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CCUS

CARBON CAPTURE, UTILIZATION, AND STORAGE

THE INDUSTRY'S LEADING EVENT FOR CCUS MANAGEMENT AND DEVELOPMENT

TECHNICAL PROGRAM AND REGISTRATION ANNOUNCEMENT

GEORGE R. BROWN CONVENTION CENTER
3-5 MARCH 2025
HOUSTON, TEXAS

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LETTER FROM THE CO-CHAIRS

Dear Friends,

A growing desire for lower emissions and a sustainable energy future has unleashed record levels of private sector investment and government funding creating an unprecedented concentration of carbon capture, utilization, and storage (CCUS) projects across the United States.

Leveraging the technical geologic knowledge and data related to CCUS that has been cultivated over the past two decades, combined with more recent policy instruments, such as the expanded 45Q tax credits, CarbonSAFE initiative, and carbon credit mechanisms, have presented opportunities to offset the costs of CCUS development making it more attainable for many companies.

As the industry continues to grow, so does the need for highly skilled professionals to guide the pathway for safe and economical management of carbon developments, challenges, and opportunities. At a time of rapid change, the importance of integrating innovative geoscientists and engineers to lend their expertise and skills plays a critical role in defining the future of carbon.

As hosts of Carbon Capture, Utilization, and Storage (CCUS) 2025, 3–5 March in Houston, Texas, the Society of Petroleum Engineers (SPE), the American Association of Petroleum Geologists (AAPG), and the Society of Exploration Geophysicists (SEG), have joined forces to gather leading technical experts to demonstrate the ongoing need for petroleum geoscientists and engineers in our CCUS arena.

Much like our industry, the CCUS event has sparked exponential growth doubling in size year over year since its inception in 2021. CCUS 2025 builds upon this success and looks to bring together more than 1,700 global attendees and participants. Keynote speakers, panelists, and presenters from ExxonMobil, OXY, Shell, SLB, U.S. Department of Energy, and many other organizations will facilitate discussion on current CCUS work and tackle related challenges across these themes:

- **Theme 1: Subsurface Storage and Site Selection**
- **Theme 2: Subsurface Modeling**
- **Theme 3: Subsurface Risk Assessment**
- **Theme 4: Infrastructure and Well Design**
- **Theme 5: EOR, Injection, Utilization**
- **Theme 6: Subsurface Monitoring**
- **Theme 7: Financial, Economics, and Regulatory Framework**
- **Theme 8: ESGs and Stakeholder Engagement**
- **Theme 9: ML and Data Analytics Applications**
- **Theme 10: Case Studies**

Alongside a dynamic technical program of talks, panels, and posters, CCUS 2025 will have pre- and post-event short courses on well logging and petrophysics for geologic carbon sequestration, CCUS fit-for-purpose casing and tubing analysis, CO_2 with impurities, reservoir engineering aspects of carbon capture and storage, application of machine learning to support ccs deployment, DOE's Office of Fossil Energy and Carbon Management's tools to support carbon transport and storage deployment, from source to sink: confronting uncertainty and risk in your ccs project, and subsurface CO_2 storage simulation. A pre-event field trip is scheduled to explore Galveston's coastal processes. Informative topical luncheons, engaging networking opportunities, and interactive student activities will provide an added level of experience for attendees that are sure to not be missed.

Conversations on emerging technologies and the latest innovations in sustainable development will extend to the exhibition hall with participation from a variety of companies including SLB, Viridien, S&P Global, Microseismic and the US Department of Energy.

CCUS 2025 is an influential platform where professionals engage in all aspects of the carbon capture lifecycle to innovate, integrate, and advance understanding to create value. This meeting continues to be the leading event for CCUS management and development and is best chance you'll have to gain insights into the technical and business aspects surrounding CCUS.

We invite you to participate in CCUS 2025 and hope to see you all in Houston!

Sincerely,

David Riestenberg
CCUS 2025 Technical Program Co-Chair

Scott Singleton
CCUS 2025 Technical Program Co-Chair

Caroline Wachtman
CCUS 2025 Technical Program Co-Chair

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Ali Tura
Colorado School of Mines

SCHEDULE AT A GLANCE

Sunday, 2 March

7:30 am–4:30 pm	Registration
8:00 am–6:00 pm	CCUS Inagural Golf Tournament
8:00 am–6:00 pm	FT-01: Texas Coastal Processes – Brazos River Delta to Galveston Island
8:30 am–4:30 pm	SC-01: Reservoir Engineering Aspects of Carbon Capture and Storage
8:30 am–5:00 pm	SC-02: Well Logging and Petrophysics for Geologic Carbon Sequestration
1:00 pm–5:00 pm	SC-03: Application of Machine Learning to Support CCS Deployment

Monday, 3 March

6:30 am–5:30 pm	Registration
8:15 am–8:25 am	Welcome Remarks
8:25 am–9:05 am	Keynote Presentation: The Need and Promise of Ultralow-Emission Dispatchable Power (Danny Rice)
9:00 am–6:00 pm	Exhibition Open
9:00 am–5:00 pm	Poster Session
9:20 am–12:00 pm	Technical Sessions
10:25 am–10:55 am	Refreshment Break
10:55 am–12:00 pm	Panel Session: The Economics of CCS: Is $85 Enough to Drive Progress?
12:10 pm–1:20 pm	Topical Luncheon: Advancing a Lower Carbon Future: A CCUS Perspective
12:10 pm–1:20 pm	Student/Early Career Luncheon: Navigating CCUS — Technical Challenges and Pathways for Career Growth
12:10 pm–1:20 pm	Topical Luncheon: A Brief Overview of Advances Made in Geologic CO_2 Storage Technology by US-DOE's Carbon Storage R&D Program
1:35 pm–5:00 pm	Technical Sessions
3:00 pm–3:35 pm	Refreshment Break
5:00 pm–6:00 pm	Networking Reception

Tuesday, 4 March

7:00 am–5:30 pm	Registration
8:15 am–9:00 am	Keynote Presentation – TBD
9:00 am–6:00 pm	Exhibition Open
9:00 am–5:00 pm	Poster Session
9:20 am–12:00 pm	Technical Sessions
10:25 am–10:55 am	Refreshment Break
10:55 am–12:00 pm	Panel Session: Development and Evolution of Carbon Capture Projects
12:10 pm–1:20 pm	Topical Luncheon: Induced Earthquakes Modeling and Forecasting
12:10 pm–1:20 pm	Women's Network Luncheon: Making a New Business Model Work: Navigating Policy and Commerciality Drivers for CCUS/CCS Projects
12:10 pm–1:20 pm	Topical Luncheon: Towards Global Deployment – An Industrial Perspective on CCS
1:35 pm–5:00 pm	Technical Sessions
3:00 pm–3:35 pm	Refreshment Break
3:45 pm–4:45 pm	Student/Early Career: Ask Me Anything Event
5:00 pm–6:00 pm	Networking Reception

Wednesday, 5 March

7:00 am–2:30 pm	Registration
8:15 am–9:00 am	Keynote Presentation: CCS Project Evolution (Sarah Saltzer)
9:00 am–3:00 pm	Exhibition Open
9:20 am–12:00 pm	Technical Sessions
10:25 am–10:55 am	Refreshment Break
10:55 am–12:00 pm	Panel Session: Professional Opportunities and Challenges in the Energy Transition
12:10 pm–1:20 pm	Topical Luncheon: Rock Physics Opportunities and Challenges for CO_2 Management
1:35 pm–3:00 pm	Technical Sessions

Thursday, 6 March

8:00 am–12:00 pm	SC-04: DOE's Office of Fossil Energy and Carbon Management's Tools to Support Carbon Transport and Storage Deployment
8:00 am–5:00 pm	SC-05: From Source to Sink: Confronting Uncertainty and Risk in Your CCS Project
8:30 am–5:00 pm	SC-06: CCUS Fit-for-Purpose Casing and Tubing Analysis for CO_2 with Impurities
8:30 am–5:00 pm	SC-07: Subsurface CO_2 Storage Simulation

KEYNOTE PRESENTATIONS

DANNY RICE

Chief Executive Officer and Director, NET Power and Board of Directors, EQT

The Need and Promise of Ultralow-Emission Dispatchable Power

Day: Monday, 3 March
Time: 8:25 am–9:05 am
Location: George R. Brown Convention Center
Fee: Included with registration

The demand for power is booming. While renewables continue to grow, new nuclear is on the horizon, and orders for unabated gas turbines remain strong, the world needs more electricity that is secure, dispatchable, quickly scalable, and clean. The Net Power Cycle offers a unique solution that uses natural gas while inherently capturing more than 97 percent of CO_2 emissions. The technology is designed to scale quickly and help catalyze a decarbonized resilient grid.

Danny Rice has served as NET Power's Chief Executive Officer since 2023. He brings over 20 years of energy industry experience across various sectors including traditional energy production and transportation, energy technologies and energy transition. Danny co-founded Rice Energy and led its growth from startup in 2008 into becoming one of North America's largest public natural gas production and transportation companies, culminating in its $10 billion merger with EQT Corporation in 2017. In 2018, Danny co-founded Rice Investment Group, leading investments into Archaea Energy, XCL Resources, Pinon Resources, Cold Bore Technology, Persefoni AI, and ComboCurve. Danny was raised in Boston, MA and currently resides in Dallas, TX with his wife and their two daughters.

SARAH SALTZER

Managing Director, Stanford Center for Carbon Storage, Stanford University

CCS Project Evolution

Day: Wednesday, 5 March
Time: 8:15 am–9:00 am
Location: George R. Brown Convention Center
Fee: Included with registration

While CCS projects have been operating since the 1970s, the types of projects, sources of emissions, modes of transporting large volumes of CO_2, and types of geological storage have had a significant evolution, especially in the past 5 years. These changes, in addition to a quickly growing queue of projects, have led to new areas of R&D focus. This presentation will highlight new trends and how research initiatives are adapting to the changing project landscape.

Dr. Sarah Saltzer is the Managing Director of the Stanford Center for Carbon. She was also recently named to the Biden-Harris Administration's Carbon Dioxide Capture, Utilization and Sequestration (CCUS) Non-Federal Lands Task Force. Sarah spent 25 years at Chevron where she held a series of scientific, managerial, and executive roles. She has a diversity of experience in positions of increasing responsibility, including geology research and teaching, petroleum engineering, leading exploration teams, competitor analysis and business planning and strategy. Dr. Saltzer holds a M.S. and B.S. from the Massachusetts Institute of Technology and a Ph.D. from Stanford University.

Panel Sessions

The Economics of CCS: Is $85 Enough to Drive Progress?

Date: Monday, 3 March
Time: 10:55 am–12:00 pm
Location: George R. Brown Convention Center
Fee: Included with registration

The financial viability of carbon capture projects hinges on whether the current $85 per ton incentive under 45Q provides sufficient support for widespread adoption. With actual costs of capture, transport, and storage often exceeding this threshold, questions arise about the need for adjusted incentives or alternative mechanisms like carbon taxes to drive economic feasibility. Representatives from startups, established operators, service companies, and experts involved in the CarbonSAFE initiative will bring diverse perspectives and real-world experiences to this discussion, offering insights into the practical challenges and innovative solutions for making carbon capture projects financially sustainable. This panel will provide valuable insights into the economic tipping points, financing strategies, and policy considerations that will shape the future of carbon capture, making it an essential opportunity for understanding the path forward in this evolving sector.

Moderator:

Owain Tucker,
CCS Principal Technical Expert and Global Capability Manager, Shell

Panelists:

Juan Agudelo,
Head of Energy Transition, Welligence Energy Analytics

Greg Matlock,
Partner, EY

Rodney Garrard,
Geo Energy Advisor, Arch Insurance International

Carolyn Seto,
Executive Director of Energy Technology and Innovation, S&P Global Commodity Insights

Development and Evolution of Carbon Capture Projects

Date: Tuesday, 4 March
Time: 10:55 am–12:00 pm
Location: George R. Brown Convention Center
Fee: Included with registration

The regulatory frameworks shaping the development and evolution of carbon capture projects are crucial to their success. This panel will delve into state and federal regulations, the permitting process, and how these regulations impact project timelines and overall feasibility. It will provide insights into the complexities of the regulatory landscape and the influence of various regulatory bodies, as well as explore the interplay between local and federal regulations. By understanding these factors, this discussion will offer invaluable guidance for navigating the regulatory environment, ensuring compliance, and accelerating the development of carbon capture projects. This panel will provide a valuable opportunity to gain a comprehensive understanding of the regulatory hurdles and opportunities that shape the carbon capture sector.

Panelists:

Laura Sorey,
Geology Manager, Louisiana Department of Energy and Natural Resources

Danny Kingham,
Senior Associate Hydrogeologist, GSI Environmental Inc.

Lily Barkau,
Groundwater Section Manager, Wyoming Department of Environmental Quality

Professional Opportunities and Challenges in the Energy Transition

Date: Wednesday, 5 March
Time: 10:55 am–12:00 pm
Location: George R. Brown Convention Center
Fee: Included with registration

This panel will examine the evolving landscape of career opportunities in the energy transition sector, with a focus on challenges faced by students and young professionals entering the industry. It will address the existing gaps in entry-level positions, the impact of layoffs, and ways individuals can navigate these challenges to build a sustainable career in the energy sector. Discussions will explore how academia, industry leaders, and young professionals can collaborate to create pathways for new employees to enter and remain in the carbon capture space. Attending this panel will provide valuable insights into building a successful career in the carbon capture industry and offer guidance on overcoming the challenges of entering this dynamic field.

