



SMRI SPRING 2021

VIRTUAL CONFERENCE

General Schedule

<u>CENTRAL EUROPEAN TIME (CEST)</u>	<u>EASTERN TIME (EDT)</u>	<u>EVENT</u>	
SMRI Conference Assistance		dawnL@solutionmining.org (918-914-2499)	8 am EDT to 6 pm EDT
		jnadeau@solutionmining.org (518-579-6587)	7 am EDT to 6 pm EDT
Friday, 16 April			
4:00 PM – 8:00 PM	10:00 AM – 2:00 PM	SMRI Research Committee Meeting	
Saturday, 17 April			
4:00 PM – 7:00 PM	10:00 AM – 1:00 PM	SMRI Executive Committee Meeting	
Monday, 19 April			
2:00 PM – 11:00 PM	8:00 AM – 5:00 PM	Morning Technical Sessions Open	Presentations Taped and Viewable any period after the initial session broadcast
4:00 PM – 6:00 PM	10:00 AM – 12:00 PM	General Business Meeting (MEMBERS ONLY)	Live Event
6:00 PM – 7:00 PM	12:00 PM – 1:00 PM	Break	
8:00 PM – 9:15 PM	2:00 PM – 3:15 PM	Ice Breaker	Live Event
Tuesday, 20 April			
2:00 PM – 3:30 PM	8:00 AM – 9:30 AM	Morning Technical Session Opens	Presentations Taped and Viewable any period after the initial session broadcast
3:30 PM – 4:30 PM	9:30 AM – 10:30 AM	Break	
4:30 PM – 6:00 PM	10:30 AM -12:00 PM	Afternoon Technical Session Opens	
Wednesday, 21 April			
Day 1 and Day 2 sessions available to review			
4:00 PM – 6:00 PM	10:00 AM – 12:00 PM	Q&A Session for Monday Technical Presentations	Live Event
Thursday, 22 April			
4:00 PM – 5:45 PM	10:00 AM – 11:45 AM	Q&A Session for Tuesday Technical Presentations	Live Event
5:45 PM – 6:00 PM	11:45 AM – 12:00 PM	Conference Wrap Up	Live Event

The Technical Presentations will be initially broadcast based on the Technical Papers Schedule. The individual recording will then be available to attendees to watch at their pace throughout the day. SMRI Executive and Research Committees will be monitoring presentations in order to assist with questions. Monitors will be available Monday through Wednesday from 4:00 AM EDT (10am CEST) until 6:00 PM EDT (12am CEST).

SMRI SPRING 2021 VIRTUAL CONFERENCE

April 19-22, 2021

TECHNICAL PAPERS SCHEDULE

All Times are in Eastern Daylight Time (EDT) unless noted (CEST - Central European Summer Time)

Monday Morning, 19 April 2021			
Technical Paper Sessions			
Time	Author(s)	Organization(s)	Title
7:00	Birgit Horváth Alexander Raith. Dirk Zander-Schiebenhöfer	DEEP.KBB	The Geological Barrier—A Key Component of a Comprehensive Integrity Assessment
7:30	Benoît Brouard ¹ Vassily Zakharov ¹ Pierre Bérest ²	Brouard Consulting ¹ Ecole Polytechnique ²	Assessment of Cavern Stability: Cavern Clusters vs Single Cavern
8:00	Kevin Heiberger	Respec	Stress Analysis of a Production Casing for a Cavern Developed Beneath an Existing Cavern Field
8:30	Keith Jenkins Mark Villarreal Kristaq Mitrush	Enventure Global Technology	Addressing Cavern Sealing and Cementing Issues using Solid Expandable Tubular Technology
9:00	Byoung Park	Sandia National Laboratories	Geomechanical Evaluation of the Stability of Abandoned Cavern 4 in Bayou Choctaw Salt Dome
9:30-10:00	BREAK		
10:00 16:00 CEST	Business Meeting		
12:00-13:00	LUNCH <i>Monday Afternoon</i>		
13:00	Dean Checkai. Robert Murray Gavin Fleming Mosunmola Ejike Bilel Boukadi Lauren Ramsey	Fluor Federal Petroleum Operations	Cavern Creep Closure and Volume Losses: Analysis of U.S. Strategic Petroleum Reserve Domal Salt Cavern Volume Losses During Static and Dynamic Conditions.
13:30	Pierre Bérest ¹ Benoît Brouard ² Grégoire Hévin ³ Arnaud Réveillère ⁴	Ecole Polytechnique ¹ Brouard Consulting ² Storengy ³ Geostock ⁴	Tightness of Salt Caverns for Hydrogen Storage
14:00 20:00 CEST	Ice Breaker		
15:30-16:00	BREAK		
16:00	Jay Evans ¹ Tom Shaw ²	Global Gas Group LLC ¹ LK Energy LLC ²	Storage of Hydrogen in Solution Mined Salt Caverns for Long-Duration Energy Storage
16:30	Roger Edgecombe ¹ Shelie Cascadden ² Julie Clarke ² Ian Scotland ¹ Chris Helly ¹ Marissa Whittaker ³ Luc Gravel ¹	RPS Energy ¹ Enbridge Gas Inc ² Nomad Geoservices Ltd. ³	Improving Gas Storage Deliverability Using 3D Seismic: A Case Study
17:00	Clemens Eichler ¹ H. Bernhardt ¹ R. Gjermundbo ² T. Mortensen ³	DEEP.KBB ¹ Hanover Energinet.dk ² Copenhagen Gas Storage Denmark ³ Lille Torup	Coupled Gas Filling and Flooding Process of Two Caverns
17:30	END FOR DAY		

