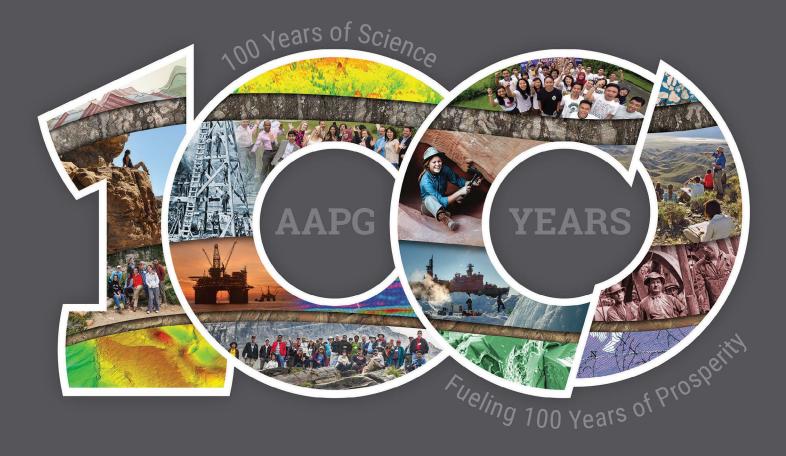
# **100° AAPG** ANNIVERSARY **ACCE** 2017 ANNUAL CONVENTION & EXHIBITION



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2-5 April 2017 • Houston, TX • George R. Brown Convention Center



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798 Poster Presentations
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21 Short Courses

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### **Register Early & Save Up to \$210**

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## **Invitation From the General Chair**



On behalf of the American Association of Petroleum Geologists (AAPG), its divisions, the Society of Sedimentary Geology (SEPM) and our host, The Houston Geological Society (HGS), it is my pleasure to invite you to join us at the newly renovated George R. Brown Convention Center in Houston, April 2nd through April 5th, for the 2017 Annual Convention and Exhibition (ACE).

In addition to the stellar technical program you have come to expect at AAPG's ACE, we will be celebrating AAPG's 100th Anniversary. AAPG was formed in 1917 for the purpose of promoting the exchange of ideas on petroleum geology through publications and oral communication. As members, we can be justifiably proud of the legacy that has been created over the last century. Our theme, "100 Years of Science Fueling 100 Years of Prosperity", signals our intention to honor the past and look to the future.

The 100th Anniversary Committee started planning for this event more than 10 years ago. A number of 100th Anniversary projects and activities will be showcased at the convention, including two Discovery Thinking sessions, video interviews with prominent petroleum geoscientists, poster and digital displays of significant outcrops, and compilations of significant papers and past field trips.

In addition, PROWESS will present an all-day forum on Saturday, April 1st honoring 100 years of women in petroleum geology and their accomplishments. They will also have a timeline honoring the first 100 female members of AAPG in the hallway outside the technical session rooms.

ACE 2017 received a record number of abstract submissions which once again reflects the strength and depth of this premier geological convention. Of course, none of these activities, celebrations or even the convention itself would be possible without the generous support of all of our sponsors and the participation of our exhibiting companies. In fact, many of these companies have major offices in Houston which makes their involvement in our centennial event even more special and will likely provide a lively exhibition. In addition to the posters in the exhibition, representative cores from several large oil and gas fields will also be on display throughout the convention.

Houston is not generally considered a "destination city" in the same sense as Denver, Calgary or San Antonio, but during the first week of April 2017, it will be the most important place to be for those interested in petroleum geoscience.

Dave Rensink General Chair AAPG 2017 Annual Convention and Exhibition (ACE)

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## **100th Anniversary Events**

### **100th Anniversary Gala Dinner and Program**

Date:Monday, 3 AprilTime:7:30 p.m.-12:00 a.m.Location:George R. Brown Convention CenterFee:\$100

Share in the celebration of AAPG's 100th Anniversary at the Centennial Gala for an evening of elegance and entertainment that will pay tribute to our rich history, while eagerly welcoming the future. After a red-carpet welcome and connecting with colleagues over cocktails, the Gala will feature marquee keynote speaker Daniel Yergin to engage and enlighten the audience.

Mr. Yergin is a highly respected authority on energy, international politics and economics. He is Vice Chairman of IHS and Founder of IHS Cambridge Energy Research Associates. A Pulitzer Prize winner, Dr. Yergin is the author of the new bestseller The Quest: Energy, Security and the Remaking of the Modern World which The Economist described as "a masterly piece of work" and The Financial Times called "a triumph." Time Magazine quoted, "If there is one man whose opinion matters more than any other on global energy markets, it's Daniel Yergin." Fortune said that he is "one of the planet's foremost thinkers about energy and its implications."

Following Mr. Yergin's presentation, musical entertainment performed by Lesli Wood and her band will continue throughout the evening. AAPG only turns 100 once, so don't miss out on making memories that will last a lifetime!

### AAPG's GeoLegends

A project of the AAPG 100th Anniversary Committee – Geo-Legends is a decade-long filmmaking initiative that presents video interviews with some of the world's top geoscientists.

These dramatic, colorful, often exciting and always historical videos provide a look at the people and the stories behind some of the most significant exploration discoveries in our profession's history. The videos feature legendary explorers such as Larry Meckel, Richard Stoneburner, Harry Jamison, John Masters, Don Todd, Fred Meissner, Bob Weimer and many, many more.

### **Past Presidents & Sidney Powers Award Winners Display**

Don't miss this display celebrating and acknowledging 100 years of AAPG's Past Presidents and the history of the Sidney Powers Memorial Award Winners

### Pioneering Women in Petroleum Geology: 100 Years - Celebration Wall

Showcasing the first 100 female members of AAPG, this display will be located in the hallway outside the technical session rooms and can be enjoyed by all throughout the convention. Don't miss the opportunity to walk along this beautiful and historical display celebrating their incredible discoveries and achievements.

### Experience Digital Immersive Field Trips- The Future of Geosciences

Dates:	Sunday, 2 April–Wednesday, 5 April
Time:	Exhibition Hours
Location:	Exhibition

In conjunction with the 100th Anniversary, the Digital Immersive Field Trip Committee has assembled a digital publication titled "Outcrops that Change the Way We Practice Petroleum Geology." This publication will launch during the convention with several outcrop studies available in the brand new Digital Immersive Geosciences platform. The DIG platform makes these outcrop field trips available in 3-D real-time terrain visualization for Windows desktops and tablets, providing the opportunity for the geoscience community to be able to see, study and experience rocks, outcrops and geologic formations across the globe without having to leave the office.

### AAPG PROWESS-AWG-SEG Forum

Pioneering	Women in Petroleum Geology: 100 Years
Date:	Saturday, 1 April
Time:	7:00 a.m9:30 p.m.
Location:	George R. Brown Convention Center
Hosted by:	AAPG Professional Women in Earth Sciences (PROWESS)
	Association for Women Geoscientists (AWG)
	Society of Exploration Geophysicists (SEG) Women's
	Network Committee
Fee:	\$65 Professionals, \$40 Students
Includes:	Continental breakfast, lunch and post-forum reception
	(open to all)

Join us for an exciting and entertaining celebration of women geologists and their historic contributions in an all-day forum featuring expert speakers, panel discussions, networking potential and the world premiere of a new documentary: "Rock Stars: Pioneering Women in Petroleum Geology." The day will end with a post-forum reception to network and honor the industry's women geoscientists.

### **Costume Contest**

A highlight of the PROWESS forum will be a costume contest, organized with the AAPG Young Professionals, featuring business and work attire that was part of a woman geologist's field "uniform" over the past century. From the Victorian dresses from 1917-20 to the 1930's field attire and World War II styles, followed by the "Ideal Woman" look of the 1950-60s and the minis of the 1970s and finally the "Dress for Success" power fashions of the 1980s, there are endless possibilities for dressing up as a Pioneer. Everyone is invited to come to the forum dressed as Pioneering Women from any one of these eras (or, just dress in your usual business casual). Contact Stephanie Nwoko (stephwoks@yahoo. com) or Terra George (terra.j.george@conocophillips.com) for more information on the "dressing for an historic era" contest.



# Highlights

### History of Petroleum Geology (AAPG)

Date:Sunday, 2 AprilTime:12:00 p.m.-2:45 p.m.Location:George R. Brown Convention CenterFee:Included with registrationCo-Chairs:A. Haddad, R. Hardy and B. Hatcher

The History of Petroleum Geology Committee will again hold its annual forum in a special session where we are commemorating the centennial of the AAPG with a series of high quality papers that run the gamut from the scientific foundations of petroleum geology before the founding of the AAPG, through the development of technologies and discoveries in our first century, with biographical sketches of key founding members and the status and future of key scientific disciplines.

First in our planned agenda, Ray Sorenson will set the stage by outlining the exploration potential of North America in the middle of the century leading up to the founding of the AAPG. Then Jim McDonald will discuss the practical tools and beginnings of professional practice as the AAPG was formed. Next Bob Merrill will highlight the discovery of giant fields through the AAPG century.

Continuing, Dana Jurick will showcase the amazing professional career of AAPG co-founder Wallace Pratt and Rasoul Sorkhabi will discuss Lewis G. Weeks and the "Oil Habitat" paradigm in petroleum geology. Also on a biographical note, Robbie Gries will honor three early AAPG women pioneers and how they contributed breakthroughs in the early 1920's.

Returning to a focus on science and technology, Steve Tedesco will discuss the role of seeps in exploration since the start of the petroleum age and finally Malcolm Ross will present his views on plate tectonics and paleoclimate modeling in exploration in the past, present and into the future.

It should be a great session, with time for questions and discussion!

The purpose of the Committee is to preserve and promote the history and heritage of the evolution of geological concepts and technologies used in the search for oil and gas worldwide and honor the memory of the men and women who caused this evolution.

### AAPG/AAPG Foundation Imperial Barrel Award (IBA) Ceremony

Date:	Sunday, 2 April
Time:	3:00 p.m3:30 p.m.
Location:	George R. Brown Convention Center
Fee:	Included with registration

You've heard the buzz – now make sure to attend as the winners of this year's global AAPG/AAPG Foundation Imperial Barrel Award competition will be announced in a thrilling awards ceremony that is open for all to attend – giving you the chance to experience it in person. It's also a convenient way to start your ACE 2017 experience, because the awards presentation will take place just prior to the convention's Opening Session and Awards Ceremony. So come a bit early and be part of the excitement.

The AAPG/AAPG Foundation IBA program is an annual competition in evaluating prospective basins, featuring teams of the top

geoscience graduate students from around the world – all of whom have qualified for the finals by first winning IBA Region and Section competitions. The fast-moving presentation will include an introduction of the IBA program and all the teams who made it to the finals and recognition of the many generous sponsors who make the program possible. It all leads to the grand finale – the announcement of this year's winning teams. Come help us celebrate the accomplishments of these hard-working students – and see which teams win scholarship funds for their geosciences departments and applaud the school that leaves Houston with the title of IBA champion. Visit iba.aapg.org to see a list of finalists.

### **Opening Session and Awards Ceremony**

Date:	Sunday, 2 April
Time:	4:00 p.m.–5:00 p.m.
Location:	George R. Brown Convention Center
Fee:	Included with registration

Arrive early and stay late for an event that will start your ACE experience with a burst of excitement, pageantry and colorful multi-media displays as we return to Houston, the "oil capital of the world", for a record 14th time. The opening session of this year's AAPG Annual Convention and Exhibition will honor its centennial by reflecting on the past 100 years of the Association while looking towards the future potential of the profession and the industry's prosperity. This year's opening session will start mere minutes after and on the same stage as, the IBA awards ceremony allowing for a dazzling pre-show display of videos and multi-media that showcase both Houston and AAPG.

General Chair Dave Rensink will serve as the master of ceremonies offering an official welcome to ACE 2017 and will be joined by AAPG President Paul Britt who will deliver a brief presidential address. The highlight of it all will be the annual awards ceremony featuring AAPG Vice President-Regions Peter Lloyd at the podium when the best of AAPG will be honored in a fast-moving, colorful and entertaining awards ceremony.

### **Awards Ceremony Honorees**

### Sidney Powers Memorial Award

Lawrence D. Meckel (Rocky Mountain)

Michel T. Halbouty Outstanding Leadership Award Edward D. Dolly (Rocky Mountain)

### Honorary Member Award

Katherine "Lee" Avary (Eastern) David R. Cook (Europe) Steven M. Goolsby (Rocky Mountain) Leslie B. Magoon (Pacific) Walter "Rusty" Riese (Gulf Coast) James P. Rogers (Rocky Mountain)

### Norman H. Foster Outstanding Explorer Award Terry Mather (Rocky Mountain)

Robert R. Berg Outstanding Research Award Julie LeFever (Rocky Mountain)

# Highlights

### **Distinguished Service Award**

Fowzia Abdullah (Middle East) Anwar M. Al-Beaiji (Middle East) Sylvia Anjos (Latin America & Caribbean) Mary Broussard (Gulf Coast) Richard D. Fritz (Mid-Continent) Creties D. Jenkins (Pacific) Kurt Neher (Pacific) Robert N. Ryan, Jr. (Gulf Coast) Lawrence Wickstrom (Eastern)

### Grover E. Murray Distinguished Educator Award

Norman Hyne (Mid-Continent) Cari Johnson (Rocky Mountain)

### **Harrison Schmitt Award**

Julia Gardner (deceased) (Pacific) Zhongjian Qiu (Asia Pacific)

### **Public Service Award**

Friends of Dinosaur Ridge (Rocky Mountain) W. Lynn Watney (Mid-Continent)

### Pioneer Award

John Oty (Rocky Mountain)

Geosciences in the Media Award Michael Collier (Rocky Mountain)

### Young Professional Exemplary Service Award

Aisha Al-Bulushi (Middle East) Catherine Campbell (Rocky Mountain) Nick Lagrilliere (Europe) Ryan Lemiski (Canada)

### Wallace E. Pratt Memorial Award

(Presented to honor and reward the author(s) of the best AAPG BULLETIN article published each calendar year.)