Moderator:

Samantha Neades,
Technical Programme Resource Manager, IEAGHG

Panelists:

Ali Tura,
Professor, Colorado School of Mines

Camelia Knapp,
Associate Dean for Research, College of Arts and Sciences, Oklahoma State University

Divya Shah,
CCUS Engineer, Wood

Fawz Naim,
PhD Candidate, Ohio State University

Topical Luncheons

Advancing a Lower Carbon Future: A CCUS Perspective

Date: Monday, 3 March
Time: 12:10 pm–1:20 pm
Location: George R. Brown Convention Center
Fee: $75

Carbon sequestration is at the forefront for the energy transition. Achieving gigaton-scale carbon sequestration requires a concerted effort involving innovative research, advanced technology, robust collaboration, and effective policies. The synergy between industry, academia, and government is crucial. By leveraging their respective strengths, these sectors can drive the technological advancements, investment, and policy frameworks needed to address the energy transition on a global scale. We play an important role in meeting the world's energy needs, and we play an essential role in delivering them in a lower carbon way. Through collaboration, we can develop and accelerate technologies that inform decisions and verify conformance and containment that are cost-effective, reliable, and applicable to carbon sequestration projects around the world.

Speaker:

Mark Dean,
Subsurface Lower Carbon Hub Leader, Chevron

A Brief Overview of Advances Made in Geologic CO_2 Storage Technology by US-DOE's Carbon Storage R&D Program

Date: Monday, 3 March
Time: 12:10 pm–1:20 pm
Location: George R. Brown Convention Center
Fee: $75

Over the past 25 years the US Department of Energy's Office of Fossil Energy and Carbon Management's (DOE-FECM) Carbon Storage Program has funded multiple initiatives to advance the geologic CO_2 storage (GCS) technology and facilitate its commercial deployment in the US and beyond. The program has led the foundation for commercial GCS technology through key investments in research, development and demonstration (RD&D) projects focused on subsurface characterization, field injection tests, advanced monitoring technologies as well as long-term risk assessment and management. This talk will provide a brief overview of the various initiatives with examples of specific outcomes and significant advances made through DOE's RD&D

Speaker:

Rajesh Pawar,
Senior Technical Advisor, US DOE - FECM

Towards Global Deployment – An Industrial Perspective on CCS

Date: Tuesday, 4 March
Time: 12:10 pm–1:20 pm
Location: George R. Brown Convention Center
Fee: $75

To achieve the goals of the Paris Agreement, the world needs to rapidly scale up the capture and storage of CO_2 – by a factor 100 or more – ahead of 2050. As a longstanding CCS operator, project developer, customer and technology provider, Shell has a unique perspective on the deployment and upscaling of CCS. This talk will highlight a number of features, enablers and lessons learned from the Shell-operated Quest project, which has been operating safely and reliably since 2015, as well as from Shell's wider, global CCS portfolio. As the industry prepares for upscaling, new technical focus and innovation areas are emerging, such as cold injection in depleted fields, legacy well assessments, compositional specifications and system integration for multi-source CCS hubs. In addition, every large project faces scrutiny and constraints (people, space, materials, equipment, schedule, policies, standards, environmental impact etc.) and the talk will highlight where this is especially relevant for CCS.

Speaker:

Onno van Kessel,
General Manager CCS Development & Subsurface, Shell Global Solutions International

Induced Earthquakes Modeling and Forecasting

Date: Tuesday, 4 March
Time: 12:10 pm–1:20 pm
Location: George R. Brown Convention Center
Fee: $75

Abundant and well-documented examples of earthquakes induced by various types of reservoir operations have provided exceptional opportunities to investigate earthquake physics and test earthquake forecasting models. We will review recent progress and discuss implications for induced earthquakes assessment and possible mitigation in the context of CO_2 subsurface storage operations.

Speaker:

Jean-Philippe Avouac,
Professor, California Institute of Technology

Topical Luncheons

Women's Network Luncheon: Making a New Business Model Work: Navigating Policy and Commerciality Drivers for CCUS/CCS Projects

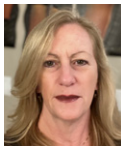
Date: Tuesday, 4 March
Time: 12:10 pm–1:20 pm
Location: George R. Brown Convention Center
Fee: $75

This panel tackles the urgent need for adaptable business models in CCUS projects, emphasizing the need for alignment of policy, commercial viability, and project execution. Through real-world examples and lessons learned, panelists will explore how to navigate the complexities of regulatory requirements and financial constraints while building resilient business cases. Attendees will gain practical insights and strategies, learning from both challenges and successes in recent CCS/CCUS projects, to turn policy and market drivers into actionable pathways for sustainable and profitable project outcomes.

Moderator:

Cindy Yeilding,
Board Chair, The Center for Houston's Future

Panelists:



Christina Harvick,
Vice President – CO_2 Field Operations, Tallgrass Energy

Jan Sherman,
Chief Development Officer, Carbonvert Inc.

Hillary O'Brien,
Senior Program Director, Carbon Management and Science, ClearPath

Rock Physics Opportunities and Challenges for CO_2 Management

Date: Wednesday, 5 March
Time: 12:10 pm–1:20 pm
Location: George R. Brown Convention Center
Fee: $75

The IPCC – AR6 report (AR6 Climate Change 2021: The Physical Science Basis — IPCC) shows that anthropomorphic CO_2 must be reduced drastically to maintain reasonable temperature increases, and negative emissions are required to remain at warming levels of 1.5 C or lower. To this effect, various initiatives have announced goals to decrease greenhouse gas emissions. The storage targets can be achieved by safely storing the captured CO_2 trapped in subsurface geological formations. CO_2 can be stored in subsurface reservoirs in large quantities in free, dissolved, or adsorbed states or in a mineralized state.

I review current efforts for CO_2 storage in the subsurface – ranging from designing CCS solutions with identified sequestration options, to improving geophysical imaging efforts to resolving the underlying physics of the trapping phenomena. These combined efforts not only allow us to design pathways to meet the goals for emissions reduction, but they also help us develop and improve technologies to ensure storage security. Various factors govern CO_2 mobility and trapping in saline aquifers. CO_2 reacts with specific minerals in shale – potentially altering seal properties. The interaction of minerals with CO_2 can take various forms: CO_2 sorption increases with increasing organic matter content, clay minerals can swell with CO_2 sorption, calcite can react with CO_2 depending on presence and amount of moisture present. Assessment of storage targets and storage security requires assessments of CO_2 storage capacity for CO_2 in the target formation as well as its seal – this can depend on the abundance of specific minerals in shales that govern the interaction with CO_2. This talk explores the insights from rock physics and simulations and their use for mapping and quantification of CO_2 storage and trapping in the subsurface with geophysical methods.

Speaker:

Manika Prasad,
Professor and Director of the Mines CCUS Innovation Center, Colorado School of Mines

Networking Events

Networking Receptions

Dates: Monday, 3 March–Tuesday, 4 March
Time: 5:00 pm–6:00 pm
Location: George R. Brown Convention Center
Fee: Included with registration

End each day at CCUS and unwind to by unwinding with a drink and light hors d'oeuvres as you network with exhibitors and industry colleagues.

Refreshment Breaks

Dates: Monday, 3 March–Wednesday, 5 March
Times: 10:25 am–10:55 am (Monday, Tuesday, and Wednesday)
3:00 pm–3:35 pm (Monday and Tuesday)
Location: George R. Brown Convention Center
Fee: Included with registration

Grab a cup of coffee or tea in-between sessions and check out some of the exhibitor presentations to learn about the latest products and services.

CCUS Inaugural Golf Tournament

Date: Sunday, 2 March
Time: 8:00 am–6:00 pm
Location: TBD
Fee: TBD

Please join us for the inaugural CCUS golf tournament sponsored by SPE's Northern Emirates Section and Gulf Coast Section. Details are still being confirmed and more information will be available soon. Please check the CCUS website for updates on event details and registration information.

Student and Early Career Activities

Student/Early Career Luncheon: Navigating CCUS—Technical Challenges and Pathways for Career Growth

Date: Monday, 3 March
Time: 12:00 pm–1:30 pm
Location: George R. Brown Convention Center
Fee: $25

Join us for an engaging and interactive session that brings together students, early career professionals, and seasoned experts in Carbon Capture, Utilization, and Storage (CCUS). Over lunch, you will have the opportunity to connect directly with professionals in the field and gain valuable insights into the technical challenges around CCUS technologies. Our panel of senior professionals will discuss real-world challenges, research and technology gaps, and emerging solutions in CCUS. This will be followed by an in-depth conversation on building a successful career in this rapidly evolving sector. Whether you are passionate about solving technical problems or looking for advice on advancing your career, this session has something for you. You will leave with fresh ideas, practical advice, and meaningful connections to help guide your journey in the CCUS industry. Do not miss this chance to network with leaders in the field and peers who share your passion for making an impact energy landscape. Register today and be part of the conversation that's shaping the future of CCUS!

Student/Early Career: Ask Me Anything Event

Date: Tuesday, 4 March
Time: 3:45 pm–4:45 pm
Location: George R. Brown Convention Center
Fee: Included with registration

Join us for a casual and engaging early career professional networking event focused on CCUS! This event is designed for students, recent graduates, young professionals, and early-stage researchers in the CCUS field to connect, share knowledge, and foster collaborations with more experienced professionals in the field. This networking opportunity is built around small group interactions between early career and experienced professionals, and it is designed to bridge gaps of experiences from business and academia. The event is designed to encourage networking, discussions, and mentorship and will provide students/EC with an opportunity to ask "any" questions and address "any" concerns they have regarding a CCUS career or otherwise. Whether you are looking to exchange ideas, seek mentorship, or explore career opportunities, this event is the perfect platform to enhance your career in CCUS or geosciences in general. Space is limited! — Sign up to attend during the CCUS registration process.

SHORT COURSES AND FIELD TRIP

Pre-Short Courses

	Title:	Instructor(s)	Date and Time	Fee	Limit
SC 01	Reservoir Engineering Aspects of Carbon Capture and Storage	**Rita Esuru Okoroafor,** Texas A&M University	Sunday, 2 March 8:30 am–4:30 pm	Professionals $500	40
SC 02	Well Logging and Petrophysics for Geologic Carbon Sequestration	**Shuvajit Bhattacharya,** Bureau of Economic Geology, The University of Texas at Austin	Sunday, 2 March 8:30 am–5:00 pm	Professionals $600	20
SC 03	Application of Machine Learning to Support CCS Deployment	**Hema Siriwardane,** National Energy Technology Laboratory, U.S. DOE; **Hari Viswanathan** and **Ting Chen**, Los Alamos National Laboratory; **Maruti Mudunuru** and **Ashton Kirol**, Pacific Northwest National Laboratory	Sunday, 2 March 1:00 pm–5:00 pm	Professionals $275	30

Register by 6 February for short courses and the field trip.

Post-Short Courses

	Title:	Instructor(s)	Date and Time	Fee	Limit
SC 04	DOE's Office of Fossil Energy and Carbon Management's Tools to Support Carbon Transport and Storage Deployment	**Robert Dilmore,** DOE NETL; **Bailian Chen,** Los Alamos National Laboratory; **Lucy Romeo** and **Kirk LaBarbara,** NETL	Thursday, 6 March 8:00 am–12:00 pm	Professionals $275	40
SC 05	From Source to Sink: Confronting Uncertainty and Risk in Your CCS Project	**Diana Khandilyan,** S&P Global; **Pieter Pestman** and **Creties Jenkins,** Rose Subsurface Assessment	Thursday, 6 March 8:00 am–5:00 pm	Professionals $625	30
SC 06	Fit-for-Purpose Casing and Tubing Analysis for CO_2 with Impurities	**John A. Howard, Albert McSpadden,** and **Issa Kalil,** Altus Well Experts	Thursday, 6 March 8:30 am–5:00 pm	Professionals $600	40
SC 07	Subsurface CO_2 Storage Simulation	**Damilola Ajose-Ogunlana,** SLB	Thursday, 6 March 8:30 am–5:00 pm Location: SLB, Beryl/ Amethyst Rooms 10001 Richmond Ave.	Professionals $150	12

Pre- and post-event short courses will be located at the George R. Brown Convention Center. SC 7 is taking place offsite at SLB.