The Technical Presentations will be initially broadcast in EDT. The individual recording will then be available to attendees to watch at their pace throughout the day. The Q&A session for Monday's papers will be held on Wednesday, 14 April.

SMRI SPRING 2021 VIRTUAL CONFERENCE

April 19-22, 2021

TECHNICAL PAPERS SCHEDULE

All Times are in Eastern Daylight Time (EDT) unless noted

Tuesday Morning, 20 April 2021

Technical Paper Sessions

Time	Author(s)	Organization(s)	Title
8:00	Todd Cash Paul W. Bieniawski	Enstor Gas LLC	Implementing an Environmental, Social and Governance (ESG) Program
8:30	Alan McArthur, William Lemons	ALMAC LLC	Potential Health Hazard to Workers from the Presence of Regulated TENORM on Gas Liquid Storage Caverns
9:00	Samuel Voegeli	Respec	Accuracy of Temperature Logging for Calculating Gas Inventories in Storage Caverns
9:30 - 10:00	BREAK		
10:00	Aurélien Soubeyran, Ahmed Rouabhi Christophe Coquelet	MINES Paris Tech	Effect of Carbon Dioxide Dissolution Into the Brine on the Storage Conditions
10:30	Pablo Rodriguez	EnStor	Effect of Heat Transfer on Gas Storage Cavern Operations
11:00	William M. Goodman		1920 To 1940 Were Transformative Years for the U.S. Salt Mining Industry: New Mines, New Methods and a Major New Market
11:30 - 13:00	LUNCH		
	<i>Tuesday Afternoon</i>		
13:00	Barry Roberts ¹ Anna Lord ¹ Drew Evans ²	Sandia National Laboratories ¹ , Geostock Sandia ²	West Hackberry Salt Dome Mapping Refinement
13:30	Brandon Schulte	WSP USA	Application of a Novel Plug and Abandonment Method in a US Gulf Salt Dome
14:00	Sophie Minas	WSP USA	The Instability of Salt Cavern Hanging Strings and Proposed Completion Modifications
16:30	END FOR DAY, END OF TECHNICAL PAPERS SESSIONS		

The Technical Presentations will be initially broadcast in EDT. The individual recording will then be available to attendees to watch at their pace throughout the day. The Q&A session for Tuesday's papers will be held on Thursday, 15 April.

