GeoGulf 2025

Stephen F. Austin State University

Baker Pattillo Student Center

MONDAY MORNING, APRIL 7

–ORAL SESSIONS–

Geology of Deepwater Gulf of Mexico (Grand Ballroom)

Session Co-Chairs: Joseph Termina and Jamie Singer

8:30 Stephen P. J. Cossey (Cossey and Associates Inc./U3 Explore), Joshua Rosenfeld (Retired Geologist), Mark Bitter (Marbit Consulting), and Gerald Dickens (Trinity College): The Paradox of the ~56 Ma Pre–PETM Paleocanyons in the Gulf of Mexico

8:55 Julie Bloxson (Stephen F. Austin State University), David Lankford-Bravo* (bp), Sidonie Revillon (Sedisor), and Chris Piela Cox (bp) (asterisk indicates speaker): New Insights on the Depositional Age of the Louann Salt in the Gulf of Mexico Basin

9:20 A. Kurt Tollestrup and Michael Hudec (Bureau of Economic Geology): Polygonal Structure of Deep Minibasins in the Gulf of Mexico Flex-Trend

9:45 BREAK

10:20 Stefanie Frelinger and Luke Pierce (Cantium): Unraveling the Stratigraphic Complexity of the Upper Miocene Slope-Channel Systems at MP313, Gulf of Mexico Shelf: Leveraging Reprocessed Seismic Data to Establish a New Trend within a Mature Field

10:45 John Snedden (University of Texas at Austin), Zach Sickmann (University of Texas at Dallas), Annie Walker, Tim Whiteaker, Michael Sweet, and Daniel Stockli (UT–Austin): Sediment Volume Balancing of Onshore Exhumation and Offshore Accommodation for Mexico Cenozoic Reservoirs and Implications for Future Deepwater Exploration

11:10 A. Kurt Tollestrup and Michael Hudec (Bureau of Economic Geology): Importance of the Mid-Level Canopies in the Gulf of Mexico Flex-Trend

Lithium Exploration and Critical Metals (President's Suite)

Session Co-Chairs: Anita Paulsen and Bobby Raines

8:30 Tim Palmer (Mississippi State University), Stephen G. Franks, Abdollah Orangi, and Prabhdeep Singh Sekhon (GreenLite Resources, Inc.): Lithium in the Triassic Subsurface of the Northern Gulf of Mexico Basin

8:55 Peter Mullin (Werrus Energy): Play Fairway Analysis for the Lithium Brine Play of NE Texas and Arkansas.

9:20 Robert G. Loucks (Bureau of Economic Geology): Factors Influencing Reservoir Quality in Potential Lithium-Enriched Brine Reservoirs of the Northeastern Texas Smackover Formation

9:45 BREAK

10:20 Katherine J. Knierim, Andrew L. Masterson, Philip A. Freeman, Amanda S. Herzberg, Aaron M. Jubb, Bonnie McDevitt, Colin A. Doolan (U.S. Geological Survey), Ciara Mills (Arkansas Department of Energy and Environment), Jessica M. Chenault (USGS), Peng Li, and Scott M. Ausbrooks (ADEE): Random Forest Machine Learning Predictions of Lithium in Brines from the Smackover Formation

10:45 Albert Maende and David Weldon (Wildcat Technologies, LLC): Prediction of Lithium Content in the Smackover Formation Of Alabama, USA, By Using Pyrolysis Analysis of Siderite in Drill Cuttings and Cores

11:10 Robert G. Loucks (Bureau of Economic Geology): Evaporite Zones and Associated Dissolution-Collapse Breccias in the Upper Jurassic Smackover Interval in Northeastern Texas: Are they a Concern for Heterogeneity?