Field Trip

	Title:	Leader	Date and Time	Fee	Limit
FT 01	Texas Coastal Processes – Brazos River Delta to Galveston Island	**Erik Scott,** Rice University and Vecta Oil & Gas	Sunday, 2 March 8:00 am–6:00 pm	Professionals $325 Students $100	18

TECHNICAL PROGRAM AT A GLANCE

Monday Morning	Welcome Remarks & Keynote Presentation				
	Theme 1: Injectivity Challenges	Theme 5: CO_2 Storage in Gas Reservoirs	Theme 9: Data and Analytics	Theme 7: Global CCUS Implementation	Posters: Themes 1-3
	Theme 1: Screening and Site Selection	Panel: The Economics of CCS: Is $85 Enough to Drive Progress?	Theme 4: Well Architecture	Theme 2: Geomechanical Models and Simulations	
Monday Afternoon	Theme 1: Reservoir Characterization I	Theme 10: Case Studies and Pilot Projects	Theme 7: Strategies and Insights on Class VI Permitting	Theme 3: Risk Management and Site Performance	
	Theme 1: Reservoir Characterization II	Theme 5: Field EOR & Storage	Theme 10: National and Regional CCS Initiatives	Theme 2: Data Assimilation	
Tuesday Morning	Keynote Presentation				
	Theme 2: Reactive Transport Modeling	Theme 1: Containment	Theme 5: Lab EOR and Storage	Theme 9: Natural Language Models	Posters: Themes 4-10
	Theme 3: Leakage Assessment and Shallow Aquifers Risk	Panel: Development and Evolution of Carbon Capture Projects	Theme 7: Paths to Commercialization	Theme 2: Subsurface Modeling	
Tuesday Afternoon	Theme 6: Low-Cost Monitoring	Theme 1: Regional Assessments I	Theme 4: CCS Surface Infrastructure	Theme 9: Modeling and Simulation	
	Theme 10: Best Practices, Challenges, and Lessons Learned	Theme 1: Geochemistry Rock/ Brine/Contaminant Interaction	Theme 5: Permitting, Risk, and Sustainability	Theme 3: Seal Integrity Risk	
Wednesday Morning	Keynote Presentation				
	Theme 6: Integrated Monitoring	Theme 1: Regional Assessments II	Theme 8: ESGs and Stakeholder Engagement	Theme 3: Risk Assessment Workflows I	
	Theme 5: Aquifer Storage & Enhanced Utilization	Panel: Professional Opportunities and Challenges in the Energy Transition	Theme 3: Risk Assessment Workflows II	Theme 6: Monitoring Plan Optimization and Emerging Technologies	
Wednesday Afternoon	Theme 10: Life-Cycle Analysis and CCS Connected Activities	Theme 1: Best of the Rest	Theme 2: Dynamic Multiphase Flow Simulations	Theme 9: Risk and Uncertainty	

THEME 1: SUBSURFACE STORAGE AND SITE SELECTION
THEME 2: SUBSURFACE MODELING
THEME 3: SUBSURFACE RISK ASSESSMENT
THEME 4: INFRASTRUCTURE AND WELL DESIGN
THEME 5: EOR, INJECTION, UTILIZATION
THEME 6: SUBSURFACE MONITORING
THEME 7: FINANCIAL, ECONOMICS, AND REGULATORY FRAMEWORK
THEME 8: ESGS AND STAKEHOLDER ENGAGEMENT
THEME 9: ML AND DATA ANALYTICS APPLICATIONS
THEME 10: CASE STUDIES

MONDAY TECHNICAL PROGRAM

Monday Morning Oral

Keynote Presentation: The Need and Promise of Ultralow-Emission Dispatchable Power
Time: 8:25 am–9:05 am
*Speaker: **Danny Rice**,Chief Executive Officer and Director, NET Power and Board of Directors, EQT*

Theme 1: Injectivity Challenges
Co-Chairs: M. Ma and J. O'Leary

9:20 **Introductory Remarks**
9:25 **Comparison of CO_2-Brine and N2-Brine Relative Permeability Results on Multiple Rock Types:** M. J. Martin[1], S. W. Drylie[1], F. Chen[1], B. Dindoruk[2] (1. Core Laboratories; 2. University of Houston)
9:45 **CO_2 Injectivity Improvement in Saline Reservoirs: Lab Scale Investigation using Chemical Additives:** G. Penny, S. Bhagwat*, C. Shuchart, V. Gupta (ExxonMobil)
10:05 **Effects of Carbonated Water Injection on Lacustrine Carbonates of Mupe Member, an Analog of the Oil and Gas Brazilian Pre-Salt Carbonate Reservoir:** I. de Albuquerque[2], C. Rabe*[1], S. Bejarano[2], C. Harper[1], G. Stael[2] (1. Baker Hughes; 2. ON)

Theme 5: CO_2 Storage in Gas Reservoirs
Co-Chairs: S. Zheng and TBD

9:20 **Introductory Remarks**
9:25 **Feasibility of 4D Seismic Monitoring for CO_2 Injection in Open Versus Closed Depleted Gas Fields: Goldeneye and Hamilton Fields:** S. Toh, C. MacBeth, J. Landa (Heriot-Watt University)
9:45 **Use of CO_2 Injection to Enhance the Recovery of Gas and Condensate During the Co-Development of a Giant Carbonate Field Containing Oil and Gas:** M. J. Aikman (Abu Dhabi National Oil Company)
10:05 **Blue Hydrogen Production and CCUS at Natural Gas Wellheads:** D. Elhossary, K. Mohanty, M. Pyrcz (The University of Texas at Austin)

Theme 9: Data and Analytics
Co-Chairs: S. Bhattacharya and M. Imhof

9:20 **Introductory Remarks**
9:25 **CO_2 -Locate: A National Living Wellbore Database and Mapping Application Supporting Site Selection, Permitting, and Risk Assessments:** L. Romeo[1], I. Pfander[2], C. Cleaveland[2], A. Dyer[2], M. Sabbatino[3], D. Tetteh[2], K. Rose[1], J. Bauer[1] (1. National Energy Technology Laboratory; 2. Leidos; 3. Battelle)
9:45 **NRAP, SMART, and EDX4CCS: Leveraging Advanced Digital Tools for Large-Scale Carbon Storage:** J. Walker Graf, T. Rodosta, R. Pawar (U.S. Department of Energy)
10:05 **Using a Self-Growing Neural Network Approach to CCS Monitoring:** R. Madarapu, Z. Vera (AspenTech)

Theme 7: Global CCUS Implementation
Co-Chairs: N. Darraj and K. Ryan

9:20 **Introductory Remarks**
9:25 **How International Subject Matter Experts in CCUS Impact Legal Frameworks and Policy Making:** I. Ombudstvedt, L. Østgaard (IOM Law)
9:45 **A CCUS Hub in the Niger Delta: A Model for Developing Oil and Gas Regions Globally:** A. G. Jacob (Nigerian National Petroleum Company Limited)
10:05 **Navigating the Path to Net Zero: Policy Innovations for Carbon Capture Utilization and Storage in India's Upstream Sector:** D. Deepa (Oil & Natural Gas Corporation)

Theme 1: Screening and Site Selection
Co-Chairs: C. Dumitrescu and F. Veenstra

10:55 **Introductory Remarks**
11:00 **A Geologic Site Characterization Database for Aiding Class VI Permitting in the Greater Green River Basin of Wyoming:** L. J. Jackson, A. Latrach, J. Amato, M. Johnson (University of Wyoming)
11:20 **Optimizing AoR Delineation and CO_2 Trapping in Gulf Coast CCS Projects:** K. Alokla[1], F. Yatte[2], T. Blasingame[1], W. Lee[1] (1. Texas A&M University; 2. Computer Modeling Group)
11:40 **3D Permian Basin Faulted Petrophysical Model:** R. Dommisse[1], C. Kerans[1], X. Janson[1], B. Price[2], I. Duncan[1], F. Male[3], L. Lake[1], I. Dommisse[4], A. Savvaidis[1] (1. University of Texas at Austin; 2. Devon Energy; 3. Penn State University; 4. Texas Tech University)

Panel Session: The Economics of CCS: Is $85 Enough to Drive Progress?
10:55 am–12:00 pm
See page 5 for more information.

Theme 4: Well Architecture
Co-Chairs: G. Casanova and O. Tahir

10:55 **Introductory Remarks**
11:00 **Innovative Application of Bismuth Alloy Plugs for CCS Well Remediation in the Irish Sea:** P. Carragher, D. Talapatra (BiSN)
11:20 **Restart of Injection Operations in CCUS Wells: Thermal Impacts and Well Design Considerations:** A. R. McSpadden[1], R. Trevisan[1], J. A. Howard[1], A. S. Halal[2] (1. Altus Well Experts, Inc.; 2. Nexus Geothermal, Inc.)
11:40 **Advanced Technology to Capture CO_2 from Exhaust for Injection or Transport to Commercial Markets:** J. Guoynes[1], T. Kreuz[2], D. Stiles[1], G. Pritchard[2] (1. Axip Energy Services; 2. National Fuel Gas)

Theme 2: Geomechanical Models and Simulations
Co-Chairs: S. Hosseini and H. Siriwardane

10:55 **Introductory Remarks**
11:00 **Microstructural Modeling of Cement Mechanical Properties Under Carbonation Reactions and Its Implications to Wellbore Integrity:** Z. Sun, R. Salazar-Tio, A. Fager, B. Crouse (Dassault Systemes (Abaqus))
11:20 **Deep Learning-Accelerated Robust Optimization for Reducing Geomechanical Risks and Costs in CO_2 Storage:** F. Zheng[1], M. Ma[1], H. Viswanathan[1], R. Pawar[1], B. Jha[2], B. Chen[1] (1. Los Alamos National Laboratory; 2. University of Southern California)
11:40 **Evaluating the Impact of Stress-Induced Changes on Caprock Integrity in the San Juan Basin:** N. Nimo Yeboah, W. Ampomah, D. Bui, A. Amosu (New Mexico Institute of Mining and Technology)

Monday Afternoon Oral

Theme 1: Reservoir Characterization I
Co-Chairs: D. Hume and A. Haagsma

1:35 **Introductory Remarks**
1:40 **CO_2-Brine Relative Permeability Using a Multi-rate Unsteady State Method:** J. Walls, E. Ahmed, J. Reed, A. Mitra (PremierCorex)
2:00 **Analog Selection and Project Comparison Using Offshore Carbon Storage Project Inventory and Data:** J. Mulhern, M. Mark-Moser, K. Rose (National Energy Technology Lab)
2:20 **Fracture Network Quantification for Enhanced Reservoir Characterization in CO_2 Storage Sites:** A. Kumar, W. Harbert, E. Myshakin, G. Liu*, L. Cunha, H. Siriwardane (DOE NETL)
2:40 **Physicochemical Interactions Between Carbonates/Brine/CO_2 and their Impact on Residual Trapping: Application for CO_2 Geo-Storage:** J. Mouallem[1], M. Arif[1], A. Raza[2], M. Mahmoud[2] (1. Khalifa University; 2. King Fahd University of Petroleum and Minerals)

Theme 10: Case Studies and Pilot Projects
Co-Chairs: I. Ruiz and C. Uroza

1:35 **Introductory Remarks**
1:40 **Case Study: Orientated Perforating in a Large Diameter Wellbore Using Tubing Conveyed Perforating in Conjunction with Fiber Optic Cable:** J. W. Cron[1], W. Armstrong[1], Z. Liu[2], C. Stevens[2], R. Hill[3] (1. Geostock Sandia; 2. Harvestone; 3. Thru Tubing Solutions)
2:00 **Supporting Offshore CCS Pilot Scale Injection with Spot Seismic – Greensand Pilot:** H. S. Al Khatib[1], J. Mari[1], E. Morgan[1], T. Roth[2] (1. SpotLight; 2. Wintershall DEA)
2:20 **Early Adoption of CCUS Projects Using Class II Well Projects: Case Study Western USA:** R. S. Balch[1], M. Eales[2], J. Fonquergne[1] (1. New Mexico Tech; 2. Cool Sky Energy LLC)
2:40 **First CO_2 Sequestration in a Carbonate Saline Aquifer – Case Study Onshore Abu Dhabi:** J. Mason, H. J. Parra, G. Cambois, J. Cowell, O. Kirstetter, A. Martinez, R. Jellema (ADNOC)

Theme 7: Strategies and Insights on Class VI Permitting
Co-Chairs: R. Harrison and K. Ryan

1:35 **Introductory Remarks**
1:40 **Planning the 'Yes-able' Permit – Insights from EPA Technical Reviews on Class VI Project Testing and Monitoring Approaches:** S. Fuchs (Geosyntec Consultants)
2:00 **Implementing Financial Assurance for Class VI Emergency Remedial Response Actions:** Z. Finnigan, N. A. Azzolina, L. L. Jacobson, A. Zandy, M. P. Warmack, K. C. Connors (University of North Dakota)
2:20 **Class VI Permitting Considerations for Mafic/Ultramafic Formations:** S. DiRaddo, M. Villante (Pacific Northwest National Laboratory)
2:40 **Strategies for Evaluating Threshold Pressures Used in Determining the Area of Review:** A. Bean (Electric Power Research Institute (EPRI))

** Denotes the presenter other than first author*

MONDAY TECHNICAL PROGRAM

Theme 3: Risk Management and Site Performance

Co-Chairs: C. Dumitrescu and J. Joyce

1:35 **Introductory Remarks**

1:40 **Assessing the Impact of Proximal Geological Carbon Storage Projects on Basin Capacity and Risks: A Hypothetical Case Study Based on Sacramento Basin:** A. Zibitsker, B. Schmidt, N. Castelletto, J. Iyer (Lawrence Livermore National Laboratory)

2:00 **A Review of Class VI Well Applications: Insights into Data Acquisition, Risk, and Uncertainty for Improved Risk Characterization and Program Flexibility:** R. Frohman[1], J. Eleson[2] (1. C^3; 2. Sproule)

2:20 **Knowledge Transfer from Underground Natural Gas Storage and CO_2 EOR to CCS:** E. Agartan Karacaer, J. Mozelewski, T. Firincioglu (Nitec LLC)

2:40 **Concepts and Strategies to Evaluate and Optimize the Planning for a Carbon Capture and Storage Process in Stratified Carbonate Formations:** M. J. Aikman, H. J. Parra, A. Martinez, R. Jellema (Abu Dhabi National Oil Company)

Theme 1: Reservoir Characterization II

Co-Chairs: D. Hume and A. Haagsma

3:35 **Introductory Remarks**

3:40 **Understanding Sleipner's Pre-Injection Geology Using Stratigraphic Continuity and Apparent Time Thickness Attributes: New Insights into CO_2 Storage and Migration:** B. O. Nwafor[1], J. Castagna[1], R. Van Eykenhof[2] (1. University of Houston; 2. Lumina Geophysical)

4:00 **Otway Stage 4 CCS Project: Recharacterization of the Tidal Depositional System for Parasequence 2 of the Paaratte Formation, Australia:** N. Pearson, I. Barranco (Chevron)

4:20 **Reservoir Characterization in the Frio Formation and Lower Miocene Sequences for CO_2 Storage in Southwestern Louisiana:** A. Coker[2], J. S. Herrera*[1], K. Doupé[3], E. Link[1], K. Foust[1], S. Dasgupta[1] (1. slb; 2. VerdeCo2)

