym.org](mailto:gbenda@wmsym.org)

**Additional Organizers:**

Joe Pillittere, CH2M HILL BWXT West Valley, LLC, V: 716-942-4996, [Joseph.Pillittere@chbwv.com](mailto:Joseph.Pillittere@chbwv.com)

Melody Bell, US DOE, V: 240-751-3072, [melody.bell@emcbc.doe.gov](mailto:melody.bell@emcbc.doe.gov)

**R1.38 Update of the DOE LANL Site**

This session focuses on the accomplishments and developments at the US DOE's Los Alamos National Laboratory Site (LANL) in Los Alamos, NM. The session features the various representatives from the DOE LANL site including the DOE and its contractors.

**Additional Organizers:**

Erich Evered, N3B Los Alamos, V: +1 505-309-1360, [erich.evered@em-la.doe.gov](mailto:erich.evered@em-la.doe.gov)

Jeannette Hyatt, Triad National Security, LLC, V: +1 505-695-8478, [jhyatt@lanl.gov](mailto:jhyatt@lanl.gov)

Paul Dixon, Los Alamos National Laboratory, V: 505-699-1744, [p\\_dixon@lanl.gov](mailto:p_dixon@lanl.gov)

**R1.39 Producing Solutions and Creating Acceptable Disposal Pathways for all DOE Radioactive Waste Streams?**

This session focuses on producing solutions and moving forward with US DOE Cleanup by creating acceptable disposal pathways for all radioactive waste streams by the ECA.

**Lead Organizer:**

Kara Colton, Energy Communities Alliance, V: +7038643520, [kara.colton@energyca.org](mailto:kara.colton@energyca.org)

**R1.40 Focusing on US Legacy HLW, SNF, and Consent-Based Siting – Moving the Process Forward (1/2)**

This session focuses on the re-start of DOE's consent-based siting initiative, and how to ensure past experiences inform new efforts.

**Lead Organizer:**

Kara Colton, Energy Communities Alliance, V: +7038643520, [kara.colton@energyca.org](mailto:kara.colton@energyca.org)

**R1.41 Energy Communities Alliance (ECA) – Business Meeting (Invited Only)**

This session focuses on the business activities of the ECA in producing solutions and moving forward with US DOE Cleanup by creating acceptable disposal pathways for all radioactive waste streams

**Lead Organizer:**

Kara Colton, Energy Communities Alliance, V: +7038643520, [kara.colton@energyca.org](mailto:kara.colton@energyca.org)

**R1.42 Update on Australia / ANSTO**

This session focused on the activities in Australia. Panellist will include speakers on an • Update on the commissioning the Synroc facility • The Role of ANSTO Synroc technology for closing the Advanced Nuclear Reactors fuel cycle • Australian low level radioactive waste repository • Australian borehole repository • CORIS 360 technology • HIFAR decommissioning

**Lead Organizer:**

Constantinos (Con) Lyras, ANSTO, V: +61 2 9717 3382, [con.lyras@ansto.gov.au](mailto:con.lyras@ansto.gov.au)

**Additional Organizers:**

Anton Peristyy, ANSTO, V: +61 458 748 774, [peristya@ansto.gov.au](mailto:peristya@ansto.gov.au)

**R1.43 Intern Research Posters Featuring US DOE Savannah River National Laboratory**

This topic showcases the research projects that the Savannah River National Laboratory Interns supported and/or contributed for SRS.

**Lead Organizer:**

Jen Wohlwend, Savannah River National Laboratory, V: +1 803-617-8239, [Jennifer.Wohlwend@srnl.doe.gov](mailto:Jennifer.Wohlwend@srnl.doe.gov)

**R1.44 US DOE NNSA Procurement Activities**

**Lead Organizer:**

Cathy Hickey, Riemke Professional Solutions, Inc., V: 865-621-8494, [tryopt1@aol.com](mailto:tryopt1@aol.com)

**Additional Organizers:**

Robert Raines, Atkins, V: 865-406-4593, [robert.raines@atkinsglobalns.com](mailto:robert.raines@atkinsglobalns.com)

**R1.45 Non-US Procurement Opportunities**

This sessions focused on procurement activities outside the US, including United Kingdom, Canada, Sweden, France and Germany.

**Additional Organizers:**

Craig Michaluk, Atomic Energy of Canada Limited, V: +1 204-470-1665, [cmichaluk@aecl.ca](mailto:cmichaluk@aecl.ca)

Anthony Banford, UK National Nuclear Laboratory, V: +44 7715 043778, [anthony.w.banford@uknnl.com](mailto:anthony.w.banford@uknnl.com)

**R1.46 Update of the DOE EMCBC Sites (DOE EM Focus)**

This session focuses on the accomplishments and developments at the US DOE's EM sites managed by EMCBC in Cincinnati, OH. The session features the various representatives from the DOE site including EM activities at West Valley, NY; Brookhaven, NY; Nevada Test Site; MOAB, UT; ETEC , CA; LBNL and LLNL in CA.

**Additional Organizers:**

Aaron Deckard, US DOE, V: +5134469032, [aaron.deckard@emcbc.doe.gov](mailto:aaron.deckard@emcbc.doe.gov)

Melody Bell, US DOE, V: 240-751-3072, [melody.bell@emcbc.doe.gov](mailto:melody.bell@emcbc.doe.gov)

Anne Marie Bird, US DOE Office of Environmental Management, V: +1 513-256-2141, [annemarie.bird@emcbc.doe.gov](mailto:annemarie.bird@emcbc.doe.gov)

**R1.47 Additional Emerging Contracting Opportunities in the US Federal Market**

**Lead Organizer:**

Vanessa Hatfield, Waseyabek Development Company, V: +1 706-726-2428, [vhatfield@wfedservices.com](mailto:vhatfield@wfedservices.com)

**R1.48 US DOE NE/ Office of Science - Contracting Opportunities**

**Lead Organizer:**

Cathy Hickey, Riemke Professional Solutions, Inc., V: 865-621-8494, [tryopt1@aol.com](mailto:tryopt1@aol.com)

**Additional Organizers:**

Gary Benda, WM Symposia, Inc., V: +1 803-317-1116, [gbenda@wmsym.org](mailto:gbenda@wmsym.org)

**R1.49 Unlocking Success: Proven Strategies for Winning US Government Proposals**

This session will focus on strategies to win US Government Proposals. Our experts will shed light on the fundamental strategies applicable to all government proposals, while delving into specific tactics that have proven particularly effective for securing US DOE Tier 1 and 2 contracts. Benefit from their wealth of knowledge as they share practical insights and real-world examples that can elevate your proposal game to new heights. Discover the key to securing government contracts with our panel of consultants and business executives who collectively have extensive experience in successfully winning Tier 1 and Tier 2 contracts with the US DOE and other government agencies. During the panel, our speakers will deliver initial remarks, sharing their extensive experience. Following their presentations, we encourage the audience to actively participate by asking questions (excluding any discussions of ongoing procurements, of course). This interactive exchange promises to provide attendees with additional valuable takeaways and actionable strategies. We welcome your active participation!

**Lead Organizer:**

Cathy Hickey, Riemke Professional Solutions, Inc., V: 865-621-8494, [tryopt1@aol.com](mailto:tryopt1@aol.com)

**Additional Organizers:**

Eric Knox, Amentum, V: +5712322897, [eric.knox@amentum.com](mailto:eric.knox@amentum.com)

**2 - HIGH-LEVEL RADIOACTIVE WASTES (HLW), SPENT/USED NUCLEAR FUEL (SNF/UNF) AND LONG-LIVED ALPHA/TRANSURANIC RADIOACTIVE WASTE (TRU)**

Tom Brouns, Pacific Northwest National Laboratory (Lead Co-Chair), V: 509-372-6265, [tom.brouns@pnnl.gov](mailto:tom.brouns@pnnl.gov)

Thilo von Berlepsch, BGE TECHNOLOGY GmbH (Co-Chair), V: +49 5171 431517, [thilo.berlepsch@bge.de](mailto:thilo.berlepsch@bge.de)

Steven Thomson, National Nuclear Laboratory (Co-Chair), V: +44 1946 556622, [steven.thomson@uknnl.com](mailto:steven.thomson@uknnl.com)

J.R. Stroble, US DOE (Co-Chair), V: +1 575-706-0100, [j.r.stroble@cbfo.doe.gov](mailto:j.r.stroble@cbfo.doe.gov)

Robert Jubin, Consultant (Co-Chair), V: +1 865-924-1568, [RTJubin1@comcast.net](mailto:RTJubin1@comcast.net)

This Track covers all long-lived alpha/TRU waste, SNF/UNF and HLW operations from generation and storage through characterization, treatment and disposal. It also covers associated technology development and deployment; recycling/reprocessing strategies and technologies; periodic progress updates oriented to specific achievements in waste removal and disposal activities, and overlapping issues including: interim and final disposition strategies for SNF/UNF and HLW, associated environmental permitting and monitoring of stored waste, waste processing alternatives, waste form, deep geologic disposal and operating facility performance and risk assessment, and the impacts of directly associated regulations and standards.

**2.0 HLW, SNF/UNF and Long-lived Alpha/TRU Waste - Non-Specified Abstracts****Lead Organizer:**

Tom Brouns, Pacific Northwest National Laboratory, V: 509-372-6265, [tom.brouns@pnnl.gov](mailto:tom.brouns@pnnl.gov)

**2.1 HLW, SNF/UNF and Long-lived Alpha/TRU Waste - Posters****Lead Organizer:**

Tom Brouns, Pacific Northwest National Laboratory, V: 509-372-6265, [tom.brouns@pnnl.gov](mailto:tom.brouns@pnnl.gov)

**2.2 HLW, SNF/UNF and Long-Lived Alpha/TRU Programs and Policies**

This topic accepts abstracts on the disposition of spent/used nuclear fuel (SNF/UNF), HLW, TRU waste, and other long-lived non-LLW that cut across two or more of the major Track 2 categories of storage and retrieval, treatment, and deep geologic disposal. Abstracts may include major programs or policy initiatives that have broad impact on the future direction of waste generation and/or disposition (storage, treatment, and disposal). Abstracts may include characterization, waste acceptance criteria, technology development and/or demonstration, operational lessons learned, and policy and regulations.

**Lead Organizer:**

Tom Brouns, Pacific Northwest National Laboratory, V: 509-372-6265, [tom.brouns@pnnl.gov](mailto:tom.brouns@pnnl.gov)

**Additional Organizers:**

Sal Golub, US DOE, V: +1 301-448-6031, [sal.golub@hq.doe.gov](mailto:sal.golub@hq.doe.gov)

Sharon Robinson, Oak Ridge National Laboratory, V: 865-574-6779, [Robinsonsm@ornl.gov](mailto:Robinsonsm@ornl.gov)

### ***Storage and Retrieval of HLW, SNF/UNF and Long-lived Alpha/TRU***

This category covers the storage of highly radioactive wastes including HLW, TRU, SNF, UNF and other long-lived materials in storage areas or vessels prior to retrieval for processing and treatment, and in interim storage areas prior to transport for disposal. Topic Abstracts for the storage and retrieval category may cover areas of waste characterization, waste acceptance criteria, monitoring and analysis of the integrity of storage systems, waste mixing, mobilization, retrieval, consolidation of wastes, and storage of said wastes prior to transport for further processing or disposal. This category also covers the retrieval of wastes from storage areas. The storage and retrieval category are divided into key topics 2.3 - 2.5 based on waste type.

### **2.3 Storage and Retrieval of Spent/Used Nuclear Fuel\***

This topic accepts abstracts for technical papers on storage and retrieval of Spent/Used Nuclear Fuel.

#### **Lead Organizer:**

John Gregory, Savannah River Mission Completion, V: 803-443-9772, [john.gregory@srs.gov](mailto:john.gregory@srs.gov)

#### **Additional Organizers:**

Steven Thomson, National Nuclear Laboratory, V: +44 1946 556622, [steven.thomson@uknln.com](mailto:steven.thomson@uknln.com)

Ashley Furman, Longenecker & Associates, V: +1 919-888-1991, [afurman@la-inc.com](mailto:afurman@la-inc.com)

### **2.4 Storage and Retrieval of HLW**

This topic accepts abstracts on the storage and retrieval of liquid and solid HLW in tanks or other vessels prior to processing and treatment, including characterization, waste acceptance criteria, and monitoring of the vessels and wastes. The topic also includes interim storage of treated (e.g., immobilized) HLW prior to transport for disposal. This topic also includes abstracts that focus on improvements for evaporator operation, managing the design life for existing tanks, plans for improving infrastructure or plans for building new storage capability.

#### **Lead Organizer:**

Jonathan Bricker, Central Plateau Cleanup Company (CPCo), V: 352-339-4804, [jonathan\\_m\\_bricker@rl.gov](mailto:jonathan_m_bricker@rl.gov)

#### **Additional Organizers:**

Vijay Jain, Savannah River Mission Completion, V: +8035074448, [Vijay.Jain@srs.gov](mailto:Vijay.Jain@srs.gov)

Terry Sams, Retired Engineering Executive, V: +1 509-420-0217, [tlsnfs@aol.com](mailto:tlsnfs@aol.com)

### **2.5 TRU Waste Disposition**

This topic accepts abstract for technical papers on retrieval, storage, characterization, and treatment of TRU Waste prior to transferring the waste to a WIPP Certified Program or TRU and Long-Lived Alpha Waste storage and retrieval issues in other countries. Of particular interest is the comparison of TRU drums from the US DOE LANL and Idaho sites.

#### **Lead Organizer:**

J.R. Stroble, US DOE, V: +1 575-706-0100, [j.r.stroble@cbfo.doe.gov](mailto:j.r.stroble@cbfo.doe.gov)

#### **Additional Organizers:**

Elizabeth (Betsy) Forinash, US DOE EM, V: +1 301-250-3539, [betsy.forinash@em.doe.gov](mailto:betsy.forinash@em.doe.gov)

### ***Treatment of HLW, SNF/UNF and Long-lived Alpha/TRU***

This category covers the treatment of SNF/UNF, HLW, TRU waste, and other Long-lived Alpha Wastes enabling recycling of nuclear materials for beneficial use, reducing the toxicity or hazard of nuclear materials, and/or producing waste forms particularly suitable for safe disposal. Abstracts for treatment may cover areas of characterization, in-process monitoring, liquid and sludge transport, process development, scale-up, testing, modeling, design, operational lessons learned and waste form performance. The treatment category is divided into the following key topics 2.6 - 2.9 based on general processing steps used in the nuclear fuel cycle:

### **2.6 Update on Salt and Supernate Tank Waste Processing**

This topic accepts abstracts on salt and supernate processing at the Hanford and Savannah River Sites, where new facilities and tank-side cesium removal processes are being commissioned or tested to enable progress in tank waste treatment.

#### **Lead Organizer:**

Vijay Jain, Savannah River Mission Completion, V: +8035074448, [Vijay.Jain@srs.gov](mailto:Vijay.Jain@srs.gov)

#### **Additional Organizers:**

Sharon Robinson, Oak Ridge National Laboratory, V: 865-574-6779, [Robinsonsm@ornl.gov](mailto:Robinsonsm@ornl.gov)

Todd Wagon, Washington River Protection Solutions, V: 509-376-8406, [todd\\_j\\_wagon@rl.gov](mailto:todd_j_wagon@rl.gov)

## **2.7 Current and Future Reprocessing/Recycling and Separation of HLW, SNF/UNF and Long-lived Alpha/TRU**

This topic accepts abstracts on both reprocessing/recycling of SNF/UNF, as well as the pretreatment of stored liquid and solid HLW from previous reprocessing operations. This topic also accepts abstracts on HLW arising from proposed future fuel cycles, and how they can be stored and processed. Separation includes dissolution and/or leaching of SNF/UNF and HLW solids, filtration, ion exchange, solvent extraction, evaporation, or other separation operations required to produce process streams suitable for subsequent recycle for reuse, immobilization into suitable waste forms, or transformation into less hazardous wastes. Process monitoring approaches and technologies necessary to support reprocessing/recycling operations are also included in this topic. Several international programs are now underway to assess alternative recycling flow sheets with their primary objective to improve performance and safety and to reduce waste, while lowering proliferation incidents. Some examples include fuel cycles involving molten salt reactors, high temperature gas-cooled reactors, and the use of accident tolerant fuels.

### **Lead Organizer:**

Robert Jubin, Consultant, V: +1 865-924-1568, [RTJubin1@comcast.net](mailto:RTJubin1@comcast.net)

### **Additional Organizers:**

Paul Bredt, Pacific Northwest National Laboratory, V: 509-375-3699, [paul.bredt@pnnl.gov](mailto:paul.bredt@pnnl.gov)

Ashley Furman, Longenecker & Associates, V: +1 919-888-1991, [afurman@la-inc.com](mailto:afurman@la-inc.com)

## **2.8 Advanced Fuel Cycle Program Update**

This topic accepts abstracts on re-processing of future fuels (AMR, SMR, Gen II Reactors) and associated waste management. This will include research into new and improved recycling and waste management methods taking into account lessons learned across the globe, and new technology developments, in order to simplify processes, reduce costs and make nuclear energy a more sustainable option in the future. This topic also includes abstracts on the R&D associated with the recovery and recycle of HALEU materials.

### **Lead Organizer:**

Steven Thomson, National Nuclear Laboratory, V: +44 1946 556622, [steven.thomson@uknnl.com](mailto:steven.thomson@uknnl.com)

### **Additional Organizers:**

Jo Jo Lee, US Nuclear Waste Technical Review Board, V: , [lee@nwtrb.gov](mailto:lee@nwtrb.gov)

Robert Jubin, Consultant, V: +1 865-924-1568, [RTJubin1@comcast.net](mailto:RTJubin1@comcast.net)

## **2.9 Stabilization/Immobilization of HLW, SNF/UNF and Long-lived Alpha/TRU**

This topic accepts abstracts on the immobilization of process wastes into suitable waste forms for storage and/or disposal. Stabilization includes processes such as de-watering, calcining, grouting and vitrification, as well as other processes producing waste forms for specific wastes from current and potential future HLW/SNF/UNF processing flow sheets. This topic is also related to 2.6.

### **Lead Organizer:**

Sharon Marra, Savannah River National Laboratory, V: 803-725-5891, [Sharon.Marra@srnl.doe.gov](mailto:Sharon.Marra@srnl.doe.gov)

### **Additional Organizers:**

Christian Ladirat, CEA, V: +33 4 66 79 63 81, [christian.ladirat@cea.fr](mailto:christian.ladirat@cea.fr)

David Peeler, Pacific Northwest National Laboratory, V: 509-372-6225, [david.peeler@pnnl.gov](mailto:david.peeler@pnnl.gov)

***Disposal and Closure of HLW, SNF/UNF and Long-lived Alpha/TRU*** This category with Topics 2.10- 2.14 covers the safe burial or placement of SNF/UNF, HLW, TRU waste and Long-lived Alpha in a subsurface environment. Although disposal means that no retrieval is intended, a common global notion is that some of the disposed waste categories, preferably, should be recoverable, if needed. As follows, for the time being, recoverability and retrievability are integral topics within the disposal component of Track 2. Disposal-system performance, waste acceptance criteria, and risk assessments are integral components of the disposal concepts covered in Track 2, as are the closure of highly radioactive waste storage tanks and ancillary equipment. Albeit both packaging/transportation and safety/safeguards are integral to disposal, they are currently addressed in Tracks 5 and 9, respectively.

## **2.10 Geological Disposal of HLW, SNF/UNF and Long-lived Alpha/TRU**

This topic accepts abstracts on Deep Geologic Disposal of HLW, SNF/UNF and Long-lived Alpha/TRU. Geologic disposal continues as the international standard for long-term isolation of highly radioactive waste from the biosphere. This topic includes demonstrations, waste receipt, and packaging for disposal, waste handling, engineering and natural barriers design and operation of geologic repositories.

**Lead Organizer:**

Thilo von Berlepsch, BGE TECHNOLOGY GmbH, V: +49 5171 431517, [thilo.berlepsch@bge.de](mailto:thilo.berlepsch@bge.de)

**Additional Organizers:**

Daniel Delort, Andra, V: 33 (0)1 46 11 80 56, [Daniel.Delort@andra.fr](mailto:Daniel.Delort@andra.fr)

Chandrika Manepally, U.S. Nuclear Waste Technical Review Board, V: , [manepally@nwtrb.gov](mailto:manepally@nwtrb.gov)

**2.11 Containment Materials for HLW/SNF/TRU Long-Term Geologic Isolation**

This topic accepts abstracts that focus on formulation, modeling, characterization and performance testing of metals, alloys, and other materials for waste packaging and other engineered barriers.

**Lead Organizer:**

Terry Sams, Retired Engineering Executive, V: +1 509-420-0217, [tlsnfs@aol.com](mailto:tlsnfs@aol.com)

**Additional Organizers:**

Jo Jo Lee, US Nuclear Waste Technical Review Board, V: , [lee@nwtrb.gov](mailto:lee@nwtrb.gov)

**2.12 Global Insights into HLW/SNF/TRU Disposal Site Selection**

This topic accepts abstracts on national radioactive waste disposal programs with perspectives, observations, and opinions on regulatory, social and political challenges surrounding the proposed and active siting for radioactive waste repositories. Abstracts are encouraged from local, regional and national authorities and organizations as well as individuals.