Regional Gulf Coast Geological Studies, Part 1 (Regent's Suite A)

Session Co-Chairs: Rich Adams and Graham Spence

8:30 Christine Griffith, Michael Pope, and Arthur Donovan (Texas A&M University): Impact of Cordilleran Tectonics on the Gulf Coast San Marcos Arch and Greater Sabine Uplift

8:55 Thomas E. Ewing (Frontera Exploration Consultants): The Balcones Fault System, Texas—An Overview

9:20 William A. Ambrose and Harold H. Rogers, III (Bureau of Economic Geology): Stratigraphic Evolution of Fluvial-Dominated Deltaic and Wave-Modified Shoreline Systems in the Eocene Yegua Formation in Northern Jim Wells County, South Texas

9:45 BREAK

10:20 Brent C. Hedquist (Texas A&M University–Kingsville), Colton Klatt (University of Texas at San Antonio), Emma Mroz, and Ashtyn Christian (TAMUK): Studying the Change in Dune Morphology in the South Texas Sand Sheets (STSS) from 1974–2024

10:45 Peter Flaig (Bureau of Economic Geology), Katherine Garcia (ExxonMobil), Christopher Denison (Astra Stratigraphics), Thomas Demchuk (WSP USA Inc.), Jorge Spangenburg (University of Lausanne), Neil Campion (PetroStrat), Thierry Adatte (University of Lausanne), Dolores van der Kolk (Bureau of Economic Geology), Sebastian Castelltort (University of Geneva), Paul Cornick (PetroStrat), and Lorena Moscardelli (Bureau of Economic Geology): Regional Significance of New Evidence for a Paleocene-Eocene Thermal Maximum Succession in Outcrops of Bastrop County, Texas

11:10 Harold H. Rogers, III, and Brent A. Elliott (Bureau of Economic Geology): A Review of Uranium Mining Activity in South Texas

ALL-CONVENTION LUNCHEON – included in full registrations & guest tickets

11:45 am–1:00 pm

(Grand Ballroom)

Geology Meets Technology: Leveraging AI and Big Data for Innovation, a panel discussion moderated by Hunter Carr, and featuring Ceri Davies, Travis Halger, Jessica Pair, and David Thul. Sponsored by Carr Resources.

The Business Side of Prospecting (Grand Ballroom)

Session Co-Chairs: Robin Smith and Bill Fairhurst

1:30 Richard A. Sears (Leading Energy Now): Tricks and Traps in Exploration Analysis and Project Proposals

1:55 Bill Fairhurst (Riverford Exploration, LLC): Pillars of Strategy and Implications: Understanding Current Market Influences is Crucial for Seizing Strategic Opportunity

2:20 Donald Muth, Sr. (Oakmont Minerals, Inc.): It's Even More About LNG!

2:45 BREAK

3:15 Bill Fairhurst (Riverford Exploration, LLC): U.S. Unconventional Oil Production is the Dominant Production Influence on Global Oil Prices

3:40 Chris H. Reed (Creedex, LLC): A River Runs through it (No Apology to Norman Maclean)

Haynesville, Eagle Ford, and Other Unconventional Plays (President's Suite)

Session Co-Chairs: Paul Hene and Josh Novello

1:30 Bryan Bottoms (Detring Energy Advisors): Gulf Coast Activity Update—A Geological Look at Modern Developments and Activity around the Eagle Ford, Haynesville, and Greater Gulf Coast Region

1:55 Jason Flaum, Justin Birdwell, Katherine French, Rand Gardner, and Scott Kinney (U.S. Geological Survey): Insights into Paleoenvironmental Variability of the Eagle Ford Shale along the Eastern Flank of the San Marcos Arch

2:20 Timothy McMahon and Sofia Berdysheva (Bureau of Economic Geology): Production Impact of Horizontal Well Orientation Relative to Shmin Direction in the Eagle Ford Group and Haynesville Shale

Mineralogy and Rare Earth Elements (President's Suite)

Session Co-Chairs: Kevin Hill and John Carr

3:15 Emma Mroz and Veronica Sanchez (Texas A&M University–Kingsville): Analysis of Mineralogy and Surface Features Provenance in Key Martian Regions Using a Spectrometry-Integrated Geodatabase