4:40 **Quantitative Seismic Stratigraphy and Deep Learning Reservoir Characterization of the Canyon-Cisco Salt Creek Field, Horseshoe Atoll, Permian Basin:** R. Dommisse[1], C. Kerans[1], F. Male[2] (1. University of Texas at Austin; 2. Penn State University)

Theme 5: Field EOR & Storage

Co-Chairs: G. Liu and M. Mehana

3:35 **Introductory Remarks**

3:40 **Investigating CO_2-EOR and CO_2 Storage at the Salt Creek Oil Field Using Wireline Logs, Core Analysis, Geological Modelling, and Dynamic Simulations:** R. Ness[1], L. Fritz[1], B. Roth[1], D. Riestenberg[1], G. J. Koperna[1], N. Jones[2] (1. Advanced Resources International, Inc.; 2. Enhanced Oil Recovery Institute)

4:00 **Extended CO_2 EOR Pilot in Tight, Carbonate Reservoir: Results and Interpretation:** M.R. Al Lawati, S. Al Baloshi, A. Al-Wahaibi, R. Valdez* (Petroleum Development of Oman)

4:20 **Miscible Ascending Dispersion: EOR Unlocks Asset Potential in San Andres Through Horizontal Well CO_2 Injection:** J. Hawkins[1], A. D. Bell[1], O. Cortez*[2], B. Westcott[2], I. El-sayed[2], J. Bennett[2], C. Michael[2], M. Rangel[2], C. Inyang[2] (1. Roosevelt Resources; 2. SLB)

4:40 **The CO_2-EOR Landscape in the Permian Basin and a Comparison to Permanent Sequestration:** G. Bain, J. Jen (Enverus)

Theme 10: National and Regional CCS Initiatives

Co-Chairs: I. Ruiz and E. Vence

3:35 **Introductory Remarks**

3:40 **3, 2, 1… Liftoff: Developing Methods for Commercial Deployment Through DOE's Carbon Transport and Storage Program:** A. Raddatz, G. Rosen, S. Leung (U.S. Department of Energy)

4:00 **Carbon Storage Assurance Facility Enterprise (CarbonSAFE): Catalyzing Deployment of Large-Scale Carbon Storage:** T. Rodosta[1], A. Raddatz[1], G. Rosen[1], B. Aljoe[2] (1. U.S. Department of Energy; 2. National Energy Technology Laboratory)

4:20 **A Road Map for Growth of Commercial CCUS Projects in the Upper Great Plains and Northwestern Regions of North America:** K. C. Connors, K. Anagnost, D. M. Hillix, C. Olsen (Energy & Environmental Research Center)

4:40 **Regional Carbon Initiative for CO_2 Management in Basalt: *CaRBTAP*:** R. Middleton[1], A. O'Rourke[2], T. Atkinson[5], R. Day-Stirrat[3], T. Schaef[4], L. Florea[6], Z. Strong[7] (1. Carbon Solutions; 2. Carbon Containment Lab; 3. Oregon Department of Geology and Mineral Industries; 4. Pacific Northwest National Laboratory; 5. Idaho National Laboratory; 6. Washington Geological Survey; 7. Washington State University)

Theme 2: Data Assimilation

Co-Chairs: S. Bakhshian and S. Hosseini

3:35 **Introductory Remarks**

3:40 **Numerical Investigation of CO_2 Solubility Enhancement by Various Injection Schemes for Geological Carbon Storage in Saline Aquifers Utilizing Input Data from Experiments:** B. Dindoruk, J.A. Benavides Arancibia, M. Ahmed* (University of Houston)

4:00 **Discussing Demigration Uncertainties Applied to Active Focused Seismic Monitoring:** B. Penot[1], B. Webb[2], M. Buia[2], G. Dell'Elce[2], K. Gestin[1], F. Duret[1] (1. SpotLight Earth; 2. ENI)

4:20 **Geomodelling for Class VI Well Application: Lessons Learned from the San Juan Basin CarbonSAFE Project:** N. Moodie[1], D. Ulmer Scholle[2], L. Martin[3], W. Ampomah[2] (1. University of Utah / Energy and Geoscience Institute; 2. New Mexico Tech; 3. New Mexico Bureau of Geology & Mineral Resources)

4:40 **Evaluation of Long-term Rate and Pressure Data to Characterize Injection Performance and Conformance at a Class 6 (CCUS) Site:** A. E. Klingensmith, D. J. Collins (Geostock Sandia)

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TUESDAY TECHNICAL PROGRAM

Tuesday Morning Oral

Theme 2: Reactive Transport Modeling
Co-Chairs: S. Bakhshian and S. Hosseini

9:20 **Introductory Remarks**
9:25 **Dynamics of Permeability Changes in CO_2 Saturated Brine Injection: An Integrated Modeling Approach:** F. Tale, A. Abdulwarith*, B. Dindoruk (University of Houston)
9:45 **Subsurface Modeling and CO_2-Brine Interactions in a Saline Aquifer, Bredasdorp Basin, South Africa:** B. A. Afolayan[1], E. Mackay[2], M. Opuwari[1] (1. University of the Western Cape, South Africa; 2. Heriot-Watt University)
10:05 **Reactive Transport Modeling of Supercritical CO_2 Injected into Fractured Basaltic Formations:** P. Lu[1], M. Chen[2], L. Gong[2], C. Zhu[2] (1. Saudi Aramco; 2. Indiana University)

Theme 1: Containment
Co-Chairs: Z. Liu and J. Herrera

9:20 **Introductory Remarks**
9:25 **Experimental Characterization of the Undrained Response of Caprock During CO_2 Breakthrough:** S. Park[1], H. Choi[2], K. Kim[1] (1. Texas A&M University; 2. Korea University)
9:45 **Engineered Precipitation Geo-Barriers via Transverse Mixing for CO_2 Storage:** M. Awarkeh[1], K. Kim[1], R.M. Younis[1], J. Lu[2] (1. Texas A&M University; 2. University of Tulsa)
10:05 **In-Situ Geo-Barriers for Enhanced Geologic Carbon Storage: A Simulation Study:** D. Kim[1], O. Alharbi[1], R.M. Younis[1], K. Kim[1], J. Lu[2] (1. Texas A&M University; 2. University of Tulsa)

Theme 5: Lab EOR and Storage
Co-Chairs: M. Mehana and B. Ren

9:20 **Introductory Remarks**
9:25 **Investigating CO_2 Enhanced Oil Recovery and Associated Storage in Fractured Reservoirs of the Williston Basin:** J. Zhao, L. Jin, N. Bosshart, C. Wu, J. Sorensen, K. Ling (University of North Dakota)
9:45 **Supercritical CO_2 Foam Stability and Mobility for Enhanced Oil Recovery and CCUS: Experimental Evaluation in Simulated Reservoir Conditions:** A. Tajik[1], A. Wileman[1], S. Wheeler[1], L. Morris[1], Y. Samarkin[2], M. Prodanovic[2], D. DiCarlo[2] (1. Southwest Research Institute; 2. University of Texas at Austin)
10:05 **Enhancing Aqueous Nanobubble Dispersion of CO_2 by Organic Carbonate Additives for Enhanced Oil Recovery:** H. Wang, R. Okuno* (The University of Texas at Austin)

Theme 9: Natural Language Models
Co-Chairs: M. Imhof and H. Siriwardane

9:20 **Introductory Remarks**
9:25 **Generative AI Application to Legacy Well Assessment in CCUS:** Z. Dong, Q. Su, L. dos Santos, J. Chen, L. Lu, I. Folmar* (Shell USA, Inc.)
9:45 **An Open-Source, Machine Learning-Informed, Geospatial-Driven Tool for Identifying and Evaluating CO_2 Transport Routes:** L. Romeo[1], S. Leveckis[2], B. Houghton[2], M. C. Gao[2], D. Zaengle[2], C. Schooley[2], K. Rose[1], J. Bauer[1] (1. National Energy Technology Laboratory; 2. Leidos)
10:05 **Streamlining Your CCS Permit Application Using Generative AI:** Y. Agbor, D. Tishechkin (Amazon Web Services)

Theme 3: Leakage Assessment and Shallow Aquifers Risk
Co-Chairs: A. Tura and E. Ay

10:55 **Introductory Remarks**
11:00 **Legacy Well Flow Modeling for Leakage Risk Assessment:** S. Bhagwat[1], P. Shandilya[2], V. Gupta[1] (1. ExxonMobil Technology & Engineering Co.; 2. ExxonMobil Services & Technology Private Limited)
11:20 **Quantitative Assessment of Risk of Legacy P&A Wells in CO_2 Storage – A Case Study in Offshore Europe:** S. Patterson[1], S. Degroote[1], M. Sefat[2] (1. TotalEnergies; 2. Heriot Watt University)
11:40 **Delineating Area of Review for Class VI Carbon Sequestration Wells: Lessons from Class I Hazardous Waste Precedents:** J. Walker[1], D. Gallagher[2] (1. WSP; 2. Geostock Sandia)

Panel Session: Development and Evolution of Carbon Capture Projects
10:55 am–12:00 pm
See page 5 for more information.

Theme 7: Paths to Commercialization
Co-Chairs: N. Darraj and R. Harrison

10:55 **Introductory Remarks**
11:00 **From Policy to Profit - The Quest to FID:** A. Lafreniere, F. Morin (McDaniel)
11:20 **Business Models for Carbon Capture and Utilization: A Case Study in Finland:** A. Agbejule, M. Makelä (Vaasa Unversity of Applied Sciences)
11:40 **CCUS Commercialization Strategies:** G. Bain (Enverus)

Theme 2: Subsurface Modeling
Co-Chairs: R. Esuru and A. Khanal

10:55 **Introductory Remarks**
11:00 **Unlocking Tight Gas Recovery: Microscale CO_2 Injection and Displacement Dynamics:** Y. Jia, Z. Liu (Exploration and Production Research Institute, Sinopec)
11:20 **Cost-Effective Carbon Sequestration: Evaluating Liquid vs. Supercritical CO_2 in Deep Aquifers:** J. K. Pauyac Estrada, M. Zeidouni (Louisiana State University)
11:40 **CCUS System Optimization: The Role of Integrated Subsurface-Surface Modeling:** D. Shah, G. Hegde, S. KV, D. Hegazy, H. Qualman, A. Santiago Torres (Wood Plc.)

Tuesday Afternoon Oral

Theme 6: Low-Cost Monitoring
Co-Chairs: J. Le Calvez and K. Walker

1:35 **Introductory Remarks**
1:40 **Time-Lapse Monitoring of CO_2 Sequestration: 1D Visco-elastic Waveform Inversion Applied to Distributed Acoustic Sensing-Acquired Zero Offset Vertical Seismic Profile – a Feasibility Study:** Y. Chen, T. Mizuno, J. Le Calvez (SLB)
2:00 **Persistent Microseismic Monitoring Using Robust Permanent SADAR Arrays:** K. D. Hutchenson[2], J. Jennings, E. B. Grant, D. Quigley, J. Yelton, P. A. Nyffenegger (Geospace Technologies Corp)
2:20 **Testing of Different Vertical Source EM Geophysical Configurations for Monitoring Subsurface Carbon Storage:** D. Alumbaugh[1], E. Um[1], G. Moe[2], M. Macquet[3] (1. Lawrence Berkeley National Lab; 2. Zonge International; 3. Carbon Management Canada)
2:40 **Numerical Modeling and Experimental Validation of Nanomaterial-Coated Distributed Fiber Optic Sensors for CO_2 Monitoring:** F. Jyoti[1], S. Mishra[2], M. R. Gartia[1], J. Sharma[1] (1. Louisiana State University; 2. SRCOM, CTTC)

Theme 1: Regional Assessments I
Co-Chairs: J. Herrera and F. Veenstra

1:35 **Introductory Remarks**
1:40 **Pressure and AoR Assessment for Multiple CCS Projects within the Same Geological Setting Using EASiTool:** Z. W. Wang, S. A. Hosseini, A. P. Bump (University of Texas at Austin)
2:00 **Developing a Spatial Database of Basin-Scale Structural Features to Support Carbon Storage Resource Assessments:** D. Justman, S. Pantaleone, J. Oliver, S. Leveckis, C.G. Creason*, K. Rose (National Energy Technology Laboratory)
2:20 **U.S. Department of Energy (DOE) Office of Fossil Energy and Carbon Management (FECM) Geologic Storage International Partnerships with Emerging Economies:** G. Rosen, M. Antes, S. Leung, A. Raddatz (U.S. Department of Energy)
2:40 **Basin Scale Evaluation of the Impact of Pressure Interference on the Performance of Geological Carbon Storage:** H.A. Chellal, A.P. Indro, Q. Kang, M. Mehana (Los Alamos National Laboratory)

Theme 4: CCS Surface Infrastructure
Co-Chairs: G. Casanova and M. Valluri

1:35 **Introductory Remarks**
1:40 **Impact of Chemical Reaction Between CO_2 and Portland Cement on Zonal Isolation: A Critical Review and New Data with Implications for Legacy Well Integrity and CCS Injector Well Cement Selection:** T. Wolterbeek, P. Kriesels, A. Ardill, O. Tucker (Shell Global Solutions International B.V.)
2:00 **Corrosion Control in Carbon Storage Through CO_2-Formate Alternating Injection:** D. Sevindik, O. Oyenowo, R. Okuno* (The University of Texas at Austin)
2:20 **Experimental Program to Evaluate Cement Formulations for CCS Applications:** Q. Wu[1], D. Stiles[2], V. Gupta[1] (1. ExxonMobil Technology and Engineering Company; 2. ExxonMobil Upstream Company)
2:40 **CO_2 Injector Well Design – Learnings and Initiatives to Design High Reliability Injectors While Lowering Unit Technical Cost:** J. Lollini (Shell)