Keith W. Shanley, Robert M. Cluff for "The evolution of pore-scale fluid-saturation in low-permeability sandstone reservoirs" (October 2015 AAPG Bulletin)

### **Robert H. Dott Sr. Memorial Award**

(Presented to honor and reward the author/editor of the best Special Publication dealing with geology published by the Association.) Dana Ulmer-Scholle, Peter Scholle, Juergen Schieber, Robert Raine for "Memoir 109: A Color Guide to the Petrography of Sandstone, Siltstones, Shales and Associated Rocks" (April 2015 AAPG Bulletin)

### J. C. "Cam" Sproule Memorial Award

# (Presented to recognize and reward younger authors of papers applicable to petroleum geology.)

Joseph English, Genville A. Lunn, Luke Ferreira, George Yacu for "Geologic evolution of the Iraqi Zagros and its influence on the distribution of hydrocarbons in the Kurdistan region" (February 2015 AAPG Bulletin)

### John W. Shelton Search and Discovery Award

(Presented in recognition of the best contribution to the "Search and Discovery" website in the past year.)

Mike Blum, Kristy Milliken, John Snedden and William Galloway for "Record of Cretaceous through Paleogene Gulf of Mexico Drainage Integration from Detrital Zircons" (Presented at the 2015 AAPG Annual Convention & Exhibition in Denver, Colorado, May 31-June 3, 2015)

### George C. Matson Award

(Presented to honor and reward the best oral presentation at the 2016 AAPG Annual Convention and Exhibition in Calgary, Alberta, Canada.) Martin J. Kennedy, Stefan Loehr, Natalie Debenham for "Seeing is Believing; High Resolution Electron Imaging and Mineral Mapping Shows Trace Minerals can Control Reservoir Properties"

### Jules Braunstein Memorial Award

(Presented to honor and reward the best poster presentation at the 2016 AAPG Annual Convention and Exhibition in Calgary, Alberta, Canada.) Jenna M. DiMarzio, Svetoslav V. Georgiev, Holly Stein, Judith Hannah for "Effect of Precipitation of Asphaltenes on Re-Os Isotopic Ratios"

### **SEG/AAPG Best Paper in Interpretation Award**

(Presented in recognition of the best contribution to the new SEG/AAPG journal, "Interpretation.")

Roderick Perez Altamar and Kurt Marfurt for "Identification of brittle/ductile areas in unconventional reservoirs using seismic and microseismic data: Application to the Barnett Shale" (November 2015 Interpretation)

### **Gabriel Dengo Memorial Award**

(Presented to honor and reward the best oral presentation at the 2016 AAPG International Conference and Exhibition in Cancun, Mexico.) Thomas Murphy for "Groundwater Environmental Liability Management Using Baseline Sampling Programs"

### **Ziad Beydoun Memorial Award**

(Presented to honor and reward the best poster presentation at the 2016 AAPG International Conference and Exhibition in Cancun, Mexico.) Daniel Emiliano Bolaños-Rodreguez, Manuel Cruz-Castillo, Adriana Acosta-Angeles for "Conceptual Geological Model About Hydrocarbon Flow Through Fractures in Siliciclastic Sequences of the Chicontepec Formation"

# Highlights



### Discovery Thinking Forums I and II - (AAPG/DPA)

Date:Monday, 3 AprilTimes:8:25 a.m.-11:50 a.m. & 1:15 p.m.-5:05 p.m.Location:George R. Brown Convention CenterFee:Included with registrationCo-Chairs:C. Sternbach and P. Weimer

Two "Discovery Thinking" Forums will be the seventeenth and eighteenth presentations of the AAPG 100th Anniversary Committee's program recognizing "100 Who Made a Difference." These Forums, co-sponsored by AAPG's Division of Professional Affairs (DPA), will feature invited speakers who will describe major and significant discoveries.

This year, AAPG is pleased to present two Discovery Thinking Forums. The morning forum will celebrate New Discoveries in the Western Hemisphere and Gulf of Mexico. The afternoon forum will feature Significant Global Discoveries (outside of the Western Hemisphere). As a headquarters of many global exploration companies, Houston is a great venue to celebrate significant game changing discoveries in the western hemisphere and around the world.

### New Discoveries in the Western Hemisphere and Gulf of Mexico

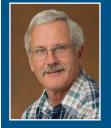
- Lessons in Exploration Creativity from a Decade of Discovery Thinking Forums: Charles Sternbach, President-elect AAPG
- Discovery of a Bolivian Foothills Giant Gas Field: Incahuasi: Philippe Mallard, Total, SA.
- Redtail Field, A Thermal Anomaly on the Eastern Extension of the Colorado Mineral Belt, Denver Basin, Colorado: John Forster, Exploration Advisor, Whiting and Mark Sonnenfeld, Mark Williams
- Discovery of the Utica Shale–Update on an evolving giant: Bill Zagorski, Chief Geologist and Taylor McClain, Senior Geologist, Range Resources
- A Fresh Look to Exploration and Discoveries in Mississippi Canyon, Northern Gulf of Mexico: Eric Zimmermann, Vice President – Geology, LLOG

### **Significant Global Discoveries**

- The Future of Exploration-The Next Decade: Bob Fryklund IHS, Chief Strategist-Upstream, Pete Stark
- The Petroleum System of the Mauritania-Senegal Basin: Dorie McGuinness, Exploration VP-Geology, Kosmos
- Opening New Oil Basins: A Pattern of Discoveries: Angus McCoss, Exploration Director, Tullow,
- The Greater Gorgon Area, Northwest Australia: Exploration to Production: Mike McLerie, Geophysical Advisor, Chevron Eurasia Business Unit

### Michel T. Halbouty Lecture: Resource Exploration on Mars-Applying the Lessons from Earth Date: Monday, 3 April

THILE.	5.10 p.m. 0.00 p.m.
Location:	George R. Brown Convention Center
Fee:	Included with registration
Speaker:	David Beaty, NASA Jet Propulsion Lab



The Michel T. Halbouty lecture series — funded by the AAPG Foundation — is an ongoing special event at the AAPG Annual Convention and Exhibition. Lecture topics are designed to focus either on wildcat exploration in any part of the world where major discoveries might contribute significantly to petroleum reserves, or space exploration where astrogeological knowledge

would further mankind's ability to develop resources on Earth and in the Solar System.

As we look ahead to the adventure of sending humans to Mars, we are faced with the question of how to sustain them. A key aspect of this is the exploration for and definition of, strategic in situ resources and developing the systems that would be required to take advantage of them. Critical lessons learned in the petroleum and mining industries here on Earth will need to be brought to bear.

David Beaty has been the Chief Scientist of the Mars Exploration Directorate at JPL in Pasadena, California for the past decade. His professional background is in geology, with a B.A. from Dartmouth College in 1975 and a PhD from Caltech in 1980. He spent the first half of his career in the resource industry here on our home planet, Earth. After leaving Caltech, he joined Noranda Exploration in the minerals industry and worked as an exploration geologist in the Rocky Mountain area, primarily searching for base and precious metals. In 1988, he joined Chevron at their research lab in La Habra, California, where he worked in support of diverse exploration and production projects throughout the world, including in the Permian Basin, the San Joaquin Valley, the Beaufort Sea, the North Sea and others. During his time at Chevron, Dave advanced into management, at different times leading both the geology and physical/chemical measurements divisions and overseeing a variety of exploration- and productionrelated research applications.

In 1999 Dave joined the NASA family at the Jet Propulsion Laboratory in Pasadena, California. His role began with an assignment as project manager on a portion of the Mars Sample Return mission, but then to the Mars Program Office, first as Associate Chief Scientist, then as Chief Scientist. His responsibilities include oversight of the scientific productivity of JPL's existing missions to Mars and also strategic planning for potential future Mars missions that are over the horizon. Most importantly, the latter includes the completion of the missions associated with Mars Sample Return, the design of the precursor missions needed to support the potential human exploration of Mars and planning for the scientific objectives and strategies for the future human explorers.

# Highlights

### **Preservation of Geoscience Data Display**

Dates:	Monday, 3 April–Wednesday, 5 April
Time:	9:00 a.m6:00 p.m. (Monday and Tuesday)
	9:00 a.m2:00 p .m. (Wednesday)
Location:	George R. Brown Convention Center
Fee:	Included with Registration

The Preservation of GeoScience Data committee (PGDC) within AAPG will be showcasing two displays as part of the exhibition during the convention. One display will be of Cores and the other of Data/Media.

### Cores

Oil and Gas discoveries over the last years have seen changes and shifts in the plays, traps and reservoirs over the decades. From marine, lacustrine, fluvial or aeolian sandstones, shelf carbonates, chalks and reefs and even volcanics, to the present day oil "shale" deposits, the industry is forever seeking new and innovative sources from which to extract the much needed hydrocarbons to keep our world moving and warm. The display of cores put on by the PGDC will attempt to represent the major reservoir and play types that have resulted in giant or significant oil and gas fields over the last 100 years. Each table will aim to display cores representing the significant play or reservoir types that were dominant during each decade or that typified the giant or major fields in that era. The cores will be displayed across 10 tables, one for each decade, with posters behind each table to show the geology of the field or play from which the core is taken.

### Data/Media

The PGDC proposes to put on a second display of data and media through the last 100 years. This will include examples of early logs and seismic on paper and film to show how the amount and format of data and information has changed. The display will also include examples of different storage media types including tape reels, cassettes, cartridges and disks that have increased in capacity as the demands from industry required more and more data to be stored. This display will be both nostalgic for the older members but also we hope of interest to younger members who may only have heard of 8-track tapes and VHS cartridges, etc.

### Theme 12: SEPM Research Symposium: How Seismic and Sequence Stratigraphy Have Advanced: 40 Years After AAPG Memoir 26 and 30 Years After SEPM Special Publication 42

- Date: Tuesday, 4 April
- Time: 8:00a.m.-11:50a.m. 1:15p.m.-5:05p.m.
- Location: George R. Brown Convention Center
- **Co-Chairs:** K. Ehman and H. Posamentier (morning) R. Sarg and L. Wood (afternoon)

This year, in honor of the 100th Anniversary of AAPG, the annual SEPM Symposium is being jointly sponsored by SEPM and AAPG with a look at the history and advances made in sequence and seismic stratigraphy over the last 40 years, highlighting what was published then in AAPG Memoir 26 and SEPM Special Publication 42 both seminal early compendiums of the state of the knowledge at those times. The oral presentations includes invited talks from some of the most prominent names in both researching and applying these concepts. The oral presentations will be accompanied by a poster presentation on the theme on Wednesday, 5 April.