**Lead Organizer:**

Thilo von Berlepsch, BGE TECHNOLOGY GmbH, V: +49 5171 431517, [thilo.berlepsch@bge.de](mailto:thilo.berlepsch@bge.de)

**Additional Organizers:**

Daniel Delort, Andra, V: 33 (0)1 46 11 80 56, [Daniel.Delort@andra.fr](mailto:Daniel.Delort@andra.fr)

Chandrika Manepally, U.S. Nuclear Waste Technical Review Board, V: , [manepally@nwtrb.gov](mailto:manepally@nwtrb.gov)

**2.13 Operational Safety Issues in the Implementation of Deep Geological Repositories (DGR)**

This topic accepts abstracts that focus on the Operational Safety Issues of Deep Geological Repositories (DGR). With the progressive developments of DGR concepts and the submission of licensing files for the construction and implementation of underground facilities for radwaste disposal, there is an increasing interest to operational safety issues. Abstracts are solicited that focus on the functions to be performed by the global disposal system or individual equipment during the operating phase, the main technical options and safety options planned to prevent the various internal and external risks as well as the defense-in-depth levels selected for managing the operations, preventing of accidents and reducing radiological consequences. The topic will accept abstracts dealing with regulatory requirements – including reversibility, safety guidelines that are directly applicable to the DGR with special emphasis on operational safety.

**Lead Organizer:**

Daniel Delort, Andra, V: 33 (0)1 46 11 80 56, [Daniel.Delort@andra.fr](mailto:Daniel.Delort@andra.fr)

**Additional Organizers:**

Thilo von Berlepsch, BGE TECHNOLOGY GmbH, V: +49 5171 431517, [thilo.berlepsch@bge.de](mailto:thilo.berlepsch@bge.de)

Chandrika Manepally, U.S. Nuclear Waste Technical Review Board, V: , [manepally@nwtrb.gov](mailto:manepally@nwtrb.gov)

**2.14 Recent Developments in Underground Research Laboratory (URL) Activities**

This topic accepts abstracts on the strategy and recent developments of underground research activities in established and new URL programs supporting radioactive waste management programs around the world. The important and multi-faceted roles URLs serve in the development of deep geological repositories for the disposal of radioactive waste will be highlighted, both from a scientific and technological point of view as well as for building public confidence. In addition, this topic will help to illustrate how URLs provide a unique platform for international cooperation and knowledge exchange and transfer and demonstrate the need of well-established data management concepts.

**Lead Organizer:**

Daniel Delort, Andra, V: 33 (0)1 46 11 80 56, [Daniel.Delort@andra.fr](mailto:Daniel.Delort@andra.fr)

**Additional Organizers:**

Thilo von Berlepsch, BGE TECHNOLOGY GmbH, V: +49 5171 431517, [thilo.berlepsch@bge.de](mailto:thilo.berlepsch@bge.de)

Ingo Blechschmidt, Nagra, V: +41 76 411 23 31, [ingo.blechschmidt@nagra.ch](mailto:ingo.blechschmidt@nagra.ch)

## **2.15 Closure and Monitoring of HLW, SNF/UNF and Long-lived Alpha/TRU Facilities**

This topic accepts abstracts on the closure of HLW, SNF/UNF and Long-lived Alpha/TRU Facilities around the world. This includes the final waste removal, characterization, waste acceptance criteria, stabilization, and closure of facilities such as waste tanks and ancillary equipment used in the processing or storage of HLW, SNF/UNF, TRU/ILW, US DOE tank closure process related to its “waste incidental to reprocessing” process developed between US DOE and US NRC, and other Long-lived Alpha radioactive materials.

### **Lead Organizer:**

Jonathan Bricker, Central Plateau Cleanup Company (CPCCo), V: 352-339-4804, [jonathan\\_m\\_bricker@rl.gov](mailto:jonathan_m_bricker@rl.gov)

### **Additional Organizers:**

Tom Brouns, Pacific Northwest National Laboratory, V: 509-372-6265, [tom.brouns@pnnl.gov](mailto:tom.brouns@pnnl.gov)

Steven Thomson, National Nuclear Laboratory, V: +44 1946 556622, [steven.thomson@uknml.com](mailto:steven.thomson@uknml.com)

## **2.16 Infrastructure Improvements in HLW, SNF/UNF and Long Lived Alpha/TRU Aging Facilities**

This topic accepts abstracts on project management, engineering analysis, funding, and planning for improving infrastructures of aging facilities with extended missions and extended life cycles. Abstracts on the life extension or expansion of the US DOE WIPP site are of particular interest.

### **Lead Organizer:**

Larry Ling, Savannah River Mission Completion, V: 803-208-0651, [L.Ling@Srs.Gov](mailto:L.Ling@Srs.Gov)

### **Additional Organizers:**

Jonathan Bricker, Central Plateau Cleanup Company (CPCCo), V: 352-339-4804, [jonathan\\_m\\_bricker@rl.gov](mailto:jonathan_m_bricker@rl.gov)

Todd Wagnon, Washington River Protection Solutions, V: 509-376-8406, [todd\\_j\\_wagnon@rl.gov](mailto:todd_j_wagnon@rl.gov)

## **R2.1 Panel: Advanced Reactor Waste Stream Integrated Management and Disposition**

This panel focuses on efforts and ideas to reduce the impact of used nuclear fuel (UNF) and other waste streams stemming from the implementation of advanced reactor fuel cycles. Advancing these efforts will facilitate the acceptance and increase the commercialization potential of advanced reactor fleets. Early consideration of the back end of the fuel cycle in the advanced reactor design process offers a unique opportunity to co-develop technologies with this goal in mind.

### **Lead Organizer:**

Robert Howard, Pacific Northwest National Laboratory, V: +1 702-812-925, [rob.howard@pnnl.gov](mailto:rob.howard@pnnl.gov)

### **Additional Organizers:**

Eric Knox, Amentum, V: +5712322897, [eric.knox@amentum.com](mailto:eric.knox@amentum.com)

Tom Brouns, Pacific Northwest National Laboratory, V: 509-372-6265, [tom.brouns@pnnl.gov](mailto:tom.brouns@pnnl.gov)

## **R2.2 Panel: US HLW Repository: Status and Next Steps**

This panel focuses on the technical, institutional and broader political issues associated with advancing a US HLW Repository program including programmatic, regulatory, legislative and funding challenges. This panel may be consolidated with panel R2.3 on the same subject but a more worldwide view.

### **Lead Organizer:**

Eric Knox, Amentum, V: +5712322897, [eric.knox@amentum.com](mailto:eric.knox@amentum.com)

### **Additional Organizers:**

John Gregory, Savannah River Mission Completion, V: 803-443-9772, [john.gregory@srs.gov](mailto:john.gregory@srs.gov)

## **R2.3 Panel: Progress on Deep Repository Programs Around the World**

This session focuses on the progress of deep repository programs, worldwide. While efforts to re-initiate a deep geological repository for SNF/UNF and HLW in the US are continuing, considerable progress is reported around the world and deserve to be recognized. Three European countries are now moving forward and the current decade would be the one of the industrial deployment of final geological disposal solutions for SNF/UNF and HLW. Panelists from national, multi-national, international repository programs and other organizations will report upon the status and future plans as well as the perceived reasons underlying the success and difficulties of their respective repository program. This panel will present, exchange, and take advantage of, as appropriate, repository progress, challenges, concepts/designs and other lessons learned around the world, including site characterization, site selection, research and development, licensing, construction, operation, and public acceptance.



**Lead Organizer:**

Thilo von Berlepsch, BGE TECHNOLOGY GmbH, V: +49 5171 431517, [thilo.berlepsch@bge.de](mailto:thilo.berlepsch@bge.de)

**Additional Organizers:**

Daniel Delort, Andra, V: 33 (0)1 46 11 80 56, [Daniel.Delort@andra.fr](mailto:Daniel.Delort@andra.fr)

Steven Thomson, National Nuclear Laboratory, V: +44 1946 556622, [steven.thomson@uknnl.com](mailto:steven.thomson@uknnl.com)

**R2.4 Panel: Challenges in the US DOE HLW Tank Management Program**

This panel focuses on the successes and challenges of the DOE High-Level radioactive tank waste management, with an emphasis on doing more with what we have. US DOE Field site and headquarters representatives will discuss approaches, results, and lessons learned addressing current and evolving tank waste management priorities, and increasing multi-site integration in areas of tank integrity and plant startup and commissioning, and other examples of process improvement to increase efficiency of tank waste storage and treatment operations.

**Additional Organizers:**

Tom Brouns, Pacific Northwest National Laboratory, V: 509-372-6265, [tom.brouns@pnnl.gov](mailto:tom.brouns@pnnl.gov)

Larry Ling, Savannah River Mission Completion, V: 803-208-0651, [L.Ling@Srs.Gov](mailto:L.Ling@Srs.Gov)

**R2.5 a-d Panel: Update on the US Waste Isolation Pilot Plant (WIPP)**

These panels focus on the US DOE Carlsbad Field Office and Waste Isolation Pilot Plant (WIPP) and the National TRU Program and are comprised of separate panel sessions on a) TRU Waste Disposition, b) WIPP Regulatory Update, c) National TRU Program Central Characterization Capabilities, and (d) WIPP Infrastructure. Because WIPP is a key component of the US DOE Environmental Management (EM) cleanup strategy, these panels will provide current information on TRU waste cleanup.

**Lead Organizer:**

J.R. Stroble, US DOE, V: +1 575-706-0100, [j.r.stroble@cbfo.doe.gov](mailto:j.r.stroble@cbfo.doe.gov)

**Additional Organizers:**

Elizabeth (Betsy) Forinash, US DOE EM, V: +1 301-250-3539, [betsy.forinash@em.doe.gov](mailto:betsy.forinash@em.doe.gov)

**R2.6 Prospects for Shared Solutions for Solving the WM Challenge for Small & Emerging Nuclear Countries**

This panel focuses on sharing WM solutions for small and emerging nuclear countries. As countries with substantial inventories of spent nuclear fuel pursue their national repository programs with varying degrees of progress, countries with only a few reactors and those at the beginning stages of their nuclear programs face a far different and substantial challenge toward developing a national solution. This session will bring together a panel of experts from government, industry and academia to explore shared solutions and next steps building off the recent progress made by international organizations and the recent efforts and lessons learned.

**Lead Organizer:**

Eric Knox, Amentum, V: +5712322897, [eric.knox@amentum.com](mailto:eric.knox@amentum.com)

**Additional Organizers:**

Robert Jubin, Consultant, V: +1 865-924-1568, [RTJubin1@comcast.net](mailto:RTJubin1@comcast.net)

**R2.7 Panel: Progress in Closing Future Fuels in the Nuclear Fuel Cycle**

This session focuses on the re-processing of future fuels (AMR, SMR, Gen II Reactors) and associated waste management. This will include research into new and improved recycling and waste management methods taking into account lessons learned and collaborative working across the globe, and new technology developments, in order to simplify processes, reduce costs and make nuclear energy a more sustainable option in the future

**Lead Organizer:**

Steven Thomson, National Nuclear Laboratory, V: +44 1946 556622, [steven.thomson@uknnl.com](mailto:steven.thomson@uknnl.com)

**Additional Organizers:**

Jo Jo Lee, US Nuclear Waste Technical Review Board, V: , [lee@nwtrb.gov](mailto:lee@nwtrb.gov)

Robert Jubin, Consultant, V: +1 865-924-1568, [RTJubin1@comcast.net](mailto:RTJubin1@comcast.net)

**R2.8 50th Anniversary of WM Symposia: Track 2 Retrospective – 1974-2024 Innovations in HLW, SNF/UNF UNF**

This Session will highlight the progress and innovations in HLW, SNF/UNF, and TRU waste management over the past 50 years

since the first WM symposium. This may be a reserved panel or reserved paper session, and will address progress in the key areas of waste treatment for all Track 2 wastes.

**Lead Organizer:**

Tom Brouns, Pacific Northwest National Laboratory, V: 509-372-6265, [tom.brouns@pnnl.gov](mailto:tom.brouns@pnnl.gov)

**Additional Organizers:**

Thilo von Berlepsch, BGE TECHNOLOGY GmbH, V: +49 5171 431517, [thilo.berlepsch@bge.de](mailto:thilo.berlepsch@bge.de)

Steven Thomson, National Nuclear Laboratory, V: +44 1946 556622, [steven.thomson@uknpl.com](mailto:steven.thomson@uknpl.com)

J.R. Stroble, US DOE, V: +1 575-706-0100, [j.r.stroble@cbfo.doe.gov](mailto:j.r.stroble@cbfo.doe.gov)

Robert Jubin, Consultant, V: +1 865-924-1568, [RTJubin1@comcast.net](mailto:RTJubin1@comcast.net)

**3 - LOW-LEVEL WASTE (LLW), INTERMEDIATE LEVEL WASTE (ILW), VERY LOW-LEVEL WASTE (VLLW), MIXED WASTE (MW), BY PRODUCT MATERIAL, TENORM, NORM RESIDUES, ENRICHED AND DEPLETED URANIUM (DU)**

Linda Suttora, Consultant (Lead Co-Chair), V: +1 240-460-9360, [lcsuttora@gmail.com](mailto:lcsuttora@gmail.com)

Stephen Halliwell, VJ Group (Co-Chair), V: +1 516-768-9776, [shalliwell@vjt.com](mailto:shalliwell@vjt.com)

Kapila Fernando, ANSTO (Co-Chair), V: +61 414 912 100, [kapila.fernando@icloud.com](mailto:kapila.fernando@icloud.com)

This track consists of many waste categories including LLW, ILW, VLLW, MW (radioactive & hazardous), Naturally Occurring Radioactive Material (NORM), Enriched and Depleted Uranium (DU) and Technologically Enhanced NORM (TENORM). The track encompasses: Operations from generation through treatment and disposal; Technology development, demonstration, and deployment; Overlapping issues including waste minimization, waste characterization and analysis, effluent monitoring, waste form and facility performance assessment, regulations and standards; and for all types of facilities from hospitals, accelerators, research reactors, government facilities, disposal sites, etc. This Track covers waste management of uranium or thorium ores as well as US NRC defined "Greater than Class C - LLW", byproducts or tailings, NORM residues and waste, and NRC defined TENORM. This track also includes radioactive materials, articles and consumer products. (NPP operational waste is covered in Track 4. TRU and similar long-lived alpha waste are covered in Track 2.)

**3.0 LLW, ILW, MW, NORM, TENORM and Depleted Uranium - Non-specified Abstracts**

**Lead Organizer:**

Linda Suttora, Consultant, V: +1 240-460-9360, [lcsuttora@gmail.com](mailto:lcsuttora@gmail.com)

**3.1 LLW, ILW, MW, NORM, TENORM and Depleted Uranium - Posters**

**Lead Organizer:**

Linda Suttora, Consultant, V: +1 240-460-9360, [lcsuttora@gmail.com](mailto:lcsuttora@gmail.com)

**3.2 Selected Key Topics in US Commercial LLW Management**

This topic accepts abstracts on key issues in commercial LLW management in the US and is the second half of the panel topic R3.1 but as a paper topic. This Topic will include the presentation of the Richard S. Hodes Award followed by the awardee's presentation. Next will be two selected papers on key US issues regarding state regulatory and legislative activities, legal developments in states and compacts, federal regulatory and legislative activities, and economic and technical trends in LLW processing.

**Lead Organizer:**

Daniel Shrum, Low-Level Radioactive Waste Forum, V: 801-580-3201, [dshrum@llwforum.org](mailto:dshrum@llwforum.org)

**Additional Organizers:**

J. Scott Kirk, CHP, Savannah River Mission Completion, V: 214-681-7178, [jskirk@bwxt.com](mailto:jskirk@bwxt.com)

**3.3 Regulatory Issues and Solutions for LLW/ILW Worldwide**

This topic accepts abstracts on programmatic and regulatory issues and changes that impact VLLW, LLW, ILW, mixed hazardous and LLW/ILW radioactive waste, NORM and TENORM (including uranium and byproduct wastes). Abstracts are solicited on innovative approaches for resolution for these issues, including variances, consent order, or pursuit of regulatory and statutory changes. Abstracts are also solicited to address administrative and engineering methods and approaches for sustainability, re-use, and recycling of these wastes.

**Lead Organizer:**

Linda Suttora, Consultant, V: +1 240-460-9360, [lcsuttora@gmail.com](mailto:lcsuttora@gmail.com)

**Additional Organizers:**

Colleen Owens, Consultant, V: 303-638-9283, [cowens4673@gmail.com](mailto:cowens4673@gmail.com)

Sherri Ross, US DOE, V: 202-430-1877, [Sherri.Ross@em.doe.gov](mailto:Sherri.Ross@em.doe.gov)

**3.4 Waste Generation Issues and Solutions for LLW/ILW Worldwide**

This topic accepts abstracts on operating facilities associated with generating VLLW, LLW, ILW, mixed hazardous and LLW/ILW radioactive waste, NORM and TENORM. Abstracts are solicited to address administrative and engineering methods involving the generation of these wastes. Topics will also be accepted regarding approaches to improve sustainability, re-use, and recycling of these wastes.

**Lead Organizer:**

Kapila Fernando, ANSTO, V: +61 414 912 100, [kapila.fernando@icloud.com](mailto:kapila.fernando@icloud.com)

**Additional Organizers:**

Fabienne Anton, TÜV NORD EnSys GmbH & Co. KG, V: +49 511 9861407, [fanton@tuev-nord.de](mailto:fanton@tuev-nord.de)

Stephen Halliwell, VJ Group, V: +1 516-768-9776, [shalliwell@vjt.com](mailto:shalliwell@vjt.com)

**3.5 Waste Characterization Methods and Data Analysis for LLW/ILW Worldwide**

This topic accepts abstracts for emerging waste characterization techniques, along with experiences and advances in current techniques for VLLW, LLW, ILW, mixed hazardous and LLW/ILW radioactive waste, NORM and TENORM (including uranium and byproduct wastes). These methods include measurements of nuclear emission from containerized waste, laboratory measurements of samples extracted from potential waste streams, and in-situ measurements of items or structures to determine potential waste classification. Advances in data analysis methods and analysis of data to improve the validity of results and assist in waste classification decision making are also addressed in this topic. This topic also accepts abstracts for all inter-laboratory comparison tests of waste characterization, including non-destructive and destructive analytical technologies and the use of process knowledge and records for waste characterization.

**Lead Organizer:**

Frazier Bronson, Mirion Technologies (Canberra), V: 203-639-2345, [fbronson@mirion.com](mailto:fbronson@mirion.com)

**Additional Organizers:**

J. Scott Kirk, CHP, Savannah River Mission Completion, V: 214-681-7178, [jskirk@bwxt.com](mailto:jskirk@bwxt.com)

**3.6 Treatment and Processing Experience of LLW/ILW Worldwide**

This topic accepts abstracts on operating experience and issues associated with emerging technologies for treatment, conditioning, processing, and stabilization of VLLW, LLW, ILW, mixed hazardous and LLW/ILW radioactive waste, NORM and TENORM (including uranium and byproduct wastes). Abstracts are solicited on management systems, operating procedures, facility design, and construction. The technologies include physical and chemical processes, stabilization/immobilization (including the use of cementitious materials), thermal and wastewater treatment processes.

**Lead Organizer:**

Gabriele Bandt, Vattenfall Europe Nuclear Energy GmbH, V: +017678494227, [gabriele.bandt@vattenfall.de](mailto:gabriele.bandt@vattenfall.de)

**Additional Organizers:**

Colleen Owens, Consultant, V: 303-638-9283, [cowens4673@gmail.com](mailto:cowens4673@gmail.com)

Christine Langton, Savannah River National Laboratory, V: 803-725-5806, [christine.langton@srnl.doe.gov](mailto:christine.langton@srnl.doe.gov)

William Jolin, Savannah River National Laboratory, V: +1 803-679-3672, [william.jolin@srnl.doe.gov](mailto:william.jolin@srnl.doe.gov)

**3.7 Storage and Disposal Experiences for LLW/ILW Worldwide**

This topic accepts abstracts on the ability to certify, dispose, and assess long-term performance on near-surface storage and disposal of VLLW, LLW, ILW, mixed hazardous and LLW/ILW radioactive waste, NORM and TENORM (including uranium and byproduct wastes). This can include existing or proposed waste forms and facilities, including site, design, licensing, construction, commissioning, operation, closure, post-closure monitoring, and long-term contaminant fate and transport including research and development supporting these topics.

**Lead Organizer:**

Justin Marble, US DOE, V: 301-903-7210, [justin.marble@em.doe.gov](mailto:justin.marble@em.doe.gov)

**Additional Organizers:**

Kent Rosenberger, Savannah River Mission Completion, V: 803-645-2835, [Kent.Rosenberger@Srs.Gov](mailto:Kent.Rosenberger@Srs.Gov)  
Marcel Bergeron, Washington River Protection Solutions, V: 509-376-4935, [marcel\\_p\\_bergeron@rl.gov](mailto:marcel_p_bergeron@rl.gov)

### **R3.1 Panel: Hot Topics in US Commercial LLW Management**

This session focuses on emerging issues in commercial LLW management in the US from the perspective of active members of the Low-Level Radioactive Waste Forum, Inc. State, compact, federal and industry officials will share their views on a variety of timely and significant topics related to low-level radioactive waste management, disposal and related issues.

#### **Lead Organizer:**

Daniel Shrum, Low-Level Radioactive Waste Forum, V: 801-580-3201, [dshrum@llwforum.org](mailto:dshrum@llwforum.org)

### **R3.2 Panel: US DOE LLW Streams and Policies**

This session focuses on DOE radioactive waste streams and policy, primarily LLW. The panel will discuss some of the current "hot" topics including, but not limited to: NEPA and waste, DOE Order 435.1 revisions and the disposal of PFAS containing waste (e.g., emerging contaminants).