3:40 Mindy Faulkner and Rebecca Beyer (Stephen F. Austin State University): Searching for the K–Pg Anomaly in Central Arkansas

4:05 Andrew Kaze Sezibera and Mindy Faulkner (Stephen F. Austin State University): Characterization of Residual Mineral Content in Bauxite Piles, Saline County, Arkansas: An XRF and XRD Analysis Approach

Machine Learning, Data Analysis, and AI (Regent's Suite A)

Session Co-Chairs: Derrick Whiting and Jess Kozman

1:30 Richard L. Adams (Carr Resources, Inc.): Pitfalls from the "Patch": Or, is your Well Data Really Valid?

1:55 Michael Ramirez and Derrick Whiting (NthDS): AI–Driven Data Management: Revolutionizing Data Discovery, Standardization, and Intelligent Accessibility

2:20 Jess Kozman (Katalyst Data Management) and Lorena Pelegrin (Iron Mountain): Augmented Intelligence for Geoscience Data in Mature Basins

2:45 BREAK

3:15 Bryan Flynn (Greenhead Consulting) and Muhlis T. Unaldi (Quantico Energy Solutions): A Practical Guide to Machine Learning Applications: Case Studies on Reservoir Characterization and Completions Optimization

3:40 Niladri Das (Shaligram Research Institute): Multi-Modal Data Fusion for Critical Metal Exploration

4:05 Victoria M. Williams, Daniel R. Unger, Yanli Zhang, David L. Kulhavy, and I-Kuai Hung (Stephen F. Austin State University): Predictive Modeling of Unmanned Aerial Vehicle Obtained Forest Orthophoto Mosaic Completeness

TUESDAY MORNING, APRIL 8

–ORAL SESSIONS–

Regional Gulf Coast Geological Studies, Part 2 (Grand Ballroom)

Session Co-Chairs: Richard Van-Den-Brand and Graham Spence

8:30 Jenny M. Rashall (Stephen F. Austin State University): The Comanchean and Gulfian "Series": A Review in Cretaceous Stratigraphic Nomenclature

8:55 Robert M. Reed, Robert G. Loucks, and Priyanka Periwal (Bureau of Economic Geology): Micropetrographic Applications to the Study of Sedimentary Rocks: Some Gulf Coast Examples

9:20 Xuesong Ding, Tim Dooley, Lorena Moscardelli, Mike Hudec (Bureau of Economic Geology), Sascha Brune, and Kai Li (Helmholtz Center Potsdam–GFZ German Research Center for Geosciences): Evolution of Salt-Detached Systems at Various Stages of Rifting: Insights from Fully Coupled Geodynamic and Surface Process Modeling

9:45 BREAK

10:20 Sidonie Revillon (SEDISOR/GEO-OCEAN, Univ. Brest–CNRS–IFREMER), John W. Snedden (University of Texas at Austin), Timothy F. Lawton (Bureau of Economic Geology), and J. Richard Kyle (UT–Austin): Refining Middle to Upper Jurassic Evaporite Stratigraphy of the Mexican Gulf of Mexico through a Strontium Isotope Stratigraphy (SIS) Approach

10:45 David T. King, Jr., and Lucille W. Petruny (Auburn University): Burial and Exhumation History of the Wetumpka Impact Crater, Alabama

11:10 Deane Foss (Independent): An Incomplete History of the Discovery and Development of Little Cedar Creek and Brooklyn Smackover Oil Fields, Southwestern Alabama, USA

History and Geology of the Texas Gulf Coast (President's Suite)

Session Co-Chairs: Jen Wadsworth and Chris Reed

8:30 John M. Sharp, Jr. (University of Texas): Role of Petroleum Production Subsidence on Submergence of Texas Coastal Lands

8:55 Thomas E. Ewing (Bexar Geological Surveys): *Caminos y Pueblos*: Geologic Controls on Native and Early European Pathways and Settlement in Texas

