

Technical Presentations

--- THURSDAY MORNING, APRIL 11 ---ORAL SESSIONS-

Wildcattin' Ain't Dead Yet: The Next Wave of Prospecting on the Gulf Coast, USA

Co-chairs: Jon Rotzien and Laura Pommer **MAGNOLIA**

Deborah Sacrey, INVITED - Cindy A. Yeilding Honorary Lecture in Giant Discoveries: Geronimo Wilcox Exploration Project
Barry Rava, INVITED - Houston Explorers Club Honorary Lecture: Subtle Faults and Future Wildcats in the Onshore Gulf Coast
Christopher Murley and Machelle Johnson, INVITED - Peter J. Lellis Memorial Lecture in Petroleum Geology: Achieving Growth in a "Brownfield": 7900 Ft Sand Development in the Main Pass 41 Field, Gulf of Mexico
Robert Pascoe, INVITED - Roger M. Slatt Memorial Lecture in Deepwater Stratigraphy: The Deep Miocene Potential of the Outer West Louisiana Shelf: An Underexplored Play
BREAK
Richard Sears, INVITED - Cheryl Collarini Honorary Lecture in Exploration Economics and Risk: Exploration and Wildcatting—Risk in our Business and What it Really Means
Chad Williams, David Lee, and Danny Williams: Technology Triggered Stranded Assets—The New Wildcatting
Selim S. Shaker, Dave Reynolds, and Walter W. Wornardt: Exploring the Missing Blind Zone in the Gulf of Mexico Shelf
BCCGROBRAC

Structure and Geomechanics of the Gulf Coast

Co-chairs: Molly Turko and John Cannon **PECAN**

8:00	David Ferrill, Gary R. Walter, Kevin J. Smart, and Adam J. Cawood: Fault Zone Control on Groundwater Flow in the Glen Rose Formation within the Hidden Valley Fault Zone, Comal County, Texas
8:25	Kevin Smart and David Ferrill: Geomechanical Modeling of Injection-Induced Deformation in the Eagle Ford Formation: Importance of Mechanical Stratigraphy and Stress State
8:50	Selim S. Shaker: Geomechanics and Drilling Challenges in the Deepwater Mississippi Fan Fold Belt—Case Histories from the Gulf of Mexico
	BREAK
10:15	Selim S. Shaker: Pore Pressure Prediction Geology and Modeling Assessment
10:40	Adam Cawood, David Ferrill, and Kevin Smart: Mineralogy Controls Normal Fault Displacement and Height in Mechanically Layered Rocks at Hoover Point, Central Texas
11:05	Roberto Wagner Alvarado, Scott Wilkins, Stephanie Cook, Robert Holman, Robin Pearson, Abbey Hale, Grant Loxton, Jonathan Woolley, Jennifer Roberts, Wei Zheng, and Vincenzo De Gennaro: Advanced Geomechanical Modeling of Stimulation Induced Stress Change for Casing Deformation Analysis



Critical Metals (and Lithium) Exploration Value Chain

Co-chairs: Swapan Sahoo and Graham Spence **ELM**

8:00	Eric Wolff: Introduction to Exploration and Mining of Uranium in South Texas
8:25	Julie Bloxson: Understanding the Lithium Content Trends in the Smackover Formation: Potential Influencing Factors in the Ark-La-Tex Region
8:50	Shailee Bhattacharya, Shailee Bhattacharya, Shikha Sharma, Michael C. Dix, Albert S. Wylie, and Tom Wagner: Potential Lithium Enrichment in Pyrite from Organic-Rich Shales
	BREAK
10:15	Christopher Smith, Timothy Smith, Patrick Gordon, and Michael Smith: Stratigraphic Analysis of Helium and Other Volatiles in Legacy Core Samples: Lessons Learned on Exploration Applications and How Helium Moves
10:40	Roxana Darvari, Jean-Philippe Nicot, Bridget R. Scanlon, J. Richard Kyle, and Brent A. Elliott: Lithium in Oilfield Waters in Texas and Neighboring States
11:05	Alex Zumberge, Graham Spence, and Swapan Sahoo: The History and Future of Critical Metals: Knowledge Integration and Future Business

--- THURSDAY AFTERNOON, APRIL 11 --- -ORAL SESSIONS-

Wildcattin' Ain't Dead Yet: The Next Wave of Prospecting on the Gulf Coast, USA --SPECIAL DISCUSSION--

Co-chairs: Jon Rotzien and Laura Pommer MAGNOLIA

1:00	Susan Morrice and Cindy Yeilding: The Wildcatter's Mindset: Come on CatsWhat will it Take to Bring Out the "Wild Cat" in
-	Each of us?
2:15	

Geology of the Gulf Coast (Part 1)