#### **Lead Organizer:**

Kent Rosenberger, Savannah River Mission Completion, V: 803-645-2835, [Kent.Rosenberger@Srs.Gov](mailto:Kent.Rosenberger@Srs.Gov)

#### **Additional Organizers:**

Elizabeth (Betsy) Forinash, US DOE EM, V: +1 301-250-3539, [betsy.forinash@em.doe.gov](mailto:betsy.forinash@em.doe.gov)

Justin Marble, US DOE, V: 301-903-7210, [justin.marble@em.doe.gov](mailto:justin.marble@em.doe.gov)

Aaron White, US DOE, V: +1 240-306-7467, [aaron.white@em.doe.gov](mailto:aaron.white@em.doe.gov)

### **R3.3 Panel: US NRC - Current and Emerging US NRC Regulatory Topics**

This session focuses on several current and emerging NRC regulatory issues impacting the radioactive waste arena. The panelists will provide different perspectives on several key issues including the revision to 10 CFR Part 61 and consolidated interim storage of spent nuclear fuel, among other timely regulatory topics.

#### **Lead Organizer:**

Rateb (Boby) Abu Eid, US NRC, V: 301-415-5811, [boby.abu-eid@nrc.gov](mailto:boby.abu-eid@nrc.gov)

#### **Additional Organizers:**

Larry Camper, Advoco Professional Services, LLC, V: 301-452-1758, [camp1020@comcast.net](mailto:camp1020@comcast.net)

### **R3.4 Panel: US DOE LLW On-Site Disposal: LLW Disposal Facility Federal Review Group**

This session focuses on the review process for technical basis documents including the Performance Assessments that are used to issue the disposal authorization statement. The US DOE Low-Level Waste Disposal Facility Federal Review Group (LFRG) as the regulatory authority for onsite low-level waste disposal facilities and their review process for DOE complex per DOE Order 435.1 will be discussed.

#### **Lead Organizer:**

Justin Marble, US DOE, V: 301-903-7210, [justin.marble@em.doe.gov](mailto:justin.marble@em.doe.gov)

#### **Additional Organizers:**

Sherri Ross, US DOE, V: 202-430-1877, [Sherri.Ross@em.doe.gov](mailto:Sherri.Ross@em.doe.gov)

### **R3.5 Panel: Low-Level Waste Disposal Facility Cover Design - Worldwide**

This session focuses on the on-going and emerging issues with the design and construction of final cover system of unlined low level disposal facilities (e.g., MDAs, SDAs, burial grounds, and similar historical waste trenches, pits and vaults). The discussion will focus on key technical and regulatory issues as well as lessons learned from years of engineering and construction in the US and around the world.

#### **Lead Organizer:**

Te-Yang Soong, CTI and Associates, Inc., V: 248-486-5100, [tsoong@cticompanies.com](mailto:tsoong@cticompanies.com)

### **R3.6 Panel: Commercial LLW Management: Global Perspective**

This panel will focus on opportunities and challenges in providing commercial nuclear waste management services in a global context. The panelists will comment on their approach to establishing new businesses, overcoming communication barriers

acquiring / maintaining skills and capabilities and delivering commercial nuclear waste management projects in a range of regulatory and socio-economic environments. The panel discussion will be followed by a Q&A session with audience participation.

**Lead Organizer:**

Kapila Fernando, ANSTO, V: +61 414 912 100, [kapila.fernando@icloud.com](mailto:kapila.fernando@icloud.com)

**Additional Organizers:**

Eric Knox, Amentum, V: +5712322897, [eric.knox@amentum.com](mailto:eric.knox@amentum.com)

Stephen Halliwell, VJ Group, V: +1 516-768-9776, [shalliwell@vjt.com](mailto:shalliwell@vjt.com)

Gabriele Bandt, Vattenfall Europe Nuclear Energy GmbH, V: +017678494227, [gabriele.bandt@vattenfall.de](mailto:gabriele.bandt@vattenfall.de)

**R3.7 Panel: DOE Environmental Management Cementitious Community Of Practice**

The session focuses on the DOE EM Cementitious Community Of Practice (COP) and draw on the collective lessons learned for the numerous uses of these important materials. The COP was formed to discuss progress and arising issues related to stabilization of low, intermediate, and TRU waste. Additionally, environmental media treatment and closure technology are also part of this scope. This session will discuss the use of cementitious materials including current practices and technology needs across the DOE complex and international community. Topics in scope for COP include cementitious material utilization for the solidification/stabilization for final disposal, debris encapsulation, tank closure, and environmental media management to accelerate the closure. The long-term performance of waste, structural integrity, and changes in industry practices with also be discussed.

**Lead Organizer:**

Christine Langton, Savannah River National Laboratory, V: 803-725-5806, [christine.langton@srnl.doe.gov](mailto:christine.langton@srnl.doe.gov)

**Additional Organizers:**

William Jolin, Savannah River National Laboratory, V: +1 803-679-3672, [william.jolin@srnl.doe.gov](mailto:william.jolin@srnl.doe.gov)

Ming Zhu, US DOE, V: 301-903-9240, [Ming.Zhu@em.doe.gov](mailto:Ming.Zhu@em.doe.gov)

**4 - NUCLEAR POWER PLANT (NPP) WASTE MANAGEMENT AND ON-SITE SNF/USF STORAGE**

Myron Kaczmarzsky, Holtec Government Services (Lead Co-Chair), V: +1 856-797-0900 ext. 3657, [m.kaczmarzsky@holtec.com](mailto:m.kaczmarzsky@holtec.com)

Dale Vines, Dominion Engineering, Inc. (Co-Chair), V: 225-305-3428, [dvines@domeng.com](mailto:dvines@domeng.com)

Andreas Roth, Atkins SNC-Lavalin (Co-Chair), V: +49 40 303339606, [Andreas.Roth@atkinsglobal.com](mailto:Andreas.Roth@atkinsglobal.com)

The Nuclear Power Plant (NPP) Waste Management Track encompasses waste characterization and minimization, treatment, packaging and management of NPP operational wastes and NPP SNF/UNF storage and management.

**4.0 Nuclear Power Plant (NPP) Waste Management and On-Site SNF/USF Storage- Non-specified Abstracts**

**Lead Organizer:**

Myron Kaczmarzsky, Holtec Government Services, V: +1 856-797-0900 ext. 3657, [m.kaczmarzsky@holtec.com](mailto:m.kaczmarzsky@holtec.com)

**4.1 Nuclear Power Plant (NPP) Waste Management and On-Site SNF/USF Storage - Posters**

**Lead Organizer:**

Myron Kaczmarzsky, Holtec Government Services, V: +1 856-797-0900 ext. 3657, [m.kaczmarzsky@holtec.com](mailto:m.kaczmarzsky@holtec.com)

**4.2 Advances in the Management of Nuclear Power Plant Dry Waste from Around the World**

This topic accepts abstracts on minimization, volume reduction and packaging of dry waste at NPPs arising from operation and decommissioning. The topic is open to all experience reports from existing or completed projects, but explicitly also include any new technologies, research and concept for that waste stream. Early considerations to manage small scale operational wastes from SMR's are welcome as well.

**Lead Organizer:**

Andreas Roth, Atkins SNC-Lavalin, V: +49 40 303339606, [Andreas.Roth@atkinsglobal.com](mailto:Andreas.Roth@atkinsglobal.com)

**Additional Organizers:**

Mark Kirshe, ReNuke Services, Inc., V: 410-991-7628, [mark@renuke.com](mailto:mark@renuke.com)

#### **4.3 Perspectives on Management of Nuclear Power Plant Liquid and Wet Waste**

This topic accepts abstracts on liquid radwaste processing and wet waste packaging experiences at NPPs as well as any new developments and research for those waste streams. Wet waste may include filter cakes, resins, sludge, filters, and other solid wastes that may require liquid removal, characterization or processing from operation and decommissioning. Early considerations to manage small scale operational wastes from SMR's are welcome as well.

**Lead Organizer:**

Mark Lewis, EnergySolutions, V: 803-960-3619, [mslewis@energysolutions.com](mailto:mslewis@energysolutions.com)

#### **4.4 Nuclear Power Plant Onsite SNF/UNF Storage ISFSIs and Failed Fuel Handling at NPPs**

This topic accepts abstracts on radioactive material characterization and/or on-site SNF/UNF handling and storage at NPPs. Abstracts addressing NPP SNF/UNF storage issues, improvements in storage and handling systems, and advances in storage facility designs are included. This topic also addresses Independent Spent Fuel Storage Installations (ISFSIs) and failed fuel handling at reactor sites.

**Lead Organizer:**

Myron Kaczmarek, Holtec Government Services, V: +1 856-797-0900 ext. 3657, [m.kaczmarek@holtec.com](mailto:m.kaczmarek@holtec.com)

**Additional Organizers:**

Mark Lewis, EnergySolutions, V: 803-960-3619, [mslewis@energysolutions.com](mailto:mslewis@energysolutions.com)

#### **4.5 Aging Management of Spent Nuclear Fuel in Extended Storage and Transportation**

The topic accepts abstracts on aging management activities and lessons learned of spent nuclear fuel (SNF) and performance assessment of wet and dry storage systems for extended duration; R&D on aging degradation mechanisms and mitigation of aging effects on structure, system, and components (SSCs) and materials used in extended storage and transportation; R&D on inspection, monitoring and surveillance technologies for storage systems and transport packages.

**Lead Organizer:**

Myron Kaczmarek, Holtec Government Services, V: +1 856-797-0900 ext. 3657, [m.kaczmarek@holtec.com](mailto:m.kaczmarek@holtec.com)

**Additional Organizers:**

Yung Liu, Argonne National Laboratory, V: +1-630-252-5127, [yliu@anl.gov](mailto:yliu@anl.gov)

Christoph Gastl, IAEA, V: +431260025884, [c.gastl@iaea.org](mailto:c.gastl@iaea.org)

Tom Brouns, Pacific Northwest National Laboratory, V: 509-372-6265, [tom.brouns@pnnl.gov](mailto:tom.brouns@pnnl.gov)

#### **R4.1 Panel: US Nuclear Power Plant Waste Management - US LLW Disposal Issues**

This panel focuses on senior utility managers discussing issues with commercial LLW processors. LLW processors will have an opportunity to update utilities/NPPs on new or different services or technologies being offered to assist in their radioactive waste management goals, changes to their facility license, revisions to their acceptance guidelines, and emerging compliance issues.

**Lead Organizer:**

Mark Kirshe, ReNuke Services, Inc., V: 410-991-7628, [mark@renuke.com](mailto:mark@renuke.com)

**Additional Organizers:**

Mark Lewis, EnergySolutions, V: 803-960-3619, [mslewis@energysolutions.com](mailto:mslewis@energysolutions.com)

#### **R4.2 Panel: Nuclear Power Plant Waste Management - Waste Management Evolution – the 50-year Retrospective**

This panel focuses on how nuclear plants have evolved in their generation and handling of radioactive waste over the last 50 years.

**Lead Organizer:**

Dale Vines, Dominion Engineering, Inc., V: 225-305-3428, [dvines@domeng.com](mailto:dvines@domeng.com)

**Additional Organizers:**

Dale Vines, Dominion Engineering, Inc., V: 225-305-3428, [dvines@domeng.com](mailto:dvines@domeng.com)

Mark Kirshe, ReNuke Services, Inc., V: 410-991-7628, [mark@renuke.com](mailto:mark@renuke.com)

#### **R4.3 Panel: Radwaste Shipping Challenges at Operating Plants**

This panel focuses on how operating nuclear power plants are dealing with changes in radwaste operations as well as an evolving regulatory environment. Specifically, operating plants are dealing with a renewed regulatory focus on shipping

processes at a time when the industry is experiencing changes to their operating model. Areas of interest include the following: 1) Shipping changes in regulatory environment; 2) Accurate and Efficient Characterization of Waste; 3) LLW disposal site interaction/ concerns; 4) Alternate approaches to Shipping Model.

**Lead Organizer:**

Kenneth Walter, Palo Verde Generating Station, V: +1 623-210-9670, [kenneth.walter@aps.com](mailto:kenneth.walter@aps.com)

**Additional Organizers:**

Dale Vines, Dominion Engineering, Inc., V: 225-305-3428, [dvines@domeng.com](mailto:dvines@domeng.com)

**R4.4 Panel: Advanced Reactor Radioactive Waste Processes**

This panel focuses on how advanced nuclear power plants are planning to deal with radwaste operations and how they plan to incorporate lessons learned from current operating plants. While this panel will not address spent fuel or fuel reprocessing, the discussion will center on processes and designs that minimize or eliminate waste generation and/or handling challenges that the current nuclear fleet struggled historically to address.

**Lead Organizer:**

Dale Vines, Dominion Engineering, Inc., V: 225-305-3428, [dvines@domeng.com](mailto:dvines@domeng.com)

**Additional Organizers:**

Kenneth Walter, Palo Verde Generating Station, V: +1 623-210-9670, [kenneth.walter@aps.com](mailto:kenneth.walter@aps.com)

**5 - PACKAGING AND TRANSPORTATION**

Anna Wikmark, Swedish Nuclear Fuel and Waste Management Co. (Lead Co-Chair), V: +46 70 459 76 08, [anna.wikmark@skb.se](mailto:anna.wikmark@skb.se)

Edward Ketusky, NAC International (Co-Chair), V: +1 404-268-5236, [eketusky@NACINTL.com](mailto:eketusky@NACINTL.com)

Paul Jones, Perma-Fix Environmental Services (Co-Chair), V: 865-591-8632, [pjones@perma-fix.com](mailto:pjones@perma-fix.com)

The Packaging and Transportation Track includes all activities and issues related to the safe, secure, and economical packaging and transportation of radioactive materials. This includes HLW, TRU, LLW, ILW and MW; fresh and irradiated nuclear fuel; contaminated media and debris; isotopes and radioactive sources; uranium hexafluoride, etc. Topic areas include: International regulatory activities, issues, and initiatives; packaging development and related issues; logistics and transportation operations, including large items from decommissioning; integrated planning and scheduling; status and issues for large shipping campaigns; and stakeholder and public interactions and issues.

**5.0 Packaging and Transportation - Non-Specified Abstracts**

**Lead Organizer:**

Anna Wikmark, Swedish Nuclear Fuel and Waste Management Co., V: +46 70 459 76 08, [anna.wikmark@skb.se](mailto:anna.wikmark@skb.se)

**5.1 Packaging and Transportation - Posters**

**Lead Organizer:**

Anna Wikmark, Swedish Nuclear Fuel and Waste Management Co., V: +46 70 459 76 08, [anna.wikmark@skb.se](mailto:anna.wikmark@skb.se)

**5.2 Worldwide Experience in Packaging and Transportation of Radioactive and Other Hazardous Materials**

This topic accepts abstracts on worldwide innovation, experiences, and lessons learned in packaging and transportation of radioactive material, radioactive and hazardous waste, and UNF. Abstracts are encouraged from national international commercial entities (power and research reactors, decommissioning sites, waste and material handling facilities) and government-managed facilities. This topic also accepts abstracts describing the design and licensing phase of package development for transport, storage and disposal. Abstracts are also sought for experiences related to modal-related topics including road, rail, maritime and air transport. In addition, topics on barge, intermodal, heavy-haul, and overweight shipments are encouraged. Topics may also include experience and capabilities to solve current packaging and transportation challenges, technical issues, traffic management and logistics.

**Lead Organizer:**

Paul Jones, Perma-Fix Environmental Services, V: 865-591-8632, [pjones@perma-fix.com](mailto:pjones@perma-fix.com)

**Additional Organizers:**

Edward Ketusky, NAC International, V: +1 404-268-5236, [eketusky@NACINTL.com](mailto:eketusky@NACINTL.com)  
Jeff England, NAC International, V: 770-605-3250, [jengland@nacintl.com](mailto:jengland@nacintl.com)

### **5.3 Radioactive Material Packaging and Transportation Regulatory Issues Worldwide**

This topic accepts abstracts on national and international regulatory and multi-regulatory challenges and issues, including regulatory change and risk-informed regulation (US DOT, US NRC, IAEA, ADR– European Accord on Transportation of Dangerous Materials and other applicable agencies, worldwide). Abstracts are encouraged to share methods for addressing new regulatory requirements (e.g., new security requirements in 10 CFR 37 and 73; IAEA SSR-6), new acceptance criteria for packaging, or new transport requirements. Abstracts are also sought to provide novel or unique approaches to meeting existing regulatory requirements.

#### **Lead Organizer:**

Jeff England, NAC International, V: 770-605-3250, [jengland@nacintl.com](mailto:jengland@nacintl.com)

#### **Additional Organizers:**

Olaf Oldiges, Orano NCS GmbH, V: +49 6181 501100, [Olaf.Oldiges@orano-ncs.com](mailto:Olaf.Oldiges@orano-ncs.com)

Tanya Sloma-DeLosier, Westinghouse Electric Company, V: , [sloma1t@westinghouse.com](mailto:sloma1t@westinghouse.com)

### **5.4 Global Advances in Packaging for Interim Storage, Transport and Disposal**

This topic accepts abstracts on national and international experience with packaging development to meet specific challenges associated with interim storage of radioactive materials intended to be transported for reuse or disposal. Abstracts are encouraged which share experiences and solutions to challenging operational issues including: storage of UNF and HLW in transportable canisters; Class B and C waste previously packaged for storage. Additional topics including cooperative programs for packaging design and testing worldwide are encouraged.

#### **Lead Organizer:**

Jeff England, NAC International, V: 770-605-3250, [jengland@nacintl.com](mailto:jengland@nacintl.com)

#### **Additional Organizers:**

Anna Wikmark, Swedish Nuclear Fuel and Waste Management Co., V: +46 70 459 76 08, [anna.wikmark@skb.se](mailto:anna.wikmark@skb.se)

### **5.5 State, Tribal and Regional Groups Perspectives in Resolving Radiological Transportation Issues**

This topic accepts abstracts on how States, Regional and Tribal organizations participate in and influence decisions for safe transportation of radioactive materials and UNF both nationally and internationally. Abstracts are encouraged from these organizations and include interest group objectives, ongoing group activities and policy decision recommendations, related research, strategic approaches, and socioeconomic considerations. Abstracts are sought for topics of interest such as risk management, risk perception, transportation risk, and risk communication. Abstracts may include experience with emergency response and preparedness, including training or regulatory issues.

#### **Lead Organizer:**

Edward Ketusky, NAC International, V: +1 404-268-5236, [eketusky@NACINTL.com](mailto:eketusky@NACINTL.com)

### **5.6 Packaging and Design Analysis**

This topic accepts abstracts on transportation activities including multi-modal transport (e.g., road, rail, maritime and air). The topic is intended to provide communication and sharing of experiences to provide opportunities for continuous improvement with transporting radioactive material. Abstracts are encouraged from national, international, and commercial entities (power and research reactors, decommissioning sites, waste and material handling facilities) and government-managed facilities. Abstracts are also sought on incidents and accidents (recent or historical), focusing on outcomes and lessons learned. In addition, abstracts related to potential threats and sabotage of radioactive materials packages in transit will be included in this topic.

#### **Lead Organizer:**

Olaf Oldiges, Orano NCS GmbH, V: +49 6181 501100, [Olaf.Oldiges@orano-ncs.com](mailto:Olaf.Oldiges@orano-ncs.com)

#### **Additional Organizers:**

Anna Wikmark, Swedish Nuclear Fuel and Waste Management Co., V: +46 70 459 76 08, [anna.wikmark@skb.se](mailto:anna.wikmark@skb.se)

Edward Ketusky, NAC International, V: +1 404-268-5236, [eketusky@NACINTL.com](mailto:eketusky@NACINTL.com)



## 5.7 Transportation Security Advances and Challenges

This topic accepts abstracts on all aspects of transportation security advances, challenges and lessons learned from domestic as well as international shipments of radioactive materials (waste as well as fuel).

### **Lead Organizer:**

Anna Wikmark, Swedish Nuclear Fuel and Waste Management Co., V: +46 70 459 76 08, [anna.wikmark@skb.se](mailto:anna.wikmark@skb.se)

### **Additional Organizers:**

Christopher Brandjes, Perma-Fix Environmental Services, V: 865-806-4168, [chris.brandjes@perma-fix.com](mailto:chris.brandjes@perma-fix.com)

## 5.8 The Best of the PATRAM 2023 Conference

Papers presented at PATRAM 2023 that are recognized to be valuable to the community of packaging and transportation.

### **Lead Organizer:**

Edward Ketusky, NAC International, V: +1 404-268-5236, [eketusky@NACINTL.com](mailto:eketusky@NACINTL.com)

### **Additional Organizers:**

Anna Wikmark, Swedish Nuclear Fuel and Waste Management Co., V: +46 70 459 76 08, [anna.wikmark@skb.se](mailto:anna.wikmark@skb.se)

James Shuler, US DOE, V: 301-903-5513, [James.Shuler@em.doe.gov](mailto:James.Shuler@em.doe.gov)

## R5.1 Panel: Challenges and Lessons learned in Radwaste Packaging, Transportation, Compliance and Receipt

This panel focuses on challenges and lessons learned in radioactive waste packaging, transportation, compliance and receipt for fabricators of radioactive waste packaging. World-wide companies are urged to participate. Participants will provide their perspectives and suggestions on how to increase efficiencies through eliminating inconsistencies between specifications and other requirements to provide products at a reasonable cost and enhance communication to enable better service.

### **Lead Organizer:**

Paul Jones, Perma-Fix Environmental Services, V: 865-591-8632, [pjones@perma-fix.com](mailto:pjones@perma-fix.com)

### **Additional Organizers:**

Tanya Sloma-DeLosier, Westinghouse Electric Company, V: , [sloma1t@westinghouse.com](mailto:sloma1t@westinghouse.com)

## R5.2 Panel: Challenges and Opportunities in Establishing a System for Transportation of SNF/UNF

This panel focuses on updates or status of transportation of SNF/UNF. Panelists will provide updates and information on continuing impacts, risk assessment, equipment (rail cars, handling, securement), possible rail routing, proposed inspection equipment/routing prior to shipments. This panel will primarily focus on US experience but would consider input from other countries. It is also important to receive information from academia as well as industry.