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TUESDAY TECHNICAL PROGRAM

Theme 9: Modeling and Simulation

Co-Chairs: S. Bhattacharya and Y. Yuan

1:35 **Introductory Remarks**

1:40 **Forecasting Post-Injection CO_2 Flow Dynamics with Fourier Neural Operators:** H. Zhou[1], F. Mortier[2], B. Samuelsen[2], B. Hegstad[2], A. Pontén[2] (1. Equinor US Operations; 2. Equinor ASA)

2:00 **Improved Temporal Prediction of Saturation and Pressure in Modified MeshGraphNets Models During Injection of CO_2 in the Subsurface:** P.S. Holcomb, A. Sun, C. Shih, G. Liu, H. Siriwardane (National Energy Technology Laboratory (NETL))

2:20 **Artificial Intelligence (AI) Based Surrogate Models for Accelerating CO_2 Storage Modeling Scenarios Over 1000 Years:** A. Chandra[1], S. Pawar[1], M. Koch[2], A. Panda[1], K. Azizzadenesheli[2], J. Snippe[1], F. Alpak[1], F. Hariri[2], C. Etienam[2], P. Devarakota[1], A. Anandkumar[3], D. Hohl[1] (1. Shell; 2. NVIDIA; 3. Caltech)

2:40 **Deep Learning-Based Surrogate Model for Efficient Reservoir Simulation in Large-scale Geological Carbon Storage: Application in IBDP Dataset:** H. Wang, S. A. Hosseini (University of Texas at Austin)

Theme 10: Best Practices, Challenges, and Lessons Learned

Co-Chairs: C. Knapp and H. Phuong

3:35 **Introductory Remarks**

3:40 **Reviewing Geological Modeling and Simulation Approaches to Delineate Area of Review in Class VI Permits: Lessons Learned:** S. Raziperchikolaee (Battelle Memorial Institute)

4:00 **Underground Injection Operational Envelope Determination - Calibration and Upscaling Best Practice:** A. Simone[1], R. Patterson[2], M. Garcia[1], R. Decesari[1] (1. Ryder Scott Company; 2. MetaRock Laboratories)

4:20 **Dark Fiber DAS in a CCS Feld – The Processing and Imaging Challenges:** H. Moore[1], K. Liao[1], F. Oggioni[1], M. Probst[1], E. B. Raknes[2], P. Dhelie[2] (1. Viridien; 2. AkerBP)

4:40 **Emerging Challenges for CCUS Deployment in the Midwest Regional Carbon Initiative (MRCI) Region:** N. Gupta, M. E. Kelley, J. Sminchak, P.R. Ganesh (Battelle)

Theme 1: Geochemistry Rock/Brine/Contaminant Interaction

Co-Chairs: M. Ma and J. O'Leary

3:35 **Introductory Remarks**

3:40 **Experimental Investigation of the Impact of CO_2 Storage on Interfacial Tension and Rock Properties in Sandstone Reservoirs and Saline Aquifers:** M. Ahmed, D. M. Paker, B. Dindoruk (University of Houston)

4:00 **Impact of Mineral Spatial Distribution on CO_2 Dissolution Rates in Multimineral Carbonate Rocks:** O. Adedipe, Y. Al-Khulaifi, Q. Lin, M. Blunt, B. Bijeljic (Imperial College London)

4:20 **Novel Techniques of Carbon Capture Monitoring: Geochemical Studies Based on CO_2-Brine-Rock Interactions for CO_2 Sequestration:** G. C. Thakur, M. Khan, S. Siddiqui (University of Houston)

4:40 **Investigating Study of Near-Wellbore Injectivity Characteristic of Carbonate CO_2 Sequestration Reservoir In Saline Aquifers:** A.A. Alarawi, A. AL Moajil, A. Alghamdi, J. Rubeh (Saudi Aramco)

Theme 5: Permitting, Risk, and Sustainability

Co-Chairs: M. Mehana and S. Singleton

3:35 **Introductory Remarks**

3:40 **Alternating Injection of CO_2 and Aqueous Formate Solution for Maximizing Carbon Storage and Oil Recovery: A Techno-Economic-Environmental Study:** A. Mirzaei-Paiaman, R. Okuno, L. Moscardelli (The University of Texas at Austin)

4:00 **Transitioning CO_2-EOR Field to Dedicated CO_2 Storage: Risk Considerations and Quantifications:** G. Liu, M. Rezkalla, R. Dilmore, M. Mehana, D.J. Morgan, L. Cunha, B. Strazisar (DOE NETL)

4:20 **Influence of Water Alternating Gas (CO_2) Injection on Field Production Sustainability:** B. Ren[1], W. Long[2] (1. Aramco Americas; 2. Stanford University)

4:40 **Class II to Class VI Program Conversion: Preparation of Continued Sequestration in Existing EOR Fields:** V. Cimino, C. Douglas, D. Davis (Burns & McDonnell)

Theme 3: Seal Integrity Risk

Co-Chairs: V. Cimino and H. Quevedo

3:35 **Introductory Remarks**

3:40 **Evidence of Seal Integrity and Internal Baffling Using Fluid Inclusion Analysis on Legacy Cuttings from the Illinois Basin Decatur Project:** S. Cowan[1], B. Hill[1], J. Chao[1], W. Phiukhao[1], D. Hall[2] (1. SLB; 2. FIC)

4:00 **Re-Establishing Seal Confinement for CCS in Onshore Existing Wells:** S. Mason[2], J. Jephson[1], P. Morris[1], P. Suryanarayana[2] (1. Carbon TerraVault; 2. Blade Energy Partners)

4:20 **NRAP Recommended Practices for Least Principal Stress ("Fracture Pressure") Characterization at Geologic Carbon Storage Sites:** J. Burghardt[1], D. Appriou[1], W. Wang[1], R. Dilmore[2], K. Kroll[3] (1. Pacific Northwest National Laboratory; 2. National Energy Technology Laboratory; 3. Lawrence Livermore National Laboratory)

4:40 **CO_2 Storage Risk Assessment in Large-Scale Industrial Projects: In Salah Case Study:** O. Dufour, F. Bourgeois, C. BA, S. Grelaud, L. Pauget (TotalEnergies)

** Denotes the presenter other than first author*

WEDNESDAY TECHNICAL PROGRAM

Wednesday Morning Oral

Keynote Presentation: CCS Project Evolution
Time: 8:15 am–9:00 am
*Speaker: **Sarah Saltzer,** Managing Director, Stanford Center for Carbon Storage, Stanford University*

Theme 6: Integrated Monitoring
Co-Chairs: M. Verliac and K. Walker
9:20 **Introductory Remarks**
9:25 **Implications of Carbon Dioxide-Methane Interaction on Time-Lapse Seismic Interpretation and Modeling:** S. Torset, S.S. Abdelkareem, A.L. Morosov (Equinor)
9:45 **Improved Microseismic Monitoring at the Quest CO_2 Storage Facility with Cluster Analysis of Trimmed Spectrograms (CATS):** W. Fadil, S. Grubas, M. van der Baan (University of Alberta)
10:05 **Dynamic Reservoir Modeling and Real-Time Monitoring for Optimizing CO_2 Sequestration Strategies:** H. Behmanesh, M. Macquet, K. Osadetz, D. Lawton (CMC)

Theme 1: Regional Assessments II
Co-Chairs: A. Martinez and S. Nwoko
9:20 **Introductory Remarks**
9:25 **Understanding the Key Controls on CO_2 Sequestration in the Wilcox Group, Onshore Texas, USA: Modelling a Deep USDW and Overpressure Constraints:** C.A. Uroza, S. Bhattacharya, S. Hovorka (Bureau of Economic Geology)
9:45 **Preliminary Screening Approach to Support Carbon Sequestration Efforts in Kansas:** B.R. Bream, S. Bhattacharjee, M. White, J. Gumble (Kansas Geological Survey)
10:05 **Geologic Carbon Storage Potential in Utah: Test Cases from the Colorado Plateau to the Great Basin:** G. St Pierre[1], L. Bailey[2], J. Ogland-Hand[2], E. Szymanski[1], M. Vanden Berg[1] (1. Utah Geological Survey; 2. Carbon Solutions)

Theme 8: ESGs and Stakeholder Engagement
Co-Chairs: M. Valluri and K. Yared
9:20 **Introductory Remarks**
9:25 **Advancing CCUS in Developing Countries:** G.J. Koperna[2], I. Ombudstvedt*[1], P. Prasad[3] (1. IOM Law; 2. Advanced Resources International; 3. Department of Commerce)
9:45 **Development of Community and Stakeholder Engagement Strategies and Benefits Plan to Support the Advancement of CCUS in Michigan:** A. Haagsma[1], S. Greenberg[2] (1. Michigan Geological Survey; 2. Sallie Greenberg Consulting)
10:05 **Community Acceptance of CCUS Projects: Lessons from Leading Projects:** E. Snelling (Stantec Consulting Services)

Theme 3: Risk Assessment Workflows I
Co-Chairs: E. Ay and K. Bannister
9:20 **Introductory Remarks**
9:25 **A Practical Application of Stochastic Simulations Workflow to Fast-Track CCS Development:** H. Mulyadi (TotalEnergies)
9:45 **Quantifying Low Frequency, High Impact Events in Carbon Storage Projects:** P.D. Carragher[1], R. Constable[2], C. Jenkins[1], P. Pestman[1] (1. Rose & Associates LLP; 2. Constable Energy Consulting)
10:05 **Basin-Scale Risk Assessment for Safe Deployment of Carbon Storage: Evaluating Geomechanical, Seismic, and Leakage Hazards in the Illinois Basin:** J. de Toledo Camargo[1], R. Haagenson[1], J. Wang[2], N. Mitchell[2], G. Lackey[2], P. Morkner[2], C.G. Creason[2], E. Kutsienyo[1], D. Appriou[1] (1. Pacific Northwest National Lab; 2. National Energy Technology Lab)

Theme 5: Aquifer Storage & Enhanced Utilization
Co-Chairs: B. Ren and S. Singleton
10:55 **Introductory Remarks**
11:00 **Rapid Prediction of Early-Stage CO_2 Injectivity in Saline Reservoirs:** Z. Li[1], A. Shedbale[2], C. Shuchart[1], C. Mayer[1], V. Gupta[1] (1. ExxonMobil Technology & Engineering Company; 2. ExxonMobil Services & Technology Private Limited)
11:20 **The Effect of Capillary Pressure Heterogeneity on Fluid Flow in Porous Media:** N. Darraj[1], C. Spurin[2], S. Manoorkar[3], M. Blunt[1], R. Pini[1], S. Krevor[1] (1. Imperial College London; 2. Stanford University; 3. Ghent University)
11:40 **Acoustic-Based Injectivity Monitoring at the Perforation Scale:** J. Ma[1], G. Wilson*[1], R. DeHart[2], J. McGregor[2], M. Jaaskelainen[1] (1. Halliburton; 2. JET Research Center)

Panel Session: Professional Opportunities and Challenges in the Energy Transition
10:55 am–12:00 pm
See page 5 for more information.

Theme 3: Risk Assessment Workflows II
Co-Chairs: A. Martinez and J. O'Leary
10:55 **Introductory Remarks**
11:00 **Field-Scale Validation of Stochastic Fault Multiphase Properties:** L. Salo-Salgado[1], S. Giles[2], N. Harkins[2], L. Lun[2], R. Juanes[1] (1. MIT; 2. ExxonMobil)
11:20 **Uncertainty Assessment Methodology for Defining the Area of Review (AoR) in CO_2 Injection Wells:** G.S. Oliveira, D. Mercado, V. Lara (CMG)
11:40 **Fault Stability Assessment Workflows for CCS Projects During Screening, Development and Injection Phases:** I. Barranco, S. Sarmiento, J. Adachi (Chevron Technical Center)

Theme 6: Monitoring Plan Optimization and Emerging Technologies
Co-Chairs: J. Le Calvez and M. Verliac
10:55 **Introductory Remarks**
11:00 **Modern Phenomenological Methods and Correlations for Estimating Density and Sonic Velocity of Liquid, Gas, and Supercritical CO_2 for Enhanced Assessment of Borehole Acoustic and Seismic Measurements:** A.P. Garcia, K. Walker*, P. Theologou (Chevron Technical Center)
11:20 **Illuminating CO_2 Plume Dynamics in Stiff Heterogenous Onshore Reservoirs: 4D Time Shift Analysis:** I. Bukar, R. Bell, A. Muggeridge, S. Krevor (Imperial College London)
11:40 **A Successful Case Study of CO_2 Saturation Imaging Using Surface Based Electromagnetics:** T. Pugh (ESG Solutions)

Wednesday Afternoon Oral

Theme 10: Life-Cycle Analysis and CCS Connected Activities
Co-Chairs: C. Knapp and E. Vence
1:35 **Introductory Remarks**
1:40 **Utililizing Life Cycle Assessment to Design a Novel Carbon-Negative Power Plant in Appalachia, USA:** K. Sale[1], M. Miranda[1], A. Harrison[1], K. Ellett*[1], D. Stauffer[2], S. Winter[3], E. Blumer[4] (1. Carbon Solutions LLC; 2. Worley; 3. CONSOL Energy; 4. OsoMono Ltd)
2:00 **Class II Wells for CO_2 Sequestration: Commercializing Carbon Storage with CO_2 EOR and AGI – A New Business Opportunity:** M. Garcia[1], A. Chen[2], R. Decesari[1] (1. Ryder Scott Company; 2. BlueCCS)
2:20 **Optimizing Nationwide CO_2 Transport Infrastructure: A Pathway to Net-Zero Emissions:** M. Velasco Lozano, M. Ma, R. Pawar, B. Chen (Los Alamos National Laboratory)
2:40 **Integration of Modular Geothermal Power Plants and CO_2 Plume Geothermal Systems for Renewable Energy and Carbon Sequestration:** J. Navar, T. Phythian, J. Turluck* (Blacktail Energy)

