

SMRI SPRING 2023

DETROIT, MICHIGAN

April 23–26, 2023

TECHNICAL CLASS SCHEDULE

Sunday, 23 April 2023			
Time	Instructor	Title	Objectives
8:00	Tim Bauer (SMRI Research Coordinator)	Class Introduction	
8:15	Charles Chabannes (United Brine Services)	SMRI History & Research Subjects related to Cavern Sealing and Abandonment	Understand history of SMRI activities since the 90's
8:40	Benoit Brouard (Brouard Consulting)	Overview of the Physical Phenomena involved in Salt Cavern Abandonment	Understand the phenomena involved and how they can be measured or calculated
9:05	Dieter Brückner (IfG)	Rock mechanical concept and in-situ investigations for cavern abandonment	Providing evidence for a successful and safe abandonment; Securing evidence
9:30	Questions / Discussion		
9:40	BREAK: Coffee / Tea, Refreshments (30 Mins)		
10:10	Benoit Brouard (Brouard Consulting)	Numerical Simulation of Cavern Abandonment for Shallow and Deep Caverns	Show how cavern-pressure evolution on the long term can be predicted using simple and robust hypotheses
10:35	Dirk Zapf (IUB)	The Results of the Pressure Build-Up Test in a Brine Filled Cavern in Etzel	Overview of the test conditions and the test results
11:00	Arnaud Reveillere (Geostock)	Abandonment of LPG Caverns at Carresse: Removing of Trapped Propane and Tests on Shallow Caverns in France	Review of several case studies including a couple of abandonment tests supported by SMRI, and sharing of experiences after removing of trapped product
11:25	Andreas Bannach (ESK)	SMRI, Research Project (2004-2009): "The Staßfurt Abandonment Field Test"	Demonstrate the phenomena identified in previous research at a field scale for shallow bedded salt
11:50	Questions / Discussion		
12:00	LUNCH Break: Included with Class Registration (1 Hour)		
13:00	Marinus den Hartogh (Nobian)	Things to consider for abandonment of shallow bedded caverns (Hengelo) and large domal caverns (Heiligerlee)	Topics to be considered when planning abandonment? What are the differences between abandonment of shallow caverns in bedded salt and large caverns in domal salt?
13:25	Joel Nieland (RESPEC)	Geomechanical Modeling of Gulf Coast Salt Cavern for Abandonment Alternatives	Conventional and unconventional plugging and abandonment options
13:50	Brandon Lampe (Agapito Associates, Inc)	Recent Abandonment Techniques - North America	Compare recent abandonment techniques and regulatory requirements across North America
14:15	Alton Perry (WSP USA)	Case Study Abandonment Gulf Coast Cavern Cap Rock Depressure	Practical Application of Salt Dome cavern abandonment in Gulf Coast with depressure of Brine to caprock
14:40	Questions/ Discussion		
14:50	BREAK: Coffee / Tea, Refreshments (30 Mins)		
15:20	Phillip Gallet (Keller N.A.)	Cavern Backfilling at Carlsbad, New Mexico, USA	Case history of backfill material design, testing, and pumping
15:45	Wilfred Brandt (Braskem S.A.)	Cavern backfilling operations related to the Maceió Mine Closure Plan – Brazil	Cavity backfilling case study in the Mine Closure Plan of Maceió, Brazil: Planning, execution, monitoring and results
16:10	Heike Bernhardt (DEEP.KBB)	"Abandonment of Salt Caverns", Research Project 2022: Gap Analysis	Identification of missing subjects regarding cavern and cavern field closures
16:35	Questions / Discussion		
16:45	Tim Bauer (SMRI Research Coordinator)	Concluding Remarks	Class synthesis, future SMRI Technical Classes, Future Research ideas