### **Lead Organizer:**

Jeff England, NAC International, V: 770-605-3250, [jengland@nacintl.com](mailto:jengland@nacintl.com)

### **Additional Organizers:**

Anna Wikmark, Swedish Nuclear Fuel and Waste Management Co., V: +46 70 459 76 08, [anna.wikmark@skb.se](mailto:anna.wikmark@skb.se)

Edward Ketusky, NAC International, V: +1 404-268-5236, [eketusky@NACINTL.com](mailto:eketusky@NACINTL.com)

## R5.3 Panel: Packaging and Transportation of Radioactive Materials Around the World

This panel focuses on international issues facing the shipment of radioactive materials.

### **Lead Organizer:**

Anna Wikmark, Swedish Nuclear Fuel and Waste Management Co., V: +46 70 459 76 08, [anna.wikmark@skb.se](mailto:anna.wikmark@skb.se)

### **Additional Organizers:**

James Shuler, US DOE, V: 301-903-5513, [James.Shuler@em.doe.gov](mailto:James.Shuler@em.doe.gov)

## R5.4 Panel: Transport of MicroReactors

This panel focuses on the transport of microreactors, transportable nuclear power plants, halon fuel; package approvals for microreactors, transportable nuclear power plants, HALEU fuel; transportation PRAs for microreactors, transportable nuclear power plants.

### **Lead Organizer:**

Jeff England, NAC International, V: 770-605-3250, [jengland@nacintl.com](mailto:jengland@nacintl.com)

**Additional Organizers:**

Edward Ketusky, NAC International, V: +1 404-268-5236, [eketusky@NACINTL.com](mailto:eketusky@NACINTL.com)

Tanya Sloma-DeLosier, Westinghouse Electric Company, V: , [sloma1t@westinghouse.com](mailto:sloma1t@westinghouse.com)

**R5.5 Panel: Conflicts and Synergies of Packaging 3S by Design and Culture**

As the nuclear industry grows worldwide and becomes more diverse with the advent of advanced nuclear reactor fuel cycles, synergies and conflicts during interactions and interfaces of safety, security, and safeguards (3S) become increasingly important for operational effectiveness and efficiency. This is true for nuclear packaging and transportation of new fuels, in particular, which is the most vulnerable link in the nuclear fuel cycle. Underlying the disciplines of nuclear safety, security, and safeguards is the development of nuclear culture for each discipline. Private industry and the IAEA have begun the process of developing and issuing nuclear culture guidelines and recommendations.

**Lead Organizer:**

Anna Wikmark, Swedish Nuclear Fuel and Waste Management Co., V: +46 70 459 76 08, [anna.wikmark@skb.se](mailto:anna.wikmark@skb.se)

**Additional Organizers:**

Kenneth Sanders, Argonne National Laboratory, V: 301-865-0533, [ksanders@anl.gov](mailto:ksanders@anl.gov)

Yung Liu, Argonne National Laboratory, V: +1-630-252-5127, [yliu@anl.gov](mailto:yliu@anl.gov)

**6 - DECONTAMINATION AND DECOMMISSIONING (D&D)**

Al Freitag, Globalpundits Technology (Lead Co-Chair), V: 914-475-1170, [aafreita@aol.com](mailto:aafreita@aol.com)

Rick Demmer, MARCOM (Co-Chair), V: 208-589-4858, [dcondude@gmail.com](mailto:dcondude@gmail.com)

Anthony Banford, UK National Nuclear Laboratory (Co-Chair), V: +44 7715 043778, [anthony.w.banford@uknnl.com](mailto:anthony.w.banford@uknnl.com)

This Track includes all aspects of D&D from shutdown and planning to license termination, Brownfield, and/or Greenfield, including characterization, decontamination, storage/SAFESTOR, dismantling, demolition, waste handling, final survey, and associated new technology development for both government and commercial nuclear power and non-power facilities. It also includes D&D technologies and program strategies worldwide, as well as the regulatory aspects.

**6.0 D&D - Non-specified Abstracts****Lead Organizer:**

Fred Sheil, Sheil Consulting Ltd, V: +44 1900 821061, [fred@sheil.myzen.co.uk](mailto:fred@sheil.myzen.co.uk)

**Additional Organizers:**

Amanda Anderson, US DOE, V: 240-702-5556, [amanda.anderson@em.doe.gov](mailto:amanda.anderson@em.doe.gov)

**6.1 D&D - Posters****Lead Organizer:**

Ron Unz, Institute for Clean Energy Technology - Mississippi State University, V: 662-325-9528, [unz@icet.msstate.edu](mailto:unz@icet.msstate.edu)

**6.2 D&D of Nuclear and Non-Power Generating Facilities Both Large and Small**

This topic accepts abstracts on actual D&D projects of non-power generating contaminated facilities, such as fuel cycle facilities, research reactors including fusion, research laboratories as well as small nuclear facilities such as hospitals, universities, nuclear laundries, radiochemical laboratories etc. Progress and innovative approaches including the application of robotics as well as lessons learned from the completion of major projects will be of particular interest.

**Lead Organizer:**

Niklas Bergh, Westinghouse Electric Company, V: +46 73 236 75 16, [berghne@westinghouse.com](mailto:berghne@westinghouse.com)

**Additional Organizers:**

Al Freitag, Globalpundits Technology, V: 914-475-1170, [aafreita@aol.com](mailto:aafreita@aol.com)

Anthony Banford, UK National Nuclear Laboratory, V: +44 7715 043778, [anthony.w.banford@uknnl.com](mailto:anthony.w.banford@uknnl.com)

Joe Dixon, NuVision-Walischmiller, V: 651-356-5605, [dix2056@hotmail.com](mailto:dix2056@hotmail.com)

**6.3 D&D of Nuclear Power Plants**

This topic accepts abstracts on planning, decommissioning, deactivation, execution and final facility cleanup of NPP

decommissioning projects. Funding, contracting and lessons learned from the execution of major decommissioning projects will be also of particular interest.

**Lead Organizer:**

Serge Vanderperre, Tractebel, V: +32 476 61 63 46, [serge.vanderperre@tractebel.engie.com](mailto:serge.vanderperre@tractebel.engie.com)

**Additional Organizers:**

Simon Carroll, Vattenfall AB, V: +46 72 236 38 07, [simon.carroll@vattenfall.com](mailto:simon.carroll@vattenfall.com)

Al Freitag, Globalpundits Technology, V: 914-475-1170, [aafreita@aol.com](mailto:aafreita@aol.com)

#### **6.4 D&D of US DOE Facilities**

This topic accepts abstracts on the project planning, deactivation and execution of D&D projects at US DOE sites. The topic includes site-wide approaches to footprint reduction, progress and status of US DOE D&D projects, innovative approaches to planning, deactivation, execution of projects (including use of robotics), and lessons learned.

**Lead Organizer:**

Michelle Claggett, Project Enhancement Corp, V: +1 301-412-2234, [mclaggett@projectenhancement.com](mailto:mclaggett@projectenhancement.com)

**Additional Organizers:**

Mike Serrato, S&K Logistics Services, LLC, V: 803-725-5200, [michael.serrato@srs.gov](mailto:michael.serrato@srs.gov)

Rob Seifert, US DOE HQ, V: 301-250-5239, [robert.seifert@em.doe.gov](mailto:robert.seifert@em.doe.gov)

#### **6.5 Plans for and Experience in Transitioning from Operations to Decommissioning**

This topic accepts abstracts that provide information on the selected decommissioning models, preparation and planning necessary to transition operating nuclear facilities into decommissioning. The session will focus on the commercial and regulatory aspects in making the decision for decommissioning prior to license expiration. Also included will be information on decommissioning costs/funding, scheduling, work force transition, legacy retired large components/waste, regulatory requirements for decommissioning, full system chemical decontamination, plant security changes, and system re-categorization. What if there are still operational reactors at the same site? How will that affect the decommissioning?

**Lead Organizer:**

Al Freitag, Globalpundits Technology, V: 914-475-1170, [aafreita@aol.com](mailto:aafreita@aol.com)

**Additional Organizers:**

Rateb (Boby) Abu Eid, US NRC, V: 301-415-5811, [boby.abu-eid@nrc.gov](mailto:boby.abu-eid@nrc.gov)

Constantinos (Con) Lyras, ANSTO, V: +61 2 9717 3382, [con.lyras@ansto.gov.au](mailto:con.lyras@ansto.gov.au)

Scott Dam, Spectrum, Inc., V: 702-538-8944, [asd444@cox.net](mailto:asd444@cox.net)

#### **6.6 International Experience in Waste Optimization/Minimization, Recycling and Clearance from D&D**

This topic accepts abstracts on worldwide perspectives on waste optimization/minimization efforts before and during D&D, clearance or other methods. NPP projects involving replacement and removal of large components and waste optimization/minimization is also included. Experiences from implementation of clearance levels from the point of view of regulators and users are welcome. The author may also consider the complimentary topic 3.4, Improvement of Sustainability, Re-use and Recycling in Management of LLW/ILW Worldwide.

**Lead Organizer:**

Mark Costella, Lawrence Livermore National Laboratory, V: 925-422-8999, [costella2@llnl.gov](mailto:costella2@llnl.gov)

**Additional Organizers:**

Cynthia Liu, Engineering/Remediation Resources Group, Inc, V: +1 925-250-3967, [cindy.liu@errg.com](mailto:cindy.liu@errg.com)

Jeff Bowers, Perma-Fix Environmental Services Inc., V: +1 925-278-3156, [jeff.bowers@perma-fix.com](mailto:jeff.bowers@perma-fix.com)

Maria Lindberg, Cyclife Sweden AB, V: +46 76 000 92 16, [Maria.lindberg@cyclife-edf.com](mailto:Maria.lindberg@cyclife-edf.com)

#### **6.7 Application of Innovative D&D Technologies Including Application of Virtual Reality**

This topic accepts abstracts on the successful application of innovative D&D technologies brought into use from both the commercial and government sectors. Technologies, which make D&D less costly, safer, and more efficient, are sought in all areas of D&D, including robotics, decontamination, characterization; size and volume reduction; disposition; and recycling/recovery.

**Lead Organizer:**

Rick Demmer, MARCOM, V: 208-589-4858, [dcondude@gmail.com](mailto:dcondude@gmail.com)

**Additional Organizers:**

Joe Dixon, NuVision-Walischmiller, V: 651-356-5605, [dix2056@hotmail.com](mailto:dix2056@hotmail.com)

Jen Wohlwend, Savannah River National Laboratory, V: +1 803-617-8239, [Jennifer.Wohlwend@srnl.doe.gov](mailto:Jennifer.Wohlwend@srnl.doe.gov)

**6.8 Fast Track D&D Technology Development and Demonstration**

This topic accepts abstracts on the approaches and frameworks to accelerate the development of D&D technology, from research to deployment. Case studies from NPPs and non-power generating facilities are also welcome.

**Lead Organizer:**

Anthony Banford, UK National Nuclear Laboratory, V: +44 7715 043778, [anthony.w.banford@uknnl.com](mailto:anthony.w.banford@uknnl.com)

**Additional Organizers:**

Rateb (Boby) Abu Eid, US NRC, V: 301-415-5811, [boby.abu-eid@nrc.gov](mailto:boby.abu-eid@nrc.gov)

Constantinos (Con) Lyras, ANSTO, V: +61 2 9717 3382, [con.lyras@ansto.gov.au](mailto:con.lyras@ansto.gov.au)

**6.9 Planning for Decommissioning of SMRs in the Future**

How future decommissioning has been included in the design of SMRs, for example in the choice of structural material, coolant, as well as fuel. Other aspects of decommissioning of SMRs are the possibilities of recycling of materials as well as practical issues such as dose rates during decommissioning.

**Lead Organizer:**

Maria Lindberg, Cyclife Sweden AB, V: +46 76 000 92 16, [Maria.lindberg@cyclife-edf.com](mailto:Maria.lindberg@cyclife-edf.com)

**Additional Organizers:**

Jen Wohlwend, Savannah River National Laboratory, V: +1 803-617-8239, [Jennifer.Wohlwend@srnl.doe.gov](mailto:Jennifer.Wohlwend@srnl.doe.gov)

Niklas Bergh, Westinghouse Electric Company, V: +46 73 236 75 16, [berghne@westinghouse.com](mailto:berghne@westinghouse.com)

**R6.1 Panel: Decommissioning, Issues and Possibilities/ Opportunities**

This session focuses on decommissioning projects in Sweden, UK, US and other selected countries. This interactive discussion between the audience and panelists will include, but is not limited to the following topics: logistics (from cradle to grave); organizational aspects of decommissioning; regulatory aspects and issues; definition of the back-end with regard to packages and Waste Acceptance Criteria (WACs); Identification and management of difficult-to-handle D&D waste (e.g. damaged fuel, legacy/forgotten waste inside Nuclear Power Plants, etc. ). The panel will not include military or legacy facilities.

**Lead Organizer:**

Maria Lindberg, Cyclife Sweden AB, V: +46 76 000 92 16, [Maria.lindberg@cyclife-edf.com](mailto:Maria.lindberg@cyclife-edf.com)

**Additional Organizers:**

Mark Costella, Lawrence Livermore National Laboratory, V: 925-422-8999, [costella2@llnl.gov](mailto:costella2@llnl.gov)

**R6.2 Panel: Japan Fukushima Daiichi Decommissioning Update**

This panel focuses on up-dating the activities at Fukushima Daiichi. Proposed panelists include Japanese representatives from TEPCO, Toshiba, Hitachi GE, Kajima/Shimizu, IHI, ATOX, and invited US and non-US companies and government representatives.

**Lead Organizer:**

Kazuhiro Suzuki, TG Consulting, Inc., V: +81 90-8302-3815, [k.suzuki@t-g-consulting.com](mailto:k.suzuki@t-g-consulting.com)

**Additional Organizers:**

Kazuhito Takeda, Tokyo Electric Power Company Holdings, Inc., V: +81 70-4530-0998, [takeda.kazuhito@tepcoco.jp](mailto:takeda.kazuhito@tepcoco.jp)

Paul Dickman, Argonne National Laboratory, V: 703-489-1591, [pdickman@anl.gov](mailto:pdickman@anl.gov)

**R6.3 Panel: Robotics / Remote Control Technology at Japan Fukushima Daiichi**

This panel focuses on the activities at Fukushima Daiichi and the experiences and expectation of robots and remote technologies.

**Lead Organizer:**

Kazuhiro Suzuki, TG Consulting, Inc., V: +81 90-8302-3815, [k.suzuki@t-g-consulting.com](mailto:k.suzuki@t-g-consulting.com)

**Additional Organizers:**

Gary Benda, WM Symposia, Inc., V: +1 803-317-1116, [gbenda@wmsym.org](mailto:gbenda@wmsym.org)

## **R6.5 Panel: Decision Making Processes for Nuclear Facilities Awaiting Decommissioning and Decontamination**

This panel focuses on the decision making processes of Owners, Regulators, Government Bodies, and Stakeholders on what to do for reactors, reactor complexes, and facilities that are awaiting decommissioning, decontamination, demolition, and disposition.

### **Lead Organizer:**

Al Freitag, Globalpundits Technology, V: 914-475-1170, [aafreita@aol.com](mailto:aafreita@aol.com)

### **Additional Organizers:**

Mike Serrato, S&K Logistics Services, LLC, V: 803-725-5200, [michael.serrato@srs.gov](mailto:michael.serrato@srs.gov)

## **R6.6 Panel: Changes to D&D Over 50 Years**

### **Lead Organizer:**

Lawrence Boing, Argonne National Laboratory, V: +1 815-953-5238, [lboing@anl.gov](mailto:lboing@anl.gov)

### **Additional Organizers:**

Rick Demmer, MARCOM, V: 208-589-4858, [dcondude@gmail.com](mailto:dcondude@gmail.com)

## **7 - ENVIRONMENTAL REMEDIATION (ER) Vicky Freedman, Sealaska (Co-Chair), V: +1 546-167-9,**

[Vicky.freedman@sealaska.com](mailto:Vicky.freedman@sealaska.com)

Margaret MacDonell, Argonne National Laboratory (Co-Chair), V: +1 630-252-3243, [macdonell@anl.gov](mailto:macdonell@anl.gov)

This Track includes all activities associated with the assessment, cleanup, and closure of contaminated sites. The topics will explore how to restore and protect human health and the environment through investigation, cleanup, closure, and long-term site management. The focus is on above and below ground remedial actions and cleanup activities including site inspection, characterization and evaluation; sampling and analysis; compliance monitoring; resolving regulatory issues that impact cleanup; aquifer and soil remediation; managing waste resulting from cleanup activities; remedial design and implementation; accelerating cleanup through technological or process improvements; closure; sustainable green remediation processes and legacy management/ long-term stewardship.

## **7.0 Environmental Remediation - Non-specified Abstracts**

### **Lead Organizer:**

Margaret MacDonell, Argonne National Laboratory, V: +1 630-252-3243, [macdonell@anl.gov](mailto:macdonell@anl.gov)

## **7.1 Environmental Remediation - Posters**

### **Lead Organizer:**

Margaret MacDonell, Argonne National Laboratory, V: +1 630-252-3243, [macdonell@anl.gov](mailto:macdonell@anl.gov)

## **7.2 Environmental Remediation Progress Toward Closure of Contaminated Sites Around the World**

This topic accepts abstracts on key implementation issues (Fiscal, Technical, and Social-political) that challenge remediation completion in the USA and internationally, as the 2021 Emerging Topic. Abstracts are encouraged that deal with oversight or implementation issues that delay remediation completion.

### **Additional Organizers:**

Latrincy Bates, US DOE, V: 301-903-7654, [Latrincy.Bates@em.doe.gov](mailto:Latrincy.Bates@em.doe.gov)

## **7.3 Technical Innovations in Environmental Remediation and Site Closure**

This topic accepts abstracts on new technologies and new processes that enable risk reduction, accelerate remediation schedules, streamline cleanup, and reduce maintenance and security cost at high-risk or high-cost sites. Abstracts are solicited to describe specific new technical solutions using existing and innovative technologies that have assisted sites to achieve closure goals and milestones, and/or replaced or improved baseline technologies by providing efficient, cost-effective solutions. Abstracts are also encouraged on in-situ isolation technologies as well as permanent barrier design and construction. Of particular interest are lessons learned on the application of technologies or processes used to treat contaminated surface soils, buried waste tanks or ground water, including case studies, including those from other sites.

**Lead Organizer:**

Del Baird, Pro2Serve, V: 740-876-3184, [bairdd@p2s.com](mailto:bairdd@p2s.com)

**Additional Organizers:**

Leo van Velzen, EURSSEM & Environmental, V: +31-263255431, [vanvelzen.eurssem@gmail.com](mailto:vanvelzen.eurssem@gmail.com)

Dale Bignell, Sundance Consulting, LLC, V: 803-507-1080, [d.tbignell@yahoo.com](mailto:d.tbignell@yahoo.com)

Ella Feist, Longenecker and Associates, Inc, V: 509-539-7054, [ellat1@msn.com](mailto:ellat1@msn.com)

**7.4 Innovative Field Monitoring for Environmental Remediation**

This topic accepts abstracts on the monitoring of contaminated sites and its role to assess efficacy of containment and cleanup strategies. Abstracts requested include strategies and technologies for environmental monitoring of air, water, soil, and biota via the development and deployment of remote, in-situ or portable field instruments and integrative approaches for site and waste characterization, remediation process monitoring, and long-term stewardship. Of interest is to reduce uncertainties associated with risk assessment so that less conservative models and assumptions can be used to ensure the safety of workers and the public. Abstracts are also solicited on minimally or non-invasive approaches based on new detection methods or concepts, improved sampling strategies, and the acquisition and interpretation of field-test data.

**Lead Organizer:**

Ella Feist, Longenecker and Associates, Inc, V: 509-539-7054, [ellat1@msn.com](mailto:ellat1@msn.com)

**Additional Organizers:**

Ron Unz, Institute for Clean Energy Technology - Mississippi State University, V: 662-325-9528, [unz@icet.msstate.edu](mailto:unz@icet.msstate.edu)

**7.5 ER Post Closure Challenges and Long-Term Stewardship/Legacy Management**

This topic accepts abstracts on post-closure progress and results in monitoring end states (future land use) for sites contaminated with radioactive or hazardous materials. Abstracts are solicited that discuss implementation of long-term stewardship, legacy management plans and associated responsibilities. This topic includes abstracts discussing the processes used to identify what contaminants will remain on a site, the results of risk assessments that demonstrated the potential hazard of leaving these materials on site, as well as the required long-term stewardship activities

**Lead Organizer:**

Darina Castillo, US DOE, V: 720-377-3824, [Darina.Castillo@LM.DOE.gov](mailto:Darina.Castillo@LM.DOE.gov)

**Additional Organizers:**

Dale Bignell, Sundance Consulting, LLC, V: 803-507-1080, [d.tbignell@yahoo.com](mailto:d.tbignell@yahoo.com)

Joy Shoemake, Hanford Mission Integration Solutions, V: 509-308-4945, [joy\\_shoemake@rl.gov](mailto:joy_shoemake@rl.gov)

**7.6 Formerly Utilized Sites Remedial Action Program (FUSRAP) and US Army Corps of Engineers Projects**

This topic accepts abstracts on the US Army Corps of Engineers and the FUSRAP program. Abstracts for this topic are solicited to update program achievement and site accomplishments, waste characterization and waste volume issues, health physics approaches, long-term stewardship issues, excavation methodologies, technology deployment, and disposal requirements. In addition, this topic accepts abstracts on closed FUSRAP sites transitioning to the US DOE for legacy management, including planning and process, issues and challenges, success stories, lessons learned, the state of affairs related to assets transferred and findings, and costs.