Theme 1: Best of the Rest
Co-Chairs: C. Dumitrescu and S. Nwoko
1:35 **Introductory Remarks**
1:40 **U.S. Department of Energy (DOE)'s Expansion of Carbon Storage Opportunities Through Mineralization Approaches:** S. Leung, G. Rosen, A. Raddatz (U.S. Department of Energy)
2:00 **A Quick Way to Evaluate the Effect of CO_2 Impurities on Caprock Performance for Carbon Capture and Storage Projects:** Y. C. Araujo, B. C. Harrell, G. C. Herrera (Intertek)
2:20 **Basin-Level Carbon Sequestration Analysis: A Comparative Study in Data Poor and Data Rich Areas on the Pacific OCS:** K. Baldwin, E. Huchzermeyer, O. Racicot, K. Smith, N. Mondegari, C. Ojukwu (Bureau of Ocean Energy Management)
2:40 **Numerical Evaluation of Different Physical Mechanisms on Geological Carbon Storage in Saline Aquifers:** C. Jia, J. Hu, S. Kamy (The University of Texas at Austin)

Theme 2: Dynamic Multiphase Flow Simulations
Co-Chairs: R. Esuru and A. Khanal
1:35 **Introductory Remarks**
1:40 **Towards an Integrated Open-Source Modeling Tool for Dense-Phase CO_2 Transport and Decompression in Wellbore and Pipelines:** P. Bhuvankar, A. Cihan (Lawrence Berkeley National Laboratory)
2:00 **Characterizing Flow Paths in Peridotite Formations for CO_2 Sequestration: Hydro-Mechanical Modelling of Pilot Tests in Oman and UAE:** P. Mahzari, E. Kolahchian, S. Al Mani, J. M. Matter (44.01)
2:20 **Dynamics of CO_2-Brine Mass Transfer in Naturally Fractured Reservoirs: Implications for Storage Capacity and Predictive Modeling:** H. Huang[1], J. Walker[2] (1. Tetra Tech; 2. WSP)
2:40 **Simulation Study on the Impact of Faults as Boundary Conditions on Carbon Geological Storage Flow Dynamics:** Z.W. Wang, S.A. Hosseini (UT Austin)

Theme 9: Risk and Uncertainty
Co-Chairs: S. Hosseini and S. Minisini
1:35 **Introductory Remarks**
1:40 **Machine Learning-Based History Matching at the Illinois Basin-Decatur Project Site: An End-to-End Demonstration:** H. Yoon[1], J. Lee[3], B. Petras[2], S. Skopec[2], P.R. Ganesh[2], T. Kadeethum[1], J. White[4] (1. Sandia National Laboratories; 2. Battelle Memorial Institute; 3. University of Hawaii at Manoa; 4. Lawrence Livermore National Laboratory)
2:00 **Bayesian Optimization and Robust Decision-Making Under Uncertainty for Carbon Capture and Storage Supply Chain Management:** T. Taha, M. Abdallah, M. Shabani, S. Engebretsen, G. Blin, P. Childs, E. Gringarten (Aspen Technology)
2:20 **Optimizing CO_2 Storage Monitoring with Enhanced Rock Physics Modeling and Optimal Pressure Control:** A. Gahlot, H. Li, F. J. Herrmann (Georgia Institute of Technology)
2:40 **Cross-Geology Transfer Learning for Accelerated Geological Carbon-Storage Simulation:** V.T. Kumar, M. Siddharth, Y. Falola (Texas A&M University)

** Denotes the presenter other than first author*

MONDAY POSTERS

Monday Poster Session

Presenters in booths: 10:25 am–10:55 am and 3:00 pm–3:35 pm

Theme 1: Subsurface Storage and Site Selection

- **Experimental Investigation of the Effect of Interfacial Tension on CO_2 Geo-Storage Capacity in Carbonate Saline Aquifers:** J. Mouallem[1], M. Arif[1], A. Raza[2], M. Mahmoud[2] (1. Khalifa University; 2. King Fahd University of Petroleum and Minerals)
- **Impact of Vaporization on Mineral Changes and Salt Precipitation During CO_2 Storage:** P. N. Boison[1], W. Ampomah[2], N. Sibaweihi[2] (1. New Mexico Institute of Mining and Technology; 2. Petroleum Recovery Research Center)
- **Cuttings to the Rescue: Cost-Effective, Reservoir-Risk Assessment of Petrophysical Properties via Novel Image Analysis, Elemental, Isotopic, and LIBS-Based Microscopy:** H. Carvajal Ortiz, G. M. Oliver, I. M. Easow (Geolog Americas Inc)
- **Best Practise Approach to Live CO_2 Brine Preparation and Solubility Calculation:** L. Abiashue (Memorial University)
- **Reservoir Property Heterogeneity Influence on the CO_2 Injectivity, Storage Capacity, Pressure Management, and Risk Assessment, Dry Fork CarbonSAFE Project, Powder River Basin, Wyoming:** Z. Jiao, T. Bai, M. Johnson, F. McLaughlin, P. Li, Y. Yu, S. Quillinan (University of Wyoming)
- **Carbon Sequestration Potential in Marine Turbidite Sandstones: A Sub-Regional Perspective:** S. Dabeer, D. Shaukry, H. M. Jubran (Saudi ARAMCO)
- **Workflows and Technical Challenges of Regional Multi-Resource Assessments in the U.S. Geological Survey:** J. LaGesse, S. Brennan (USGS)
- **Impact of Hydrothermal Alteration on Basalt Pore Systems: Insights into Carbon Storage and Seal Potential:** Z. Kou[1], S. Kelly[1], D. Veselinovic[2], M. Dick[2] (1. Columbia University; 2. Green Imaging Technologies)
- **Simplifying Pressure Prediction for CO_2 Storage in Deep Saline Aquifers:** A. Pontén, A. Zahid, K. Håland, E. Otterlei, S. Riordan (Equinor ASA)
- **Experimental Investigation of Formation of Carbon Dioxide Hydrates during Injection into Cold Water Zones:** M. Mahmood, M. T. Islam, B. Guo (University of Louisiana at Lafayette)
- **Near-Wellbore Effects in CO_2 Projects – Salt Precipitation and Reduction of Injectivity:** A. Santiago Torres, H. Qualman, D. Hegazy, D. Shah, G. Hegde (Wood)
- **Capacity Evaluation of CO_2 Storage through Mineralization in Rio Bonito Formation, Brazil:** A. Izadpanahi, C. Tassinari, M. Sampaio (University of Sao Paulo)
- **Appalachian CCS – Can It Work?:** B. Johnston (Enverus)
- **ERCIM Framework for CCS Project Assessment:** I. Barranco, D. Alvarado (Chevron)
- **An Open-Source Seismic Site Characterization Tool for Geologic Carbon Storage:** T. Chen, K. Gao, J. woo (Los Alamos National Laboratory)
- **The Effect of Oil Infiltration on the Geomechanical Response of Mudrocks for Geologic Carbon Storage:** S. H. Khan, K. Kim (Texas A&M University)
- **Site-Scale Evaluation of Geologic Carbon Storage at the Matagorda Island Leasing Area, Offshore Texas:** J. Mendez, I. Andrade, A. J. Effiong, E. P. Irumhe, B. O. Lawson, B. A. Shabab, R. Pollyea (Virginia Tech)
- **Multi-Parameter Assessment of CO_2 Injectivity for Optimal Well Siting in Geological Carbon Storage:** D. Essel, W. Ampomah, N. Sibaweihi, D. Bui (New Mexico Institute of Mining and Technology)
- **Beyond CO_2 Plume and Pressure Front Outlines: A Case for Extracting More Value from Simulation Models:** C. Joy[1], J. van Gestel[1], D. Costello[2], G. E. Brew[2] (1. bp; 2. Dynamic Graphics, Inc.)
- **Spatiotemporal Visualization of CO_2 Plume During Geological Carbon Storage Under Uncertain Subsurface and Engineering Conditions for Site Selection:** V. T. Kumar, M. Siddharth, Y. Falola (Texas A&M University)
- **Multimodal Identification of Complex Basalt Pore-Lining Mineralogy for Subsurface Carbon Mineralization:** O. Terry[1], T. Shen[1], M. Dick[2], D. Veselinovic[2], Q. Miller[3], N. Lahiri[3], T. Schaef[3], S. Kelly[1] (1. Columbia University; 2. Green Imagining; 3. Pacific Northwest National Laboratory)
- **Investigating the Impact of CO_2 Pressure on the Evolution of Chemo-Mechanical Properties of Shale Rocks Exposed to CO_2-Rich Brine:** S. Mahgoub, S. Abedi (Texas A&M University)
- **Application of Seismic Inversion, Attribute Analysis, and Machine Learning to Assess the CO_2 Storage Potential in the Gulf of Mexico:** S. A. Samuel, C. Knapp (Oklahoma State University)

Theme 2: Subsurface Modeling

- **Potential for Carbonate Precipitation in Basaltic Systems Based on Geochemical Modeling with PHREEQC in a Closed System:** V. K. Cescani, T. Siqueira, A. P. Mizusaki, J. Vargas, E. Mello, R. V. Conceição* (UFRGS)
- **Critical Operational Factors Affecting CO_2 Storage in Saline Aquifers: Insights from Multi-Stacked Carbonate Reservoirs in South Florida:** U. D. Orivri, L. Koehn, R. Pollyea (Virginia Polytechnic Institute and State University)
- **Creating More Accurate Geological Models and Dynamic Plumes for CCUS Using AI Driven 3D Seismic Interpretation:** P. G. Pistoun (Integrated Seismic & Geomodels, LLC)
- **Upscaling of Diffusivity in CO_2 Storage Processes in Deep Saline Aquifers:** B. Dindoruk, J.A. Benavides Arancibia, S. Oyagha*, D. M. Paker (University of Houston)
- **Closed-Form Analytical Approaches to Constrain Fraction of Injected CO_2 Dissolving in Brine During CO_2 Storage in Saline Aquifers:** M. Zeidouni (Louisiana State University)
- **Evaluating the Impact of Temperature Differences on Near-Wellbore Stresses and Caprock Integrity for CO_2 Sequestration:** A. O. Badejo, E. R. Okoroafor (Texas A&M University)
- **How to Best Model the Impact of Capillary Heterogeneity on CO_2 Flow and Trapping Across Scales:** H. Ni[1], N. Darraj[2], C. Harris[2], I. Bukar[2] (1. The University of Texas at Austin; 2. Imperial College London)
- **Assessing the Potential for CO_2 Storage in the Marcellus Shale in Pennsylvania by Conversion of Shale Gas Production Wells:** D. Tu, K. Ellett* (Carbon Solutions LLC)
- **Proactive Evaluation and Management of Geochemical Aspects of Subsurface CO_2 Storage:** M.K. Aliyu (Federal University of Lafia)
- **Advanced Geochemical Modeling and Experimental Evaluation of CO_2 Storage in Bunter Sandstone: Implications for Large-Scale CCS Deployment:** M. Ahmed, J.A. Benavides Arancibia, B. Dindoruk (University of Houston)
- **Assessing the Influence of Fracture Permeability Anisotropy on the Spatial and Temporal Distribution of Injected CO_2 in Naturally Fractured Reservoirs:** H. Huang[1], J. Walker[2] (1. Tetra Tech; 2. WSP)
- **Geomechanical Sensitivity Analysis for CO_2 Storage in Gulf Coast Saline Aquifers:** K. Alokla[1], P. Sarkar[1], J. E. Omeke[1], D. Lochary[2] (1. Texas A&M University; 2. Louisiana State University)
- **CO_2 Convective Mixing in Heterogeneous Porous Media: Implications for Safe Storage of CO_2:** E. A. Ofosu, A. Khanal (University of Tulsa)
- **Brine Production Strategies for Enhanced CO_2 Storage:** K. Alokla[1], F. Yatte[2], D. Lochary[3] (1. Texas A&M University; 2. Computer Modeling Group; 3. Louisiana State University)