### Morning

- Evolution and Effects of Sequence Stratigraphy: R. M. Mitchum
   Advances in Sequence Stratigraphy–Insights From 35 Years of Studying the Other 80% of the Stratal Record: K. Bohacs, J. MacQuaker
- A Simplified Guide For Sequence Stratigraphy: Nomenclature, Definitions and Method: V. Abreu, K. Pederson, J. Neal, K. Bohacs
- Defining Aquifer Architecture Using Seismic and Sequence Stratigraphy in the Los Angeles Basin, California: A Foundation for Future Assessment and Management of Groundwater Resources: K. D. Ehman, B. D. Edwards
- New Time Constraints on the Karoo Deepwater Physical Sequence Hierarchy: S. Flint, D. Hodgson, M. Poyatos-Moré, E. Tohver
- Stratal Stacking Patterns of Continental Margin Successions in Low-Accommodation and Low-Sediment-Supply Settings: C. R. Fielding
- Sequence Variability in Shallow Marine/Deltaic Syn-Rift Systems: Impact of Fault Network Evolution and Sediment Supply Variations, Plio-Pleistocene of the Corinth Rift: R. Gawthorpe, M. Muravchik, G. A. Henstra, M. R. Leeder, J. Andrews, H. Kranis, E. Skourtsos, R. Collier, M. Ford
- Stratigraphic Evolution of the Barrow Group (Northern Carnarvon Basin, North West Shelf, Australia): Controls on the Architecture of a Shelf-Margin During a Syn-Rift to Post-Rift Transition: V. Paumard, J. Bourget, T. Payenberg, B. Ainsworth, S. Lang, H. W. Posamentier, A. George
- Deep-Water Turbidites in Not-so-Deep Basins: H. W. Posamentier, K. D. Ehman, A. Teletzke, V. Paumard, J. Bourget, S. Lang, A. Powell

### Afternoon

- Carbonate Sequence Stratigraphy An Historical Perspective: R. Sarg
- Carbonate Sequence Stratigraphy First Principles Accommodate the Unruly Carbonate System: G. Eberli
- Build-and-Fill Stratigraphic Sequences in Carbonates: E. K. Franseen, R. H. Goldstein
- Chemical Diagenesis and Biota in Stratigraphic Context: The Phosphoria Rock Complex (Permian), Rocky Mountain Region: M. Pommer, R. Sarg

# Highlights

- Advances in Seismic Stratigraphy of Carbonate Platforms and the Importance of Integrated Interpretation Using Time- / Depth-slice and Well Calibration Data: S. Bachtel
- Sequence Stratigraphy and Modeling Carbonate Heterogenity: M. Mutti, F. Amour
- Ancient Processes in Modern Data: Quantitative Seismic Geomorphology for Evaluating the Sedimentary Processes That Characterize the Ancient Earth: L. J. Wood
- Combining Full-Volume 3-D Seismic Interpretation With Quantitative Seismic Geomorphology and Modern Process-Based Analogue Databases: The Next Generation Tools for Stratigraphic Analysis and Reservoir Characterization: J. Bourget, B. Vakarelov, B. Ainsworth, V. Paumard, S. Lacaze
- Predictive Stratigraphic Methods and Their Development: New Global Geological Concepts Driven by Technology Advances: O. J. Martinsen, A. Groth

### The Next 100 Years of Global Energy Use: Resources, Impacts and Economics DEG/EMD

Date:	Tuesday, 4 April
Time:	1:15 p.m.–5:05 p.m.
Location:	George R. Brown Convention Center
Fee:	Included with registration
<b>Co-Chairs:</b>	S. W. Tinker and W. Camp

This forum, which celebrates the 100th Anniversary of the founding of the American Association of Petroleum Geologists, addresses the future challenges of the oil and gas industry to supply the world's increasing energy needs without compromising global environmental concerns with continued use of fossil fuels. A diverse panel of distinguished speakers will engage in a sobering discussion of the global challenges in transitioning to low carbon energy future.

### Speakers Include:

Steven E. Koonin, Professor of Information and Director, NYU Center for Urban Science and Progress, New York University, New York, New York Topic: Global Population, Energy Demand and Future Technology

Cindy Yeilding, Senior Vice President, BP America, Houston, Texas Topic: Global Petroleum Resources and Transportation Fuel Options

Mark A. Snell, President of Sempra Energy, San Diego, California Topic: The Global Power Fuel Mix and the Carbon Transition

Jesse H. Ausubel, Director of the Program for the Human Environment and Senior Research Associate, Rockefeller University, New York, New York

Topic: Atmosphere, Air, Land, Water and Energy Density

Kenneth B. Medlock III, Senior Director, Center for Energy Studies, Baker Institute for Public Policy, Rice University, Houston, Texas Topic: Energy Diversity, Carbon Tax and Economic Realities

Scott W. Tinker, Director, Bureau of Economic Geology, The University of Texas at Austin, Austin, Texas

Topic: Global Energy Security and Poverty

Moderated Panel discussion follows talks

### DEG/DPA Forum: The Future Best Practices for Extraction Industries in a Lower Carbon Environment

Date:	Wednesday, 5 April
Time:	8:00 a.m11:50 a.m.
Location:	George R. Brown Convention Center
Fee:	Included with registration
<b>Co-Chairs:</b>	J. Boak and C. Wilhelm

This forum addresses practical aspects of how the fossil fuel industry should operate in the coming decades based on two key assumptions/ goals. First, availability to energy increases prosperity and well-being of the population as a whole and our industry should strive to furnish it. The second is that policies that restrict any manner of alteration to local or global environments are likely to become more prevalent as technology allows both more detailed measurements and various media allows dissemination of both information and disinformation.

### Aspects to be addressed are among the following:

- What regulatory or economic incentives (e.g., a tax on carbon) would be best for our industry to allow it to both supply the needed energy and to be seen as a positive, creative industry by the public?
- How should the energy industry prepare its infrastructure for the managing risk better, be it in hazardous environments, in response to weather related accidents, aggradation of cumulative effects, etc.
- How can our industry better transfer knowledge and best practices between generations and from where will we develop the next generation of skill workers?
- How do corporations and regulators "bake in" Best Practices for technologies and plays that have not even been imagined.
- Finally, how can we change public perceptions to view the fossil fuel industry as part of the solution and not just the problem?

**Creating a Social Contract to Operate – A Necessity in the Post COP 21 World:** Daniel D. Domeracki, Vice President, Government and Industry Relations, Schlumberger Limited

**Sub-Surface Injection of Fluids and Induced Seismicity Best Practices:** Dr. Jeremy Boak – University of Oklahoma and State Geologist of Oklahoma

**Future Best Practices in the Deep Water Offshore:** C. R. (Charlie) Williams II, Executive Director, Center for Offshore Safety and Chief Scientist – Well Engineering and Production Technology, Shell

Mitigating Methane Emissions: The Role of Science, Data Transparency and Innovative Technology: David Lyon, Ph.D., Scientist, Environmental Defense Fund, Austin, Texas

**Building Social Acceptance and Trust at the Community and National Levels:** Alan J. Krupnick, Senior Fellow and Co-Director, Resources for the Future, Center for Energy and Climate Economics, Washington D.C.

# Highlights

### **AAPG Pitchapalooza**

Date:	Thursday, April 6
Time:	8:00 a.m12:00 p.m.
Location:	George R. Brown Convention Center
Fee:	\$55 Professionals / \$35 Students

### What is Pitchapalooza?

Pitchapalooza is an event where individuals and companies can "pitch" an audience and potentially obtain funding for a project. These can include oil & gas projects that feature a new application of technology, or the development of an innovative (even disruptive) technology. The goal is to help accelerate the productive development and application of innovation as well as ensure potential for a significant return on investment.

Projects can include mature fields that can be revitalized, shale plays that have newly identified sweet spots, new technologies for identifying hydrocarbons (either as reservoirs or as environmental problems), alternative energy solutions, smart systems, sensors, or software.

### Luncheons

### All-Convention Luncheon: The Evolution of the American Shale Plays: Where We Are and How We Got There

Date:Monday, 3 AprilTime:11:30 a.m.-1:15 p.m.Location:George R. Brown Convention CenterFee:\$65Speaker:Richard K. Stoneburner, Managing Director of<br/>Pine Brook Partners



Since around 2006 the exploration, appraisal and development of shale reservoirs in the Lower 48 has seen a dramatic escalation, first starting with the gas productive shale reservoirs then followed by those that are liquid productive. The result has been a total renaissance for the domestic E & P industry. Each of the plays, which total approximately 14 that have seen substantial development, underwent an evolutionary cycle

that was driven by the roles of the various functions that contribute to the success of any given play: land, geologic, drilling, completion and production. As each play progresses through the evolutionary cycle, the role of each function changes accordingly. Even though all of the plays have certain common characteristics, Richard will attempt to point out something uniquely different about each of the 14 plays that might aid in a better understanding of plays yet to be discovered.

Mr. Stoneburner is currently a Managing Director for Pine Brook Partners, a private equity firm focusing on investments in the energy sector.

Mr. Stoneburner has over 35 years' experience in upstream oil and gas exploration and production. He is a former co-founder, President and Chief Operating Officer of Petrohawk Energy Corporation and

### How will it work?

Presenters will pitch to an audience of financing sources and potential partners. There will also be a panel of judges for a competition within different categories. Most pitches will be between 10 - 15 minutes in length. The full pitch packet will be available for download in January 2017. Some teams may have longer video pitches available after the event.

There will also be opportunities for mini-pitches: "5 for 5" which is a 5-minute pitch for a \$5,000 investment.

Sponsorships available. For more information, contact Susan Nash at snash@aapg.org

President – North America Shale Production Division for BHP Billiton Petroleum from. Prior to co-founding Petrohawk in 2003, Stoneburner was Vice President Exploration for 3TEC Energy Corporation and worked for several E&P companies, including Hugoton Energy Corporation, Stoneburner Exploration Inc., Weber Energy and Texas Oil & Gas.

Richard has a Bachelor of Geological Sciences from the University of Texas at Austin, a Master's of Geology from Wichita State University, was a member of the AAPG's Distinguished Lecturer Series and was awarded the Norman Foster Outstanding Explorer of the Year award by the AAPG in 2016. Stoneburner also serves on the Advisory Council of The Jackson School of Geosciences, the Visiting Committee of the Bureau of Economic Geology and on the board of Memorial Assistance Ministries.

The AAPG Foundation's Teacher of the Year Award will be presented during the All-Convention Luncheon. The annual Teacher of the Year award of \$6,000 is given to a K-12 teacher for excellence in the teaching of natural resources in the earth sciences. The award includes \$3,000 to the recipient's school and \$3,000 for the recipient's personal use. In addition, the recipient receives an expense-paid trip to the Annual Convention and Exhibition (ACE) to receive the award. Nominations for the award are submitted by the AAPG sections and the winner is chosen by AAPG Foundation's Teacher of the Year Judges. Each section winner receives a \$500 cash award.



## Luncheons

### Division of Professional Affairs (DPA) Luncheon: Toward a Philosophy of Oil Finding: Then, Now, Tomorrow! Wallace Pratt, Founding member of AAPG and Visionary Geoscientist, retired Humble Oil Co (Exxon)

Date:	Tuesday, 4 April
Time:	11:30 a.m1:00 p.m.
Location:	George R. Brown Convention Center
Fee:	\$60
Speaker:	Wallace Pratt*, Founding member of AAPG and
•	Visionary Geoscientist



DPA is pleased to present a very special luncheon for this year's convention in honor of AAPG's 100th anniversary celebration, featuring founding AAPG member Wallace Pratt – legendary geologist, businessman, humanist and philosopher - as our esteemed speaker. Wallace will draw upon his rich breadth, wisdom and experience to relate the Heritage of the

Petroleum Geologist across the generations, with the aim to inspire today's geoscientists to continue to "find oil in their minds" and follow their instincts to raise the profession of geology "not only as a means of livelihood, but as a way of life." This luncheon is a sequel to the 2002 "Heritage of the Petroleum Geologist" luncheon, which honored 43 pioneering and notable geologists who served as table hosts. This 2017 offering will follow suit, honoring 58 accomplished and distinguished geologists, bringing the total of recognized honorees to 101; 100 to celebrate AAPG's centennial, plus 1 additional individual to symbolize the passing of our deep heritage to the next generation of energy-finders. Attendees will converse and dine with our honorees and will also receive a print edition of our 2017 honorees' experience – including successes, disappointments, anecdotes and advice.

### Actor portrayal\*

### **SEPM Business Meeting Luncheon:**

### Can We Do Big Science in a Petroleum-Rich Basin? - The Robust Sedimentary Archive of the Deep Gulf of Mexico Basin

Date:	Tuesday, 4 April
Time:	12:00 p.m1:00 p.m.
Location:	George R. Brown Convention Center
Fee:	\$55
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**Speaker:** John W. Snedden, Senior Research Scientist, Director of the Gulf Basin Depositional Synthesis Project at the Institute for Geophysics, University of Texas at Austin



John W. Snedden received his B.A. from Trinity University (San Antonio), his M.S. at Texas A&M University (College Station) and Ph.D. from Louisiana State University (Baton Rouge). With multiple domestic and international assignments, he worked for Mobil and ExxonMobil for over 25 years in research, exploration, development and production prior to joining UT. The Gulf of Mexico is one of the most prolific hydrocarbon-producing basins in the world, with an estimated endowment (discovered and expected future finds) of over 152 BBOE and a 2017 projected oil production of 1.8 million barrels per day. As such, over half a million wells have drilled in the greater Gulf Basin, including onshore areas of the US, Mexico and Cuba. Virtually the entire northern Gulf is covered by 2-D and 3-D seismic surveys and in many areas, new wide-azimuth reflection surveys have been shot over the allochtonous salt canopy. With Mexico recently opening up to international exploration, a large number of new surveys are being acquired, including multi-beam bathymetry and backscatter, used for targeting natural oil and gas seeps. Real-time monitoring of sedimentary processes related to coastal erosion and deltaic sediment input to the basin is ongoing.

### **Division of Environmental Geosciences (DEG) Luncheon**

Date:	Wednesday, 5 April
Time:	11:30 a.m1:00 p.m.
Location:	George R. Brown Convention
Fee:	\$55
Speaker:	Bridget R. Scanlon, Bureau of
-	Jackson Cohool of Cooperations

: **Bridget R. Scanlon**, Bureau of Economic Geology, Jackson School of Geosciences, University of Texas at Austin



Bridget Scanlon is a Senior Research Scientist at the Bureau of Economic Geology, Jackson School of Geosciences, University of Texas at Austin. Her degrees are in Geology with a focus on hydrogeology with a B.A. Mod. from Trinity College, Dublin (1980); M.Sc. from the University of Alabama (1983) and Ph.D. from the University of Kentucky (1985). She has worked at the

Center

University of Texas since 1987. Her current research focuses on the interdependence of water and energy, focusing on water quantity aspects. Her group evaluated water use for hydraulic fracturing for shale oil and gas extraction relative to water use in electricity generation. Their recent work focuses on oil plays in semiarid regions where water scarcity is a concern. She also works on broader issues related to water resources within the context of climate extremes using ground-based and satellite data. With increasing unconventional oil and gas production, accounting for about 50% of total U.S. production, it is important to understand various water risks related to sourcing of water to implement hydraulic fracturing and disposal of produced water that is generated with oil and gas production.