9:20 Linda Sternbach (Star Creek Energy): Houston to Beaumont Salt Domes—What Makes Some Onshore Domes Oil Giants and Why are Some Domes Not Productive Even after 100 Years? A Look at Salt Dome Morphology, Trap, Reservoir, and Timing

Environmental Studies–Water Resources (President's Suite)

Session Co-Chairs: Jenny Rashall and Saugata Datta

10:20 Benjamin Grunau, Jennifer Morris, and Jeffrey Paine (Bureau of Economic Geology): Protecting Texas Groundwater: The Interactive Drilling Insight and Casing Estimator (DICE) Website

10:45 John W. Nelson (Advanced Groundwater Solutions, LLC): Groundwater Development for Public Water Supply in the Vicinity of Shallow Salt Domes: Examples in Southeastern Texas

11:10 (CANCELED) Varun Paul, Emma Tucker, and Gabriel Hernandez (Mississippi State University): Chemical Characteristics of Coastal Sediments in the Pascagoula River Estuary: Insights from Stable Carbon and Nitrogen Isotopes

East Texas Basin Special Session, Part 1 (Regent's Suite A)

Session Co-Chairs: Jon Rotzien and Molly Turko

8:30 Jon Rotzien (Basin Dynamics) and Molly Turko (Turko Tectonics): East Texas Basin Special Session Introduction

8:55 Bo Henk, Richard Denne, Ryan Pastor, Henry Henk (Texas Christian University), Stan Paxton, and Jason Flaum (U.S. Geological Survey): Stratigraphy and Depositional Environment of the Woodbine Group in North-Central Texas from an Integrated Core and Outcrop Study

9:20 Kelly Hattori (Bureau of Economic Geology): Evaluating the Overprint of Local-Scale Controls on Eustatically-Driven Sequence Stratigraphic Frameworks and Reservoir Facies Distribution in the Lower Cretaceous Pettet Formation, East Texas

9:45 BREAK

10:20 Dan Jarvie (Wildcat Technologies, LLC), John Zumberge, and Stephen Brown (GeoMark Research): The Mouse that Roared: East Texas Salt Withdrawal Basin Kiamichi and Goodland Shales

10:45 Deborah K. Sacrey (Auburn Energy): Double A Wells Field Study Using Machine Learning to Look for By-Passed Pay in the Woodbine Sands

11:10 Carl E. Gray (Tyler, Texas): Observations in Conventional Woodbine Exploration in the East Texas Basin

East Texas Basin Core Workshop, Part 1 (Regent's Suite B)

8:00–12:00 View and discuss cores from the East Texas Basin. Bo Henk and Kelli Hattori will be available during the morning break, 9:45 am–10:20 am, to discuss the Pettet and Eagle Ford cores.

GCSSEPM LUNCHEON 11:45 am–1:00 pm (Grand Ballroom) - included in full registrations & guest tickets

Dr. Lorena Moscardelli (Director, Bureau of Economic Geology): Emerging Energies, Expansions, and the New Role of the Subsurface.

TUESDAY AFTERNOON, APRIL 8

–ORAL SESSIONS–

Carbon Capture and Storage (Grand Ballroom)

Session Co-Chairs: Alex Bump and Mohamed Abdalla

1:30 Alexander Bump (University of Texas at Austin) and Chinemerem Clement Okezie (New Jersey Institute of Technology): Using Historic SWD to Predict Reservoir Performance for CCS on the Texas Gulf Coast

1:55 Toddy Guidry (Core Labs): Planning the Analytics for CCUS, Waste Injection, Mineral Extraction, Water Production, and Monitoring Wells

2:20 Danny Kingham, Christ Niamike, Lisa Molofsky, and Travis McGuire (GSI Environmental Inc.): Best Laid Plans: Comparing and Contrasting Subpart RR MRV Plans with UIC Injection Permits

2:45 BREAK

3:15 Alexander Bump and German Chavez (University of Texas at Austin), and Ethan Cavasos (Texas A&M University): Are the Fears Justified? Observations of Gulf Coast Fault Seal and Predictions for CCS