SMRI SPRING 2021 VIRTUAL CONFERENCE

April 19–23, 2021

QUESTION & ANSWER SESSION SCHEDULE

All Q&A Sessions are LIVE

Q & A SESSION, WEDNESDAY 21 APRIL 2021

Technical Paper Sessions			
Time	Author(s)	Organization(s)	Title
16:00 CEST (10:00 EDT)	Birgit Horváth Alexander Raith Dirk Zander-Schiebenhöfer	DEEP.KBB	The Geological Barrier—A Key Component of a Comprehensive Integrity Assessment
16:10 CEST (10:10am EDT)	Benoît Brouard ¹ Vassily Zakharov ¹ Pierre Bérest ²	Brouard Consulting ¹ Ecole Polytechnique ²	Assessment of Cavern Stability: Cavern Clusters vs Single Cavern
16:20 CEST (10:20am EDT)	Kevin Heiberger	Respec	Stress Analysis of a Production Casing for a Cavern Developed Beneath an Existing Cavern Field
16:30 CEST (10:30am EDT)	Keith Jenkins Mark Villarreal Kristaq Mitrushi	Enventure Global Technology	Addressing Cavern Sealing and Cementing Issues using Solid Expandable Tubular Technology
16:40 CEST (10:40am EDT)	Byoung Park	Sandia National Laboratories	Geomechanical Evaluation of the Stability of Abandoned Cavern 4 in Bayou Choctaw Salt Dome
16:50 CEST (10:50am EDT)	Dean Checkai Robert Murray Gavin Fleming Mosunmola Ejike Bilel Boukadi Lauren Ramsey	Fluor Federal Petroleum Operations	Cavern Creep Closure and Volume Losses: Analysis of U.S. Strategic Petroleum Reserve Domal Salt Cavern Volume Losses During Static and Dynamic Conditions.
17:00 CEST (11am EDT)	Pierre Bérest ¹ Benoît Brouard ² Grégoire Hévin ³ Arnaud Réveillère ⁴	Ecole Polytechnique ¹ Brouard Consulting ² Storengy ³ Geostock ⁴	Tightness of Salt Caverns for Hydrogen Storage
17:10 CEST (11:10am EDT)	Jay Evans ¹ Tom Shaw ²	Global Gas Group LLC ¹ LK Energy LLC ²	Storage of Hydrogen in Solution Mined Salt Caverns for Long-Duration Energy Storage
17:20 CEST (11:20am EDT)	Roger Edgecombe ¹ Shelie Cascadden ² Julie Clarke ² Ian Scotland ¹ Chris Helly ¹ Marissa Whittaker ³ Luc Gravel ¹	RPS Energy ¹ Enbridge Gas Inc ² Nomad Geoservices Ltd. ³	Improving Gas Storage Deliverability Using 3D Seismic: A Case Study
17:30 CEST (11:30am EDT)	Clemens Eichler ¹ H. Bernhardt ¹ R. Gjermundbo ² T. Mortensen ³	DEEP.KBB ¹ Hanover Energinet.dk ² Copenhagen Gas Storage Denmark ³ Lille Torup	Coupled Gas Filling and Flooding Process of Two Caverns



SMRI SPRING 2021 VIRTUAL CONFERENCE

April 19–23, 2021

QUESTION & ANSWER SESSION SCHEDULE

All Q&A Sessions are LIVE

Q & A SESSION, THURSDAY 22 APRIL 2021

Technical Paper Sessions			
Time	Author(s)	Organization(s)	Title
16:00 CEST (10am EDT)	Todd Cash Paul W. Bieniawski	Enstor Gas LLC	Implementing an Environmental, Social and Governance (ESG) Program
16:10 CEST (10:10am EDT)	Alan McArthur William Lemons	ALMAC LLC	Potential Health Hazard to Workers from the Presence of Regulated TENORM on Gas Liquid Storage Caverns
16:20 CEST (10:20am EDT)	Samuel Voegeli	Respec	Accuracy of Temperature Logging for Calculating Gas Inventoris in Storage Caverns
16:30 CEST (10:30am EDT)	<u>Aurélien Soubeyran</u> , Ahmed Rouabhi Christophe Coquelet	MINES Paris Tech	Effect of Carbon Dioxide Dissolution Into the Brine on the Storage Conditions
16:40 CEST (10:40am EDT)	Pablo Rodriguez	EnStor	Effect of Heat Transfer on Gas Storage Cavern Operations
16:50 CEST (10:50am EDT)	William M. Goodman		1920 To 1940 Were Transformative Years for the U.S. Salt Mining Industry: New Mines, New Methods and a Major New Market
17:00 CEST (11am EDT)	<u>Barry Roberts</u> ¹ Anna Lord ¹ Drew Evans ²	Sandia National Laboratories ¹ Geostock Sandia ²	West Hackberry Salt Dome Mapping Refinement
17:10 CEST (11:10am EDT)	Brandon Schulte	WSP USA	Application of a Novel Plug and Abandonment Method in a US Gulf Salt Dome
5:20 CEST (11:20am EDT)	<u>Sophie Minas</u>	WSP USA	The Instability of Salt Cavern Hanging Strings and Proposed Completion Modifications



