

SMRI SPRING 2023 DETROIT, MICHIGAN

April 23–26, 2023

TECHNICAL PAPERS SCHEDULE

Monday, 24 April 2023

Time	Author(s)	Organization(s)	Title
8:00	SMRI Business Meeting - SMRI Members Only (all members are welcome)		
10:00-10:30	Mid-Morning Break		
10:30	Stuart Buvhholz ¹ Evan Keffeler ¹ Uwe Dusterloh ²	RESPEC ¹ Clausthal University of Technology ²	Oral Research Report - RR2022-3 - Evaluate the Thermal Expansion Coefficient of Damaged Rock Salt and the Implications on the Thermal-Induced Stresses in Cyclic Storage Caverns
11:00	René Buzogany ¹ Heike Bernhardt ¹ Arnaud Réveillère ² Cyriane Fournier ² Samuel Voegel ³ Jai Duhan ³	DEEP.KBB ¹ Geostock ² RESPEC ³	Oral Research Report - RR2023-1 Hydrogen Storage in Salt Caverns, Stage 1: Current Status and Potential Future Topics for Research
11:30	Jug Manocha ¹ Mike Olesko ² Mike Edgar ³	Subterra Engineering ¹ Plains Midstream ² Pembina ³	Trends in Salt Cavern Storage in Ontario, Canada
12:00-13:30	Lunch Break		
13:30	Rocky Halbgewachs ¹ , R. Coleman Hale ² , Henry Seidlitz ² , Joel Nieland ³ , Patrick Seymour ² , Sergio Mendes ²	Sask Energy Inc ¹ Lonquist & Co. ² RESPEC ³	Pru'homme Cavern No.1 - Remediation & Reactivation of a Natural Gas Storage Cavern
14:00	Brandon Lampe ¹ Denghong Zhou ¹ Biao Qui ¹ Mike Rose ²	Agapito Associates, Inc. ¹ Williams ²	Unintended Brine Production in a Liquid-Hydrocarbon Storage Cavern
14:30	Andrew Warren ¹ Alan Purves ¹ Andreas Acht ¹ Hendrik Wilke ¹ Peter Amelung ²	Atkins ¹ NWKG ²	Hydrocarbon Contamination of Alternative Storage Media in Converted Oil Caverns
15:00-15:30	Mid-Afternoon Break		
15:30	Cyriane Fournier ¹ Florence Geneste ² Didier Floner ² Xavier Decotenie ³	Geostock ¹ ISCR ² Geosel ³	Redox Flow Battery: Application to Salt Cavern
16:00	Julie Shemeta	MEQ Geo Inc.	Borehole Microseismic Monitoring at Napoleonville Salt Dome, Louisiana: Nine Years of Microseismicity Associated with Brining and Storage Facilities on a Gulf Coast Salt Dome, USA
16:30	Timothy Masterlark ¹ Scyller Borglum ² Victoria Karnes ¹ Sophie Minas ² Nils Skaug ²	South Dakota School of Mines ¹ WSP USA ²	Satellite Radar Data and Machine Learning to Locate and Quantify Creep of a Salt cavern
17:00	End of Presentations for the Day		

The Technical Presentations will be initially broadcast in Eastern Standard Time (EST). The individual recording will then be available to virtual attendees to watch within a couple of days, if missed Live.

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TECHNICAL PAPERS SCHEDULE

Tuesday, 25 April 2023

Time	Author(s)	Organization(s)	Title
8:00	Tonya Ross Kyung Won Chang Steven R. Sobolik	Sandia National Laboratories	Feasibility Study to Evaluate Casing Deformation in Storage Caverns in Salt Dome
8:30	Sophie Minas	WSP USA	A Novel Method for Gas Cavern Mechanical Integrity Test Analysis
9:00	Dean Checkai P.E. Gavin Fleming P.E. Bilel Boukadi Jeff Knippa Robert Murray P.G.	Fluor Federal Petroleum Operations	Liquid Pressure Observation Test. An Alternative to Nitrogen Pressure Mechanical Integrity test
9:30	Todd R. Zeitler David B. Hart	Sandia National Laboratories	The Utility of Sonars and the SANSMIC Leaching Code for Monitoring Cavern Shape Development During the Recent Unprecedented Oil Volume Movements at the SPR
10:00 - 10:30 Mid-Morning Break			
10:30	Biao Qiu Michael Hardy	Agapito Associates, Inc.	An Overview of the Solution-Mining Methodologies for Potash Mining
11:00	Lennart Schimmrigk	UGS	100% Core Recovery in Potassium Salt Layers - Our Experience with MgCl ₂ -Mud-Systems
11:30	Rohola Hasanpour Dirk Zander-Schiebenhofer	DEEP.KBB	Impact of Pressure Change Rates on the Cavern Integrity-Thermo-Mechanical Analyses for the Storage Media Hydrogen and Natural Gas
12:00 - 13:30 Lunch Break			
13:30	Sheida Sheikheh Vamegh Rasouli Minou Rabiei	Energy and Petroleum Engineering Department, University of Wyoming	Comparison of Salt and Trona Caverns for Hydrogen Storage
14:00	April Stanley ¹ Lin Yuan ¹ Hassan Dehghanpour ¹ Alex Reed ²	University of Alberta ¹ Keyera Corporation ²	Measurement and Modeling of Helium Diffusion in Lotsberg Salt Cores As a Proxy to Evaluate Hydrogen Leakage
14:30	Rene Buzogany Ingo Meinecke	DEEP.KBB	Experiences from the First H ₂ -MITs in Northern Europe. Review of Design, Operational Experience and Results
15:00 - 15:30 Mid-Afternoon Break			
15:30	Dan Noack (Moderator) ¹ Paul Munsterman ² Donald Conley ³ Dave Marchese ⁴ Brian Rapp ⁵	Plains All American Pipeline ¹ Linde ² Sandia National Lab ³ Caliche ⁴ Texas Brine ⁵	Hydrogen Panel Discussion

17:30 End of Day, End of Technical Paper Sessions

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