3:40 Finn B. Michelsen (GeoSurvey Systems Inc.) and Judy Schulenberg* (Earth Group 1) (asterisk indicates speaker): Challenges and Opportunities for Qualifying Carbon Sequestration Prospects in the Northern Gulf of Mexico Using VHR3D Multi-Streamer Seismic Techniques

4:05 Robert Svec (NextDecade Corporation/NEXT Carbon Solution): A New Method for Volume of Shale Evaluation Using the Well Log Resistivity Invasion Profile

4:30 Mohamed Abdalla and Qingsheng Wang (Texas A&M University): Carbon Mineralization and Lithium Extraction in Phyllosilicates under Different Temperatures and CO_2 Pressures: Advancing Secure CO_2 Storage and Utilization Strategies

Seismic Attributes and Modern Geophysical Technology (President's Suite)

Session Co-Chairs: Kevin Hill and Jeffrey Bridges

1:30 Alejandro Martinez, Shujaat Ali (SLB), George Zemlicka (OXY), Sean Ruiz (SLB), Christopher Moyer, Guillaume Richard, Erik Bergersen, Tina Campbell (OXY), Brent Adkins and Johnny Bassil (SLB): Distributed Acoustic Sensing Vertical Seismic Profiling (DAS VSP) in an Exploration Well in the Gulf of Mexico—Case Study

1:55 Walee Yeboah, Arogundade B. Augustine, and Nancye Dawers (Tulane University): Fault-Driven Fluid Migration and Seepage Features in the Garden Banks Region of the Gulf of Mexico

2:20 Catie Donohue, Roman Ianev (Murphy Oil Corporation), Christopher Smith (Advanced Hydrocarbon Stratigraphy), Stan Stanbrook, Brian LeCompte (MOC), Craig Farley (Former MOC), Mike Durcanin (MOC), and Mike Smith (AHS): Necessary and Novel Post Well Analysis: An Integrated Review of an Exploration Well, Salina Basin, Mexico

Geothermal and Other Energy Resources (President's Suite)

Session Chair: Kenneth Wisian & Joseph Ebrom

3:15 Ken Wisian (Bureau of Economic Geology): The Gulf Region can Lead the Geothermal Energy Revolution

3:40 Rand Gardner and Justin Birdwell (U.S. Geological Survey): Evaluating the Potential of Co-Located Non-Petroleum Energy Resources in the Gulf of Mexico Basin Using Play Fairway Analysis

4:05 William DeMis (Rochelle Court, LLC): The Sophistry of Wind and Solar as Baseload Power, the Reality of Nuclear Power, and the Role of Natural Gas

East Texas Basin Special Session, Part 2 (Regent's Suite A)

Session Co-Chairs: Carl Gray and Lucy Ko

1:30 James Bedford (Independent): East Texas Seismically Defined Paleozoic Strawn Reefs

1:55 C. Nur Schuba and Lorena Moscardelli (Bureau of Economic Geology): Evaluating Underground Storage Potential in the Salt Domes of the East Texas Basin

2:20 Lucy Tingwei Ko, Rob Reed, Priyanka Periwal, and Amanda Calle (Bureau of Economic Geology): Haynesville Shale Revisit: Impact of Overpressure on Pore Sizes, Impact of Variation in Clay Minerals, and Impact of Facies Heterogeneity

2:45 BREAK

3:15 William DeMis (Rochelle Court, LLC): Declining Haynesville Gas Production and the Coming Demand for Natural Gas

3:40 Steven W. Dobbs (Preon Energy, LLC) and Rob W. Karlewicz (Magnetar Exploration, LP): Western Hayneville Play—What's All the Hype About?