Theme 3: Subsurface Risk Assessment

- **Toward an Enhanced Functionality for Categorizing and Simulating Legacy Well Leakage Risks:** J. Wise[1], G. Lackey[1], N. Mitchell[1], I. Anwar[2], M. Meng[2], M. Mehana[2], R. Dilmore[1] (1. NETL; 2. Los Alamos National Lab)
- **Introducing the NRAP Risk Register Tool: an Innovative Risk Management Tool for Carbon Storage Projects:** S. Baur, J. Frame, C. Brown, D. Appriou, J. Fernandez, H. Luu, P. Tran, T. Franklin (Pacific Northwest National Laboratory)
- **Structural Characterization and Fault Slip Potential of Basement-Involved Structures in the Illinois Basin: An Evaluation in the Context of CO_2 Storage:** O. Babarinde, K. Taft (Prairie Research Institute)
- **Quantifying Stress Uncertainty and Assessing Geomechanical Risks with SOSAT: Applications and Insights in Geological Carbon Storage:** W. Wang, J. Burghardt, D. Appriou*, R. Haagenson (Pacific Northwest National Laboratory)
- **Risk Based Area of Review Delineation with Modflow and Groundwater Contaminant Fate and Transport Modeling:** T. Umstot, G. A. Schnaar (Daniel B. Stephens & Associates, Inc.)
- **Seismic Event Monitoring with Intelligent AI for Carbon Storage:** C. Chai (Oak Ridge National Laboratory)
- **Key Challenges and Evaluation of Legacy Well Integrity in CO_2 Storage: Insights from Real-World CCS Projects:** B.M. Eissa (Texas Tech)
- **The Use of NRAP and SMART Tools to Assess the Performance and Cost of Remedial Responses to Leakage Events at a CO_2 Saline Storage Site:** D. J. Morgan[1], D. Appriou[2], K. Bello[1], B. Chen[3], L. Cunha[1], R. Dilmore[1], N. Huerta[2], A. P. Kirol[2], E. Kutsienyo[2], G. Liu[1], L. Mamud[2], N. Mitchell[1], M. K. Mudunuru[2], C. Shih[1], H. Siriwardane[1], V. Vasylkivska[1], D. Vikara[1], T. Warner[1], K. Wilson[2] F. Zheng[3] (1. National Energy Technology Laboratory; 2. Pacific Northwest National Laboratory; 3. Los Alamos National Laboratory)
- **Rapid Zonal Rate Allocation Optimization for CO_2 Storage Operation Using Multi-Resolution Deep-Learning Model: Application to the Illinois Basin Decatur Project:** C. Chan, S. Das, A. Datta-Gupta (Texas A&M University)
- **An Update on the U.S. Department of Energy's National Risk Assessment Partnership: Computational Tools and Workflows to Support Risk-Based Decision Making for Geologic Carbon Storage Deployment:** R. Dilmore[1], D. Appriou[2], T. Chen[4], A. Cihan[3], E. Gasperikova[3], J. Iyer[5], K. Kroll[5], M. Mehana[4], D. J. Morgan[1], B. Strazisar[1] (1. US DOE National Energy Technology Laboratory; 2. Pacific Northwest National Laboratory; 3. Lawrence Berkeley National Laboratory; 4. Los Alamos National Laboratory; 5. Lawrence Livermore National Laboratory)
- **Risk Assessment in CO_2 Storage Projects: A Comprehensive Approach to Risk Management:** C. W. Cavalieri Rodriguez, H. Costeno Enriquez, R. Salter, A. Trejo (SLB)

** Denotes the presenter other than first author*

TUESDAY POSTERS

Tuesday Poster Session

Presenters in booths: 10:25 am–10:55 am and 3:00 pm–3:35 pm

Theme 4: Infrastructure and Well Design

- **CO_2 Injectivity and Near-Well Conformance in Saline Reservoirs: Insights from Well and Completion Design Study:** A. Shedbale[1], Z. Li[2], V. Gupta[2] (1. ExxonMobil Services & Technology Private Limited; 2. ExxonMobil Technology & Engineering Company)
- **Casing and Tubing Design for CCS Wells: A Review of Critical Scenarios:** H. Costeno Enriquez, F. X. Feng, G. Duque, A. Vasper, S. Dyer (SLB)
- **Well Design of Re-Entry Wells for Carbon Sequestration with Enhanced Gas Recovery:** I. A. Kalil[1], S. Houston[2], R. Logsdon[2], C. Dewitt[2], A. R. McSpadden[1], R. Trevisan[1] (1. Altus Well Experts; 2. Contango Resources)
- **Application of Ionic Liquid-Based Inhibitors for Steels in Supercritical CO_2 Environment:** R. Nguele[1], H. Riggs[1], C. Graff[2], B. Sheets[1] (1. University of Alaska Fairbanks; 2. Alyeschem, LLC)
- **CO_2 Streams Captured from Industrial Processes and Corrosion of Steel Pipelines:** Z. Belarbi, K. Rozman, O. Dogan (National Energy Technology Laboratory)
- **Unified SimCCS Platform for Decision-Making in Carbon Capture, Transport, and Storage Infrastructure:** B. Chen, M. Ma, B. Ahmmed, Q. Guo, I. Jahan, M. James, W. Li, M. Mehana, M. Meng, R. Pratt, M. Velasco Lozano, R. Pawar (Los Alamos National Laboratory)
- **CO_2 Impurities and CO_2 Specification for CCS Business:** A. Faanes, A. Fahmi, J. Sæten, S. Høiset, A. Halvorsen, S. Hesjevik (Equinor ASA)
- **Leveraging Multimodal CO_2 Transportation for Large-Scale Carbon Capture and Storage Deployment:** M. Ma, Q. Guo, M. James, B. Chen (Los Alamos National Laboratory)

Theme 5: EOR, Injection, and Utilization

- **Laboratory Investigation of Wall Creek Formation Performance on Combined Oil Recovery and CO_2 Storage within the Residual Oil Zone Fairways of the Powder River Basin, Wyoming:** Y. Yu[2], T. Bai[2], R. Ness[1], L. Fritz[1], Z. Jiao[2], F. McLaughlin[2], S. Quillinan[2], N. Jones[3] (1. Advanced Resources International, Inc.; 2. University of Wyoming; 3. Enhanced Oil Recovery Institute)
- **CCS to CCUS: Continuing Carbon Storage with CO_2 EOR Post 45Q:** M. Wallace (Advanced Resources International)
- **Best Laid Plans: Comparing and Contrasting Subpart RR MRV Plans with UIC Injection Permits:** D. Kingham, K.C. Niamike, L. Molofsky, T. McGuire (GSI Environmental Inc.)
- **Geochemical Effects and CO_2-Rock Interactions in the Bakken Formation: Implications for Enhanced Oil Recovery and Carbon Storage:** A. Larbi (University of North Dakota)
  CO_2 Injection into Formation Brines to Improve the Potential of Lithium Extraction: K. Lee, M. Mojid (University of Houston)
- **Utilization of Captured CO_2 to Graphene via Magnesiothermic Reduction:** M. Hartmann, M. Salas* (Southwest Research Institute)
- **Optimization of CO_2 Injection in Depleted Gas Reservoirs:** G. S. Abe, D. Meehan (Texas A&M University)

Theme 6: Subsurface Monitoring

- **Active Source Sparse Imaging Using Permanent SADAR Arrays:** D. Quigley, P. A. Nyffenegger*, K. D. Hutchenson, J. Yelton (Geospace Technologies Corp)
- **Real-Time CO_2 Leakage Detection from Plugged and Abandoned Wells: Integrating Near-Surface Monitoring with Machine Learning:** S. Bakhshian[1], A. Chavoshi[2], H. Dashtian[2], M. Haddad[2], S. Hovorka[3] (1. Rice University; 2. The University of Texas at Austin)
- **Non-Intrusive Surface Heat Mapping for Detecting CO_2 Leakage in P&A Wells:** M. Zeidouni (Louisiana State University)
- **Sensitivity of Seismic Properties to CO_2 Saturation and Pore-Pressure in the Texas Gulf Coast:** R. Sabbagh Maciel, A. Tura (Colorado School of Mines)
- **Effects of CO_2 Phase State on Seismic Properties: Overview of Lab Testing on Cambrian Sands, Porous Carbonates, and Synthetic Rock:** D. R. Schmitt[1], A. Wendel[1], R. Kofman[2], J. Nycz[3] (1. Purdue University; 2. Consultant; 3. North American Helium)
- **DAS VSP Data Observed from Well Tubing Versus Well Casing on CO_2 Injector and Monitor Wells:** O. A. Barrios[2], M. Willis[2], W. Blanchard[2], G. Zhan[1], C. Egger[1] (1. TGS; 2. Halliburton)
- **An Integrated Approach to Risk-Based Monitoring for Geological Carbon Storage:** V. Vasylkivska[1], A. Hanna[2], A.P. Kirol[2], S. Salek[1], L. Huang[3], X. Yang[4], Y. Tian[4], E. Gasperikova[5] (1. National Energy Technology Laboratory; 2. Pacific Northwest National Laboratory; 3. Los Alamos National Laboratory; 4. Lawrence Livermore National Laboratory; 5. Lawrence Berkeley National Laboratory)
- **Enhancing 2D Legacy Seismic Data Value for CCS Monitoring Using Predictive Maintenance:** K. Gestin[1], H. S. Al Khatib[1], S. Randazzo[2], D. Katz[2] (1. SpotLight Earth; 2. Baker Hughes)
- **A Decade (Plus) of InSAR Monitoring for Injection Operations - What Have We Done and Where Are We Going Next?:** C. Lucente (TRE Altamira)

Theme 7: Financial, Economics, and Regulatory Framework

- **Value of Offshore Pore Space for Carbon Capture and Storage:** R. Diby, D. Meehan (Texas A&M University)
- **Techno Economic Evaluation of Carbon Capture Utilization and Storage Project in India:** P.K. Bansal (Corporate Exploration Centre, ONGC ltd India)
- **Carbon-Led Growth - The Components of the $73 Billion Required to Build Out CCUS in the United States:** G. Bain, J. Jen (Enverus)
- **A Novel CO_2 Shipping Transport Cost Evaluation Model: Comprehensive and Customizable Evaluation for Offshore Storage:** Q. Guo, M. Ma, B. Chen (Los Alamos National Laboratory)
- **Optimal CO_2 Transport and Storage Cost Screening: Application Example:** T. Warner, D. J. Morgan, C. Shih, G. Liu*, M. Mark-Moser, D. Vikara, L. Cunha (DOE NETL)
- **Debottlenecking the Computational Model Requirements by Analyzing EPA Reviews of Submitted Class VI Applications:** S. Tangirala, E. Torres (Geosyntec Consultants, Inc.)
- **Economic Evaluation of Geomechanical-Based Long-Duration Energy Storage: A Case Study in Permian Basin:** X. Xia, H. Zhang (Ryder Scott Company)

** Denotes the presenter other than first author*

TUESDAY POSTERS

Theme 8: ESGs and Stakeholder Engagement

- **EDX disCO$_2$ver, a New Digital Infrastructure Platform Aimed at Simplifying Carbon Transport and Storage Project Research:** P. Morkner[1], C. Rowan[1], K. Kuhn[2], T. Jones[2], D. McFarland[2], A. Maurice[2], K. Rose[1] (1. National Energy Technology Laboratory; 2. AVN)
- **Developing CCS Prospects Through Data-Driven Visualization:** R. Wilson[2], D. J. Hills[1], B. Roth[1] (1. Advanced Resources International, Inc; 2. Virginia Tech)
- **Challenges of Geologic Sequestration on BLM Lands:** D. G. Soutter, P. Ashmore (Burns & McDonnell)

Theme 9: ML and Data Analytics Applications

- **A Physics-Guided Deep Learning Model for Quantitative Risk Assessment in Geologic CO_2 Storage:** Z. Qin, M. Mehana (Los Alamos National Laboratory)
- **Bridging Models and Data: ML-Powered Forecasting for Carbon Storage Operations:** A. Hanna[1], A. P. Kirol[1], I. Patel[1], M. K. Mudunuru[1], H. Siriwardane[2] (1. Pacific Northwest National Laboratory; 2. National Energy Technology Laboratory)
- **Stochastic Ensemble Generation for Improved Characterization of Representing Geologic Variability in a Reservoir: IBDP Case Study for SMART Initiative:** B. Petras[1], S. Skopec[1], P. R. Ganesh[1], H. Yoon[2] (1. Battelle; 2. Sandia National Laboratories)
- **Applications of Machine Learning for CCS Project Acceleration:** J. Zhou[1], A. Chandra[2], Y. Li[1], Y. Perez Claro[1], L. Jia[2], D. Dindoruk[2] (1. Stanford University; 2. Shell)
- **Estimating CO_2 Saturation in Subsurface Geologic Reservoirs Using Pre-Stack Seismic Attributes and Machine Learning:** P.A. Owusu, R. Zhang (University of Louisiana at Lafayette)
- **FRACML: A Machine Learning Based Tool to Quantify Reservoir Scale Fracture Network for CO_2 Storage:** A. Kumar, W. Harbert, G. Liu*, L. Cunha, H. Siriwardane (DOE NETL)
- **Streamlining Carbon Storage Data Integration and Real-Time Analysis with Machine Learning:** W. Wang[1], J. Burghardt[1], H. Siriwardane[2], M. K. Mudunuru*[1] (1. Pacific Northwest National Laboratory; 2. National Energy Technology Laboratory)
- **CO_2 Plume Imaging with Diverse Monitoring Data at the Illinois Basin-Decatur Carbon Sequestration Project Using an Accelerated Deep-Learning Approach:** T. Sakai, M. Nagao, A. Datta-Gupta (Texas A&M University)
- **Imaging and Prediction of the CO_2 Plume Migration from Sparse Monitoring Data Configurations Using Deep Learning Models:** Y. Liu, B. Jafarpour (University of Southern California)
- **Augmented Data Management for Subsurface CCUS Data Sets:** J. B. Kozman[2], L. Pelegrin[1], R. Blake[2], J. Lamb[2] (1. Iron Mountain; 2. Katalyst Data Management)
- **Forecasting the Temporal Evolution of Carbon-Dioxide Plume Size During Geological Carbon Storage:** O. Talabi, M. Siddharth, V. T. Kumar, G. Ren (Texas A&M University)
- **Transforming Core Analysis with Core Digitalization and Machine Learning for Next-Generation Subsurface Insights in CCUS Projects:** T. Lhomme[1], C. Germay[1], J. Omma[2] (1. EPSLOG; 2. Stratum Reservoir)