**Lead Organizer:**

Helen Edge, USACE, V: 917-790-8332, [helen.k.edge@usace.army.mil](mailto:helen.k.edge@usace.army.mil)

**Additional Organizers:**

Margaret MacDonell, Argonne National Laboratory, V: +1 630-252-3243, [macdonell@anl.gov](mailto:macdonell@anl.gov)

**7.7 Groundwater Remediation Projects - Worldwide Experiences**

This topic accepts abstracts on technologies and methodologies for the in-situ stabilization of metal and radioactive contaminants in soils and sludges. Abstracts addressing all aspects of the study area are encouraged, including; chemical and biological approaches along with the evaluation of long-term stability of these materials.

**Lead Organizer:**

Latrincy Bates, US DOE, V: 301-903-7654, [Latrincy.Bates@em.doe.gov](mailto:Latrincy.Bates@em.doe.gov)

**Additional Organizers:**

Gregg Occhiogrosso, Neptune and Company, Inc., V: 814-336-9204, [gregg@neptuneinc.org](mailto:gregg@neptuneinc.org)

### **7.8 Characterization and ER Technologies for Complex and Comingled Contaminants**

This topic accepts abstracts on contamination which is beyond typical Remove-Treat-Dispose technologies' reach. There are world-wide complexities associated with deep vadose contamination, co-mingled radionuclide, metal, and volatile contaminant plumes, and a wide-range of other physical or treatment complexities are posing critical impacts to environmental media over extended periods of time as well as presenting challenges for developing approaches for successful remediation. Aspects to be discussed include lessons learned, innovations, strategies, status and overall goals. Abstracts are encouraged from around the world to provide perspective of the challenges and possible solutions for these complex problems.

**Lead Organizer:**

Stefanie Fountain, Geosyntec Consultants, Inc., V: 865-361-1699, [sfountain@geosyntec.com](mailto:sfountain@geosyntec.com)

**Additional Organizers:**

Latrincy Bates, US DOE, V: 301-903-7654, [Latrincy.Bates@em.doe.gov](mailto:Latrincy.Bates@em.doe.gov)

Richard Murphy, ARCADIS US, Inc., V: 303-475-5210, [richard.murphy@arcadis.com](mailto:richard.murphy@arcadis.com)

### **7.9 Environmental Remediation in Urban and Suburban Environments - Examples from Around the World**

This topic accepts abstracts on all aspects of the challenges of ER of sites that are associated with urban and suburban areas. Remediation of urban and suburban radiologically and chemically contaminated sites present special challenges including protection of the public, limited working space, and communication and involvement with stakeholders, and planning for future use and/or redevelopment of the site. Many of these sites were previously located in undeveloped or rural areas, but due to development, are now surrounded by urban, suburban or industrial/commercial areas.

**Lead Organizer:**

Nelson Walter, WSP, V: +1 207-651-0315, [nelson.walter@wsp.com](mailto:nelson.walter@wsp.com)

**Additional Organizers:**

Ella Feist, Longenecker and Associates, Inc, V: 509-539-7054, [ellat1@msn.com](mailto:ellat1@msn.com)

Alex Lopez, Perma-Fix Environmental Services, V: 724-728-3960, [alex.lopez@perma-fix.com](mailto:alex.lopez@perma-fix.com)

### **7.10 Environmental Remediation of Abandoned Uranium Mines and Mills**

This topic accepts abstracts on all aspects associated with the environmental remediation of abandoned uranium mines and mills world-wide, including field surveys and investigation techniques, sample collection and analysis, risk or dose assessment, remedial design and remedial experiences, long-term operation and maintenance of remedies, cultural and societal aspects, interaction with local, state, tribal, and federal agencies, returning sites to beneficial reuse, and site closure experiences. This topic coordinates with Session 3.12 Waste Management in Mining, Uranium Industry, Oil and Gas and Non-Nuclear Sectors.

**Lead Organizer:**

Stuart Walker, US EPA, V: 703-603-8748, [walker.stuart@epa.gov](mailto:walker.stuart@epa.gov)

**Additional Organizers:**

Richard Murphy, ARCADIS US, Inc., V: 303-475-5210, [richard.murphy@arcadis.com](mailto:richard.murphy@arcadis.com)

Tjalle Vandergraaf, Retired, V: 2047538402, [ttveiv@mts.net](mailto:ttveiv@mts.net)

### **7.11 Modeling Applications and Flow/Transport Analysis in Environmental Remediation**

This topic accepts abstracts from around the world on all aspects of modeling or calculations used for environmental applications, including flow and transport modeling to support monitoring and remedy evaluations, with conceptual site models as the foundation. Aspects to be discussed include data analysis and integration, uncertainty analyses and decision support, and the use of simulations to study physical and bio-geochemical phenomena to support site decisions and engineering design.

**Lead Organizer:**

Vicky Freedman, Sealaska, V: +1 546-167-9, [Vicky.freedman@sealaska.com](mailto:Vicky.freedman@sealaska.com)

**Additional Organizers:**

Simon Kwong, National Nuclear Laboratory, V: +4401925933787, [simon.kwong@uknnl.com](mailto:simon.kwong@uknnl.com)

Margaret MacDonell, Argonne National Laboratory, V: +1 630-252-3243, [macdonell@anl.gov](mailto:macdonell@anl.gov)

### **7.12 Emerging Contaminant Issues**

This topic accepts abstracts that bring to light the emerging contaminants around the world such as perflurooctane sulfonate (PFOS) and perflurooctanoic acid (PFOA), plastics and microplastics. The issues and growing world-wide awareness of these

pervasive contaminants that may be found on nuclear waste sites (operating and in phases of closure) are of interest. Topics covered will include contaminant discovery, site investigation, remediation, risks, regulations and stakeholder concerns.

**Lead Organizer:**

Richard Murphy, ARCADIS US, Inc., V: 303-475-5210, [richard.murphy@arcadis.com](mailto:richard.murphy@arcadis.com)

**Additional Organizers:**

Margaret MacDonell, Argonne National Laboratory, V: +1 630-252-3243, [macdonell@anl.gov](mailto:macdonell@anl.gov)

**7.13 Modeling Applications and Risk/Dose Analysis in Environmental Remediation**

This topic accepts abstracts on all aspects of quantitative risk and dose assessments used to inform human and ecological risk/dose decisions on chemical and radiological exposure. The multistep procedure used to evaluate risk/dose, including data selection, model selection, statistical linkage, parameter estimation, quality evaluation, and model sensitivity are topics relevant to the characterization of dose–response relationships and exposure estimates that guide regulatory decision-making.

**Lead Organizer:**

Vicky Freedman, Sealaska, V: +1 546-167-9, [Vicky.freedman@sealaska.com](mailto:Vicky.freedman@sealaska.com)

**Additional Organizers:**

Simon Kwong, National Nuclear Laboratory, V: +4401925933787, [simon.kwong@uknnl.com](mailto:simon.kwong@uknnl.com)

Margaret MacDonell, Argonne National Laboratory, V: +1 630-252-3243, [macdonell@anl.gov](mailto:macdonell@anl.gov)

**7.14 Approaches to Overcome Challenges in Environmental Data Management, Access, and Analysis**

This topic accepts abstracts that discuss approaches to overcome challenges associated with the access, analysis, and management of environmental data. Environmental information and data are heterogenous and highly distributed in both space and time. Topics may include cataloging, storing, retrieving, and managing data, as well as innovations in methods and software tools that provide critical analyses that support environmental restoration, long-term stewardship, and site closure.

**Lead Organizer:**

Vicky Freedman, Sealaska, V: +1 546-167-9, [Vicky.freedman@sealaska.com](mailto:Vicky.freedman@sealaska.com)

**Additional Organizers:**

Stefanie Fountain, Geosyntec Consultants, Inc., V: 865-361-1699, [sfountain@geosyntec.com](mailto:sfountain@geosyntec.com)

Richard Murphy, ARCADIS US, Inc., V: 303-475-5210, [richard.murphy@arcadis.com](mailto:richard.murphy@arcadis.com)

**R7.1 Panel: Implementing Technically-Based Cleanup; US DOE Balancing Regulatory/ Fiscal Complexity**

This panel focuses on progress and challenges in implementing remediation approaches in the DOE complex that are technically feasible and balance regulatory and fiscal responsibilities. Panelists will include government perspectives (USEPA, USDOE, State Officials) on successes and challenges.

**R7.2 Panel: US DOE Defense Related Uranium Mines (DRUM) Program and Uranium Leasing Program**

This panel focuses on the US DOE Defense Related Uranium Mines (DRUM) Program and Uranium Leasing Program (ULP).

**R7.3 Panel: Risk-Based Approaches to Environmental Remediation and Adaptive Site Management**

This panel focuses on the remediation of legacy trench sites, discussing challenges associated with site characterization, risk evaluation, and remedial approaches using adaptive and iterative approaches needed to manage these difficult-to-remediate sites. The discussion will also include international case studies, highlighting the importance of end state selection and the benefits of including interested parties in the decision-making process.

**Lead Organizer:**

Vicky Freedman, Sealaska, V: +1 546-167-9, [Vicky.freedman@sealaska.com](mailto:Vicky.freedman@sealaska.com)

**Additional Organizers:**

Kim Baines, IAEA, V: , [k.baines@iaea.org](mailto:k.baines@iaea.org)

**R7.4 Panel: Innovative and Cost-Effective Monitoring Approaches**

This panel focuses on discussing recent advancements in monitoring and remaining challenges associated with implementing cost-effective monitoring approaches for complex sites. Monitoring presents one of the largest, long-term costs for environmental remediation and site stewardship within the DOE because contamination at complex sites will likely be present for tens to hundreds of years into the future. Several challenges need to be met, including the integration of autonomous, time-



series geophysical measurements, the use of machine learning, and the data management and qualification of large volumes of data.

**Lead Organizer:**

Vicky Freedman, Sealaska, V: +1 546-167-9, [Vicky.freedman@sealaska.com](mailto:Vicky.freedman@sealaska.com)

**R7.5 Panel: Radiological Modeling for Input for Cleanup of Sites**

This would be an inter-agency panel on use of radiological modeling for the purpose of demonstrating protection of the public and environment for nuclear reactor environmental remediation and cleanup of government sites.

**Lead Organizer:**

Amanda Anderson, US DOE, V: 240-702-5556, [amanda.anderson@em.doe.gov](mailto:amanda.anderson@em.doe.gov)

**Additional Organizers:**

Rateb (Boby) Abu Eid, US NRC, V: 301-415-5811, [boby.abu-eid@nrc.gov](mailto:boby.abu-eid@nrc.gov)

**R7.6 LM Business Meeting ??? (DOE LM Focus)**

**8 - COMMUNICATION, STAKEHOLDERS & INDIGENOUS ENGAGEMENT, TRAINING AND PROFESSIONAL DEVELOPMENT (CSTD)**

Rob Seifert, US DOE HQ (Lead Co-Chair), V: 301-250-5239, [robert.seifert@em.doe.gov](mailto:robert.seifert@em.doe.gov)

Robert O. Berry, Foxfire Scientific Inc (Co-Chair), V: +44 161 292 7990, [berry@foxfirescientific.com](mailto:berry@foxfirescientific.com)

Joceline Nahigian, US DOE (Co-Chair), V: +1 301-250-3409, [joceline.nahigian@hq.doe.gov](mailto:joceline.nahigian@hq.doe.gov)

This track covers communications, stakeholders & indigenous engagement, training and professional public involvement, and education and training development for technical and management issues in the nuclear waste-management industry, such as used nuclear fuel; and high-level, low-level and TRU waste management.

**8.0 Communications, Stakeholders & Indigenous Engagement, Training and Develop - Non-Specified Abstracts**

**Lead Organizer:**

Rob Seifert, US DOE HQ, V: 301-250-5239, [robert.seifert@em.doe.gov](mailto:robert.seifert@em.doe.gov)

**8.1 Communications, Stakeholders & Indigenous Engagement Training and Development - Posters**

**Lead Organizer:**

Rob Seifert, US DOE HQ, V: 301-250-5239, [robert.seifert@em.doe.gov](mailto:robert.seifert@em.doe.gov)

**8.2 Communication of Technical Issues: Worldwide Experiences**

This topic accepts abstracts on experiences gained from involving the public/stakeholders, regulators, peers, customers, and government entities in technical issues and risk informed decision-making processes. This topic explores all aspects of communicating technical issues associated with the radioactive waste management industry, including environment, safety, health, quality, and other support services. The aim is to capture various perspectives for waste management practitioners, policy makers, regulators and members of the public. This topic highlights approaches that have been successful and can be applied by others. This topic will draw on ideas from a variety of disciplines that have experience in communicating and participating in controversial issues that may offer insights into the multi-disciplinary field of radioactive waste management.

**Lead Organizer:**

Sonny Goldston, Consultant, V: +1 803-292-1079, [sonnygoldston@gmail.com](mailto:sonnygoldston@gmail.com)

**Additional Organizers:**

Jeannette Hyatt, Triad National Security, LLC, V: +1 505-695-8478, [jhyatt@lanl.gov](mailto:jhyatt@lanl.gov)

Natalia Saraeva, US DOE, V: +1 202-460-2482, [natalia.saraeva@nuclear.energy.gov](mailto:natalia.saraeva@nuclear.energy.gov)

Rob Seifert, US DOE HQ, V: 301-250-5239, [robert.seifert@em.doe.gov](mailto:robert.seifert@em.doe.gov)

**8.3 Advancements in Technical Education and Training to Improve and Sustain Institutional Knowledge**

This topic accepts abstracts on the initiatives that address knowledge enhancement and retention. Abstracts are welcomed

describing formal training (electronic or on site), practical workplace experience, and innovative approaches to retain institutional knowledge.

**Lead Organizer:**

Robert O. Berry, Foxfire Scientific Inc, V: +44 161 292 7990, [berry@foxfirescientific.com](mailto:berry@foxfirescientific.com)

**Additional Organizers:**

Judith Connell, Fluor, V: 509-531-4484, [Judy.Connell@fluorgov.com](mailto:Judy.Connell@fluorgov.com)

Rachel West, HPM Corporation, V: +9317031628, [rach0714@gmail.com](mailto:rach0714@gmail.com)

**8.4 The Stakeholder's Voice – Stakeholder and Tribal Perspective Related to Environmental Cleanup**

This topic accepts abstracts focused on cleanup issues that will have a direct and lasting impact on the future of our worldwide nuclear program initiatives. Decisions on SNF storage and disposal, LLW treatment and disposal, TRU waste treatment and disposal, and the waste from HLW processing facilities will all be affected by the involvement of stakeholders and tribes in the process. Partnership with stakeholders and tribal nations are critical to ensure that perspectives are understood and considered in decisions facing our world.

**Lead Organizer:**

Rob Seifert, US DOE HQ, V: 301-250-5239, [robert.seifert@em.doe.gov](mailto:robert.seifert@em.doe.gov)

**Additional Organizers:**

Jeannette Hyatt, Triad National Security, LLC, V: +1 505-695-8478, [jhyatt@lanl.gov](mailto:jhyatt@lanl.gov)

Thomas Klein, Retired, V: 575-302-3655, [Silvertea2000@outlook.com](mailto:Silvertea2000@outlook.com)

**8.5 Decision-making Tools and Frameworks that Enhance Communication for ER Cleanup Programs**

This topic accepts abstracts on information, communication and knowledge-management technologies and techniques to organize, share, maintain, and track/trend data for sites and facilities with contamination issues and preparedness for incident response. The emphasis is on innovative approaches for efficient and effective frameworks to access, interpret, and communicate information that addresses broad stakeholder concerns and workforce transitions to the next generation of nuclear leadership. The overall aim is to improve external and internal interactions, limit redundancy, and streamline sharing routine and incident-specific information with a variety of stakeholders.

**Lead Organizer:**

Jeannette Hyatt, Triad National Security, LLC, V: +1 505-695-8478, [jhyatt@lanl.gov](mailto:jhyatt@lanl.gov)

**Additional Organizers:**

Sonny Goldston, Consultant, V: +1 803-292-1079, [sonnygoldston@gmail.com](mailto:sonnygoldston@gmail.com)

Leonel Lagos, Applied Research Center - FIU, V: 305-348-1810, [lagosl@fiu.edu](mailto:lagosl@fiu.edu)

Joceline Nahigian, US DOE, V: +1 301-250-3409, [joceline.nahigian@hq.doe.gov](mailto:joceline.nahigian@hq.doe.gov)

**8.6 Role of Advisory Boards in Environmental Cleanup**

This topic accepts abstracts on interactions between technical experts and Advisory Boards on key policy or project decisions at nuclear cleanup sites and power plants from advisory board members. Advisory Boards include Site Specific Advisory Boards, Citizen Advisory Boards, and Others.

**Lead Organizer:**

Jeannette Hyatt, Triad National Security, LLC, V: +1 505-695-8478, [jhyatt@lanl.gov](mailto:jhyatt@lanl.gov)

**Additional Organizers:**

Natalia Saraeva, US DOE, V: +1 202-460-2482, [natalia.saraeva@nuclear.energy.gov](mailto:natalia.saraeva@nuclear.energy.gov)

Joceline Nahigian, US DOE, V: +1 301-250-3409, [joceline.nahigian@hq.doe.gov](mailto:joceline.nahigian@hq.doe.gov)

**8.7 Innovations and Performance Solutions to Workplace Management**

This topic accepts abstracts on effective organizational management practices to meet multiple objectives including safety, technology utilization, and organizational performance measures of all types. Abstracts are welcome on lessons learned about integrating the efforts of individuals, teams, technologies and coordinating performance across multiple departments or organizations including improving management practices, implementing change and streamlining management communications.

**Lead Organizer:**

Rob Seifert, US DOE HQ, V: 301-250-5239, [robert.seifert@em.doe.gov](mailto:robert.seifert@em.doe.gov)

### **Additional Organizers:**

Andrew Fellingner, Savannah River National Laboratory, V: +1 803-507-5163, [a.fellinger@srnl.doe.gov](mailto:a.fellinger@srnl.doe.gov)

Evelyn Dawson, GES-ASRC Industrial, V: 480-212-3768, [edawson@ges-ais.com](mailto:edawson@ges-ais.com)

Joceline Nahigian, US DOE, V: +1 301-250-3409, [joceline.nahigian@hq.doe.gov](mailto:joceline.nahigian@hq.doe.gov)

## **8.8 Social Sciences as a Resource for Improving Public Involvement in HLW Issues**

This topic accepts abstracts on lessons learned about public readiness for the siting of new HLW disposition facilities and ways to avoid and/or repair past mistakes.

### **Lead Organizer:**

Paul Dickman, Argonne National Laboratory, V: 703-489-1591, [pdickman@anl.gov](mailto:pdickman@anl.gov)

### **Additional Organizers:**

Natalia Saraeva, US DOE, V: +1 202-460-2482, [natalia.saraeva@nuclear.energy.gov](mailto:natalia.saraeva@nuclear.energy.gov)

Carl-Reinhold Brakenhielm, Swedish National Council for Nuclear Waste, V: +46-8651-0549, [brakenhielm@teol.uu.se](mailto:brakenhielm@teol.uu.se)

Ann Riedesel, Fluor, V: +1 208-569-6320, [ann.riedesel@fluorgov.com](mailto:ann.riedesel@fluorgov.com)

## **8.9 Manhattan Project National Historic Park – Legacy Lives On**

The recently established Manhattan Project National Historic Park and how each of the three sites that are involved: Hanford-Oak Ridge-Los Alamos. Additional abstracts on museums or interpretative centers focused on the approaches used to preserve the legacy of the advent of the nuclear age.

### **Lead Organizer:**

Darina Castillo, US DOE, V: 720-377-3824, [Darina.Castillo@LM.DOE.gov](mailto:Darina.Castillo@LM.DOE.gov)

### **Additional Organizers:**

Jeannette Hyatt, Triad National Security, LLC, V: +1 505-695-8478, [jhyatt@lanl.gov](mailto:jhyatt@lanl.gov)

Padraic Benson, US DOE Office of LM, V: +3038597727, [padraic.benson@lm.doe.gov](mailto:padraic.benson@lm.doe.gov)

## **8.10 Implementation Lessons Learned and Novel Approaches for Risk-Informing WM Regulations**

This topic accepts abstracts on the risk-informed implementation approaches for waste management of US DOE and other countries' radioactive wastes. The US DOE revised regulation (DOE Order 435.1A) was recently released and presentations will highlight the approaches used to incorporate the changes in the order into practice while sharing lessons learned. Papers that provide insight to global perspectives on similar waste management approaches to risk-informing their waste management regulations, are also encouraged.

### **Lead Organizer:**

Jeannette Hyatt, Triad National Security, LLC, V: +1 505-695-8478, [jhyatt@lanl.gov](mailto:jhyatt@lanl.gov)

### **Additional Organizers:**

Rob Seifert, US DOE HQ, V: 301-250-5239, [robert.seifert@em.doe.gov](mailto:robert.seifert@em.doe.gov)

Sonny Goldston, Consultant, V: +1 803-292-1079, [sonnygoldston@gmail.com](mailto:sonnygoldston@gmail.com)

## **8.11 Global Experience of Records, Knowledge and Memory (RK&M): Global Marker Systems**

This topic accepts abstracts on knowledge and records aspects for national and multi-national repositories for nuclear waste. A focus will be on developing methods to communicate the aspects and effects of nuclear waste repositories to future generations through records retention programs and physical repository marker projects. Abstracts that are focused on the design and content of messages to the future being developed by various repository programs around the world, differences and similarities in messages, marker materials and designs, and key elements of a records retention program are especially welcome. Special focus will also center on the progress being made through the NEA RK&M initiative, programs with environmental friendly goals and methods, and challenges encountered and overcome during this unprecedented time. Additionally, abstracts that discuss progress and implications made subsequent to the Directive adopted by the European Union on 19 July 2011 allowing its member states/nations to host multi-national nuclear-fuel-cycle-waste inventories of SNF, UNF and HLW will be accepted.