4:05 David Tonner, Carl Symcox, and Andreina Liborius (Diversified Well Logging): Enhancing Drilling Efficiency and Geosteering Precision in the Haynesville Shale through Real-Time Elemental Analysis of Drill Cuttings Using Automated Technology

4:30 Alex Blizzard and Toby Burrough (S&P Global Commodity Insights): Machine-Learning Approach on Identifying Key Drivers and Trends of the Haynesville and Middle Bossier Plays

East Texas Basin Core Workshop, Part 2 (Regent's Suite B)

1:30–5:00 View and discuss cores from the East Texas Basin. Beverly DeJarnett and Lucy Tingwei Ko will be available during the afternoon break, 2:45 pm–3:15 pm, to discuss the Woodbine and Haynesville cores.

POSTER SESSIONS

(Hallway on East Side of Twilight Ballroom)

Poster Session 1: 8:30 am–12:00 pm, Monday, April 7

Poster Session 2: 1:30 pm–4:30 pm, Monday, April 7

Poster Session 3: 8:30 am–12:00 pm, Tuesday, April 8

Poster Session 4: 1:30 pm–4:30 pm, Tuesday, April 8

Presenters in booths and poster judging during the morning breaks (9:45 am–10:20 am) and afternoon breaks (2:45 pm–3:15 pm)

Poster Session 1: 8:30 am–12:00 pm, Monday, April 7

P1–01 Belkasim Khameiss (Oklahoma Geological Survey) and Scott Ishman (Kansas Geological Survey): Insights into Late Cretaceous Marine Environments at Wilson Lake, Kansas

P1–02 Russell Jackson (Tyler Oil & Gas): Deposition of Long Linear Shoals of the Jeter Limestone Member of the Rodessa Formation in the Ark–La–Tex Region Controlled by Basinal Tectonic Faulting

P1–03 Gerald (Jerry) Ragan (Ragan Biostrat), Bruce Desselle (Total Biostratigraphic Services), and Robert Campbell (Shell Oil): Calibration of Agglutinated Foraminifera, Rhodochrosite Micronodules, and Pyritized Radiolarian Events into Gulf of Mexico Deepwater Wilcox Biostratigraphic and Chronostratigraphic Zonations

P1–04 Danish Khalid, Claudio R. S. Lucas, José Leão de Luna, Sophia Pereira (Federal University of Pará): Coquinas from the Morro do Chaves Formation as Analogues to the Presalt: Petrographic and Petrophysical Integration

P1–05 Alexandria Deards and Zachariah Fleming (Stephen F. Austin State University): Preliminary Geologic Mapping and Correlations of Ibex Pass Volcanics, Death Valley, California

P1–06 Jonathan Leard and Tim Palmer (Mississippi Geological Survey): Surface Geologic Mapping of Anomalous Oligocene Channel Sands

P1–07 Natalie Girlinghouse, Julie Bloxson (Stephen F. Austin State University), Jason Flaum (U.S. Geological Survey), and Jacob McKinney (Black Mountain Oil and Gas): Geochemical Variability of the Eagle Ford Shale in Webb and Dimmit Counties, Texas

P1–08 Eric Browning and Julie Bloxson (Stephen F. Austin State University): Characterization of the Smackover Formation in Upshur County, Texas, Using Core and Geochemical Data

P1–09 Brightin R. Blanton (University of Mississippi), Lawrence R. Baria (Jura-Search, Inc.), Gregory L. Easson, Brian F. Platt, and Louis G. Zachos (UMiss): Petroleum Field Study and Environmental Evolution of the Cotton Valley Group in Glade Crossing Field, Jones County, Mississippi

P1–10 Cari Mitchell and Jenny Rashall (Stephen F. Austin State University): A Preliminary Analysis of the Epiphytic Diatom Community at Lake Naconiche, Nacogdoches County, Texas

Poster Session 2: 1:00 pm–5:00 pm, Monday, April 7

P2–01 Martin W. Schramm IV, Cameron J. Manche, and Michael C. Pope (Texas A&M University at College Station): Quantitative Stratigraphic Analysis of Facies Distributions and Depositional Trends in the Frio Formation, South Texas