**TECHNICAL PAPER LIST WITH ALL AUTHORS
VIRTUAL TECHNICAL CONFERENCE**

Author(s)	Organization(s)	Title
Pierre Bérest ¹ Benoît Brouard ² Grégoire Hévin ³ Arnaud Réveillère ⁴	Ecole Polytechnique ¹ Brouard Consulting ² Storengy ³ Geostock ⁴	Tightness of Salt Caverns for Hydrogen Storage
Benoît Brouard ¹ Vassily Zakharov ¹ Pierre Bérest ²	Brouard Consulting ¹ Ecole Polytechnique ²	Assessment of Cavern Stability: Cavern Clusters vs Single Cavern
Todd Cash, Paul W. Bieniawski	Enstor Gas LLC	Implementing an Environmental, Social and Governance (ESG) Program
Dean Checkai Robert Murray Gavin Fleming Mosunmola Ejike Bilel Boukadi, Lauren Ramsey	Fluor Federal Petroleum Operations	Cavern Creep Closure and Volume Losses: Analysis of U.S. Strategic Petroleum Reserve Domal Salt Cavern Volume Losses During Static and Dynamic Conditions.
Roger Edgecombe ¹ Shelie Cascadden ² Julie Clarke ² Ian Scotland ¹ Chris Helly ¹ Marissa Whittaker ³ Luc Gravel ¹	RPS Energy ¹ Enbridge Gas Inc ² Nomad Geoservices Ltd. ³	Improving Gas Storage Deliverability Using 3D Seismic: A Case Study
Clemens Eichler ¹ H. Bernhardt ¹ R. Gjermundbo ² T. Mortensen ³	DEEP.KBB ¹ Energinet.dk ² Gas Storage Denmark ³	Coupled Gas Filling and Flooding Process of Two Caverns
Jay Evans ¹ Tom Shaw ²	Global Gas Group LLC ¹ LK Energy LLC ²	Storage of Hydrogen in Solution Mined Salt Caverns for Long-Duration Energy Storage
William M. Goodman		1920 To 1940 Were Transformative Years for the U.S. Salt Mining Industry: New Mines, New Methods and a Major New Market
Kevin Heiberger	Respec	Stress Analysis of a Production Casing for a Cavern Developed Beneath an Existing Cavern Field
Birgit Horváth, Alexander Raith, Dirk Zander-Schiebenhöfer	DEEP.KBB	The Geological Barrier—A Key Component of a Comprehensive Integrity Assessment
Keith Jenkins Mark Villarreal Kristaq Mitrushi	Enventure Global Technology	Addressing Cavern Sealing and Cementing Issues using Solid Expandable Tubular Technology
Alan McArthur, William Lemons	ALMAC LLC	Potential Health Hazard to Workers from the Presence of Regulated TENORM on Gas Liquid Storage Caverns
Sophie Minas	WSP USA	The Instability of Salt Cavern Hanging Strings and Proposed Completion Modifications
Byoung Park	Sandia National Laboratories	Geomechanical Evaluation of the Stability of Abandoned Cavern 4 in Bayou Choctaw Salt Dome
Barry Roberts ¹ Anna Lord ¹ Drew Evans ²	Sandia National Laboratories ¹ Geostock Sandia ²	West Hackberry Salt Dome Mapping Refinement
Pablo Rodriguez	EnStor	Effect of Heat Transfer on Gas Storage Cavern Operations
Brandon Schulte	WSP USA	Application of a Novel Plug and Abandonment Method in a US Gulf Salt Dome
Aurélien Soubeyran, A. Rouabhi C. Coquelet	MINES Paris Tech	Effect of Carbon Dioxide Dissolution Into the Brine on the Storage Conditions
Samuel Voegeli	Respec	Accuracy of Temperature Logging for Calculating Gas Inventories in Storage Caverns