### **Lead Organizer:**

Russell Patterson, Private Contractor, V: +1 575-499-9903, [ruspatson@gmail.com](mailto:ruspatson@gmail.com)

### **Additional Organizers:**

Thomas Klein, Retired, V: 575-302-3655, [Silvertea2000@outlook.com](mailto:Silvertea2000@outlook.com)

Stephan Hotzel, BASE, V: +49 30 1843216607, [stephan.hotzel@base.bund.de](mailto:stephan.hotzel@base.bund.de)

### **R8.1 Panel: Graduating Students and New Engineers- Wants and Needs –Are Companies Even Listening?**

This panel focuses on new hires, graduating scientists and engineers having open lines of communication with employers. Considering the projected shortfalls in the workforce, effective communication of wants-and-needs of both the employer and employee must exist. Do these needs differ between industries and/or generations? Currently, it seems that both sides must work harder to achieve this level of communication. With this new approach, both sides can express their wants and needs for a more satisfied workforce and a better work environment.

#### **Lead Organizer:**

Leonel Lagos, Applied Research Center - FIU, V: 305-348-1810, [lagosl@fiu.edu](mailto:lagosl@fiu.edu)

#### **Additional Organizers:**

Robert O. Berry, Foxfire Scientific Inc, V: +44 161 292 7990, [berry@foxfirescientific.com](mailto:berry@foxfirescientific.com)

Rachel West, HPM Corporation, V: +9317031628, [rach0714@gmail.com](mailto:rach0714@gmail.com)

### **R8.2 Panel: Young Professionals in Nuclear Science and Engineering an International Perspective**

This panel focuses on young professionals and covers views on radioactive waste management from young persons' perspective from all around the world. An informal panel will enable the future leaders of our industry to share ideas and experiences, and of course, develop contacts within their peer group on a truly international level. By selecting this format, it is hoped that the topic will be interactive, stimulating valuable discussion among the participants and the audience. The panel will be led by young professionals who will actively encourage participation from all those attending including a discussion of mentoring. The aim is to encourage fresh thinking and provide an opportunity for an open and frank discussion on issues.

#### **Lead Organizer:**

Robert O. Berry, Foxfire Scientific Inc, V: +44 161 292 7990, [berry@foxfirescientific.com](mailto:berry@foxfirescientific.com)

#### **Additional Organizers:**

Leonel Lagos, Applied Research Center - FIU, V: 305-348-1810, [lagosl@fiu.edu](mailto:lagosl@fiu.edu)

Natalia Saraeva, US DOE, V: +1 202-460-2482, [natalia.saraeva@nuclear.energy.gov](mailto:natalia.saraeva@nuclear.energy.gov)

### **R8.3 Panel: Best Practices in Risk Communications**

This panel focuses on a sustainable, holistic and integrated approach to structure nuclear waste management, disposal and remediation decisions. This panel will have participation from internal and external stakeholders and demonstrate use of tools and techniques to effectively communicate factors that inform decisions. The desired outcome is to effectively communicate how risk is evaluated at complex sites, highlight holistic site level approaches that are protective of human health and the environment, and incorporate policy and technical concerns related to achieving alternative end points. This discussion will include existing decision-making tools in conjunction with case studies.

#### **Lead Organizer:**

Jeannette Hyatt, Triad National Security, LLC, V: +1 505-695-8478, [jhyatt@lanl.gov](mailto:jhyatt@lanl.gov)

#### **Additional Organizers:**

Katie Warner, Jacobs, V: 720-286-1547, [katelyn.warner@jacobs.com](mailto:katelyn.warner@jacobs.com)

Rob Seifert, US DOE HQ, V: 301-250-5239, [robert.seifert@em.doe.gov](mailto:robert.seifert@em.doe.gov)

Joceline Nahigian, US DOE, V: +1 301-250-3409, [joceline.nahigian@hq.doe.gov](mailto:joceline.nahigian@hq.doe.gov)

### **R8.5 Stakeholder Involvement in Consolidated ISF Storage and Transportation Initiatives**

This panel focuses on the current efforts undertaken by initiatives to involve stakeholders for the success of Integrated Interim Storage, Transportation and Disposal facilities for SNF and HLW. The panel will discuss elements needed for success in engaging various stakeholders at all levels of the project lifecycle and can include best practices and lessons learned from previous projects.

#### **Lead Organizer:**

Natalia Saraeva, US DOE, V: +1 202-460-2482, [natalia.saraeva@nuclear.energy.gov](mailto:natalia.saraeva@nuclear.energy.gov)

#### **Additional Organizers:**

Sonny Goldston, Consultant, V: +1 803-292-1079, [sonnygoldston@gmail.com](mailto:sonnygoldston@gmail.com)

Joceline Nahigian, US DOE, V: +1 301-250-3409, [joceline.nahigian@hq.doe.gov](mailto:joceline.nahigian@hq.doe.gov)

### **R8.6 Panel: A Human Resource Perspective on Challenges & Opportunity in Workforce Requests**

This panel focuses on aging workforce and knowledge management are critical issues in nuclear waste management globally. This panel includes issues, challenges and opportunities from a Human Resource management perspective.

**Lead Organizer:**

Eric Knox, Amentum, V: +5712322897, [eric.knox@amentum.com](mailto:eric.knox@amentum.com)

**Additional Organizers:**

Lisa Tharp-Bernard, Amentum, V: 803-292-5058, [lisa.tharp-bernard@amentum.com](mailto:lisa.tharp-bernard@amentum.com)

Robert O. Berry, Foxfire Scientific Inc, V: +44 161 292 7990, [berry@foxfirescientific.com](mailto:berry@foxfirescientific.com)

Judith Connell, Fluor, V: 509-531-4484, [ludy.Connell@fluorgov.com](mailto:ludy.Connell@fluorgov.com)

Joceline Nahigian, US DOE, V: +1 301-250-3409, [joceline.nahigian@hq.doe.gov](mailto:joceline.nahigian@hq.doe.gov)

**R8.7 Panel- Indigenous Perspectives on Environmental Remediation**

This panel focuses on the perspectives of Indigenous societies (e.g., Indian Tribes (US), First Nations (Canada)) related to risk assessment of environmental remediation challenges, including deep geological disposal of HLW and ILW, near-surface disposal of LLW and in-situ entombment of nuclear reactor components, and environmental remediation of abandoned uranium mines and historic wastes. Standard risk assessment assumptions often do not adequately address the cultural and spiritual values that may be unique to indigenous societies. Factoring those into a risk assessment that still meets regulatory requirements and policies such as reasonably anticipated land use at US EPA CERCLA sites can be challenging but has the potential to lead to a site or facility approach that is more accepted.

**Lead Organizer:**

Stuart Walker, US EPA, V: 703-603-8748, [walker.stuart@epa.gov](mailto:walker.stuart@epa.gov)

**Additional Organizers:**

Tjalle Vandergraaf, Retired, V: 2047538402, [ttveiv@mts.net](mailto:ttveiv@mts.net)

Richard Murphy, ARCADIS US, Inc., V: 303-475-5210, [richard.murphy@arcadis.com](mailto:richard.murphy@arcadis.com)

Joceline Nahigian, US DOE, V: +1 301-250-3409, [joceline.nahigian@hq.doe.gov](mailto:joceline.nahigian@hq.doe.gov)

**R8.8 Roundtable: Success and Challenges with DOE Legacy Management Interpretative Centers (DOE LM Focus)**

This session focuses on success and Challenges with DOE Legacy Management Interpretative Centers.

**Lead Organizer:**

Darina Castillo, US DOE, V: 720-377-3824, [Darina.Castillo@LM.DOE.gov](mailto:Darina.Castillo@LM.DOE.gov)

**Additional Organizers:**

Kurt Gerdes, Consultant, V: +3013301457, [kgerdes@wmsym.org](mailto:kgerdes@wmsym.org)

**R8.9 Panel: Former WMS Scholarship Winners Now Leading Our Industry (Student Focus)**

This session focuses on past scholarship winners now in the industry. The Roy Post Foundation has awarded scholarships for over 30 years and the panel is intended to provide a forum for 6-8 past scholarship winners to discuss their experiences.

**Lead Organizer:**

Robert O. Berry, Foxfire Scientific Inc, V: +44 161 292 7990, [berry@foxfirescientific.com](mailto:berry@foxfirescientific.com)

**Additional Organizers:**

Leonel Lagos, Applied Research Center - FIU, V: 305-348-1810, [lagosl@fiu.edu](mailto:lagosl@fiu.edu)

Ravi Gudavalli, Applied Research Center - FIU, V: 305-348-7207, [gudavall@fiu.edu](mailto:gudavall@fiu.edu)

**R8.10 Panel: Future Workforce – Employment Opportunities for Students**

This panel will facilitate employment opportunities for students attending WM2024. The selected DOE contractors will provide “real” employment opportunities and guidance to the students.

**Lead Organizer:**

Leonel Lagos, Applied Research Center - FIU, V: 305-348-1810, [lagosl@fiu.edu](mailto:lagosl@fiu.edu)

**Additional Organizers:**

Dameone Ferguson, US DOE EM, V: +1 240-654-7892, [dameone.ferguson@hq.doe.gov](mailto:dameone.ferguson@hq.doe.gov)

Kurt Gerdes, Consultant, V: +3013301457, [kgerdes@wmsym.org](mailto:kgerdes@wmsym.org)

**R8.11 ECA/EFCOG DOE EM Workforce Initiative - Learning from the 5 Year Plans**

This joint session between ECA, EFCOG, and DOE-EM will feature discussion on workforce development challenges across the DOE complex, and how communities, contractors and DOE can best work together to meet shared needs and goals.

**Lead Organizer:**

Kara Colton, Energy Communities Alliance, V: +7038643520, [kara.colton@energyca.org](mailto:kara.colton@energyca.org)

**Additional Organizers:**

Kristen Ellis, US DOE, V: +1 202-586-5810, [kristen.ellis@hq.doe.gov](mailto:kristen.ellis@hq.doe.gov)

**9 - SPECIAL TOPICS AND MULTI-TRACK CROSS CUTTING TECHNOLOGY TOPICS**

Ming Zhu, US DOE (Lead Co-Chair), V: 301-903-9240, [Ming.Zhu@em.doe.gov](mailto:Ming.Zhu@em.doe.gov)

Paul Dixon, Los Alamos National Laboratory (Co-Chair), V: 505-699-1744, [p\\_dixon@lanl.gov](mailto:p_dixon@lanl.gov)

This Track includes all Special Topics including the aspects of US and non-US International Safety, Security, and Safeguards and US Homeland security issues. It also includes technical track crosscutting topics or special WM topics on programs associated with orphan and sealed sources, Integrated Risk Management and decision support analysis in support of Program Management & Project Management inclusive of but not limited to modeling, compliance activities, criteria and standards development, Natural Resource Damage Assessment (NRDA); Technology Deployment and Technical Risk Management; instruments, filtration, advanced technologies, extreme environment operations enabling technologies, technology driven program implications and drivers, and/or other technical crosscutting issues that involve multiple waste forms or radioactive materials and/or risk management. /\* Style Definitions \*/ table.MsoNormalTable {mso-style-name:"Table Normal"; mso-tstyle-rowband-size:0; mso-tstyle-colband-size:0; mso-style-noshow:yes; mso-style-priority:99; mso-style-parent:""; mso-padding-alt:0in 5.4pt 0in 5.4pt; mso-para-margin:0in; mso-para-margin-bottom:.0001pt; mso-pagination:widow-orphan; font-size:10.0pt; font-family:"Calibri","sans-serif";}

**9.0 Special Topics and Track Cross Cutting Technology Topics - Non-specified Abstracts****Lead Organizer:**

Alan Paulley, Quintessa Ltd., V: +4401925885952, [alanpaulley@quintessa.org](mailto:alanpaulley@quintessa.org)

**9.1 Special Topics and Track Cross Cutting Technology Topics - Posters****Lead Organizer:**

Alan Paulley, Quintessa Ltd., V: +4401925885952, [alanpaulley@quintessa.org](mailto:alanpaulley@quintessa.org)

**9.2 Nuclear and Industrial Robotics, Remote Systems and Emerging Technology**

This topic accepts abstracts on all aspects of the use of robotics, remote systems and tools used in the nuclear industry, including needs, problem statements, research and development. Abstracts are encouraged that discuss technology maturation, utilization, testing and verification, best practices, lessons learned, knowledge management and trends in robotics and remote systems, applications, facilities, use in emergency preparedness or response and recovery actions and the ability to withstand exposure to radioactive contamination or ionizing radiation.

**Lead Organizer:**

Kim "KD" Auclair, KD Auclair & Associates, LLC VOSB, V: +3606090627, [kdaclair@gmail.com](mailto:kdaclair@gmail.com)

**Additional Organizers:**

Paul Dixon, Los Alamos National Laboratory, V: 505-699-1744, [p\\_dixon@lanl.gov](mailto:p_dixon@lanl.gov)

**9.3 Crosscutting Subsurface Mass Transport and Environmental Assessment of Geological Disposal Systems**

This topic accepts abstracts that crosscut other Tracks related to environmental and/or risk assessment of geological radioactive waste disposal systems that consider hydrological, mechanical, thermal and chemical/biochemical effects. Complementary Topics 2.11 and 3.10 focus on Track-specific Performance Assessment but all Topics, including related topic 9.4, will exchange abstracts in developing the Technical Program. Abstracts are requested on advances in methodologies and technologies associated with characterization and evaluation of the fluid flow, diffusion and/or dispersion, chemical and geochemical processes including consideration of their evolution, model development, model application and validation, parameter acquisition and evaluation techniques and integrated process assessment.

**Lead Organizer:**

Amy Jordan, Neptune and Company, Inc., V: , [ajordan@neptuneinc.org](mailto:ajordan@neptuneinc.org)

**Additional Organizers:**

Tjalle Vandergraaf, Retired, V: 2047538402, [tveiv@mts.net](mailto:tveiv@mts.net)

Simon Kwong, National Nuclear Laboratory, V: +4401925933787, [simon.kwong@uknln.com](mailto:simon.kwong@uknln.com)

#### **9.4 Risk-Informed Performance Based Decision Making for Site Closure**

This topic accepts abstracts on highlighting the progress made on the development of technical methods or approaches relative to closure of complex sites. Complex issues include those of a technical or regulatory nature. Technical topics include chemical, physical and biological approaches to in-situ sequestration of contaminants and methods to monitor both performance and long-term effectiveness to ensure reduction of risks to human health and the environment.

##### **Additional Organizers:**

Ming Zhu, US DOE, V: 301-903-9240, [Ming.Zhu@em.doe.gov](mailto:Ming.Zhu@em.doe.gov)

Leonel Lagos, Applied Research Center - FIU, V: 305-348-1810, [lagosl@fiu.edu](mailto:lagosl@fiu.edu)

Sean McCandless, Neptune and Company, Inc., V: 801-556-1994, [smccandless@neptuneinc.org](mailto:smccandless@neptuneinc.org)

#### **9.5 Integrated Performance and Risk Assessments, Decision Analyses, and Risk Management**

This topic accepts abstracts from the US and International communities on: 1) New approaches for performance assessments, multimedia risk assessments, and multi-attribute decision analyses in support of remedy selection for environmental cleanup and closure projects. 2) Developments in methodologies and tools for multimedia environmental modeling, particularly data management and visualization, (conceptual model and data) uncertainty quantification, and dose calculations. 3) Integration of performance/risk assessment models into life cycle cost analyses. 4) Integration of monitoring and modeling approaches for validating multimedia environmental models and optimizing environmental monitoring.

##### **Lead Organizer:**

Ming Zhu, US DOE, V: 301-903-9240, [Ming.Zhu@em.doe.gov](mailto:Ming.Zhu@em.doe.gov)

##### **Additional Organizers:**

Paul Black, Neptune and Company, Inc., V: 720-746-1803 x1001, [pblack@neptuneinc.org](mailto:pblack@neptuneinc.org)

Rateb (Boby) Abu Eid, US NRC, V: 301-415-5811, [boby.abu-eid@nrc.gov](mailto:boby.abu-eid@nrc.gov)

#### **9.6 Radiological Dispersion Devices and Weapons of Mass Destruction: Detection, Response, and Recovery**

This topic accepts abstracts on the determination of an affected zone, the recovery process and procedures and cleanup methodologies from those incidents that involve radioactive material dispersion. Abstracts that address large scale (fission/fusion) and mixed/hybrid device incident recovery will also be considered. This topic will also focus on the National Response Framework flow down, including critical aspects of data sharing, data analysis, and command and control aspects of an event response, including information dissemination to the public in such an event.

##### **Lead Organizer:**

Kim "KD" Auclair, KD Auclair & Associates, LLC VOSB, V: +3606090627, [kdaclair@gmail.com](mailto:kdaclair@gmail.com)

##### **Additional Organizers:**

Gregg Occhiogrosso, Neptune and Company, Inc., V: 814-336-9204, [gregg@neptuneinc.org](mailto:gregg@neptuneinc.org)

#### **9.7 Global Perspectives on Advances in Nuclear Safety Management**

This topic accepts abstracts on the full range of nuclear safety management with an emphasis on methods and processes to improve safety performance, prevent accidents, provide improved emergency response, and reduce the overall risk of injuries, exposure, damage, or shutdowns for both the commercial and governmental activities and programs involving nuclear materials. Abstracts are encouraged that discuss alternative methods of maintaining a high awareness of safety and a highly incentivized workforce. Abstracts that discuss specific unsafe occurrences and the associated immediate responses and longer-term corrective actions applicable to the broad range of activities undertaken by participants in the nuclear waste management business are solicited. Additionally, discussions of changes in safety standards and measurement methods could be presented under this topic.

##### **Lead Organizer:**

Judith Connell, Fluor, V: 509-531-4484, [Judy.Connell@fluor.gov](mailto:Judy.Connell@fluor.gov)

##### **Additional Organizers:**

Robert Brounstein, TerranearPMC, V: +505 4125 718, [rbrounstein@terraneapmc.com](mailto:rbrounstein@terraneapmc.com)

#### **9.8 Radioactive Containment Ventilation**

This topic accepts abstracts on issues associated with containment ventilation. It will include presentations on difficult problems/novel solutions associated with waste processing, facility decontamination, maintenance, site remediation, and filters developed for design basis conditions. Lessons learned from various containment ventilation systems are anticipated.

Abstracts are particularly solicited that address issues associated with cleanup of the Fukushima Daiichi tsunami, upgrades at WIPP, and status of waste treatment facilities at US DOE Idaho and Hanford, as well as other facilities worldwide. Abstracts are also sought for changes in US and international codes allowing qualification of filters for use under design basis conditions facilitating safety in design as well as gas absorbers.

**Lead Organizer:**

Ron Unz, Institute for Clean Energy Technology - Mississippi State University, V: 662-325-9528, [unz@icet.msstate.edu](mailto:unz@icet.msstate.edu)

**Additional Organizers:**

Robert Jubin, Consultant, V: +1 865-924-1568, [RTJubin1@comcast.net](mailto:RTJubin1@comcast.net)

Coralie Rose, Mississippi State University, V: 601-955-0952, [rose@icet.msstate.edu](mailto:rose@icet.msstate.edu)

**9.9 Project Management Improvements-Planning through Completion-Scope, Cost, & Schedule Control**

This topic accepts abstracts on the latest developments in project management systems and methods and their application to waste management projects. Subjects could include planning approaches to ensure that the scope is clear and achievable, cost estimates are complete and realistic, and schedules include time estimates for both the direct project activities and the administrative and regulatory activities required to allow project implementation. Abstracts that discuss the use of planning tools, such as Critical Path Method (CPM), and control tools, such as the Earned Value Management (EVM), will be encouraged. In addition, abstracts that discuss methods used for effective integrated planning across multiple sites and programs and the coordination/inclusion of the key participants required for success – client, workers, regulators, public, etc. will be encouraged.

**Lead Organizer:**

Sean McCandless, Neptune and Company, Inc., V: 801-556-1994, [smccandless@neptuneinc.org](mailto:smccandless@neptuneinc.org)

**Additional Organizers:**

Kim "KD" Auclair, KD Auclair & Associates, LLC VOSB, V: +3606090627, [kdaclair@gmail.com](mailto:kdaclair@gmail.com)

**9.10 Developments in Deep Borehole Disposal Around the World**

This topic accepts abstracts on deep borehole disposal of SNF, HLW, Disused Sealed Radioactive Sources and DOE-managed waste forms, including siting, site characterization, permitting and regulations, operations (e.g., surface handling, down hole canister emplacement), closure (e.g., borehole sealing), and post-closure safety.

**Lead Organizer:**

Dirk Mallants, CSIRO, V: +61 8 8303 8595, [dirk.mallants@csiro.au](mailto:dirk.mallants@csiro.au)

**Additional Organizers:**

Geoff Freeze, Sandia National Laboratories, V: +1 505-235-8823, [gafreez@sandia.gov](mailto:gafreez@sandia.gov)

Andrew Orrell, Idaho National Laboratory, V: +1 208-526-5489, [stanley.orrell@inl.gov](mailto:stanley.orrell@inl.gov)

Ming Zhu, US DOE, V: 301-903-9240, [Ming.Zhu@em.doe.gov](mailto:Ming.Zhu@em.doe.gov)

**9.11 Issues & Recent Developments in Security of Nuclear Sector**

This topic accepts abstracts on the physical, cyber, policy, and regulatory challenges and developments in securing the nuclear sector around the world. The history of, and emerging security issues for, the protection of radioactive materials are of keen interest to federal agencies, e.g., DHS, DOE, NNSA, and NRC, the nuclear power industry (NEI), academia, medical and non-power radionuclide producers and users.