Theme 10: Case Studies

- **Sensitivity Analysis and Validation of the FluidFlower Benchmark Applied to CO_2 Storage:** P. Ortega[1], R. Quevedo[1], D. Roehl[1], B. Carvalho[2] (1. The Tecgraf Institute of Technical-Scientific Software Development of PUC-Rio; 2. Petrobras Research Center)
- **AMIGO Project Overview:** D. Crandall[1], R. Dilmore[1], G. Lackey[1], G. Zambrano-Narvaez[2], R. Chalaturnyk[2], M. Livingstone[3], G. Dolce[3], S. Chen[3], V. Wang[3], I. Butynets[4] (1. National Energy Technology Laboratory; 2. University of Alberta; 3. GLJ Ltd; 4. Peyto Exploration & Development Corp.)
- **ML-Powered Subsurface Interpretation: Transforming Geologic Carbon Storage with Data-Driven Insights:** A.P. Kirol[1], A. Hanna[1], I. Patel[1], P. Wingo[2], M.K. Mudunuru*[1], H. Siriwardane[2] (1. Pacific Northwest National Laboratory; 2. NETL)
- **Comparative Assessment of Levelized Costs in Carbon Abatement Strategies:** J. Florez, J.D. Dedhia, I. Karunagaran (Genesis Energies)
- **CO_2 Storage Economic Analysis: CarbonSAFE Use Case:** D.J. Morgan[1], K. Bello[1], G. Liu*[1], C. Shih[1], T. Warner[1], D. Vikara[1], M. Mark-Moser[1], L. Cunha[1], J. Fonquergne[2], A. Morgan[2], A.D. Ameyaw[2], G. El-kaseeh[2], W. Ampomah[2] (1. DOE NETL; 2. New Mexico Institute of Mining and Technology)
- **The Role of CCUS in Decarbonizing the Cement Industry: Challenges, Opportunities, and Future Outlook:** D. Bodin (Ramboll)
- **Regional Carbon Initiatives in Pakistan: Focus on Feasibility of Geological Storage of CO_2:** S. Ahmed, W. Habib (Oil and Gas Development Company Limited, Pakistan)
- **Co-Optimizing Hydrogen, and Carbon Dioxide Infrastructure for Deep Decarbonization in Appalachia:** Q. Mehdi[1], R. Middleton[1], J. Duque[1], A. Harrison[1], C. Upchurch[1], A. Nasta[2], M. Ives[2], D. Wissmiller[2] (1. Carbon Solutions; 2. GTI Energy)
- **Petrophysical and Geologic Characterization for Arbuckle Group:** B. Milad, F. Suriamin, B. Allen, C. Smith, D. Sapardina, J. Peng, N. Hayman (University of Oklahoma)
- **A Pilot Study of Hydrogen Production Unit Flue Gas Carbon Capture for Sequestration and Utilization:** L. Dobelle, H.K. Szentkuti, S. Pina, C.A. Cid, R. Rogers, W. Mo, A. Gu, C.D. Trang (Mitico)

** Denotes the presenter other than first author*

EXHIBITION INFORMATION

Looking to find the latest innovations, emerging technologies, and services that will deliver results for your business? The exhibition features more than 110 exhibiting companies and operators, as well as a variety of global service providers and innovators. Make plans to connect face-to-face with the companies leading the way for successful net-zero operations, developments, and opportunities.

Exhibition Location

George R. Brown Convention Center, Grand Ballroom

Exhibition Hours

9:00 am–6:00 pm **Monday, 3 March**
9:00 am–6:00 pm **Tuesday, 4 March**
9:00 am–3:00 pm **Wednesday, 5 March**

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AAPG....1219
AGAT Laboratories....1107
ArianeLogiX GmbH....704
AspenTech....1101
Atlus Well Experts....1200
Badley Ashton....817
Baker Hughes....701
Battelle....813
Burns & McDonnell Engineering Company, Inc.....1003
Canamera Coring....1109
Chinook Consulting Services....618
Core Labs....807
DataCan USA....1002
Diversified....1001
Dolan Integration Group, LLC....501
DrillPlus Coring Solutions....409
Earth Signal Processing, Ltd....509
Eastern Energy Services, Inc....606
EasyCopy Company....1009
Eliis....1014
ESG Solutions....1100
ESGWAY Corporation....609
Expro....603
Geoex MCG Ltd.....1012
Geomap Company....1000
Geophysical Society of Houston (GHS)....504
Geospace Technologies....1112
Geostock Sandia, LLC....812
Green Imaging Technologies....601
GVERSE GeoGraphix....717
Haas & Cobb Petroleum Consultants....604
Halliburton Energy Services, Inc.....901
Ikon Science....1005
Intertek Westport Technology Center....907
IPT Well Solutions....1106
ISTI....1113
Katalyst Data Management....615
Lonquist Sequestration LLC....706
Luna Innovations Inc....1004
MBA Energy & Industrial, LLC.....816
MicroSeismic, Inc.....912
MJ Logs Inc.....713
Nanometrics, Inc.....600
Oklahoma State University/
Boone Pickens School....1208
Paragon Geophysical Services, Inc.....512
PE Limited....1006
Pelican Energy Consultants....915
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PetroStrat....410
Premier Corex....613
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Ridgeline Engineering, LLC....607
Rose Subsurface Assessment....920
S&P Global Commodity Insights....712
SageRider....506
Sequent....716
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SensorEra Inc....815
SLB....707
SPE Gulf Coast Section....1215
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Stryde....1007
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Tech Limited....1017
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TGT Diagnostics....500
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TRE Altamira Inc....715
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Energy Resources....1211
US DOE Office of Fossil Energy
& Carbon Management....1115
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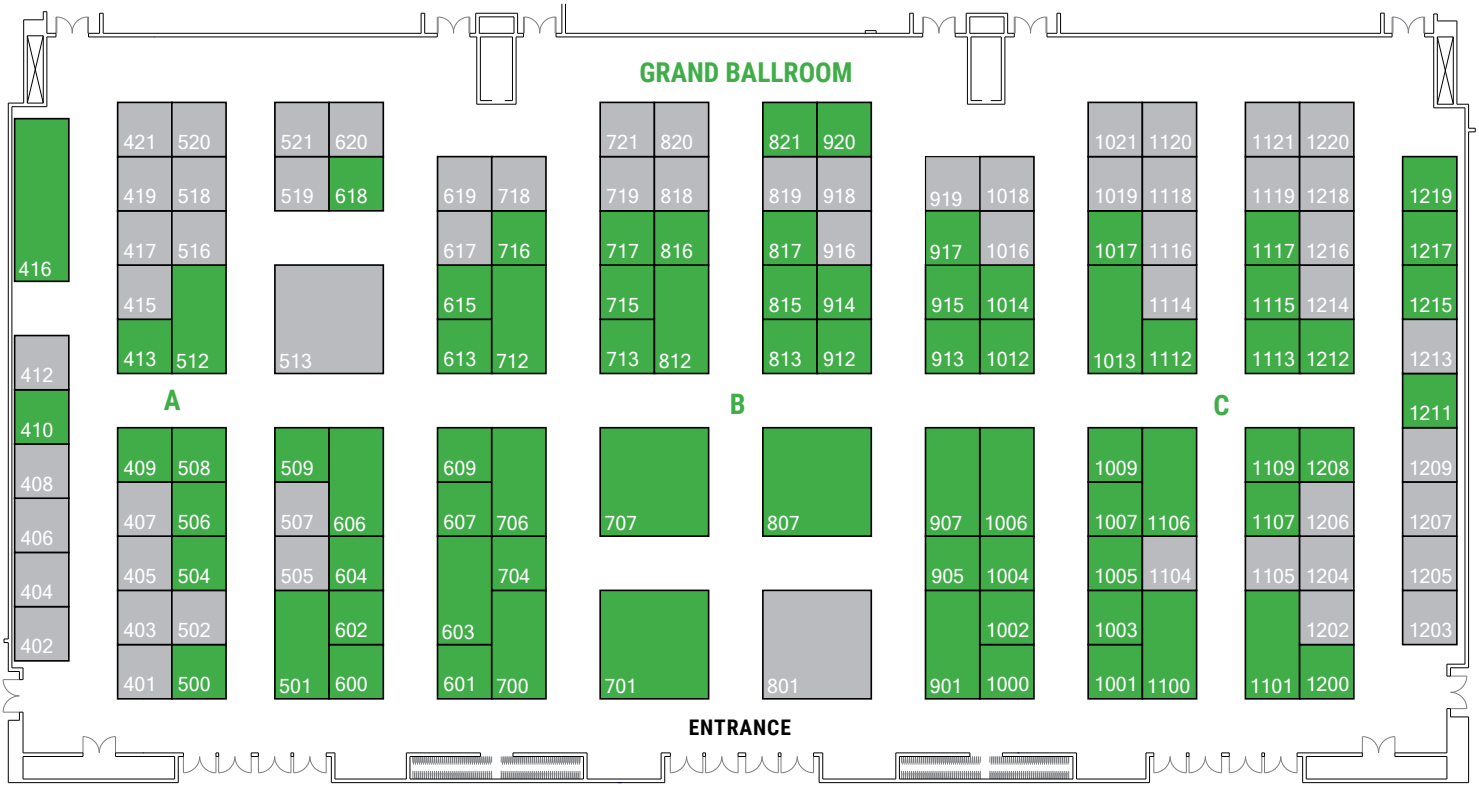

REGISTRATION INFORMATION

Registration Pricing

Note: All Prices USD	Registration Types	On or before 21 January 2025 Midnight EDT	After 21 January 2025 Midnight EDT
Conference Registration	Member - Full Conference	$725	$925
	Non Member - Full Conference	$875	$1075
	Government/Educator – Full Conference	$525	$675
	Conference Registration includes: Access to all three days of the event, oral and poster sessions, refreshment breaks, networking receptions, exhibition, and program book.		
	One Day - Conference	$375	
	One Day - Conference Registration includes: Access to specific day's event including oral and poster sessions, refreshment breaks, networking receptions, exhibition, and program book.		
	Member - Student	$75	
	Non Member - Student	$100	
	Student Registration includes: Access to all three days of the event, oral and poster sessions, refreshment breaks, networking receptions, exhibition, and program book.		
Exhibition Only Registration	One Day - Exhibition Only	$150	
	One Day - Exhibition Only includes: Access to specific day's event in the exhibition hall, refreshment breaks, and networking receptions.		
Non Conference Registration	Registration for Short course(s) and/or Field Trip only.	$35 + Cost of the Ticketed Event	
	Non Conference Includes: Access to the chosen Short course(s) and/or Field Trip for which you registered. You will not receive access to conference sessions, networking receptions or exhibition.		

Corporate / Group Registrations

Share the benefits and save on registration fees with group packages. Group registration provides a lower-than-member-rate cost for participants regardless of their membership status. Full conference Group Registrations are priced at $625/per person with a minimum group requirement of 10.

Custom packages are available beyond the minimum group requirement. Enter the additional quantity of registrations when completing the Group Registration Form. AAPG.to/CCUS2025groupreg

Confirmations

A detailed confirmation, including information about the registration type, payment information, receipt, etc. will be emailed to you upon completion of registration. Please retain this acknowledgement for your records. Should you not receive a confirmation, please contact the AAPG Customer Experience Center by email at ccus@aapg.org, or at 1 918 584 2555 or 800 364 2274 (toll free - US & Canada only).

Cancellations/Refunds

Cancellations can be made by following instructions on your confirmation or contact the AAPG Customer Experience Center by email at ccus@aapg.org, or at 1 918 584 2555 or 800 364 2274 (toll free - US & Canada only) by 14 February. Cancellations received on or before 14 February will be fully refunded less a $75 processing fee.

Registration Hours:

- 7:30 am–4:30 pm **Sunday, 2 March**
- 6:30 am–5:30 pm **Monday, 3 March**
- 7:00 am–5:30 pm **Tuesday, 4 March**
- 7:00 am–2:30 pm **Wednesday, 5 March**

ACCOMMODATIONS AND TRAVEL

Accommodations

Please book your rooms directly with these hotels using the links at CCUSevent.org to receive special conference room rates. Hotel reservations must be reserved by **7 February**.

Hotel	Address	Price	Price Includes	Parking* (Daily)
Embassy Suites by Hilton	1515 Dallas St, Houston, TX 77010	Single/Double – $256	Complimentary Breakfast In-Room Dining Complimentary Guest Room Internet	Self-parking – Not available Valet – $55 per night
Hampton Inn by Hilton	710 Crawford Street, Houston, TX 77002	Single/Double – $219	Complimentary Breakfast In-Room Dining Complimentary Guest Room Internet	Self-parking – Not available Valet – $55 per night
Homewood Suites by Hilton	710 Crawford Street, Houston, TX 77002	Single/Double – $229	Complimentary Breakfast In-Room Dining Complimentary Guest Room Internet	Self-parking – Not available Valet – $55 per night

Convention Center Information

George R. Brown Convention Center
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Convention Center Parking

There are 1,425 parking spaces in the South Avenida Garage (Hilton Americas-Houston) parking garage connected by a Level 2 skywalk to the convention center for up to $24 daily. Address: 1710 Polk Street.

There are 1,846 parking spaces in the Avenida North Garage (Partnership Tower) connected by a Level 2 skywalk to the convention center for up to $24 daily. Address: 701 Avenida de las Americas.

There is an additional 663 parking spaces in Avenida Central Garage (Discovery Green underground parking facility) across the street from the George R. Brown Convention Center for $18. Address: 1002 Avenida de las Americas.

Tundra Garage (by Toyota Center) is an additional 2,478 parking spaces that the cost ranges from $5 to $10 on non-game/ concert days.
Address: 1506 Jackson Street.

Public Transportation

Taxis

$6 Cab Fare Anywhere Downtown. The City of Houston has authorized a flat taxi fare of $6 for all trips in the downtown area. This $6 fare will apply anywhere within the Central Business District, bounded by Interstate 45, Interstate 10 and U.S. 59. No surcharges will apply to the fare, which can accommodate multiple riders under the $6 total rate.

METRORail System

METRORail offers convenient and accessible service within the heart of the city between downtown Houston and several of Houston's top destinations and districts. You can purchase a day pass for use on METRORail and METRO buses for just $3 a day. Visit ridemetro.org for more route and fare information.

METROBus System

METRO also offers bus service throughout Houston. Local service runs mostly on city streets, stopping at every other corner along its route. Oneway fare is $1.25. Visit ridemetro.org for more route and fare information.

For assistance, contact CCUS Customer Experience
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