### **Energy Minerals Division (EMD) Luncheon**

Wednesday, 5 April
11:30 a.m.–1:00 p.m.
\$55
George R. Brown Convention Center
To be announced

The traditional Energy Minerals Division (EMD) Luncheon will take place Wednesday. Please continue to check ACE.AAPG.org for new information added as it becomes available.

## **Networking Events**

### **Icebreaker Reception**

Date:	Sunday, 2 April
Time:	5:00 p.m.–7:30 p.m.
Location:	Exhibition Hall
Fee:	Included with registration

Kick off our centennial celebration in style as the Exhibition opens with drinks and hors d'oeuvres for you to enjoy while connecting with your colleagues and networking with exhibitors.

### **Refreshment Breaks**

Dates:	Monday, 3 April–Wednesday, 5 April
Times:	9:15 a.m. – 10:15 a.m. (Monday, Tuesday and Wednesday)
	2:30 p.m3:30 p.m. (Monday and Tuesday only)
Location:	Exhibition Hall
Fee:	Included with registration

Now is your perfect opportunity to meet industry experts, innovators and influencers face-to-face as you savor a coffee or tea and engage with product and service providers to see what the industry offers inside the Exhibition.

### **End-of-Day Receptions**

Dates:	Monday, 3 April–Tuesday, 4 April
Time:	5:00 p.m6:00 p.m.
Location:	Exhibition Hall
Fee:	Included with registration

Discover new industry trends, exchange ideas, gain competitive intel and cultivate your credibility as you relax with a drink and some appetizers and connect with fellow professionals, product and service providers and business prospects in the Exhibition.

### **All-Alumni Reception**

Date:	Monday, 3 April
Time:	5:30 p.m7:30 p.m.
Location:	Hilton Americas-Houston Hotel
Fee:	Included with registration

Mingle with former classmates at the All-Alumni Reception while enjoying cash bars stationed throughout the room. Signs will identify tables for participating colleges and universities. Any alumni group wishing to participate in the All-Alumni Reception or sponsor your own private function should contact Alicia Collins at AAPG (acollins@ aapg.org or +1 918 560 2616) by Tuesday, 17 January.

### **Students**

### **Student and Faculty Lounge**

Dates:	Monday, 3 April–Wednesday, 5 April
Times:	Exhibition Hours
Location:	Exhibition Hall

Complimentary refreshments are provided each day during exhibition hours. The lounge offers students a place to meet with fellow students and industry professionals to develop career contacts and lifelong friends.

### **Student Career Seminar**

Date:	Monday, 3 April
Time:	4:00 p.m6:00 p.m.
Location:	Hilton Americas-Houston Hotel
Fee:	\$10
Limit:	64 Students

This workshop, sponsored by the AAPG Student Expo Committee, is designed to assist students and recent graduates in their employment search endeavors within the petroleum and environmental industries by introducing them to the activities of day-to-day life in these industries and offering specific job search strategies and tips for finding employment. There will be a brief introduction to the table discussion leaders, who are industry managers and technical professionals, followed by a series of 30-minute facilitated roundtables where students are encouraged to ask questions of the discussion leaders. The discussion leaders will rotate among the tables maximizing interaction between industry professionals and students.

Students may also choose to sign up for a résumé review with an industry recruiter during this workshop. The résumé review offers practical guidelines for résumé development and interviewing tips.

### **AAPG/SEPM Student Reception**

Date:	Monday, 3 April
Time:	6:00 p.m8:00 p.m.
Location:	Hilton Americas-Houston Hotel
Fee:	Included with registration

All students and faculty attending the convention are invited to the AAPG/SEPM Student Reception. Enjoy hors d'oeuvres and refreshments while mingling with your peers. An introduction will be given by an ExxonMobil representative before the top three poster authors from the Shell sponsored "Selected Academic Research Topics: Student Presentations" receive awards. The Jim Hartman Service to Students Award will be conveyed to AAPG recipients(s) who contributed exceptional service to AAPG's student programs. The awards program continues with the presentation of the Schlumberger sponsored Outstanding Student Chapter awards, the Student Chapter YouTube Video competition and recognition of the Imperial Barrel Award team.



# **Networking Events**

### AAPG/AAPG Foundation Imperial Barrel Award (IBA)

The IBA program is an annual prospective basin evaluation competition for geoscience graduate students from universities around the world. Teams winning IBA Region and Section competitions qualify for an opportunity to compete in the international finals during ACE. Sponsoring company representatives are allowed to watch the team presentations. For more information, please go to iba.aapg.org/ sponsorship or contact a Programs Coordinator at iba@aapg.org. The announcement of the winning teams for this year's IBA competition will be open for all to attend and will take place right before the start of the Opening Session and Awards Ceremony.

### Young Professionals

### Young Professionals Meet & Greet

Date:Sunday, 2 AprilTime:2:00 p.m.-3:00 p.m.Location:George R. Brown Convention Center

Make plans to participate in the Young Professionals Meet & Greet event sponsored by Noble Energy– a great networking opportunity that serves as a link to connect students and early career professionals with experienced attendees (mentors) at ACE. Attendees are paired up and learn and/or share industry knowledge as well as help guide newcomers through the convention experience. Professionals may be paired with one or more students/young professionals. These paired groups of students/young professionals will be shown around the exhibition hall during the Icebreaker reception and introduced to other AAPG members and colleagues. This program grows in popularity every year with positive reviews from all who participate. Please indicate your interest in this program during the registration process. The Young Professionals Special Interest Group oversees this event.

### **Career Center**

Career Center - Open to All Job Seekers		
Dates & Times:	Monday, 3 April, 8:30 a.m.–5:00 p.m.	
	Tuesday, 4 April, 8:30 a.m.–5:00 p.m.	
	Wednesday, 5 April, 8:30 a.m2:00 p.m.	
Location:	George R. Brown Convention Center	

The Career Center in Houston is an AAPG benefit for both employers and job seekers. The room is conveniently accessible to the public and meeting registration is not required to utilize this service. We also have private interview rooms available during the hours posted.

The AAPG Career Center helps job seekers and employers connect in an environment specifically designed for petroleum geosciences professionals, saving them both time and effort. An assistant will be in the room to answer questions and assist with scheduling interviews, as well as posting résumés and jobs.

Job seekers – Bring your résumé to post to the Career Center bulletin board at no charge. AAPG members also have the option of posting their résumés online.

**Employers** – Post jobs on our bulletin board and contact us to reserve a table to meet with job seekers or share promotional material about your company. Those with paid postings to our online Career Center have access to our online résumé database as well. Companies may reserve half-day, full-day or all three days at no cost. Table must be staffed by your company representative. Limited space is available.

Prior to the show, contact our staff to inquire about posting jobs on our website to receive special discounts. To post a job online, go to careercenter.aapg.org. To reserve a table, contact Brian McBroom in the Customer Experience Center at bmcbroom@aapg.org.



## **NO ELECTRONIC CAPTURING POLICY**

Capturing and photographing via any electronic device or media is strictly prohibited at ACE.

## **Convention Volunteers Needed**

Students and Young Professionals – Sign up online to be a volunteer at ACE and benefit by earning cash and spending valuable time at the convention. Volunteers are needed in the following areas: Judges' Room, Opening Session, Oral Presentations, Poster Presentations, core and digital media display and Registration. Receive \$25 for every four hours you volunteer. Select the day(s) and time(s) you are available as well as the location(s) you prefer when you register online. If you register on the printed registration form, indicate interest by marking the box by "I want to be a student volunteer" and you will be contacted about your preferences. To be eligible for benefits, volunteers must be either students or employees in industry who are recent (2016–2017) graduates.

## **SEPM Annual Meeting** Visit sepm.org for updates

### SEPM President's Reception and Awards Ceremony

Date:Tuesday, 4 AprilTime:7:00 p.m. – 9:00 p.m.Location:Four Seasons HotelFee:Included in registration



SEPM President Vitor Abreu invites you to an evening of celebration to honor the 2017 award winners of SEPM – Society for Sedimentary Geology – and a great event to network and visit with colleagues old and new. The Twenhofel Medal, the highest award of SEPM given in recognition of a career of outstanding contributions to sedimentary geology, will be presented to Judith A. Mckenzie. SEPM Honorary

Membership, given for both scientific contributions and service to the society, will be awarded to Don McNeill. The other science award recipients are Lynn Wright, who will receive the Francis P. Shepard Medal in recognition of excellence in marine geology; Susan Kidwell, the Raymond C. Moore Medal in recognition of excellence in paleontology; Steve Graham, the Pettijohn Medal for excellence in sedimentology & stratigraphy; and Jake Covault, the Wilson Award for excellence in sedimentary geology by an early career geoscientist.

SEPM will also honor the recipients of the Outstanding Paper Awards for both of its journals: Journal of Sedimentary Research and PALAIOS. SEPM will also recognize the Outstanding Student Presentation Awards from the 2017 Annual Meeting, where cash prizes will be presented to the top student presenters from the SEPM Student Awards Poster Session scheduled for Monday at Houston, sponsored by Nexen. As always, SEPM will recognize the members of the 2017 Annual Meeting Organizing Committee, without whom the meeting could not take place and SEPM Foundation Student Grant recipients. The reception will begin at 7:00 p.m., with cocktails available at cash bars and substantial hors d'oeuvres. The awards ceremony will start at 7:30 p.m.

#### **SEPM Research Group Meetings and Reception**

Date:	Monday, 3 April
Time:	7:00 p.m10:00 p.m.
Location:	Four Seasons Hotel
Fee:	Included in registration

The (SEPM) Society for Sedimentary Geology would like to invite anyone who is interested in research group activities to attend the SEPM Research Group Meetings. Individual Research Groups will meet on Monday, 3 April. Specific locations will be announced at a later date. Check the SEPM website for updates at www.sepm.org.

### **SEPM Field Trips and Short Courses**

Be sure to check out the great array of trips and courses available for this meeting. Students especially should be aware of the Sequence Stratigraphy for Graduate Students sponsored by Chevron and the other SEPM courses that have some discounted student seats sponsored by multiple companies. Field Trips and Short Courses are listed on pages 58 and 60

#### **SEPM Best Student Poster Presentation Competition**

SEPM will be recognizing the top student presentations from the SEPM Student Awards Poster Session (Monday). The top student presenters will be recognized with cash prizes at the SEPM President's Reception and Awards Ceremony on Tuesday evening. For additional information contact Theresa Scott (tscott@sepm.org) or Howard Harper (hharper@sepm.org) at SEPM headquarters.

### **Guest Program**

### **Celebrating AAPG's 100th Anniversary!**

Welcome to Houston, the fourth largest city in the U.S. and one of the most culturally diverse. We are proud of our Texas hospitality, so don't be surprised if someone gives you a big smile and says "Howdy." We hope you have the opportunity to visit some of our world class museums, as well as some more eclectic areas and sample our incredible cuisine.

Registered guests are invited to enjoy the comforts of the Guest Hospitality Suite in the Hilton Americas-Houston Hotel located across from the George R. Brown Convention Center. This is the perfect place to visit with friends, relax and enjoy refreshments.

Volunteers from the Guest Program Committee will be on hand to answer your questions about the tours and about the Houston area. Let us help you get acquainted with our city and the surrounding area and provide you with the brochures and maps you need. Whatever your interest, Houston has something for everyone!

This year we have set up a Facebook page to help you connect with old friends, make new friends with similar interests, get links for useful tools and links to navigate and enhance your stay in Houston during

the convention. "Like us" now to get info and updates prior to the convention! Facebook Page (search: AAPG ACE 2017 guest program)

### **Guest Hospitality Suite Hours:**

Monday, 3 April	.8:00 a.m3:00 p.m.
Tuesday, 4 April	.8:00 a.m4:30 p.m.
Wednesday, 5 April	.8:00 a.m12:00 p.m.
Location: Hilton Americas-He	ouston Hotel

### **Social Activity**

#### Wine and Cheese Tasting

Date:	Tuesday, 4 April
Time:	3:30 p.m4:30 p.m.
Location:	Guest Hospitality Suite
Fee:	Included with guest program registration - Please note
	your interest when registering

### **Guest Tours**

All Guest Tours will depart from the Guest Hospitality Suite at the Hilton Americas-Houston Hotel. Participants should plan to arrive in the Hospitality Suite 15 minutes prior to the published departure



## **Guest Program**

times and check in with the AAPG Guest Tour Host. Participants need to wear comfortable walking shoes and appropriate clothing for both indoor and outdoor conditions.

### "Houston Building Stones" Walking Tour with Geologist Neal Immega

Date:	Monday, 3 April
Time:	10:00 a.m12:00 p.m.
Fee:	Included with guest program registration
Includes:	Two miles of walking with stops, both indoor and outdoor
Limit:	No limit – Please note your interest when registering

Houston is known more for its clay and lack of outcrops, unless you are downtown that is. Join Neal to discover the variety of interesting sedimentary, igneous and metamorphic rocks from all over the world that now cover the surfaces of Houston's downtown buildings, both inside and out.