Co-chairs: Tom Ewing and Dallas B. Dunlap MAGNOLIA

3:15	Kelly Hattori and Robert G. Loucks: The Early Cretaceous Sligo Shelf Margin of East Texas: Facies and Depositional Settings
3:40	John Snedden, Chris M. Lowery, Timothy F. Lawton, and Tim Whiteaker: The End of the Cretaceous: Depositional Paleogeographic Reconstruction of the Gulf of Mexico and Adjacent Areas Just Prior to the Chicxulub Impact
4:05	Peter Flaig, Katherine Garcia, Chris Denison, Thomas Demchuk, Jorge Spangenberg, Neil Campion, Sebastian Castletort, Lorena Moscardelli, and Nikhil Sharma: Evidence for the Paleocene-Eocene Thermal Maximum in Outcrops, Bastrop County, Central Texas
4:30	Thomas E. Ewing: Tectonic Setting and Petroleum Systems of the Seno Mexicano (South Texas and Northeastern Mexico)—An Initial Synthesis



Geology and Exploration Opportunities of the East Texas Basin

Co-chairs: Hunter Carr and Casey Clawson **PECAN**

1:00	Will Pollard: Educated Development of Conventional Reservoirs
1:25	Qiqi Wang, Robert H. Lander, Linda M. Bonnell, and Stephen E. Laubach: Modeled Rock Properties through Time and Implications for Fracture Attributes Development in Travis Peak Formation Sandstone, East Texas
1:50	Pukar Mainali, Casey Clawson, Nikechi Odumodu, Santhosh Narashimhan, Ben Chen, and Simon Hughes: Geochemistry and Geomechanics to Improve Selection of Horizontal Landing Zones—A Case Study in the Haynesville
2:15	Amanda Calle, Fritz Palacios, David L. Carr, Raymond L. Eastwood, Shuvajit Bhattacharya, and Tim McMahon: Basinwide Haynesville-Bossier Lithofacies Distribution, North-Central Gulf of Mexico Basin
	BREAK
3:15	William Ambrose: The Shelf-to-Lower-Shoreface Transition in the Upper Midway Group in Southeastern Texas
3:40	Jeffrey Bridges and Julie Bloxson: Stratigraphic Analysis of the Buda Limestone with Implications on Hydrocarbon Production Constraints, Madison and Houston Counties, Texas
4:05	Richard Denne, Joshua Davidson, Marissa English, and Samantha Patterson: The Lower Cenomanian Maness Shale of East Texas: Depositional Patterns and Hydrocarbon Source Potential
4:30	Robert G. Loucks, Kelly E. Hattori, and Colton S. Spears: Stratigraphic and Lithofacies Framework of the Lower Cretaceous Pettet Formation in the Wright Mountain Field on the Northeastern Flank of the East Texas Basin

Environmental and Geotechnical Technologies and Advancements

Co-chairs: Jack Sackrider and Marcus Gary

ELM

1:00	Mustafa Saribudak: Adding Value to Client Projects: A Geophysical Consultant's Field Guide
1:25	James Willis: Nodal and Antinodal Eclipse Observation and Other Astronomical Using Modern Software Technology
1:50	Rebecca Nunu, F. Paul Bertetti, Ronald T. Green, and Gordon Wittmeyer: Application of a Geochemical Framework for Water Resource Management in a Semi-Arid Karst Landscape: San Solomon Springs, Texas, USA
2:15	John Sharp: Subsidence Caused by Hydrocarbon Production in the Rose City and Nearby Fields, Southeastern Texas

Emerging Geothermal Energy Resources and Technologies

Co-chairs: Joseph Batir and Bryan Freymuth **ELM**

3:15 Peace C. Eze, Alex Blizzard, Rajashree Kumkar, Cesar Velasquez, and Travis Hagler: Machine Learning-Based Imputation of Bottom Hole Temperature for Enhanced Geothermal Resource Assessment in the US and Canada 3:40 Joseph Batir: Why the Gulf Coast will be the Geothermal Evolution Capital of the World 4:05 Ken Wisian and Malcolm Ross: The Potential of Rural Geothermal Development—Presidio County, Texas, Case Study

J. Eric Stautberg and Stephen A. Sonnenberg: Prospecting for Sedimentary Geothermal Resources in the Mesozoic Strata of South Texas



--- FRIDAY MORNING, APRIL 12 ---ORAL SESSIONS-

Eagle Ford and the Austin Chalk: Gifts that Keep on Giving!