**Lead Organizer:**

Ray Clark, US EPA, V: 202-343-9198, [clark.ray@epa.gov](mailto:clark.ray@epa.gov)

**Additional Organizers:**

Kim "KD" Auclair, KD Auclair & Associates, LLC VOSB, V: +3606090627, [kdaclair@gmail.com](mailto:kdaclair@gmail.com)

**9.12 UAV Emerging Technology for Safety/Security Inspection Monitoring and Disposal of Nuclear Material**

This topic accepts all aspects of the use of unmanned aerial vehicles (UAV's) or drones, used in the nuclear industry, nuclear safety and security. Abstracts are encouraged that discuss technology maturation, utilization testing and verification, best practices lessons learned and trends in UAV systems, facilities and use in inspection, monitoring, disposition and emergency preparedness and response.

**Lead Organizer:**

Kim "KD" Auclair, KD Auclair & Associates, LLC VOSB, V: +3606090627, [kdaclair@gmail.com](mailto:kdaclair@gmail.com)



### **Additional Organizers:**

Kenneth Sanders, Argonne National Laboratory, V: 301-865-0533, [ksanders@anl.gov](mailto:ksanders@anl.gov)

### **9.13 Artificial Intelligence (AI) and Machine Learning (ML) Applications in Radioactive WM**

This topic accepts abstracts related to all aspects of applying artificial intelligence, machine learning (AI/ML), deep learning and complex data analytics to the complex problems that are faced in deactivation and decommissioning (D&D), environmental remediation, waste disposal, and long-term stewardship of contaminated sites and facilities. Abstracts are encouraged that discuss applications that support finding optimal solutions to the types of complex problems listed above using AI/ML and other methods. This could include structured decision making, sensitivity/uncertainty analysis, and model building in general, and might be applied to optimizing remediation strategies, reducing long-term monitoring costs, optimizing sensor networks, integrating data from multiple sources (e.g., in situ sensors, drone/satellite-based remote sensing, reactive transport modeling, etc.), scaling data/models for different purposes, and providing actionable information from vast datasets to support key

### **Lead Organizer:**

Thomas Danielson, Savannah River National Laboratory, V: +1 803-646-1828, [thomas.danielson@srnl.doe.gov](mailto:thomas.danielson@srnl.doe.gov)

### **Additional Organizers:**

Paul Black, Neptune and Company, Inc., V: 720-746-1803 x1001, [pblack@neptuneinc.org](mailto:pblack@neptuneinc.org)

Ming Zhu, US DOE, V: 301-903-9240, [Ming.Zhu@em.doe.gov](mailto:Ming.Zhu@em.doe.gov)

### **9.14 Digital Engineering – Transforming the Way We Design, Deliver, and Manage Projects**

This topic accepts abstracts related to Digital Engineering (DE), an integrated digital approach that uses authoritative sources of system data and models as a continuum across disciplines to support lifecycle activities from concept through disposal. Megaproject construction challenges have common traits with many active projects failing to meet cost and schedule efforts by significant margins. In addition, due to the desire to reduce schedule and avoid escalation, construction is often begun prior to full design maturity. DE embodies a deliberate transformational approach to the way systems are designed, engineered, constructed, operated, maintained, and retired. Abstracts are solicited in any, or all, of the five areas of DE: 1) Transformation from document-centric engineering to model-based engineering; 2) Centralization of data into an authoritative source of truth through a digital thread; 3) Innovation through technology to form domain aware digital twins, 4) Computational infrastructure to host the ecosystem and environment, or 5) Transformation of culture to utilize new digital ecosystem.

### **Lead Organizer:**

Ming Zhu, US DOE, V: 301-903-9240, [Ming.Zhu@em.doe.gov](mailto:Ming.Zhu@em.doe.gov)

### **Additional Organizers:**

Monica Regalbuto, Idaho National Laboratory, V: 2085262319, [Monica.regalbuto@inl.gov](mailto:Monica.regalbuto@inl.gov)

Rodrigo Rimando, US DOE, V: 240-676-6470, [rodrigo.rimando@em.doe.gov](mailto:rodrigo.rimando@em.doe.gov)

William Bates, Savannah River National Laboratory, V: +8037251341, [william.bates@srnl.doe.gov](mailto:william.bates@srnl.doe.gov)

### **R9.1 Panel: Operational Excellence in Safety: Back to the Basics**

This session focuses on exploring current trends in building a strong operational culture and will include safety culture best practices from industry, DOE, and NRC. Safety culture is the foundation of strong operational performance. The panel will also review tools being used to measure and evaluate safety culture programs

### **Lead Organizer:**

Judith Connell, Fluor, V: 509-531-4484, [Judy.Connell@fluorgov.com](mailto:Judy.Connell@fluorgov.com)

### **Additional Organizers:**

Ann Riedesel, Fluor, V: +1 208-569-6320, [ann.riedesel@fluorgov.com](mailto:ann.riedesel@fluorgov.com)

Kliss McNeel, Fluor, V: +1 208-403-3928, [kliss.mcneel@fluorgov.com](mailto:kliss.mcneel@fluorgov.com)

Jan Preston, Fluor Mission Solutions, V: 240-654-7705, [jan.preston@fluorgov.com](mailto:jan.preston@fluorgov.com)

### **R9.2 Panel: Interagency Community of Practice in Risk and Performance Assessment (Defer to 2025)**

This panel focuses on the status of the Inter-agency Performance & Risk Assessment Community of Practice (P&RA COP). Representatives from the P&RA COP and subject matter experts will discuss lessons learned and provide feedback on building the P&RA COP to support risk-informed environmental decision making.

### **Lead Organizer:**

Ming Zhu, US DOE, V: 301-903-9240, [Ming.Zhu@em.doe.gov](mailto:Ming.Zhu@em.doe.gov)

**Additional Organizers:**

Christopher McKenney, US NRC, V: 301-415-6663, [christopher.mckenney@nrc.gov](mailto:christopher.mckenney@nrc.gov)

Karen Skubal, US DOE, V: , [Karen.Skubal@em.doe.gov](mailto:Karen.Skubal@em.doe.gov)

**R9.3 Panel: Perspectives (US and Non-US) on the Use of Risk and Dose Assessment Tools**

This panel focuses on various dose and risk assessment tools for assessments, Deactivation and Decommissioning, remediation, and closure of sites of chemical and radioactive wastes. Representatives from the US (DOE, EPA, NRC), non-US countries and their representative regulatory bodies or authorities, as well as performance/risk assessment practitioners will compare and contrast the various guidance from regulatory agencies and authorities on how tools such as the Preliminary Remediation Goals (PRG) calculator, the Dose Compliance Concentrations (DCC) calculator, and RESidual RADioactivity (RESRAD) should be used in support of analyses and decisions for environmental cleanup activities.

**Lead Organizer:**

Amanda Anderson, US DOE, V: 240-702-5556, [amanda.anderson@em.doe.gov](mailto:amanda.anderson@em.doe.gov)

**Additional Organizers:**

Stuart Walker, US EPA, V: 703-603-8748, [walker.stuart@epa.gov](mailto:walker.stuart@epa.gov)

Rateb (Boby) Abu Eid, US NRC, V: 301-415-5811, [boby.abu-eid@nrc.gov](mailto:boby.abu-eid@nrc.gov)

**R9.4 Panel: Nuclear and Industrial Robotics, Remote Systems and Emerging Technologies**

This panel focuses on all aspects of the use of robotics, remote systems and tools used in the nuclear industry, including needs, problem statements, research and development. Abstracts are encouraged that discuss technology maturation, utilization, testing and verification, best practices, lessons learned, knowledge management and trends in robotics and remote systems, applications, facilities, use in emergency preparedness or response and recovery actions and the ability to withstand exposure to radioactive contamination or ionizing radiation.

**Lead Organizer:**

Paul Dixon, Los Alamos National Laboratory, V: 505-699-1744, [p\\_dixon@lanl.gov](mailto:p_dixon@lanl.gov)

**Additional Organizers:**

Rodrigo Rimando, US DOE, V: 240-676-6470, [rodrigo.rimando@em.doe.gov](mailto:rodrigo.rimando@em.doe.gov)

Thomas Nance, Savannah River National Laboratory, V: +1 803-646-1179, [Thomas.nance@srnl.doe.gov](mailto:Thomas.nance@srnl.doe.gov)

Jake Deuel, Sandia National Laboratories, V: +1 379-479-9, [jkdeuel@sandia.gov](mailto:jkdeuel@sandia.gov)

**R9.5 Panel: Issues & Recent Developments in Security of Nuclear Sector**

This session focuses on the physical, cyber, policy, and regulatory challenges and developments in securing the nuclear sector around the world. The history of, and emerging security issues for, the protection of radioactive materials are of keen interest to federal agencies, e.g., DHS, DOE, NNSA, and NRC, the nuclear power industry (NEI), academia, medical and non-power radionuclide producers and users. This session will address security, fitness for duty, cyber UAS, etc. with discussion by members of the Nuclear Sector Critical Infrastructure Partnership Advisory Council (CIPAC). CIPAC is combination of industry, academic, and government entities that is sponsored by the US Cybersecurity and Infrastructure Security Agency of the Department of Homeland Security.

**Lead Organizer:**

Ray Clark, US EPA, V: 202-343-9198, [clark.ray@epa.gov](mailto:clark.ray@epa.gov)

**Additional Organizers:**

Susan A. Walter, WM Symposia, Inc., V: 865-208-9714, [swalter@wmarizona.org](mailto:swalter@wmarizona.org)

**R9.6 Digital Engineering – Transforming the Way We Design, Deliver, and Manage Projects**

This panel focuses on Digital Engineering (DE), an integrated digital approach that uses authoritative sources of system data and models as a continuum across disciplines to support lifecycle activities from concept through disposal. Megaproject construction challenges have common traits with many active projects failing to meet cost and schedule efforts by significant margins. In addition, due to the desire to reduce schedule and avoid escalation, construction is often begun prior to full design maturity. DE embodies a deliberate transformational approach to the way systems are designed, engineered, constructed, operated, maintained, and retired. Abstracts are solicited in any, or all, of the five areas of DE: 1) Transformation from document-centric engineering to model-based engineering; 2) Centralization of data into an authoritative source of truth through a digital thread; 3) Innovation through technology to form domain aware digital twins, 4) Computational infrastructure to host the ecosystem and environment, or 5) Transformation of culture to utilize new digital ecosystem,

**Lead Organizer:**

William Bates, Savannah River National Laboratory, V: +8037251341, [william.bates@srnl.doe.gov](mailto:william.bates@srnl.doe.gov)

**Additional Organizers:**

Monica Regalbuto, Idaho National Laboratory, V: 2085262319, [Monica.regalbuto@inl.gov](mailto:Monica.regalbuto@inl.gov)

Rodrigo Rimando, US DOE, V: 240-676-6470, [rodrigo.rimando@em.doe.gov](mailto:rodrigo.rimando@em.doe.gov)

**R9.7 Advancement of HEPA Filters at US DOE Sites**

This Panel/Roundtable will discuss the advancement of HEPA filters at the DOE Sites. Panelists will discuss the recent Southwest Research Institute analysis on the need for independent testing of HEPA filters used at DOE sites, the cooperative agreement with Mississippi State University, current research and development efforts and implications for DOE sites, recent changes to handbooks and standards regarding HEPA filters, integration of DOE guidance into existing industry consensus codes and standards (such as ASME AG-1), and DOE Program office insights on challenges and lessons learned associated with HEPA filters.

**Lead Organizer:**

Ron Unz, Institute for Clean Energy Technology - Mississippi State University, V: 662-325-9528, [unz@icet.msstate.edu](mailto:unz@icet.msstate.edu)

**Additional Organizers:**

Tom Hiltz, US DOE, Office of Environment, Health, Safety & Security, V: 301-903-0928, [Thomas.Hiltz@hq.doe.gov](mailto:Thomas.Hiltz@hq.doe.gov)

**R9.8 Panel: Systems Thinking for Decision Analysis in Legacy Site Cleanup**

This Panel will discuss the following: 1) System approaches for integrating & optimizing end state, 2) Processes and decommissioning strategies, 3) Decision analysis processes for legacy facilities, 4) Bringing together diverse inputs from different site functions and operations, 5) Considering environmental risks and other factors and risks in decommissioning and end state processes, and 6) Systems models and decision processes for complex sites.

**Lead Organizer:**

Alan Paulley, Quintessa Ltd., V: +4401925885952, [alanpaulley@quintessa.org](mailto:alanpaulley@quintessa.org)

**Additional Organizers:**

Paul Dixon, Los Alamos National Laboratory, V: 505-699-1744, [p\\_dixon@lanl.gov](mailto:p_dixon@lanl.gov)

Paul Black, Neptune and Company, Inc., V: 720-746-1803 x1001, [pblack@neptuneinc.org](mailto:pblack@neptuneinc.org)

**R9.9 Panel: Use of Dose Modeling Tools for Final Clean-up Decisions (Defer to 2025)**

This panel will discuss the following: 1) RESRAD, 2) PRG, 3) PC Chrome, 4) ERICA, 5) Other radiological risk dose modeling codes, and 6) Clarify when and how various dose modeling tools should be used.

**Lead Organizer:**

Karen Skubal, US DOE, V: , [Karen.Skubal@em.doe.gov](mailto:Karen.Skubal@em.doe.gov)

**Additional Organizers:**

Amanda Anderson, US DOE, V: 240-702-5556, [amanda.anderson@em.doe.gov](mailto:amanda.anderson@em.doe.gov)

Rateb (Boby) Abu Eid, US NRC, V: 301-415-5811, [boby.abu-eid@nrc.gov](mailto:boby.abu-eid@nrc.gov)

**R9.11 Distributed Ledger Technology Improving Efficiencies (Defer to 2025)**

This session focuses on Distributed Ledger Technology (DLT). In nuclear waste management today, the record keeping processes often require significant effort involving spreadsheets, manual querying and updating information in dispersed data silos, and coordination of multiple entities. DLT has been proven to address these challenges while improving efficiency and trust across the waste handling and compliance supply chain. DLT solves supply chain challenges by getting information to the correct people when needed while assuring trust in the right data through attestation to improve efficiency, security, and oversight organizations. The panel will discuss a digital solution that would: 1) Provide global waste asset visibility; 2) Ensure compliance with waste acceptance criteria; 3) Deliver continuous information assurance with accessibility, security, and resilience; and 4) Result in cost savings and process improvements

**Lead Organizer:**

Alan Paulley, Quintessa Ltd., V: +4401925885952, [alanpaulley@quintessa.org](mailto:alanpaulley@quintessa.org)

**Additional Organizers:**

Edwin Matthews, Sellafield Ltd, V: +44 7711 927568, [edwin.c.matthews@sellafieldsites.com](mailto:edwin.c.matthews@sellafieldsites.com)

Dave Clark, NDA, V: +07821809000, [dave.clark@nda.gov.uk](mailto:dave.clark@nda.gov.uk)

Jeanne Beard, US DOE, V: +1 202-586-0200, [jeanne.beard@em.doe.gov](mailto:jeanne.beard@em.doe.gov)

## **R9.12 Improving the US Cybersecurity - Implementation of OMB Order 14028**

### **Lead Organizer:**

Jeanne Beard, US DOE, V: +1 202-586-0200, [jeanne.beard@em.doe.gov](mailto:jeanne.beard@em.doe.gov)

### **Additional Organizers:**

Ming Zhu, US DOE, V: 301-903-9240, [Ming.Zhu@em.doe.gov](mailto:Ming.Zhu@em.doe.gov)

## **R9.13 Updates on NNLEMS in Support of EM and LM Missions**

This Session focuses on the Network of National Laboratories for Environmental Management and Stewardship (NNLEMS)'s recent efforts to support EM and LM sites, including development of DOE Sites' climate vulnerability assessment plans, independent review of groundwater remediation and monitoring strategies, and high risk site assessments.

### **Lead Organizer:**

Ming Zhu, US DOE, V: 301-903-9240, [Ming.Zhu@em.doe.gov](mailto:Ming.Zhu@em.doe.gov)

### **Additional Organizers:**

Kathryn Taylor-Pashow, Savannah River National Laboratory, V: +8036461038, [Kathryn.Taylor-Pashow@srnl.doe.gov](mailto:Kathryn.Taylor-Pashow@srnl.doe.gov)

## **10 - LEVERAGING SCIENCE, TECHNOLOGY, ENGINEERING AND MATH (STEM) EDUCATION FOR THE FUTURE**

Judith Connell, Fluor (Lead Co-Chair), V: 509-531-4484, [Judy.CConnell@fluorgov.com](mailto:Judy.CConnell@fluorgov.com)

Kristen Ellis, US DOE (Co-Chair), V: +1 202-586-5810, [kristen.ellis@hq.doe.gov](mailto:kristen.ellis@hq.doe.gov)

Ann Riedesel, Fluor (Co-Chair), V: +1 208-569-6320, [ann.riedesel@fluorgov.com](mailto:ann.riedesel@fluorgov.com)

This track is dedicated to the education and promotion of the next generation of STEM (Science, Technology, Engineering and Math) professionals who manage/handle radioactive material and/or waste as well as associated fields that support the nuclear/waste management industry in general. Panels and sessions will focus on STEM essentials and best practices in both US and non-US settings. Topics will include (a) defining future US and global workforce needs; (b) addressing the imminent gap in a qualified STEM workforce; (c) educating and preparing the potential talent pool; (d) developing and deploying applications and tools to prepare students for careers in the nuclear industry, with a focus on radioactive waste management; (e) supporting K-12 STEM programs through outreach to academics and teachers; (f) understanding STEM workforce needs for DOE's ongoing missions; and (g) the importance of STEM education in technical solutions for worldwide problem solving.

## **10.0 Science, Technology, Engineering, and Math (STEM) Topics - Non-specified Abstracts**

### **Lead Organizer:**

Judith Connell, Fluor, V: 509-531-4484, [Judy.CConnell@fluorgov.com](mailto:Judy.CConnell@fluorgov.com)

## **10.1 Science, Technology, Engineering, and Math (STEM) Topics - Posters**

### **Lead Organizer:**

Judith Connell, Fluor, V: 509-531-4484, [Judy.CConnell@fluorgov.com](mailto:Judy.CConnell@fluorgov.com)

## **10.2 STEM's Pathway to the Future's Workforce**

This topic accepts abstracts that highlight activities of individuals, companies, agencies, and governments in the radioactive waste management industry, and ancillary disciplines, that are supporting STEM education that will help create and sustain a qualified future workforce. Individuals and companies from US and non-US are encouraged to share their understanding of STEM needs and their approaches, experiences, successes, and shortcomings experienced along the various pathways leading to STEM excellence and strengthening a future workforce for our industry.

### **Lead Organizer:**

Kristen Ellis, US DOE, V: +1 202-586-5810, [kristen.ellis@hq.doe.gov](mailto:kristen.ellis@hq.doe.gov)

### **Additional Organizers:**

George M. Taylor, Banda Group International, V: +1 865-310-2841, [george.taylor@bandagroupintl.com](mailto:george.taylor@bandagroupintl.com)

## **10.3 Programs and Initiatives that Foster STEM Learning**

This topic accepts abstracts on proactive and novel programs and initiatives for engaging K-12 students in STEM-disciplines with a view to developing a future workforce prepared to work in and forward in the nuclear industry and related energy

sectors. This topic explores all aspects of educational programs and outreach – from classroom curricula to summer camps, isolated events, newsletters, and webcasts – that pique the curiosity of young students and attract them to STEM-based careers. The objective is to capture various perspectives from administrative and in-classroom educators, technical subject matter experts, project and community-relations personnel, and technical organizations with active public-information/educational programs. This topic highlights approaches that have been both successful and can be applied by others.

**Lead Organizer:**

Ann Riedesel, Fluor, V: +1 208-569-6320, [ann.riedesel@fluorgov.com](mailto:ann.riedesel@fluorgov.com)

**Additional Organizers:**

Kristen Ellis, US DOE, V: +1 202-586-5810, [kristen.ellis@hq.doe.gov](mailto:kristen.ellis@hq.doe.gov)

**R10.1 abc Panel: Global STEM Initiatives**

**Lead Organizer:**

Judith Connell, Fluor, V: 509-531-4484, [Judy.Connell@fluorgov.com](mailto:Judy.Connell@fluorgov.com)

**Additional Organizers:**

Kristen Ellis, US DOE, V: +1 202-586-5810, [kristen.ellis@hq.doe.gov](mailto:kristen.ellis@hq.doe.gov)

**R10.2 DOE National Labs and Academia Successful Partnerships in the Development and Training of STEM Workforce**

The panel will focus on successful partnerships between the US DOE National Labs and academic institutions in the development of the 21st Century STEM workforce. Invited panel members will describe the various models used for the training of STEM students, research partnership with national labs and transition students onto the DOE/National labs workforce. Other professional training programs will also be showcased and presented.

**Lead Organizer:**

Leonel Lagos, Applied Research Center - FIU, V: 305-348-1810, [lagosl@fiu.edu](mailto:lagosl@fiu.edu)

**Additional Organizers:**

Jen Wohlwend, Savannah River National Laboratory, V: +1 803-617-8239, [Jennifer.Wohlwend@srnl.doe.gov](mailto:Jennifer.Wohlwend@srnl.doe.gov)

Rick Demmer, MARCOM, V: 208-589-4858, [dcondude@gmail.com](mailto:dcondude@gmail.com)

**R10.3 DOE Minority Serving Institution Partnership Program (MSIPP)**

This session will focus on the US DOE Minority Serving Institution Partnership Program (MSIPP). MSIPP is designed to build a sustainable pipeline between the DOE sites/labs and minority-serving institutions in STEM disciplines and bring a heightened awareness of the DOE Office of Environmental Management mission to institutions with a common interest in STEM research fields. Currently, MSIPP supports 7 programs including competitive research awards, summer internships, the Savannah River Environmental Services Field Station program, a post-doctoral research program, a graduate fellowship program, and grant opportunities through the EM/MSI shared interest research partnership program and technology curriculum and professional development program. These opportunities bring together institutions that share interests in STEM research areas and who can utilize the facilities and technology available at DOE labs and sites.