# Houston Museum of Natural Science and "Mummies of the World" Tour

Date:	Monday, 3 April
Time:	8:30 a.m12:30 p.m.
Fee:	\$45
Includes:	All transportation plus general and featured exhibition
	admissions
Limit:	Maximum 27 people

The HMNS is a must see in Houston. With a mineral exhibit and new paleontology exhibit that rival the Smithsonian's and a one of a kind energy exhibit that engulfs visitors in the process of exploring and producing oil and gas, this really is an out of this world learning experience! In addition, guests will receive admission to the "Mummies of the World" (limited engagement), the largest exhibition of real mummies and related artifacts ever assembled, presenting a never before seen collection of preserved human and animal mummies. This compelling collection, presented with reverence and dignity, includes ancient mummies from South America, Europe and ancient Egypt, dating as far back as 4,500 years.

### **Downtown Houston Walking Culinary Tour**

Date:	Monday, 3 April
Time:	12:15 p.m.–3:30 p.m.
Fee:	\$85 (must be 21 years or older)
Includes:	Taxi to starting point of tour, tour guide and culinary
	delights
Notes:	No return transportation is provided. You may take a

Notes:No return transportation is provided. You may take a taxi<br/>at your own expense or walk one mile back to the hotel.Limit:Maximum 20 people

Downtown Houston has recently established itself as a hot new scene for foodies. This Downtown Houston Culinary Tour Guide will take you on a leisurely one mile walk of the historic and hip downtown Houston food scene giving you interesting tidbits about the historic beginnings of this early section of Houston, its architecture and culture. The tour stops every 3-4 blocks to visit each of three critically acclaimed local restaurants where you can meet the chefs, learn about their culinary influences and enjoy some of their delectable specialties. Beer and wine can be purchased a la carte on site.

# "Great Day Houston" with Deborah Duncan on KHOU-TV and Lunch at the Dunlavy

Date:	Tuesday, 4 April
Time:	7:25 a.m12:30 p.m.
Fee:	\$65
Includes:	All transportation, studio show and lunch at THE DUNLAVY
Limit:	Maximum 20 people

Join celebrity talk show host, Deborah Duncan, as an audience member at the live taping of her morning talk show. This winner of two Emmy Awards and two Gracie Allen Awards is known for her wit and for her dedication to community service. Each program has surprise guests, delves into the fascinating things that make Houston tick and everyone has a great time. After the show, enjoy lunch at The Dunlavy, one of Houston's wonderful new parkland restaurants overlooking Buffalo Bayou.

### "Spirit of the Bayou" Boat Tour

Date:	Tuesday, 4 April
Time:	12:45 p.m3:30 p.m.
Fee:	\$55
Includes:	Taxi to/from the walking point, boat tour with historical
	tour guide and bottled water
Notes:	All attendees will have to walk half a mile to/from the
	walking point to the boat launch
Limit:	Maximum 20 people

The city of Houston is well known for being nicknamed "the bayou city" and Buffalo Bayou is surely one of our most natural gems. This slowmoving waterway was the site of Houston's founding in 1836 and has become a destination for outdoor recreation in the heart of the city. The park has been recently improved and contains an incredibly diverse urban ecosystem that supports dozens of native species of flora and fauna. Buffalo Bayou Partnership's pontoon tour boat, Spirit of the Bayou, will take you and your guide on a 1½ hour ride through beautiful Buffalo Bayou Park as you take in historic sites and great downtown views.

### **Bayou City Bike Tour**

Date:	Wednesday, 5 April
Time:	9:00 a.m12:00 p.m.
Fee:	\$65
Includes:	Door to door service, tour guide, bicycle, helmet
	(optional age 18+) and bottled water
Limit:	Maximum 14 people

Want to really get to know Houston? Biking can be the best way to discover a city from the most intimate, hands on perspective! This active tour will take you on a ride through downtown and the ever expanding bike trails our city has to offer. Your Host will walk you outside to meet your Bayou City Bike Tour Guide, grab a helmet and settle onto your bicycle for this fascinating tour. Average 10 mile total trip distance with many stops offers an opportunity to explore at a leisurely pace. One stop in Market Square Park offers an opportunity for a water refill or to purchase a snack or beverage at Niko Niko's.

## ACE 2017 Organizing Committee



Dave Rensink General Chair Retired



Tim Rynott Sponsorship Co-Chair Ridge Resources, LLC



Morgan Sullivan SEPM Vice Co-Chair Chevron



**Richard Ball** General Vice Chair **Detring Energy Advisors** 



Bryan Byrd DEG Vice Chair Consultant



Harry Rowe AAPG Short Course Co-Chair Bureau of Economic Geology, The University of Texas at Austin



Meredith L. Faber AAPG Matson Award & Braunstein Award Chair Noble Energy, Inc.



**Craig Shipp** Technical Program Chair Shell Exploration and Production Company



DPA Vice Co-Chair Shell Exploration and Production Company



Farzam Javadpour AAPG Short Course Co-Chair The University of Texas at Austin, Bureau of Economic Geology



Jacob Covault **SEPM Awards Chair** Bureau of Economic Geology, The University of Texas at Austin



Carl K. Steffensen Technical Program Vice Chair Technical Program Vice Chair Viking GeoSolutions, LLC



Andrea Reynolds DPA Vice Co-Chair Shell Exploration and Production Company



Don Van Nieuwenhuise SEPM Short Course Co-Chair University of Houston



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Guest Program Co-Chair Crensink Art



Amy Sullivan Shell Exploration and Production Company



Wayne K. Camp EMD Vice Chair Anadarko Petroleum



Xavier Janson AAPG Field Trip Co-Chair Bureau of Economic Geology, The University of Texas at Austin



**Teacher Program Co-Chair** 



Hunter Lockhart Sponsorship Chair **RHP** Rilliton



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Steven Shirley Sponsorship Co-Chair Chevron



Howard Harper SEPM Vice Co-Chair SEPM



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Amanda Haddad



Katharine Lee Avary



Stephanie Nwoko

Denise Cox

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Terra George



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Carol Rensink



Consultant

**Rachel Wilson** 

Guest Program Co-Chair

Amanda Guzofski Chevron





## AAPG 100<sup>th</sup> Anniversary Committee







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**Rick Fritz** 



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Steve Sonnenberg



**Calum Macaulay** Shell Exploration and Production Company



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**David Curtiss** 

**Christine Iannello Bachtel** ExxonMobil







Irene Arango Chevron



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James Courtier Shell Exploration and Production Company

**Rick Sarg** Colorado School of Mines

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Lesli Wood

Colorado School of Mines

## **ACE 2017 Technical Program**

# AAPG: Epicenter of the World's Petroleum Geosciences Community

Hear what's happening in many of the globe's hydrocarbon provinces in the ACE 2017 Technical Program and Exhibition:

- 117 Sessions Covering 12 Themes
- 430 Oral Presentations
- 798 Poster Presentations
- 1,228 Speakers from 41 Countries







- 1. Permian Basin
- 2. Anadarko Basin
- 3. Ardmore Basin
- 4. North Slope (Alaska)
- 5. Williston Basin
- 6. Appalachian Basin
- 7. Denver Basin
- 8. Paradox Basin
- 9. Eagle Ford
- 10. Gulf of Mexico

- 1. North Sea
- 2. Niger Delta
- 3. Tarim Basin (China)
- 4. Bohai Bay Basin (China)
- 5. Taranaki Basin (New Zealand)
- 6. Karoo Basin (South Africa)
- 7. Campos Basin (Brazil)
- 8. Neuquén Basin (Argentina)
- 9. Magallanes Basin (Chile)
- 10. Western Canada Sedimentary Basin

Oral Sessions at a Glance					
			<ul> <li>Theme 6: Unconventional Resources</li> <li>Theme 7: Energy and Environment</li> <li>Theme 8: Emerging Frontiers and New Technology</li> <li>Theme 9: Geophysics - Integration of the Technology Across the Business</li> <li>Theme 10: International Regions Highlights</li> </ul>		
Sunday Afternoon	History of Petroleum Geology				
Monday Morning	Theme 6: Unconventional: Advances in Mudstone and Organic Matter Depositional Processes (EMD/AAPG)	Discovery Thinking I	Theme 2: Carbonates: Honoring Lloyd C. Pray for His Contributions to Carbonates – From Cements and Pore Systems to Buildups, Slopes and Allocthonous Deposits (SEPM/AAPG)	Theme 3: Geochemistry/ Petroleum Systems: New Technologies and Workflows in Geochemistry and Basin Modeling (AAPG)	
Monday Afternoon	Theme 6: Unconventional: Advances in Unconventional Petroleum Systems and Source Rocks (EMD/AAPG)	Discovery Thinking II	Theme 6: Unconventional: New Approaches to Improving Performance of Unconventional Reservoirs (EMD/AAPG)	Theme 2: Carbonates: Giant Carbonate Reservoirs and Their Basins (AAPG/SEPM)	
				Theme 2: Carbonates: Microbial Carbonates - Modern and Ancient Analogs for Pre-Salt Deposits of the South Atlantic Margins (SEPM)	
Tuesday Morning	Theme 6: Unconventional: Permian and Eagle Ford (EMD/AAPG)	Theme 11: Future of Energy: Previous Predictions and Future Trends (AAPG)	Theme 12: SEPM Research Symposium: How Seismic and Sequence Stratigraphy Have Advanced: 40 Years After AAPG Memoir 26 and 30 Years After SEPM Special Publication 42 I	Theme 5: Deepwater: Non- Turbidite Deepwater Units as Key Petroleum System Elements (SEPM/AAPG)	
Tuesday Afternoon	Theme 6: Unconventional: Emerging and Mature North American Plays (EMD/ AAPG)	DEG/EMD Forum: The Next 100 Years of Global Energy Use: Resources, Impacts and Economics	Theme 12: SEPM Research Symposium: How Seismic and Sequence Stratigraphy Have Advanced: 40 Years After AAPG Memoir 26 and 30 Years After SEPM Special Publication 42 II	Theme 4: Structure/ Geomechanics: Salt Structure and Tectonics (AAPG)	
Morning	Theme 1: Siliciclastics: Source to Sink II: Global Examples (SEPM)	DEG/DPA Forum: The Future Best Practices for Extraction	Theme 5: Deepwater: Major Deepwater	Theme 2: Carbonates:	
	Theme 1: Siliciclastics: Continental to Shallow Marine II: Tidal to Shelf (SEPM)	Industries in a Lower Carbon Environment	Fields of the Offshore U.S. Gulf of Mexico (AAPG)	Depositional Models for Carbonate and Evaporite Systems I (SEPM)	
Wednesday Afternoon	Seismicity, Hydro Fra and Other Oil Recove	Theme 7: Energy & Environment: Induced Seismicity, Hydro Fracturing and Other Oil Recovery Best Practices (DEG)	Theme 5: Deepwater: Insights From	Theme 2: Carbonates: Depositional Models for Carbonate and Evaporite Systems II (SEPM)	
	Source to Sink I: Emphasis on the Gulf of Mexico (SEPM)	Theme 7: Energy & Environment: Climate, Environment and Challenges to the Industry (DEG)	Circum-GOM Studies and Associated Petroleum Systems (AAPG)	Theme 2: Carbonates: Carbonate Diagenesis and Paleohydrologic Modeling (SEPM)	

# Register Early & Save Up to \$210 See page 65



- Theme 11: Future of Energy Exploration
- Theme 12: SEPM/AAPG Research Symposium AAPG and SEPM Student **Research Poster Sessions**
- History of Petroleum Geology
- Discovery Thinking

- DEG/EMD Forum: The Next 100 Years of Global Energy Use: Resources, Impacts and Economics
- DEG/DPA: The Future Best Practices for Extraction Industries in a Lower **Carbon Environment**

