WM2023 Papers of Note
This award is based solely on the paper submitted, not its poster or oral presentation. The Paper Reviewers determine eligibility and then the relevant Track Co-Chairs, and subject matter experts, select their Track’s “Paper of Note” There were 28 Papers selected from WM2023.


**Paper# 23311 - Track 2** - “Safety Approach Developed for the Control of the Fire Hazard at the Cigéo Deep Geological Disposal Facility in France” Authors: Jean-Michel Hoorelbeke, David Claudel, Francois Laumann, Maxime Foucard, Andrea

**Paper# 23402 - Track 2** - “Development of a Tank Dome Core Cutting System” Authors: Shannon Callahan, Peter Rhoades, Ben Hemphill, James Fisher Technologies LLC; Joan Connolly, Tyler Goodnight, Washington River Protection Solutions

**Paper# 23302 - Track 2** - “Borosilicate Glass HLW Stability During Long-term Interim Storage”, Authors: Vincent Janin, Céline Roussel, Victor Piovesan, Orano; Sylvain Peugeot, CEA Marcoule


**Paper# 23473 - Track 2** - “Next-Generation Solvent for Caustic-Side Solvent Extraction of Cesium from Supernatant Tank Waste”, Authors: Bruce Moyer, Nathan Bessen, Oak Ridge National Laboratory

**Paper# 23559 - Track 2** - “High-Level Waste Glass Processing over Broad Range of Alternative Feed Compositions”, Authors: John Vienna, Xiaolan Lu, Pavel Ferkl, Jose Marcial, Matthew S. Fountain, Pacific Northwest National Laboratory; Michaela Trinidad, Robert Hanson, Bechtel National; Michael Britton, Laura Cree, Washington River Protection Solutions; Wahed Abdul, US DOE

**Paper# 23370 - Track 2** - “Thermal Analysis of Aged Nitric Acid-soaked Kitty Litter in TRU Waste Drums”, Authors: Michael Hobbs, Michael Kaneshige, David Rosenberg, Sandia National Laboratories; Phillip Britt, Oak Ridge National Laboratory; David Hobbs, Consultant, Michael Minette, Jon Schwantes, Pacific Northwest National Laboratory; Jessica Mintz, Audrey Williams, Lawrence Livermore National Laboratory; Frank Pennebaker, Robert Pierce, Savannah River National Laboratory

**Paper# 23048 - Track 3** - “Developing a Single-Shell Tank Performance Assessment Model for Hanford Tank Farms” Authors: Kearn Lee, David Watson, Marcel Bergeron, Washington River Protection Solutions; Mart Oostrom, Trevor Budge, INTERA, Inc.

**Paper# 23137 - Track 3** - “Terminal Potassium Phosphate Cement: A Promising Binder for the Conditioning of Aluminum-Magnesium Alloys Waste” Authors: Gabriel Poras, Hugo Danis, Celine Cauf dit Courmes, Pascal Antonucci, Stephane Perrin, CEA; Celine Cannes, Sylvie Delpech, Université Paris-Saclay, CNRS/IN2P3, IJCLab


**Paper# 23493 - Track 3** - “Reclassification of Intermediate Level Waste Employing the ANTECH UDASS” Authors: John Mason, Marc Looman, Antony Towner, Henry Turner, Matt Piotrowski, ANTECH Corporation; Nick Troughton, Alan Lewis, A.N. Technology Ltd.


**Paper# 23539 - Track 4** - “Versatile, Innovative Modular Water Treatment Systems” Authors: Ben Garrett, Paul Sylvester, Nicephore Bonnet, Jean-christophe Piroux, Veolia Nuclear Solutions

**Paper# 23322 - Track 5** - “Gas Generation by Radiolysis in Nuclear Waste Packages: an Overview of the French Approach to the Safety Assessment” Authors: Elisa Leoni, Stephane Esnouf, Muriel Ferry, Frederic Chupin, Pierre Vigneron, CEA; Coralie Chapuzet, Victor Piovesan, Adrien Rooses, Orano