Co-chairs: Toti Larson and Eddie Valek

MAGNOLIA

8:00	David Tonner, Andreina Liborius, Carl Symcox, and Carolina Mayorga: Enhancing Reservoir Characterization and Well Placement Optimization Using Chemical Elemental Compositions: A Texas Case Study
8:25	Wahid Rahman: Geochemistry and Petroleum Systems Analysis of the Eagle Ford Shale from South Texas to East Texas
8:50	Richard Denne: The Woodbine–Eagle Ford Depositional System Revisited: What is the Woodbine?
9:15	Evan Sivil, Robert G. Loucks, Lucy Ko, and Toti Larson: A Regional Examination of the East Texas Influence on Eagle Ford Group Deposition across Dewitt County
	BREAK
10:15	Jana Bachleda, Shuangyu Ge, Muqing Jin, Jiang Wu, and Faye Liu: Geochemical Reservoir Evaluation and DRV Analysis of Austin Chalk and Eagle Ford—Case Studies and Drainage Fracture Height (DHF) Statistics
10:40	John Cooper: The Eagle Ford Outcrops of Cibolo Creek, Northeastern San Antonio Area
11:05	Sean Kimiagar: Eagle Ford: An Activity and M&A Update

Geology of the Gulf Coast (Part 2)

Co-chairs: Tom Ewing and Trey Cortez

PECAN

10:15	Robert G. Loucks, Robert M. Reed, and Priyanka Periwal: Interpretation of the Upper Cretaceous Pilot Knob Volcano Associated McKown Formation at McKinney Falls State Park, Texas: Shallow-Water High-Energy Beach System or Deeper-Water Gravity-Flow Deposits?
10:40	Robert Reed and Rieko Adriaens: Compositional Variations of Tuffs of the Late Cretaceous Volcanic Play of the Balcones Igneous Province, Texas, and their Effect on Volcanic-Hosted Reservoirs
11:05	Mustafa Saribudak: Near-Surface Geophysical Mapping of Upper Cretaceous Submarine Tuff Mounds of Williamson Creek and St. Elmo within the Balcones Magmatic Province (BMP), Austin, Texas, USA

Geologic Carbon Storage on the Gulf Coast (Bureau of Economic Geology – Gulf Coast Carbon Center)

Co-chairs: Alex Bump and James Hobbs

ELM

8:00	Maria Paula Madariaga and Carlos A. Uroza: Assessment of the Wilcox Group for CO ₂ Storage Potential in an Area Onshore South Texas
8:25	Alex Bump: Pressure Space: The Key Subsurface Commodity for CCS
8:50	Timothy McMahon, Shuvajit Bhattacharya, Qiqi Wang, and Katherine Yut: Potential for Carbon Sequestration in Depleted Eagle Ford Shale Reservoirs
9:15	Jose Ubillus: Experimental Investigation of CO₂ Buoyant Flow Saturation in Ripple Bedforms



ML and AI to Accelerate Gulf Coast Development

Co-chairs: David Thul and Shuvajit Bhattacharya **ELM**

10:1	Rabindra Chakraborty, Manoj Raghorte, Catherine Donohue, and Hani Elshahawi: Intuition Al to Estimate Reservoir Fluid Properties in a More Definitive Way
10:4	William Hagan, Jeremiah Myers, Robert Foster, and David Pritchard: Ensuring Wellbore Quality and Integrity in Real Time
11:0	Dallas B. Dunlap, Shuvajit Bhattacharya, Sergey Fomel, Xavier Janson, Jacob Covalt, and Zoltan Sylvester: The Generation of Benchmarked Subsurface Datasets for Improved AI and ML Development

--- FRIDAY AFTENOON, APRIL 12 ---ORAL SESSIONS-

New Things to Old fields in Deepwater Stratigraphic Intervals

Chair: Andrew Pepper MAGNOLIA

1:00	Anish Kumar, Adaobi Irogbele, and Elizabeth Ruiz: Modern Borehole Images Unravel Non-Stop Impacts of Mass Transport Deposits on Deepwater Sands in the Gulf of Mexico
1:25	Mia Rudin, Wesley R. Brown, Robert B. Finkelman, and Ignacio Pujana: Magnetic Particles Extracted from a Deep Sea Manganese Nodule: Preliminary Observations
1:50	Catherine Donohue, Alex Zumberge, and John Zumberge: Can we Teach Old Oils New Tricks?: Reanalyzing Oil Samples in the Deepwater Gulf of Mexico
2:15	Selim S. Shaker: Subsurface Formation Pressure Gradient vs. Slope: Perception and Pitfalls
	BREAK
3:15	Gabriel Gil: Reservoir Identification with Phase Decomposition
3:40	Dan Jarvie: Major Cretaceous and Jurassic Source Rocks of East Texas, Gulf of Mexico, and Mexico
4:05	Andrew Pepper, Nawaz Bugti, Lara Heister, and Dan Jarvie: Much More to it than 'Tithonian': Anatomy of the Jurassic-Cretaceous Deepwater Gulf of Mexico Source Rock