Theme 8: Emerging Frontiers: Emerging Basins (AAPG)	Theme 9 Geophysics: Reservoir Characterization and Deep Water Exploration: Case Studies (AAPG)	Theme 1: Siliciclastics: Contributions From Numerical and Physical Models: From Fluvial to Deepwater (SEPM)	Theme 4: Structure/ Geomechanics: Contractional Structure and Tectonics (AAPG)	
Theme 8: Emerging Frontiers: Impact of Geologic Uncertainty on Pore Pressure and Implications for Well Design (AAPG)	Theme 5: Deepwater Deposits: From Classic	Theme 1: Siliciclastics: Innovative Techniques and	Theme 4: Structure/ Geomechanics: Structural Analysis in Fractured and Unconventional Reservoirs (AAPG)	
Theme 8: Emerging Frontiers: Seep Hunters: Validating Charge in Wildcat Settings for Better Results (AAPG)	Models to Paradigm Shifts (SEPM/AAPG)	Workflows (AAPG/SEPM)	Theme 4: Structure/ Geomechanics: Geomechanics (AAPG)	
Theme 10: International Regions: Latin America (AAPG)	Theme 1: Siliciclastics: Quantitative Reservoir Quality Prediction and Clastic Diagenesis (SEPM)	Theme 2: Carbonates: Pore Networks: From Nano-Scale to Touching Vug & Fracture Systems (SEPM)	Theme 3: Geochemistry/ Petroleum Systems: Basin Modeling and Geochemistry Along the Value Chain (AAPG)	Theme 11: Future of Energy: New Discoveries in the Solar System: Implications for Energy and Mineral Resources (AAPG)
Theme 10: International Regions: Europe (AAPG)	Theme 9 Geophysics: Integration of Geophysics With Geology: Theory, Workflow and Case Studies (AAPG)	Theme 1: Siliciclastics: Continental to Shallow Marine I: Alluvial, Fluvial and Aeolian (SEPM)	Theme 3: Geochemistry/ Petroleum Systems: Risk Quantification Through Petroleum System Analysis (AAPG)	
Theme 10: International Regions: Asia Pacific (AAPG)	Theme 9 Geophysics: Non- Seismic Methods, Time Lapse Seismic and Rock Physics:	Theme 3: Geochemistry/ Petroleum Systems: Hydrocarbon Charge	Theme 4: Structure/ Geomechanics: Rifting and	
Theme 10: International Regions: Africa (AAPG)	Techniques, Integration Approach and Case Studies (AAPG)	Assessment of Unconventional Plays (AAPG)	Extension (AAPG)	
Theme 11: Future of Energy: Essential Tools for the Next Generation of Geoscientists (DPA/AAPG)	Theme 1: Siliciclastics: Sea- Level, Climatic and Autogenic Controls on Coastal and Marine Stratigraphy: A Session Honoring the Career of John B. Anderson (SEPM)	Theme 4: Structure/ Geomechanics: Fault Seal and Fault Zone Modeling (AAPG)	Theme 6: Unconventional: New Techniques for Understanding Unconventionals (EMD/AAPG)	Theme 10: International Regions: Middle East and Canada (AAPG)

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Poster Sessions at a Glance					
<ul> <li>Theme 1: Siliciclastics</li> <li>Theme 2: Carbonates and Evaporites</li> <li>Theme 3: Geochemistry, Basin Modeling and Petroleum Systems</li> <li>Theme 4: Structure, Tectonics and Geomechanics</li> <li>Theme 5: Deepwater</li> <li>Theme 5: Deepwater</li> <li>Theme 1: Siliciclastics</li> <li>Theme 1: Siliciclastics</li> <li>Theme 1: Siliciclastics</li> <li>Theme 2: Carbonates and Evaporites</li> <li>Theme 2: Carbonates and Evaporites</li> <li>Theme 3: Geochemistry, Basin Modeling and Petroleum Systems</li> <li>Theme 4: Structure, Tectonics and Geomechanics</li> <li>Theme 5: Deepwater</li> <li>Theme 10: International Regions Highlights</li> </ul>					
Monday Morning	AAPG Student Posters I	Theme 1: Siliciclastics: Innovative Techniques and Workflows (SEPM/ AAPG)	Theme 1: Siliciclastics: Continental to Shallow Marine I: Alluvial to Fluvial (SEPM)	Theme 9: Geophysics: Rock Physics, Non- Seismic, 4-D Time Lapse and Microseismic: Integration and Applications (AAPG)	Theme 3: Geochemistry/ Petroleum Systems: Basin Modeling and Geochemistry Along the Value Chain I & II (AAPG)
Monday Afternoon	SEPM Student Posters I	Theme 1: Siliciclastics: Continental to Shallow Marine II: Fluvial, Deltaic and Aeolian (SEPM)	Theme 1: Siliciclastics: Source to Sink (SEPM)	Theme 5: Deepwater: Contributions From Numerical and Physical Models (SEPM)	Theme 2: Carbonates: Carbonate Diagenesis and Paleohydrologic Modeling (SEPM)
Tuesday Morning	AAPG Student Posters II	Theme 1: Siliciclastics: Challenging Basins/ Mixed Systems (SEPM)	Theme 2: Carbonates: Depositional Models for Carbonate and Evaporite Systems I, II, & III (SEPM)	Theme 7: Energy & Environment: Induced Seismicity, Hydro Fracturing and Other Oil Recovery Best Practices (DEG)	Theme 7: Energy & Environment: Reclamation and Greenhouse Gas Sequestration Techniques and Best Practices (DEG)
Tuesday Afternoon	SEPM Student Posters II	Theme 2: Carbonates: Pore Networks: From Nano-Scale to Touching Vug & Fracture Systems (SEPM)	Theme 1: Siliciclastics: Clastic Diagenesis, Reservoir Quality & Geochemistry (SEPM) Theme 1: Siliciclastics: Continental to Shallow Marine III: Aeolian to	Theme 1: Siliciclastics: Insights From Mexico to Nova Scotia (AAPG)	Theme 1: Siliciclastics: Impact of Structures on Sedimentary Systems (SEPM/AAPG)
Wednesday			Shallow Marine (SEPM)		
Morning	AAPG Student Poster III	SEPM Student Poster II	Theme 12: SEPM Research Symposium: How Seismic and Sequence Stratigraphy Have Advanced: 40 Years After AAPG Memoir 26 and 30 Years After SEPM Special Publication 42	Theme 9: Geophysics: Integration of Geophysics and Geology for Reservoir Characterization: Case Studies (AAPG)	Theme 4: Structure/ Geomechanics: Geomechanics (AAPG)



- Theme 11: Future of Energy Exploration
- Theme 12: SEPM/AAPG Research Symposium AAPG and SEPM Student Research Poster Sessions
- AAPG Student Posters
- SEPM Student Posters

Theme 8: Emerging Frontiers: Seep Hunting, Pore Pressure and Convergency of Exploration and Development (AAPG)	Theme 6: Unconventional: Unconventionals of the U.S. Lower 48 (EMD/ AAPG)	Theme 6: Unconventional: New Technologies and New Concepts in Unconventionals I (EMD/AAPG)	Theme 4: Structure/ Geomechanics: Rifting and Extension (AAPG)	Theme 4: Structure/ Geomechanics: Crustal Architecture & Rifting (AAPG)	
Theme 3: Geochemistry/ Petroleum Systems: New Technologies and Workflows in Geochemistry and Basin Modeling I & II (AAPG)	Theme 7: Energy & Environment: Fossil Fuel Demands, Environmental and Mitigation Best Practices (DEG)	Theme 11: Future of Energy Exploration and Essential Tools for the Next Generation (AAPG)	Theme 4: Structure/ Geomechanics: Contractional Structure and Tectonics (AAPG)	Theme 6: Unconventional: New Technologies and New Concepts in Unconventionals II (EMD/AAPG)	
Theme 4: Structure/ Geomechanics: Salt Structure and Tectonics (AAPG)	Theme 4: Structure/ Geomechanics: Structural Analysis in Fractured and Unconventional Reservoirs (AAPG)	Theme 3: Geochemistry/ Petroleum Systems: Risk Analysis and Hydrocarbon Charge Assessment of Unconventional Plays (AAPG)	Theme 6: Unconventional: Unconventionals of the Americas: Canada and Argentina (EMD/AAPG)	Theme 9: Geophysics: Seismic Stratigraphy - Techniques and Interpretation: Case Studies in Deepwater, Subsalt, Carbonates and Conventional Plays (AAPG)	Theme 9: Geophysics: Seismic Attributes Interpretation and Integration in Exploration: Advanced Techniques and Worldwide Case Studies (AAPG)
Theme 5: Deep-Marine Deposits: New Insights Relevant to Worldwide Deep-Water Exploration and Production (AAPG)	Theme 8: Emerging Frontiers: Emerging Basins (AAPG)	Theme 6: Unconventional: Unconventional Plays of the Eastern Hemisphere (EMD/AAPG)	Theme 4: Structure/ Geomechanics: Fault Seal and Fault Zone Modeling (AAPG)	Theme 5: Deepwater: Insights From Circum- GOM Studies and Associated Petroleum Systems (AAPG)	Theme 5: Deepwater Deposits: From Classic Models to Paradigm Shifts (SEPM/AAPG)
Theme 3: Geochemistry/ Petroleum Systems: Petroleum Systems of China (AAPG)	Theme 6: Unconventional: Unconventional Plays of China I & II (EMD/AAPG)	Theme 6: Unconventional: New Technologies and New Concepts in Unconventionals III & IV (EMD/AAPG)	Theme 1: Siliciclastics: Sea-Level, Climatic and Autogenic Controls on Coastal and Marine Stratigraphy: A Session Honoring the Career of John B. Anderson (SEPM)	Theme 2: Microbial Carbonates - Modern and Ancient Analogs for Pre-Salt Deposits of the South Atlantic Margins (SEPM)	Theme 2: Carbonates: Giant Carbonate Reservoirs and Their Basins (AAPG/SEPM)

## **Technical Program Monday**

### **Sunday Afternoon Oral Presentations**

### History of Petroleum Geology

### Co-Chairs: R. Hardy, R. Hatcher and A. Haddad

- Petroleum Exploration Potential in North America c. 1859
- The AAPG Century Giant Fields Through the Decades
- Practical Tools, the Beginnings of Professional Practice and the Founding of AAPG: 1900-1917
- Wallace E. Pratt: An Amazing Figure of 20th Century American Life and a True Petroleum Geologist
- Lewis G. Weeks and the "Oil Habitat" Paradigm in Petroleum Geology
- Three Women Provide the Profound Exploration Technology Breakthrough of the 1920s
- Macroseeps and Microseeps: A History of Unconventional Approach to Exploration Since the Start of the Petroleum Age
- A View on the Past, Present and Future Use of Paleoclimate Modeling in Hydrocarbon Exploration

### **Monday Morning Oral Presentations**

### Theme 6: Unconventional: Advances in Mudstone and Organic Matter Depositional Processes (EMD/AAPG)

Co-Chairs: D. Blood and C. Macaulay

- Can Sequence Stratigraphic Concepts Be Applied in Mudrock Systems?
- Importance of Outcrop Characterization in the Development of Unconventional Shales
- Influence of Depositional Dynamics on the Internal Architecture and Facies Continuity of the Eagle Ford Formation, Texas
- The Effects of Reservoir Heterogeneity on Shale Gas Accumulation and Production – Case Study From Ordovician Wufeng-Silurian Longmaxi Marine Shale in the Sichuan Basin, China
- A Conceptual Perspective on Processes That Deposit Mud and Their Impact on Shale Fabrics and Future Pore Systems
- Applicability of Bentonites to Early Development Areas, TOC Prediction and Quantification of Lateral Facies Variation: A Case in Vaca Muerta Formation (Argentina)
- Sedimentology and XRF-based Elemental Geochemistry of Cores From the Trenton Group and Utica Shale Along the Ordovician Outcrop Belt in Central New York
- Redox Conditions During Deposition of the Upper Ordovician Point Pleasant Limestone, Appalachian Basin: Insights Into Organic Matter Production, Preservation and Reservoir Development
- Chronostratigraphy, Correlation and Depositional History of the Marcellus Shale in the Central Appalachian Basin: A Study of Inorganic Geochemistry, Stable Isotopes and Magnetic Susceptibility Data From Pennsylvania and West Virginia

### **Discovery Thinking I**

### Co-Chairs: C. Sternbach and P. Weimer

- · Lessons from a Decade of Discovery Thinking Forums
- · Discovery of a Bolivian Foothills Giant Gas Field: Incahuasi
- Utica Shale Update, Southwest Pennsylvania
- Redtail Field, A Thermal Anomaly on the Eastern Extension of the Colorado Mineral Belt, Denver Basin, Colorado
- A Fresh Look to Exploration and Discoveries in Mississippi Canyon, Northern Gulf of Mexico

### Theme 2: Carbonates: Honoring Lloyd C. Pray for His Contributions to Carbonates – From Cements and Pore Systems to Buildups, Slopes and Allocthonous Deposits (SEPM/AAPG) Co-Chairs: W. Morgan and R. Sarg

- The Role of Capitan Research in the Evolution of Carbonate Conceptual Models and Paradigms
- Mixed Carbonate-Siliciclastic Slope Sedimentation in a Foreland Basin (Lower to Middle Permian, Southern Delaware Basin, Texas)
- Geochemical Drivers in Carbonate Shoreline Settings: Examples
   From Permian of West Texas and New Mexico
- Diagenetic Systematics of Carbonate Associated Sulfate in Carbonate Facies of the Yates, Capitan and Bell Canyon Formations, Guadalupe Mountains National Park, Texas
- Submarine-Cemented Pennsylvanian to Early Permian 'Waulsortian' and Palaeoaplysinid Reefs in the Canadian Arctic
- Microbially Influenced Waulsortian Mound Reservoirs in the Lower Mississippian (Tournasian) Lodgepole Formation, Dickinson Field Complex, Williston Basin, North Dakota
- Integrated Reservoir Characterization of Silurian (Niagaran) "Pinnacle" Reefs in the Michigan Basin – New Insights Into a Mature Reef Play
- The Impact of Paleotopography on Transport of Reef Carbonates to Basinal Settings: Lessons From the Upper Miocene of Southeast Spain
- Multi-Scale Pore Network Evaluation of Bimodal Carbonates: Implications for Hydrocarbon Production

### Theme 3: Geochemistry/Petroleum Systems: New Technologies and Workflows in Geochemistry and Basin Modeling (AAPG) Co-Chairs: A. Bennett and D. Curry

