

ANS® Winter Meeting & Expo 2022

International High Level Radioactive Waste Management Conference

Sylvia Saltzstein *General Chair*

 **ANS® IHLRWM**
**International High-Level Radioactive
Waste Management Conference 2022**

Sandia National Laboratories is a multimission laboratory managed and operated by National Technology & Engineering Solutions of Sandia, LLC, a wholly owned subsidiary of Honeywell International Inc., for the U.S. Department of Energy's National Nuclear Security Administration under contract DE-NA0003525.

CLICK TO ADD SAND XXXX-XXXX

P

Thank you for participating!



**International High-Level Radioactive
Waste Management Conference 2022**

Organizers

General Chair	Sylvia Saltzstein (Sandia National Laboratories)
Program Chair:	Brady Hanson (Pacific Northwest National Laboratory)
Program Cochair:	Emily Stein (Sandia National Laboratories)
	Robert Howard (Pacific Northwest National Laboratory)

Thank you to the Organizing Teams!

Technical Sessions

Chair: Brady Hanson, Emily Stein, Rob Howard

International Collaborations:

Chairs: Hatice Akkurt & Jens Birkholzer

Plenary:

Chair: John Kessler

Short Courses

Chair: Scott Sanborn

Publicity

Chair: Rose Montgomery and Hatice Akkurt

Awards

Chair: Sven Bader

Banquets/Social:

Chair: Christina Leggett

Student and University Involvement:

Chair: Stylianos Chatzidakis

Join us for IHLRWM Conference 2025!

Thank you to the authors!

Breakdown by topic:

Site Selection/Characterization	14
Storage and Transportation	62
Repository Systems	56
Advanced Reactor Fuel Cycles	11
Security/Safeguards	4
Emerging Waste Issues	6
Nuclear Energy University Programs	2

348 paid attendees (109 at 2019 IHLRWM Conference)
155 papers presented
202 Abstracts

Thank you to the paper reviewers!

R.A. Borelli
Yifeng Wang
David Hambley
Christoph Gastl
Efstratios (Stratis) Vomvoris
John Kessler
Rob Howard
Brady Hanson
Daniel Bullen
Matthias Jaunich
Emily Stein
Steven Ross
Ray Clark
Ed Lahoda

Chris Camphouse
Shulan Xu
Patricia Paviet
Stephen T. Lam
Phillip Stauffer
Tara LaForce
Harish Reddy Gadey
Kris Kuhlman
Milos Ivo Atz
Steve Skutnik
Rose Montgomery
Daniel Ogg
Christina Leggett
Kaushik Banerjee

Yoon Chang
Steven Curtis
Michael Lico
Scott Sanborn
Robby Joseph
Kurt Harris
Hatice Akkurt
Aman Gupta
Michelle Bourret
Ricardo Torres
Michael Smith
Sven Bader

Thank you for the Short Courses!

Very popular!

- All are full (45 each) and the waiting lists are full (10 each)

Sunday

Spent Nuclear Fuel and Related Systems Analyses Using UNF-ST&DARDS

- Kaushik Banerjee

Geologic Disposal Safety Assessment (GDSA) Framework

- Laura Swiler

Knowledge Management for a Nuclear Waste Management (NWM) Organization

- Janette Meacham

Wednesday

START (Stakeholder Tool for Assessing Radioactive Transportation)

- Mark Abkowitz

A Lot Has Changed Since the IHLRWM Conference 2019!

- Exciting Progress in Finland, Sweden, Switzerland, Canada, and More!
- 80+ New Reactor Designs
- Accident Tolerant Fuel
- HALEU Activity with Transportation Opportunities
- Consolidated Storage Effort at the U.S. Department of Energy
- New Community Outreach
- Social Science Initiatives

We have talks on each of these topics!

General Conference Set Up

We have three rooms:

- Mesquite
 - Generally Storage and Transportation
- Lantana
 - Generally Disposal
- Noble (Exciting Stuff)
 - Site Selection/Characterization/Integration
 - Advanced Reactors/Fuels/Fuel Cycles
 - Advanced Monitoring and Characterization

Wednesday Panel: Building and Maintaining Collaborative Partnerships Between Social Scientists and Technical Staff for Sustainable Solutions to Radioactive Waste Management

Wednesday, November 16, 2022 | 8:00–9:45AM MST | Honeysuckle

MODERATOR



Dr. Kuhika Gupta
Univ. of Oklahoma

Sustainable solutions for long-term management and eventual disposal of spent nuclear fuel and high-level radioactive waste depend on the interplay among the social, political, and technical realms. The goal of this panel is to discover constructive ways in which social scientists and technical staff can work together to advance solutions that address all aspects of the problem in a collaborative manner. The discussion will highlight the history of interactions between social scientists and technical staff in the context of past disposal programs in the US; what roles different engineering, physical science, and social science disciplines have played and can play; and how to address emerging priorities like environmental justice.

PANELISTS



Dr. Sharlissa Moore
Pacific Northwest National Laboratory



Dr. Hank C. Jenkins-Smith
Univ. of Oklahoma



Dr. Evaristo J. "Tito" Bonano
NAC International, Inc.



Dr. Monica C Regalbuto
Idaho National Laboratory



Dr. Aditi Verma
Univ. of Michigan

Thursday Panel: Cool New Reactors Coming to You Soon! But What about the Waste?

Thursday, November 17, 2022 | 3:15–5:00PM MST | Mesquite

PANELISTS



Bob Ledoux
ARPA-E



Kim Petry
DOE:NE



Monica C Regalbuto
INL



Sven Bader
Orano



Doug Ammerman
SNL



Ethan Bates
Deep Isolation

The management of advanced reactor waste and HALEU fuels will have some similarities to managing SNF from the current LWR fleet, but the new form factors and uranium assays will also require nuanced adjustments to cask designs, certifications, and disposal requirements. It will likely be prudent to identify these differences as early as possible so that accommodations can be made for the differences. This panel will also discuss what changes might be necessary to the existing infrastructure and what is being done to prepare for future storage, shipments, and disposal.

Evening Social and Awards Ceremony! Please Come!

Kaibab |Wednesday 6:30–8:30PM MST

Awards!

Drinks!

Nuclear Trivia Contest!

Networking Bingo!

Music!

Food!

Plenary: It Takes Everyone! Melding Social, Political, and Physical Sciences for a Successful Radioactive Waste Management Program

Tuesday, November 15, 2022 | 8:00–9:45AM MST | Honeysuckle

Hear from and join the discussion with the international leaders who have been successful merging the social, political, and physical science areas of communication in nuclear waste management

International High-Level Radioactive Waste Management 2022 Plenary

International High-Level Radioactive Waste Management Conference

[Itinerary](#)

Plenary Session

Tuesday, November 15, 2022 | 8:00–9:45AM MST | Honeysuckle

SPEAKERS



David Victor, PhD
Professor of Innovation and Public Policy
University of California, San Diego



Kim Petry, PhD
Deputy Assistant Secretary for Spent Fuel and Waste Disposition
US Department of Energy



Erika Holt, PhD
Co-Coordinator of the Project "PREDIS: PRE-DISposal management of radioactive waste"
VTT Technical Research Centre of Finland Ltd.



Dr. Cha Sung Soo
President & CEO
KORAD (Korea Radioactive Waste Agency)

 **ANS** IHLRWM
International High-Level Radioactive Waste Management Conference 2022

 **ANS**

Thank You!