P2–02 Colin Doolan and Celeste Lohr (U.S. Geological Survey): Downdip Characterization of the Buda and Woodbine Formations from Seismic Reflection Data along the Eastern Texas Gulf Coast: Implications for Undiscovered Petroleum Accumulations

P2–03 Mariana I. Olariu (Bureau of Economic Geology): Paleogene Yoakum Canyon: Geomorphic Evolution and Relationship with Coeval Deltas

P2–04 Matt Parker and Julie Bloxson (Stephen F. Austin State University): Reservoir Characterization of the Clarksville Formation in the Domino-Clarksville Fields, Red River County, Texas

P2–05 David Starkovich and Davide Oppo (University of Louisiana at Lafayette): Classification of Abyssal Plain Mass Transport Complexes: Mad Dog Field, Gulf of Mexico

P2–06 Walee Yeboah, Arogundade Augustine. B, and Nancye Dawers (Tulane University): Fault-Driven Fluid Migration and Seepage Features in the Garden Banks Region of the Gulf of Mexico

P2–07 Jeffrey Bridges (Stephen F. Austin State University): Stratigraphic Analysis of the Buda Limestone with Implications on Hydrocarbon Production Constraints, Madison and Houston Counties, Texas

P2–08 Kolby Kirk, Julie Bloxson (Stephen F. Austin State University), and Jacob Mckinney (Black Mountain Oil and Gas): Depositional Implications of the Austin Chalk Formation in Dimmit County, Texas, using Geochemical Analyses

P2–09 Sidonie Revillon (Sedisor), Julie Bloxson (Stephen F. Austin State University), David Lankford-Bravo, and Chris Piela Cox (bp): Utilizing Sr Isotopes to Better Understand Salt Bodies: Tales from the Louann and Other Salty Situations

P2–10 Ethan Pittman and Julie Bloxson (Stephen F. Austin State University): Assessing the Effects of “Serpentine” Plug Emplacement on Surrounding Sedimentary Strata in Zavala County, Texas

P2–11 Celeste Lohr (U.S. Geological Survey): Geologic Model for a USGS Hydrocarbon Assessment of the Buda Limestone, Texas

Poster Session 3: 8:30 am–12:00 pm, Tuesday, April 8

P3–01 Robert G. Loucks (Bureau of Economic Geology), Alton A. Brown (Consultant), and Christoper K. Zahm (BEG): Geological Description of the Lower Cretaceous Fort Lancaster Formation on the Comanche Shelf, Southern Trans-Pecos Texas: A Case Study of a Platform-Interior Transgressive-Regressive Carbonate Sequence and Subsequent Extensional and Transtensional Faulting with Karst Modification

P3–02 Hongliu Zeng (Bureau of Economic Geology), Xijin Liu (Surge Energy, LLC), and Qilong Fu (Bureau of Economic Geology): Seismic Sedimentology of Shelf-to-Basin Transition, Upper Pennsylvanian and Lower Permian, Michell County, West Texas

P3–03 Jazmin Villeda (University of Texas at Austin), Tim Whiteaker, and Michael Sweet (Bureau of Economic Geology): The Spatial Variability of the Mineralogy of Paleogene Sandstones in the Gulf of Mexico

P3–04 Emmanuel Darko and Zachariah Fleming (Stephen F. Austin State University): Structural Geology of the Brady Mountain Area, Ouachita Mountains, Arkansas

P3–05 Jess Kozman (Katalyst Data Management) and Lorena Pelegrin (Iron Mountain): Augmented Intelligence for Geoscience Data in Mature Basins

P3–06 Mohammed Harqi, Michael C. Pope, Esuru Rita Okoroafor, Mauro Becker, and Cameron J. Manche (Texas A&M University): Reservoir Characterization and CO_2 Sequestration Modeling of a Depleted Gas Field in the Wilcox Group, Onshore Gulf Coast, Southeastern Texas