- Source to Seep A Novel Calibration Domain Concept for Petroleum Systems Models
- Advanced Geochemical Technologies Extend Petroleum Systems to Include Previously Missed Sources Revealing New Exploration Plays
- Geochemical (Rock Eval,  $\delta$ 13C and Pyrolysis GC) and Textural Characterization of Amorphous Organic Matter (AOM) in Carboniferous Mudstones From the Pennine Basin (UK)
- The Effect of Oil Based Drilling Mud (OBM) on the Assessment of Hydrocarbon Charge Potential: Are We Underestimating Source Rock Potential?
- · Fluid Inclusion Isotope Analysis of Vein Cements as a Tool to



# **Technical Program Monday**

- **Reconstruct Basin-Scale Fluid Circulation**
- Integrated Geological and Geochemical Constraints for Petroleum Fluid Charge Models in the Circum-Manjiaer Region, Tarim Basin, Northwest China
- A New Look at Inverting Subsidence to Heat Flow in Rift-Related Basins – Deconvolution of Processes and Phases
- Thermal Cracking of Oil Under Water Pressure Up to 900 Bar at High Thermal Maturities: Implication for Oil Stability in Deep Basin
- Modified Athy-Law Compaction to Account for Porosity Generation and Preservation From Kerogen Conversion in Terzaghi-Like Models of Petroleum Source Rocks

### **Theme 8: Emerging Frontiers: Emerging Basins (AAPG)** Co-Chairs: B. David and R. Fitzsimmons

- The Falkland Islands, an Emerging Petroleum Province
- Evidence for a Jurassic Source Rock in the Guiana-Suriname Basin
- 3-D Seismic Interpretation and Geologic Evolution of an Intraslope Basin, Talara Basin, Deepwater Peru
- Giant Gas Fields Offshore Tanzania, Braided Deep Water System Within Extremely Sandy Turbidite Systems
- De-Risking One of the Final Passive Margin Hydrocarbon Basins: Insights Into the Evolution and Play Potential of Offshore Somalia
- Where Should We Drill in the Deep Waters of the Pelotas Basin, Southern Brazil and Uruguay?
- New Oil in an Old Place Geologic Framework of a Giant Oil Discovery in Arctic Alaska
- Elephants? In the U.S. Atlantic?
- Seismic Tectono-Stratigraphy Modeling of Deep Marine Oligo-Miocene Siliciclastic Reservoirs in Levant-Cyprus Basin Frontier Zone

### Theme 9: Geophysics: Reservoir Characterization and Deep Water Exploration: Case Studies (AAPG)

### Co-Chairs: J. Davis and H. Bui

- Seismic Characterization of Stratigraphic Architecture: Outcropand Well-Based Three-Dimensional Forward Seismic Modeling of Permian San Andres-Grayburg Strata
- Reservoir Delineation in Fluvial Architecture via Post-Stack
   Seismic Attributes
- Improving the Compartmentalization Definition of Prospective Areas in the Paleo-Flattened Space – An Eagle Ford Case Study
- Unsupervised Seismic Facies Classifications of the Lower Strawn Fm. Bend Arch-Fort Worth Basin, Texas

- A Comparison of Popular Neural Network Facies Classification
   Schemes
- Seismic Attributes for Reservoir Characterization in Deepwater Settings - Offshore Colombia (Guajira Basin)
- Seismic Characterization of the Pre-Salt Rifted Section of the Lagoa Feia Group, Campos Basin, Offshore Brazil
- A Royal Flush in the Great Campos (Brazil's Santos-Campos) Basin
- Taking Advantage of RTM Surface Offset Gathers for Iterative Salt
- Modeling and Subsalt Reservoir Image Enhancement

### Theme 1: Siliciclastics: Contributions From Numerical and Physical Models: From Fluvial to Deepwater (SEPM) Co-Chairs: D. Hoyal, Z. Sylvester and A. Cantelli

- Fluvial Channel Belt Reservoir Heterogeneity and Connectivity
- Modeling Deltaic Stratigraphy Through Superposition of Discrete Networks
- Quantifying Natural Delta Variability Using a Multiple-Point Geostatistics Prior Uncertainty Model: Bridging the Gap Between Quantitative Surface Dynamics and Machine Learning
- The Influence of Clay Type and Grain Size on the Bedload Deposition of Muds - An Experimental Perspective
- Does Organic Matter Have an Unacknowledged Influence on the Dynamics and Deposits of Fine-Grained Submarine Sediment Gravity Flows?
- The Role of Buoyancy Reversal in Turbidite Deposition and Submarine Fan Morphology: Examples From Flume Experiments, Quaternary Deposits and the Ancient Rock Record
- Upslope Turbidite Stratigraphic Traps: Understanding Pinchout Development
- Ripples and Levees A Match Made in Sedimentological Heaven
- Spatial Variability in the Velocity and Density Structure of Unconfined Turbidity Currents and the Implications for Reservoir Quality of Submarine Lobe Deposits

# Theme 4: Structure/Geomechanics: Contractional Structure and Tectonics (AAPG)

### Co-Chairs: O. Kostenko and P. Krzywiec

- Incorporating Layer Thickening and Thinning Into Kinematic Modeling of Fault-Related Folding
- Onshore San Joaquin Basin and Temblor Range, California: New Insights Into the Structural Framework of a Complex and Mature Fold and Thrust Belt

# Sign up to judge!

Be part of the 100th Anniversary excitement by making your mark ... on a judging form! Judges perform the crucial role of determining the winners of the Matson Memorial Award (for best oral presentation), the Braunstein Memorial Award (for best poster presentation) and the DEG, EMD and SEPM Division Awards. Whether it's your 50th ACE or your first, participating as a judge is a great way to get involved and, best of all, it's easy. Just sign up during ACE registration and indicate which poster and/or oral presentations best fit your schedule or interests. All students, YPs, Associates and Members are encouraged to sign up. Worried you're not a subject matter expert? Don't be! Critical listening and thoughtful evaluation are the only required skills. Plus, you can network while you learn! Still unsure about being a judge? Email Judging Chair Meredith Faber (meredith.faber@nblenergy.com) with questions. See you in April!

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## **Technical Program Monday**

- Implications of Uplift and Erosion on Pore Pressure, Stress and Seal Integrity
- The Role of Evaporites, Foreland Basin Fill and Inherited Crustal Weaknesses on Structural Styles in the Pamir and Tian Shan Forelands, Western Tarim Basin, Northwest China
- The Sub-Andean Fold and Thrust Belt in Southern Bolivia: Integrated Methodology and Regional Structural Implications
- Structural Modeling and Its Impact on Development of the Piedemonte Area, Eastern Cordillera Fold and Thrust Belt, Colombia
- Quantitative Structural Analysis of Newly Acquired Data From Mexican Ridges Fold Belt, Western Gulf of Mexico
- Late Cretaceous Inversion of the Polish Basin and How It Influenced Its Petroleum System
- Episodic Deformation Rates Recovered From Growth Strata, Pyrenees

### Monday Morning Poster Presentations

### AAPG Student Research Posters I Co-Chairs: A. Sullivan and A. Janevski

- A Proposed Microfossil Reliability Index and a Test Using Mid-Cretaceous Calcareous Nannofossil Data
- Effects of Convergent, Radial-Gliding "Corner" Geometry on Petroleum Charge, Port Isabel Passive-Margin Foldbelt, Northwestern Gulf of Mexico
- Geochemical and Isotope Data Aided Remote Sensing Interpretations of Surficial Mineralogical Heterogeneities as Possible Late Diagenetic Indicators of Microseepage in Garza, Texas
- Influence of Pre-Existing Weakness on Normal Fault Growth: Implications From Discrete Element Modeling
- Pressure Prediction in a Complex Setting Based on Field Data and Geomechanical Modeling: Mad Dog Field, Gulf of Mexico
- Linking Shallow-Marine Process Regime and Slope/Basin Architecture Within the Barrow Group (Northern Carnarvon Basin, Australia): Insights From Quantitative 3-D Seismic Geomorphology
- Holistic Evaluation of Basal Stress Evolution in Sinuous Submarine Channel Levee Systems: Towards Process-Based Forward Stratigraphic Modeling
- Assessing Novel Chemostratigraphic Correlation Tools in Carbonate Reservoir Rocks: A Mississippian Limestone Case Study
- Quantification and 3-D Modeling of Architectural Variability and Controls in a Permian Carbonate Ramp, Last Chance Canyon, New Mexico
- New Insights Into Falling-Stage Delta Complexes Using Virtual Outcrop Analysis: Three-Dimensional Data From the Turonian Ferron Sandstone of Southern Utah
- Similarities and Differences Between the Late Cretaceous Fan Complex and the Overlying Neogene Amazon Cone in the Foz do Amazonas Basin, Northern Brazil – Implications for Future Hydrocarbon Exploration

- Detailed Characterization of a Complete, New Woodford Shale Section in the Ardmore Basin of Oklahoma: The Case for a New Type Section?
- Applications of Structure-From-Motion Photogrammetry for Interpreting Inclined Heterolithic Strata of the Lower Cretaceous McMurray Formation, Steepbank River, Northeast Alberta, Canada
- Spatial Scaling of Normal Faults, A-Bomb Canyon, Buckskin Mountains, Arizona
- Lithofacies, Diagenesis and Reservoir Quality Evaluation of Wolfcamp Unconventional Succession in the Midland Basin, West Texas

# Theme 1: Siliciclastics: Innovative Techniques and Workflows (SEPM/AAPG)

### Co-Chairs: T. Sun, F. Laugier and J. Pugh

- Quantifying Reservoir Complexity in a Tight Oil Play by Integrating Detailed Facies Analysis With Stratigraphic Architecture Analysis From a Digital Outcrop Model
- GTMORA: A GIS Toolset for Geometric and Topological Analysis of Sandbody and Fracture Networks From Modern and Outcrop Reservoir Analogs
- Quantitative Outcrop Characterization of Incised Valley Fill Combining UAV-Based Photogrammetry and Traditional Geologic Field Methods
- Multi-Scale Analysis of Fluvial Architecture and Facies of the Burro Canyon-Dakota Formations Using UAV-Based Outcrop Photogrammetry and Modeling – Implications for Reservoir Performance, Escalante Canyon, Piceance Basin, Colorado
- Pore Fabric Characterization in Sandstones Using Magnetic
   Anisotropy Methods
- Triassic Palynology of the Central North Sea: Correlation and Environmental Reconstruction of a Fluvial System
- Process Ichnology of the Anisian Wedge, Montney Formation: Size-Diversity Trends and Feeding-Strategy Distributions of Ichnofossils Within a Post-Extinction Environment
- Understanding the Pennsylvanian Age Granite Wash Play Fairway Through Log and Core Data: Anadarko Basin, Oklahoma and Texas
- Mudstone Depositional Processes of the Cretaceous Colorado Group Shale, West-Central Alberta, Canada
- Predicting Facies Distribution Within a Fluvial System in the Subsurface: Triassic of the Central North Sea
- Detailed Reservoir Characterization by Integrating Core, 3-D CT Scan and Borehole Imaging Datasets
- Seismic, Borehole Image Log, Core and Chemostratigraphic Interpretations of the Permo-Carboniferous Unayzah Formation, Central Saudi Arabia: An Integrated Technique for Siliciclastic Reservoir Correlation
- Utilising Stratigraphic Driven Approaches and Simulations to Build Robust 3-D Geologic Models for Miocene Reservoirs, "Josh" Field, Niger Delta
- Predicting 3-D Connectivity From Core and Seismic: An Example From Outcropping Deepwater Slope Channels

## **Technical Program Monday**

 Using RMS Amplitudes Derived From Synthetic Forward Seismic Models of Channelized Deepwater Slope Deposits to Inform Stratigraphic Interpretation, Tres Pasos Formation, Magallanes Basin, Chile

### Theme 1: Siliciclastics: Continental to Shallow Marine I: Alluvial to Fluvial (SEPM)

### Co-Chairs: C. Hern, J. Moody and A. Owen

- Predictive Models for Basin Scale Alluvial Architecture: Paleocene-Eocene Bighorn Basin, Wyoming
- Incised Valley Fill Reservoirs, From Outcrop Analogue to Subsurface Interpretations (Upper Carboniferous, Kentucky)
- Cyclicity, Dune Migration and Wind Velocity in Lower Permian Eolian Strata, Manitou Springs, Colorado
- Hydraulic and Sediment Texture Evolution of a Fluvial System in Response to Changes in Subsidence: The Canyon Creek Member of the Ericson Formation, Wyoming
- Along-Strike Architectural and Sedimentologic Variation of a Distributive Fluvial System, Cretaceous Straight Cliffs Formation, Utah
- Global River Discharge Analyses: Impact of Variable Precipitation in the Context of Different Climate Zones
- Documenting an Ancient Large Fluvial Fan System: A Comparison to Modern Examples and Current Facies Models
- Modeling and Characterization of a Fluvial Low Net-to-Gross Reservoir: The Case Study of a Mature Oil Field for EOR in the Bajo Barreal Formation, Golfo San Jorge Basin, Argentina
- Prediction of Fluvial Point-Bar Form, Internal Architecture and Heterogeneity From Outcrop and Morphometric Analysis of Meander Bends
- Facies Variability and Stratal Architecture of a Large-Scale Mississippi River Point Bar, False River, Louisiana
- Shallow Seismic Reflection Images of Modern Point Bar Deposits, False River, Louisiana
- Whither the PETM? Testing Predictive Models for Climatically-Triggered Fluvial Sheet Sand
- · Progradation in a Rapidly Subsiding Basin
- The Potential of Fluvial Crevasse Splays as (Secondary) Reservoirs
- Facies Associations of Humid Terminal Splays in the Distal DFS Model and Implications for Reservoir Connectivity: A Case Study of the Raton Formation
- Humid Terminal Splays as Sand-Sheet Reservoirs: A First Look at the Modern, Andean Foreland and a New Look at the Ancient, Raton Basin