**Paper# 23008 - Track 6** - “A Feasibility Study on the use of Chrysoidine G for the in situ Detection of Common Fission Products in the Nuclear Industry” Authors: Thomas Johnson, Clint Sharrad, Simon Watson, University of Manchester; Thomas Carey, National Nuclear Laboratory
**Paper# 23068 - Track 6** - “Penetration of Cs and Sr into Cracked Dry Carbonated Mortar Considering the Contamination History of Fukushima Daiichi NPP” Authors: Kazuo Yamada, National Institute for Environmental Studies; Yasumasa Tojo, Hokkaido University; Haruka Aihara, Yoshikazu Koma, Japan Atomic Energy Agency; Sayuri Tomita, Hideyuki Hokora, Kazutoshi Shibuya, Taiheiyo Consultant Co.; Go Igarashi, Nagoya University; Yoshifumi Hosokawa, Taiheiyo Cement Corp; Ippei Maruyama, University of Tokyo

**Paper# 23131 - Track 6** - “UP1 Reprocessing Plant: Overview of the UP1 Spent Fuel Reprocessing Facility Dismantling Project in Marcoule” Authors: Jean-Francois Weiss, Pierre Marty, Hugues Chifflet, Erik Navarro, CEA

**Paper# 23091 - Track 7** - “Approaches and Tools to Assess Pump-and-Treat Performance and Endpoints” Authors: Christian Johnson, Inci Demirkanli, Pacific Northwest Laboratory

**Paper# 23100 - Track 7** - “Help is on the Way! Emerging Solutions for PFAS-Impacted Liquids” Authors: Jeff McDonough, Jason Hnatko, Jesse Guillet, Scott Lang, Jennifer Byrd, ERM

**Paper# 23328 - Track 7** - “Monitoring of Abandoned Mines and Structures Using a Handheld Laser Scanning System and Body Mounted Radiation Detectors” Authors: Matthew Ryan Tucker, Thomas Scott, University of Bristol

**Paper# 23183 - Track 8** - “Attract, Develop and Above all Retain Talent while Ensuring Generational Renewal” Author: Fabrice Puyade, Andra

**Paper# 23123 - Track 9** - “FDLPhysics-Informed Surrogate Modeling for Supporting Climate Resilience at Groundwater Contamination Sites” Authors: Aurelien Meray, FIU; Lijing Wang, Stanford University; Takuya Kurihama, University of Chicago; Ilijana Mastilovic, University of Wisconsin; Satyarth Praveen, Zexuan Xu, Lawrence Berkeley National Laboratory; Alexander Lavin, Pasteur Labs; Milad Memarzadeh, NASA Ames Research Center; Haruko Wainwright, Massachusetts Institute of Technology

**Paper# 23266 - Track 9** - “Heat-generating Radionuclide Waste Transport Modeling for Potential Borehole Disposal in the Negev Desert, Israel” Authors: Katherine Swager, Dolan Lucero, Hakim Boukhalfa, Michelle Bourret, Giles Boussod, Philip Stauffer, Los Alamos National Laboratory; Noa Salaban, Ofra Klein-BenDavid, NRC; Martin Dangelmayr, University of Wisconsin-Milwaukee; Rani Calvo, Itay Reznik, Ravid Rosenzweig, Geological Survey of Israel

**Paper# 23408 - Track 9** - “Leveraging Machine Learning and Imaging Technologies for Autonomous Container Inspection” Authors: Steven Lukow, Ross Lee, David Grow, Joseph Hafen, Jonathan Gigax, Los Alamos National Laboratory

**Paper# 23166 - Track 11** - “SMR LEU+ Very Long-Lived Once-through Fuel Cycle Spent Fuel Inventory Reduction Verification” Authors: John Bess, Gray Chang, Mie Hiruta, Julie Foster, JFoster and Associates, LLC

**Paper# 23362 - Track 11** - “Advances on LWRs Plutonium Multirecycling Solutions” Authors: Cecile Evans, Orano; Pierre-Henri Louf, Yolanda Rugama, Framatome; Guillaume Vaast, Herve Billat, EDF; Francois Sudreau, Christine Chabert, CEA

**Paper# 23432 - Track 11** - “Examining the Criticality and Dose Rate Aspects of Spent PBR Fuels in Storage and Transportation” Authors: John Wing, Ivan Maldonado, University of Tennessee; Gordon Peterson, Robert Joseph, Idaho National Laboratory