Geology of the Gulf Coast (Part 3)

Co-chairs: Tom Ewing and William Ambrose

PECAN

1:00	Mustafa Saribudak: Inner Structure of Pilot Knob Submarine Volcano in the Balcones Magmatic Province (BMP) (Austin, Texas) Revealed by Electrical Resistivity Tomography and Magnetic Surveys
1:25	Mark E. Thompson: Upper Cretaceous Bigfoot Erosional Unconformity: A Tool to Identify the Exact Position of the Middle Maastrichtian Shoreline in South-Central Texas
1:50	Paul Lawless and Ryan Weber: Upper Cretaceous Erosional Features and the K-Pg Boundary in the Northern Gulf of Mexico Subsurface of Louisiana and Mississippi
2:15	Vic Chevillon and Alf B. Hawkins: Basin Analysis: Metals and Petroleum Exploration Contrasts
	BREAK
3:15	Jacob Margoshes and Michael L. Sweet: Rapid Incision and Filling of the Mississippi Canyon during the Late Pleistocene in the Northern Gulf of Mexico
3:40	Harold H. Rogers, III and William Ambrose: Revelations of the Lower and Middle Frio Formation along the South Texas Gulf Coast
4:05	R. Larell Nielson, Taylor Carranza-Watson, and Andrew Henry: Comparative Analysis of Ripple Marks in the Hickory Sandstone along Crabapple Creek, Gillespie County, Texas, with Ripple Marks on the Beach at Follett's Island, Texas

Funding Oil and Gas Ventures: Using your Geo-Logic to Climb the Charts

Co-chairs: Lee Billingsley and Michael Mazzella

ELM

1:00	Bill Fairhurst: Strategic Decisions for Petroleum Geologists
1:25	Deborah Sacrey: Marketing Geosciences Skills to Become a Successful Consultant
1:50	Lee Billingsley: Funding Conventional Oil and Gas Prospects: Potential Sources and Deal Structure
	BREAK
3:15	Michael Mazzella: The Independent's Playbook for Joint Ventures—From Sourcing to Signing on the Dotted Line for Large Onshore Exploration Projects
3:40	Ryan Birkenfeld: Prospect Evaluation Criteria for a Large Family Office
4:05	Donald W. Downey: Saratoga Chalk Update II: Bias in Petroleum Economic Evaluation



--- THURSDAY / FRIDAY, APRIL 11 and 12 --- POSTER SESSIONS-

Poster Chair: Julie Bloxson

P-1	David T. King, Jr. and Richard A. Esposito, Jr.: Shallow Depressions of Enigmatic Origin as Possible Surficial Indicators of Hydrogen Gas Emanations from Deep-Seated Sources within the Earth
P-2	Yijie Zhu, Marie Mckechnie, Sophie Boulter, and Tianyu Chen: CO ₂ Storage Site Screening for Depleted Fields in the Texas Gulf Coast—An Integrated Approach
P-3	Vic Chevillon and Alf B. Hawkins: Basin Analysis: Metals and Petroleum Exploration Contrasts
P-4	Randy Bissell: Texas's Llano Mesteño: Improving our Understanding of the Holocene Evolution of the South Texas Sand Sheet
P-5	Mariana Olariu, Lorena Moscardelli, Maria Antonieta Lorente, and Vann Smith: Low-Amplitude, High-Frequency, Climatically Driven, Sea-Level Changes in the Lower Wilcox
P-6	Mikaela Garcia, Shuhab D. Khan, Nastassia Simon, and Ozzy Tirmizi: Quantifying Erosion at Sargent Beach, Texas, Using Remote Sensing
P-7	Rubin Olivares, Pousali Pathak, Harshad V. Kulkarni, and Saugata Datta: Freshwater Challenges at the Texas-Mexico Border - Implications of Unmonitored Private Wells for Human Health
P-8	Noah Klitus and J. M. Cannon: Somewhere between Texas and Mexico: Contextualizing the Laramide of Big Bend, Brewster County, Texas, Via Structural Restoration and Forward Modelling
P-9	Corrinne Kotara and J. K. Haschenburger: Terrace Sediment Volumes in the Lower San Antonio River, Texas
P-10	Jack Butcher and Julie Bloxson: Geochemical Insights into Porosity and Permeability Controls of the San Andres Formation on the Central Basin Platform from Andrews and Gaines Counties, Texas
P-11	Juan Pablo Ramos and Paul Mann: How Oceanic and Oceanic Plateau Crustal Architecture Controls Potential Deepwater Hydrocarbon Plays in the Colombian Basin, Caribbean Sea
P-12	Trent Fortier and John Shaw: Experimental Tests of Loop Stability in Coastal Channel Networks