P3–07 Pratyusha Gonnuru (University of Houston), Pietro Milillo (UH / German Aerospace Center), Yismaw Abera Wassie (UH), Daniel Kahl, Jochen Shubert, Brett Sanders (University of California at Irving), Paola Rizzoli, and Jose Luis Bueso Bello (German Aerospace: Spaceborne Geodetic Mapping of Sandy Beaches Topography Using TanDEM–X Bistatic SAR Interferometry Applied to Southern California

P3–08 Victoria M. Williams, Daniel R. Unger, Yanli Zhang, David L. Kulhavy, and I-Kuai Hung (Stephen F. Austin State University): Predictive Modeling of Unmanned Aerial Vehicle Obtained Forest Orthophoto Mosaic Completeness

P3–09 Katelyn Wallace, Shuhab Khan, Virginia Sisson, and Otto Gadea (University of Houston): Beyond Traditional Mining: Hyperspectral Imaging at Mountain Pass, California

P3–10 Belkasim Khameiss (Oklahoma Geological Survey) and Scott Ishman (Kansas Geological Survey): Investigating Origin of Siderite in Late Pennsylvanian Strata through Benthic Foraminifera Analysis: A Case Study of Cores PNR #1 and Edmonds A1, Northeastern Kansas

P3–11 Eri Kawamura and Wesley Brown (Stephen F. Austin State University): Comparison of Grid and Line Methods in Ground Penetrating Radar (GPR)

P3–12 Roberta Russell, Danny Kingham, Shailee Bhattacharya, and Lisa Molofsky (GSI Environmental Inc.): The State of Direct Lithium Extraction in Texas, Louisiana, and Arkansas: Technical and Regulatory Considerations

Poster Session 4: 1:00 pm–5:00 pm, Tuesday, April 8

P4–01 Ryka Shea, Amy Rambo, Mindy Faulkner, Jenny Rashall, and Alyx Frantzen (Stephen F. Austin State University): Bioremediation of Effluent Water in a Coal Ash Disposal Area: Optimizing Microbial Sulfate Reduction

P4–02 Ammar Hussain and Shuhab Khan (University of Houston): Hyperspectral Imaging for Rare Earth Elements of Coals and Fly Ash Samples

P4–03 Amy Rambo, Ryka Shea, Mindy Faulkner, Jenny Rashall, and Alyx Frantzen (Stephen F. Austin State University): Treatment Wetlands Concept for Bioremediation of Sulfate at Martin Lake Ash Disposal Facility

P4–04 Gabe Holmes and Julie Bloxson (Stephen F. Austin State University): Exploring the Link between Lithium and Large Evaporite Bodies in the Appalachian Basin

P4–05 Jamie Singer, Julie Bloxson (Stephen F. Austin State University), and William A. Heins (Getech): Identifying Salt Suture Zones and Lithological Changes of the Louann Salt, Puma Diapir, Gulf of Mexico Basin

P4–06 Katelyn Jones, Alyx S. Frantzen, and Julie Bloxson (Stephen F. Austin State University): Characterization of Global Salt Samples: Heterogeneities and Insights

P4–07 Amna Afzal, Claire Ong, Qi Fu, Ammar Hussain (University of Houston), and Yongli Gao (University of Texas at San Antonio): Quantification and Distribution of Per- and Polyfluoroalkyl Substances (PFAS) in the Edwards Aquifer, San Antonio, South-Central Texas

P4–08 Anna Romina Cervantes (University of Texas at Austin), Lorena Moscardelli, and Leopoldo M. Ruiz Maraggi (Bureau of Economic Geology): Hydrogen Storage Potential of Salt Domes in Europe

P4–09 Melanie Ertons and Mindy Faulkner (Stephen F. Austin State University): Investigation of Residual Mineral Content of Bauxite Stockpiles, Saline Mining District, Arkansas, U.S.A.

P4–10 Rylee Gabbert, I-Kuai Hung, Daniel Unger, and Jiyeon Kim (Stephen F. Austin State University): Spatial Analysis of the La Nana Bayou Watershed in Texas to Assess Stream Health