**Additional Organizers:**

Genia McKinley, US DOE, V: +1 202-586-6613, [genia.mckinley@em.doe.gov](mailto:genia.mckinley@em.doe.gov)

Vivian Holloway, Savannah River National Laboratory, V: +1 803-646-2670, [vivian.holloway@srnl.doe.gov](mailto:vivian.holloway@srnl.doe.gov)

**11 - ADVANCED NUCLEAR REACTORS FOR ELECTRICAL POWER AND OTHER APPLICATIONS (ANR)**

John Mathieson, Consultant (Lead Co-Chair), V: +44 7557 394896, [jmathieson@wmarizona.org](mailto:jmathieson@wmarizona.org)

Mark Lewis, EnergySolutions (Co-Chair), V: 803-960-3619, [mslewis@energysolutions.com](mailto:mslewis@energysolutions.com)

Tjalle Vandergraaf, Retired (Co-Chair), V: 2047538402, [ttveiv@mts.net](mailto:ttveiv@mts.net)

This Track includes advanced nuclear reactors for electrical power and other applications. Other applications could include seawater desalination, district Heating, hydrogen gas production, industrial process heat & power supply, fuel synthesis, etc.. The Track includes advancements in research, development, and deployment of advanced reactor technologies and programs addressing safety, technical, economics, security, regulations, socio-political and environmental needs. Potential sessions focused on recognizing technical barriers and expanding designs to create improvements in current existing reactor designs. Specific advanced reactor concepts discussed include the traditional base load large reactors, Small Modular Reactors

(SMRs), microreactors and mobile/ barge/ ship reactors. It also includes optimizing the economics by reducing costs from fabrication through construction to operations to D&D/ Used Nuclear Fuel and waste disposal. **This new Track is seeking additional Topic/Session Organizers.**

### **11.0 Advanced Nuclear Reactors for Electrical Power and Other Applications - Non-specified Abstracts**

**Lead Organizer:**

John Mathieson, Consultant, V: +44 7557 394896, [jmathieson@wmarizona.org](mailto:jmathieson@wmarizona.org)

### **11.1 Advanced Nuclear Reactors for Electrical Power and Other Applications - Posters**

**Lead Organizer:**

Tjalle Vandergraaf, Retired, V: 2047538402, [tveiv@mts.net](mailto:tveiv@mts.net)

### **11.2 Advanced Nuclear Reactors for Electrical Power Production**

This Topic accepts abstracts on advanced nuclear reactor designs and concepts for electrical power production. It includes advancements in research, development, and deployment of advanced reactor technologies and programs addressing safety, technical, economics, security, and licensing and regulation. Specific advanced reactor concepts discussed include the traditional base load electrical power reactors.

**Lead Organizer:**

Myron Kaczmarek, Holtec Government Services, V: +1 856-797-0900 ext. 3657, [m.kaczmarek@holtec.com](mailto:m.kaczmarek@holtec.com)

**Additional Organizers:**

John Scaglione, Spectra Tech, Inc, V: +1 702-845-4877, [jscaglione@spectratechinc.com](mailto:jscaglione@spectratechinc.com)

### **11.3 Applications of Advanced Nuclear Reactors Including Fusion to Non-Power Production**

This Topic accepts abstracts on advanced nuclear reactors (including Fusion technology) for applications other than power production such as seawater desalination, district heating, hydrogen gas production, industrial process heat and power supply, fuel synthesis, nuclear batteries, etc. It includes advancements in research, development, and deployment of advanced reactor technologies and programs addressing safety, technical, economics, security, licensing and regulation.

**Lead Organizer:**

Mark Lewis, EnergySolutions, V: 803-960-3619, [mlewis@energysolutions.com](mailto:mlewis@energysolutions.com)

**Additional Organizers:**

Robert Miklos, Idaho National Laboratory, V: +1 208-881-8042, [robert.miklos@inl.gov](mailto:robert.miklos@inl.gov)

Kevin Taylor, AECOM, V: +1 864-517-5639, [kevin.taylor@aecom.com](mailto:kevin.taylor@aecom.com)

### **11.4 Advanced Micro-Reactors and Mobile/ Barge/ Ship Reactors - Electrical Power and Other Applications**

This Topic accepts abstracts on micro and other tiny reactors for electrical power and other applications. It includes advancements in research, development, and deployment of advanced reactor technologies and programs addressing safety, technical, economics, and environmental needs. Potential sessions focused on recognizing technical barriers and expanding designs to provide clean (green) energy and other reactor applications. It also includes optimizing the economics by reducing costs from fabrication through construction to operations to D&D/ Used Nuclear Fuel and waste disposal.

**Additional Organizers:**

Robert Miklos, Idaho National Laboratory, V: +1 208-881-8042, [robert.miklos@inl.gov](mailto:robert.miklos@inl.gov)

### **R11.1 Advancements in Advanced Reactor Concepts - A Vendor's Perspective**

This session focuses on advancements in research, development, and deployment of advanced reactor technologies and programs addressing safety, technical, economics, and environmental needs. Panelist discussion will focus on addressing technical barriers and expanding clean energy production through innovative design improvements. Panelists from reactor vendors and key supply chain industries will share their experiences of the benefits and challenges of advanced technologies, including improved economics from fabrication to operations.

**Lead Organizer:**

Sal Golub, US DOE, V: +1 301-448-6031, [sal.golub@hq.doe.gov](mailto:sal.golub@hq.doe.gov)

**Additional Organizers:**

Myron Kaczmarek, Holtec Government Services, V: +1 856-797-0900 ext. 3657, [m.kaczmarek@holtec.com](mailto:m.kaczmarek@holtec.com)

**R11.2 Advanced Nuclear Reactors for Electrical Power and Other Applications Around the World**

This panel will bring together national regulators from countries adopting, or thinking of adopting, advanced nuclear technologies, together with representatives of the IAEA and NEA. Advanced nuclear technologies bring many safety benefits over their larger more conventional counterparts, but it is recognized that current regulations and licensing approaches may need to be adapted and become more risk informed and better fit for purpose. Further licensing challenges may arise if reactors are exported from one jurisdiction to another. Other topics for discussion will include non-proliferation, fuel leasing, fuel cycle issues etc. Of particular interest will be developments in the IAEA's Initiative on Regulatory and Industrial Harmonization.

**Lead Organizer:**

Mark Lewis, EnergySolutions, V: 803-960-3619, [mlewis@energysolutions.com](mailto:mlewis@energysolutions.com)

**Additional Organizers:**

John Mathieson, Consultant, V: +44 7557 394896, [jmathieson@wmarizona.org](mailto:jmathieson@wmarizona.org)

Tjalle Vandergraaf, Retired, V: 2047538402, [tveiv@mts.net](mailto:tveiv@mts.net)

**R11.3 The Fusion Breakthrough**

This session will focus on recent breakthroughs and progress in bringing nuclear Fusion to reality. Fusion is a currently highly published topic in our industry. The world has a very publicized interest in energy technologies that are efficient and clean. A panel of global experts will focus on the recent progress and the challenges ahead with insights into the key factors and timelines.

**Lead Organizer:**

Susan Stiger, Bechtel, V: 208-757-7395, [sgstiger@bechtel.com](mailto:sgstiger@bechtel.com)

**Additional Organizers:**

Angela Jones, Wood plc, V: +1 865-621-5623, [angie.jones@woodplc.com](mailto:angie.jones@woodplc.com)

Robert Miklos, Idaho National Laboratory, V: +1 208-881-8042, [robert.miklos@inl.gov](mailto:robert.miklos@inl.gov)

Christoph Gastl, IAEA, V: +431260025884, [c.gastl@iaea.org](mailto:c.gastl@iaea.org)

**R11.4 Reusing DOE sites for Energy Production – How To and Lessons Learned**

This session will explore current and future plans for demonstrating and deploying new nuclear energy projects across the DOE complex and will identify opportunities to work across DOE program offices for a more a holistic, place-based approach.

**Lead Organizer:**

Kara Colton, Energy Communities Alliance, V: +7038643520, [kara.colton@energyca.org](mailto:kara.colton@energyca.org)

**12 - MISCELLANEOUS AND NON-SPECIFIED ABSTRACTS PENDING TOPIC OR TRACK ASSIGNMENT**

This Track serves two independent miscellaneous functions (MISC). First, authors unsure of the best topic number can assign their abstract to Track 12 where it will be reviewed and reassigned by the WM PAC Chair to the appropriate topic. The second function is to assimilate late abstracts for the only WM poster topic (12.1) besides the Student Poster topic (1.2) that doesn't require a full paper. It will also accept abstracts where the authors do not want to prepare a paper or are delinquent in meeting the deadlines. All other poster topics will require an accompanying paper.

**12.0 Miscellaneous and Non-specified Abstracts Pending Topic or Track Assignment**

This topic is for authors unsure of the best topic number. They can assign their abstract to Track 12.0 where it will be reviewed and reassigned by the WM PAC Chair to the appropriate topic.

**Lead Organizer:**

Gary Benda, WM Symposia, Inc., V: +1 803-317-1116, [gbenda@wmsym.org](mailto:gbenda@wmsym.org)

### **12.1 Non-Paper Poster Topic for Emerging Issues and Late Abstracts**

This topic accepts abstracts for the non-paper, poster topic held on Wednesday afternoon and on Thursday morning of the WM Conference. Authors must clearly mark the abstract as a “non-paper, poster topic” or the abstract will be assigned to one of the other eleven Tracks’ Poster Topics. Abstracts will be accepted in topic 12.1 until Friday, January 12, 2024. Any abstract or paper in the other eleven tracks where the author may have missed the delivery deadlines may also be re-assigned to this non-paper, poster topic at the discretion of the affected Lead Organizer.

#### **Lead Organizer:**

Gary Benda, WM Symposia, Inc., V: +1 803-317-1116, [gbenda@wmsym.org](mailto:gbenda@wmsym.org)

#### **Additional Organizers:**

Al Freitag, Globalpundits Technology, V: 914-475-1170, [aafreita@aol.com](mailto:aafreita@aol.com)



Acronyms are US unless noted otherwise

**\*\* (Commonly Used by WMS Attendees and Acceptable for Use in Presentation Titles Without Spelling Out)**

**A**

**ACRS** Advisory Committee on Reactor Safety  
**ADA** Americans with Disabilities Act  
**APDAS** Associate Principal Deputy Assistant Secretary  
**AEA** Atomic Energy Agency or the Atomic Energy Act of 1954  
**\*\*AECL** Atomic Energy of Canada Limited\*  
**AFCEE** Airforce Center for Engineering and the Environment  
**AFR** Away-From-Reactor Storage  
**\*\*ALARA** As Low As Reasonably Achievable  
**\*\*ANDRA** Agence nationale pour la gestion des déchets radioactifs (French National Radioactive Waste Management Agency) \*  
**\*\*ANL** Argonne National Laboratory  
**\*\*ANS** American Nuclear Society  
**\*\*ANSTO** Australian Nuclear Science and Technology Organization\*  
**ARM** Accelerator-Produced Radioactive Material  
**\*\*ASME** American Society of Mechanical Engineers  
**ASTM** American Society for Testing Materials

**B**

**BfS** Bundesamt für Strahlenschutz (German Federal Office of Radiation Protection) \*  
**\*\*BNL** Brookhaven National Laboratory  
**BRC** Below Regulatory Concern or Blue-Ribbon Commission on America's Nuclear Future  
**BTP** NRC Branch Technical Position  
**\*\*BWR** Boiling Water Reactor

**C**

**CST&D** Communications, Stakeholder & Indigenous Engagement and Professional Development  
**\*\*CEA** Commissariat à l'Énergie Atomique (French Atomic Energy Commission) \*  
**\*\*CERCLA** Comprehensive Environmental Response, Compensation and Liability Act  
**CEU** Continuing Education Unit  
**CFR** Code of Federal Regulations  
**\*\*CH-TRU** Contact-Handled Transuranic Radioactive Waste  
**\*\*CNL** Canadian Nuclear Laboratories\*  
**CNSC** Canadian Nuclear Safety Commission\*  
**COVRA** Dutch Nuclear Waste Storage Facility\*  
**CPP** Crosscutting Policies & Programs  
**\*\*CPCCo** Central Plateau Cleanup Company

**D**

**\*\*D&D** Decontamination & Decommissioning  
**DAS** Deputy Assistant Secretary

**\*\*DAW** Dry Activated Waste  
**DBE** DBE TECHNOLOGY GmbH  
**DCS** Dry Container Storage  
**DNFSB** Defense Nuclear Facility Safety Board  
**\*\*DOD** US Department of Defense  
**\*\*DOE** US Department of Energy  
**\*\*DOT** US Department of Transportation  
**DGR** Deep Geological Repository  
**DRUM** Defense Related Uranium Mines  
**\*\*DU** Depleted Uranium

**\*\*DWPf** Defense Waste Processing Facility

**E**

**\*\*EC** European Commission\*  
**\*\*EDF** Electricite' de France (France Nuclear Utility)\*  
**EDRAM** International Association for Environmentally Safe Disposal of Radioactive Materials  
**EFCOG** Energy Facilities Contractors Group  
**EIA** U.S. Energy Information Administration  
**\*\*EIS** Environmental Impact Statement  
**\*\*EM** Environmental Management  
**ENEA** National Agency for New Technologies, Energy and Environment (Italy)\*  
**ENRESA** Empresa Nacional de Residuos Radiactivos (Spain) \*  
**\*\*EPA** US Environmental Protection Agency  
**\*\*EPRI** Electric Power Research Institute  
**\*\*ER** Environmental Remediation  
**\*\*EU** European Union\*  
**\*\*ES&H** Environment, Safety & Health

**F/G**

**\*\*FUSRAP** Formerly Utilized Sites Remedial Action Program  
**\*\*GAO** United States Government Accountability Office  
**GIS** Geographical Information System  
**GNEP** Global Nuclear Energy Partnership  
**\*\*GOCO** Government Owned/Contractor Operated  
**GTCC** Greater Than Class C Low-Level Radioactive Waste

**H**

**\*\*H&S** Health and Safety  
**\*\*HEPA** High Efficiency Particulate Air  
**\*\*HEU** Highly Enriched Uranium  
**\*\*HLW** High-Level Radioactive Waste

**I**

**\*\*IAEA** International Atomic Energy Agency (Austria)\*  
**\*\*ICRP** International Commission on Radiological Protection  
**\*\*IFNEC** International Framework for Nuclear Energy Cooperation \*  
**\*\*ILW** Intermediate Level Radioactive Waste  
**\*\*INL** Idaho National Laboratory

**\*\*IPAC International Program Advisory Committee**  
**IPSN Institute de Protection et de Surete (Institute for Protection and Nuclear Safety - France)\***  
**ISFSI Independent Spent Fuel Storage installation**  
**ITRC Interstate Technology Roundtable Commission**  
**IWTU Integrated Waste Treatment Unit**

**J/K**

**\*\*JAEA Japan Atomic Energy Agency\***  
**\*\*KAERI Korea Atomic Energy Research Institute\***

**L**

**\*\*LAW Low-Activity Radioactive Waste**  
**\*\*LANL Los Alamos National Laboratory**  
**\*\*LBNL Lawrence Berkeley National Laboratory**  
**LCA Life-cycle Assessment**  
**LFRG US DOE Low-Level Waste Disposal Facility Federal Review Group**  
**\*\*LEU Low Enriched Uranium**  
**\*\*LL/ILW Low- and Intermediate-Level Radioactive Waste**  
**\*\*LLNL Lawrence Livermore National Laboratory**  
**\*\*LLRW/LLW Low-Level Radioactive Waste**  
**\*\*LM Office of Legacy Management, US DOE**  
**\*\*LSA Low Specific Radioactive Activity**  
**LTM Long Term Monitoring**  
**\*\*LWR Light-Water Reactor**

**M**

**METI Ministry of Economy, Trade and Industry (Japan)\***  
**M&I Management & Integration**  
**M&O Management & Operation**  
**\*\*MRS Monitored Retrievable Storage**  
**\*\*MW Mixed Hazardous and Radioactive Wastes**  
**MSIPP – DOE Minority Serving Institution Partnership Program**

**N**

**\*\*NAGRA National Cooperative for the Disposal of Radioactive Waste (Switzerland)\***  
**\*\*NCRP National Council on Radiation Protection**  
**\*\*NDA Nuclear Decommissioning Authority**  
**NDAA National Defense Authorization Act of 2005**  
**NDF Nuclear Damage Compensation and Decommissioning Facilitation Corporation of Japan\***  
**\*\*NEA Nuclear Energy Agency (France)\***  
**\*\*NEI Nuclear Energy Institute**  
**\*\*NEPA National Environmental Policy Act of 1969**  
**NFDI National Facility Disposition Initiative**  
**\*\*NNL National Nuclear Laboratory (UK)\***  
**\*\*NNSA National Nuclear Security Administration**  
**\*\*NNSS Nevada National Security Site**  
**\*\*NORM Naturally Occurring Radioactive Material**  
**\*\*NPP Nuclear Power Plant**  
**NRC US Nuclear Regulatory Commission**  
**NUMO Nuclear Waste Management Organization of Japan\***  
**NWMO Nuclear Waste Management Organization (Canada)\***  
**NWPA Nuclear Waste Policy Act of 1982**

**NWPAA Nuclear Waste Policy Amendments Act of 1987**  
**NWTRB Nuclear Waste Technical Review Board**

**O**

**\*\*OECD Organization for Economic Cooperation & Development (France)\***  
**OPG Ontario Power Generation Inc.\***  
**\*\*ORNL Oak Ridge National Laboratory**

**P**

**\*\*P&T Partitioning and Transmutation**  
**PA Performance Assessment**  
**PAC Program Advisory Committee**  
**PAT Packaging and Transportation**  
**PBO Parent Body Organization for Sellafield Ltd\***  
**PCC Phoenix Convention Center**  
**PFP Plutonium Finishing Plant**  
**PHAI Port Hope Area Initiative (Canada)\***  
**\*\*PNNL Pacific Northwest National Laboratory**  
**PM Particulate Matter or Project Manager**  
**PRA Probabilistic Risk Analysis**  
**\*\*PRG Preliminary Remediation Goal**  
**PROC People's Republic of China\***  
**PURAM Public Limited Company for Radioactive Waste Management (Hungary)\***  
**\*\*PWR Pressurized Water Reactor**

**Q/R**

**\*\*QA Quality Assurance**  
**QAPP Quality Assurance Program Plan**  
**QC Quality Control**  
**\*\*R&D Research and Development**  
**RATA Lithuania State Enterprise Radioactive Waste Management Agency\***  
**RAWRA Czech Radioactive Waste Repository Authority\***  
**\*\*RCRA Resource Conservation and Recovery Act of 1976**  
**RDD Radiological Dispersion Devices**  
**\*\*R, D&D Research, Development and Demonstration**  
**\*\*RESRAD RESidual RADioactivity**  
**\*\*RH-TRU Remote-Handled Transuranic Radioactive Waste**  
**RI/FS Remedial Investigation/Feasibility Study**  
**\*\*RK&M Records, Knowledge and Memory**  
**ROK Republic of Korea\***  
**RPV Reactor Pressure Vessel**

**S**

**SAR Safety Analysis Report**  
**SARP Safety Analysis Reports for Packaging**  
**\*\*SFEN Société Française d'Énergie Nucléaire (French Nuclear Society) \***  
**SKB Swedish Nuclear Fuel and Waste Mgmt. Co\***  
**SLC Site License Companies -UK**  
**\*\*SMRs Small Modular Reactors**  
**\*\*SNF Spent Nuclear Fuel**  
**\*\*SNL Sandia National Laboratories**  
**\*\*SNM Special Nuclear Material**  
**SOGIN - Società Gestione Impianti Nucleari (Italian National Radioactive Waste Management Agency)\***

**SPAs Special Packaging Authorizations**  
**SPRU US DOE Separations Process Research Unit**  
**\*\*SRMC Savannah River Mission Completion**  
**\*\*SRNL Savannah River National Laboratory**  
**\*\*SRNS Savannah River Nuclear Solutions**  
**SRW Solid Radioactive Waste**  
**ST Special Topics including Security, Safety & Safeguards**  
**\*\*STEM Science, Technology, Engineering, Math**  
**SVE Soil Vapor Extraction**

**T**

**\*\*TENORM Technologically Enhanced Naturally Occurring Radioactive Material**  
**TER – US NRC Technical Evaluation Report**  
**TEPCO Tokyo Electric Power Company\***  
**\*\*TRU Transuranic (elements with atomic number > than 92)**  
**\*\*TRUPACT Transuranic Waste Package Transporter**  
**TSD Treatment Storage and Disposal**

**U/V**

**\*\*UK United Kingdom**  
**ULP Uranium Leasing Program**  
**\*\*US/USA United States of America**  
**\*\*USACE US Army Corps of Engineers**  
**USAF US Air Force**  
**\*\*US DOD US Department of Defense**  
**\*\*US DOE US Department of Energy**  
**\*\*US DOT US Department of Transportation**  
**\*\*US EPA US Environmental Protection Agency**  
**\*\*US NRC US Nuclear Regulatory Commission**  
**\*\*UNF Used Nuclear Fuel**  
**\*\*VLLW Very Low-Level Waste**

**W/Y**

**\*\*WAC Waste Acceptance Criteria**  
**WD Waste Determination**  
**WERC Waste-Management Education & Research Consortium**  
**\*\*WIPP Waste Isolation Pilot Plant**  
**WIR Waste Incidental to Reprocessing**  
**\*\*WM Waste Management**  
**\*\*WMS Waste Management Symposia, Inc.**  
**WRAP Waste Receiving and Processing**  
**WS Wet Storage**  
**WTP Waste Treatment Plant at Hanford**  
**WVDP West Valley Demonstration Project**  
**YM Yucca Mountain**