### Theme 9: Geophysics: Rock Physics, Non-Seismic, 4-D Time Lapse and Microseismic: Integration and Applications (AAPG) Co-Chairs: M. V. Thachparambil and J. Zheng

- Integration of Surface Seismic, Microseismic and Production Logs to Characterize Lacustrine Shale Plays in Upper Triassic Yanchang Formation, Ordos Basin, China
- $\bullet$  Investigation of Time-Lapse 4-D Seismic Attributes Across Discrete Frequencies to Monitor  $\rm CO_2\text{-}EOR$  in a Thin Carbonate Reservoir
- Prediction of Residual Oil Saturation by Using Ratio of Amplitude Attributes of Time-Lapse Seismic Data
- Repeatability Evaluation of the Time-Lapse Technology Using Ultra-Stable Seismic Source
- Comprehensive Analysis the Casing Deformation in Shale Gas Reservoir Modification by Seismic and Microseismic Technology
- Developing a Rock Physics Template for Improved Seismic Mapping of New Zealand Coaly Source Rocks
- Petrophysical Signatures of Fluid Injection in Mudstones and Shales
- Prediction of Lithologies and Reservoir Quality Using Well Logs in Wolfbone Play in the Delaware Basin, West Texas
- Analysis of Brittleness in Mudstone Caprock Using Conventional Well Logs: A Case Study from Northern Margin of Qaidam Basin
- Modeling Elastic Properties Changes and Overpressure Generation Due to Smectite to Illite Transformation in the Thunder Horse Mini-Basin, Mississippi Canyon, Gulf of Mexico
- Impact of Overpressure on Estimation of TOC Content in Organic-Rich Shales
- A New Method for Predicting Pore Pressure in Shale Gas Reservoir
- Rock Quality Prediction Using Crossplots and Seismic Lithology
  Inversion: An Example of XIN Field, Eastern Niger Delta Basin
- Geologically Driven Joint Inversion of Gravity, Seismic and Well Data: A Step Forward in Understanding of Geological Structure and Reducing E&P Risks
- Mapping of Basement Through Magnetic Depth Estimation Along Regional Lines, Southeastern Mexico

### Theme 3: Geochemistry/Petroleum Systems: Basin Modeling and Geochemistry Along the Value Chain I (AAPG) Co-Chairs: T. Searcy and S. Paulson

- Re-Evaluation of Organic Matter Deposition of Central Atlantic Black Shales
- Evaluation of High Quality Source Rocks in Saline Environment of Continental Rift Basin: A Case Study in Laizhouwan Depression, Offshore Bohai Bay Basin, China
- Middle Triassic Source Potential and Lateral Variation in Organic Facies, Southwestern Barents Sea and Svalbard
- Environmental Conditions of Deposition, Origin and Relative Maturity of Organic Matter in Uppermost Barremian - Lowest Aptian Limestones of the Eastern Prada Quarry Section, Organyà Basin, South-Central Pyrenees, Spain

## **Technical Program Monday**

- Kerogen Kinetics of the Red River Formation, Williston Basin, North Dakota
- Confined Pyrolysis Study on Hydrocarbon Generation Kinetics, Residual Solid and Hydrocarbon Yield of Lacustrine Shale Source Rocks in Bozhong Depression, Offshore Bohai Bay Basin, China
- Geochemistry, Origin and Accumulation of Petroleum in the Eocene Wenchang Formation Reservoirs in Pearl River Mouth Basin, South China Sea: A Case Study of HZ25-7 Oil Field
- Characteristics and Origin of Crude Oils in Dawanqi Oilfield, Kuqa Depression of Northwest China
- Geochemical Characterization, Depositional Environment and Controlling Factors of  $\beta$ -Carotene—A Case Study of Jimsar Depression, Junggar Basin of China
- The Geochemical Characteristics of the Eocene Oils From the Rolling Anticline Belt of Chaheji in Baxian Sag, Bohai Bay Basin and Their Origins Analysis
- Occurrences and Origin of Reservoir Solid Bitumens in Sinian Dolomites From Sichuan Basin, Southwest China
- Geochemistry and Organic Petrography of Aptian-Albian Source Rocks in the Araripe Basin, Northeastern Brazil
- Acritarchs in the Silurian Qusaiba Shale and Related Biomarkers: Implication for Identifying Paleozoic Hydrocarbon Charge
- The Origin of Heavy Oil in Sanhecun Oilfield, Jiyang Depression, East China

### Theme 3: Geochemistry/Petroleum Systems: Basin Modeling and Geochemistry Along the Value Chain II (AAPG)

### Co-Chairs: Y. Song and J. Little

- The Origin of Shallow Gas in Dongying Depression, Bohai Bay Basin, East China: Implication for Shallow Petroleum Exploration
- The Impacts of Trap-to-Kitchen Axial Orientation and Natural Gas Sweeping on Migration Efficiency: A Multi-Field Case Study From the West of Shetlands (United Kingdom)
- A Comprehensive Geochemical Studies by Using Pyrolysis Analysis and Migration Pathway Map on Evaluating Source Rock Potential in Talang Akar Formation, Jambi Sub-Basin, South Sumatra
- Hydrocarbon Migration and Accumulation of the Suqiao Buried-Hill Zone in Wen'an Slope, Jizhong Subbasin, Bohai Bay Basin
- Influence of High-Variable Geothermal Background on Hydrocarbon Generation and Expulsion: A Case Study in Baiyun Sag of Pearl River Mouth Basin, Deepwater Northern South China Sea
- Pressure Evolution in Buried-Hill Reservoirs of Wen'an Slope, Jizhong Subbasin, Bohai Bay Basin
- Overpressures and Their Significance in Offshore Bohai Bay Basin, China
- Exceptional Hydrocarbon Source Rock of the Conventional (Albian) Kharita Formation Reservoir in Matruh Basin, Northern Western Desert of Egypt

- Thermal Evolution and Maturation of Sinian and Cambrian Source Rocks in the Central Area of Sichuan Basin, Southwest China
- The Effect of Redox Conditions on Carbon Isotopes of Hydrocarbons During Hydrous Pyrolysis
- Geochemical Evidence of a Large Shift in Redox Conditions and Long Term-Deep Burial Oxidation by Radiolysis Associated with Elevated Organic-Matter Content and Gamma-Ray Intensity in the Paleozoic New Albany Shale
- · South Caribbean Petroleum Systems: An Updated Overview
- Surface Geochemical Exploration After 100 Years: Lessons Learned and What More Must Be Done
- Nature and Origin of Dry Natural Gas in the Middle Indus Basin, Pakistan
- Geochemical Characteristics of Natural Gas and Its Application in Piedmont Zone in Southwest of Tarim Basin, China

### Theme 8: Emerging Frontiers: Seep Hunting, Pore Pressure and Convergency of Exploration and Development (AAPG) Co-Chairs: F. Zhu and W. Zhao

- Formation Pressure Correction to Enhance the Prediction of the OWC in a Normal Pressure Reservoir
- · Harnessing Lightning in the Hunt for Hydrocarbons
- The Use of Iodine Surface Geochemistry Integrated With Seismic and Subsurface Geology to Find Conventional Reservoirs in the Mid-Continent USA
- Impact of Pore Pressure Estimation Uncertainty on Well Design and Execution: An Example From Deepwater West Africa
- · Pore-Pressure Prediction in Salt Basins
- Abnormal Pore Pressures in Thin Gas-Bearing Sandstones Relative to Nearby Thick Sandstones in the North Malay Basin
- Understanding Uncertainty in Pore Pressure Prediction
- Characteristics of Overpressure Units in a Fault-Block Oilfield with Lacustrine Dolomite Reservoirs in Tanggu Area, Bohaiwan Basin
- Sand Bodies Connectivity Analysis Utilizing Measured Pore Pressure in Normal Pressure, Offshore Bohai Bay Basin, China
- Genesis and Hierarchy Analysis of Mud-Rich Units Within Braided Fluvial Reservoir: A Case Study From the Orinoco Heavy Oil Belt, Venezuela
- Exploration Research to Evaluation A New Way of Working
- Geological Challenges in the Development of a Colombian Waterflood Using Horizontal Wells
- Drilling a Downdip Location: Effect on Updip and Downdip Resource Estimates and Commercial Chance
- Hyperspectral Imaging Technology Development and Application; Implications for Thin-Bedded Reservoir Characterization
- The Application of Geo-Microbial Hydrocarbon Detection and "4G" Comprehensive Research of Progressive Exploration in the Gudong Area, Shengli Oilfield



# **Technical Program Monday**

### Theme 6: Unconventional: Plays of the U.S. Lower 48 (EMD/AAPG) Chair: H. Cander

- Fracture Characterization and Prediction in Unconventional Carbonate Reservoirs of the "Mississippian Limestone", North-Central Oklahoma
- The Light and Dark Side of Eagle Ford Shale Oil: Extrapolating Data Rich Wells to a Field Scale Model
- Linking Sequence Stratigraphy and Rock Mechanics for the Unconventional Permian Tight Oil Play in the Delaware Basin: A Hierarchical Tool for Predicting Fracture Barriers and Stimulation Zones
- Assessment of Undiscovered Continuous Oil Resources in the Wolfcamp Shale of the Midland Basin, West Texas
- Detecting and Quantifying Kerogen, Bitumen and Organic Porosity From SEM Images
- Comprehensive Unconventional Reservoir Characterization of the Woodford Shale in Parts of Garfield and Kingfisher Counties, Oklahoma
- 3-D Petrogeological Modeling of the Bakken Tight Oil Play, Southeastern Saskatchewan, Canada: Adoption of Conventional Workflows to Unconventional Reservoirs
- Hiatuses in the Eagle Ford Unconventional Resource Play, Recognizing Them and Determining How They Form
- Assessing Controls of the Woodford Shale Rock Strength at the Bed Scale, Ardmore Basin, Oklahoma
- Geochemistry and Mineralogy of the Eocene Green River Formation Petroleum System, Uinta Basin, Utah
- Facies Characterization of the Wolfcamp B and Lower Spraberry Intervals in the Midland Basin: Implications for Reservoir Quality and Distribution
- Proposed Stratigraphic Correlation Framework, Wolfcamp, Delaware Basin, West Texas
- Identification of Potential Sweet-Spots by Integrated Analysis of Core Samples and Conventional Wireline Logs in the Barnett Shale Play
- 3-D Multi-Scale Lithofacies Models of the Upper and Lower Bakken Shale Members of the Williston Basin in North Dakota
- Connectivity of the Oriskany Sandstone with the Marcellus Shale; Effects on Shale Gas Operations in North Central Pennsylvania
- Heterogeneous Physical and Mechanical Properties Relative to Composition, Porosity and Diagenesis in Siliceous Mudstones of the Upper Monterey Formation, Belridge Oilfied, San Joaquin Basin, California

# Theme 6: Unconventional: New Technologies and New Concepts in Unconventionals I (EMD/AAPG)

### Chair: D. Hall

• Raman Spectroscopy of Organic Material in Shales: Identifying Suitable Laser Wavelength for Raman Spectra Excitation, Relationship to Thermal Maturity, Mechanical Properties and Organic Matter Type Interpreted From SEM Images

- Softening of Organic Matter in Shales During Heating Measured With Atomic Force Microscopy
- Depositional, Mineralogical and Maturity Controls on Pore Types, Size and Distribution in Mudstones
- Brittleness Evaluation of Unconventional Reservoirs: Part 1. A New Numerical Method Based on Energy
- A Petrophysical Model to Distinguish Water-Wet and Oil-Wet Fractions of Unconventional Reservoir Systems Using Triple-Combo Log Suites
- How Does the Pore-Throat Size Control the Reservoir Quality and Oiliness of Tight Sandstones?
- Variation in Particle Size on the Determination of Permeability in Crushed Shale Samples
- Numerical Modeling of Adsorption and Roughness Effects on Gas Transport in Shale Using the Lattice Boltzmann Method
- Estimation of Geomechanical and Petrophysical Properties for Coal Seams Using Logging Data
- Isotopic Biogeochemistry of Lipids and Organic Matter in Deep Subsurface Sediments of the Marcellus Shale
- Multiple Approaches to Pore Structure Characterization of Self-Sourced Shales
- Can Fecal Pellets in Unconventional Resource Shales Generate Hydrocarbons?
- Silica Diagenesis in Mudstones and the Impact on Consolidation and Brittle Deformation
- Rock Texture Index (RTI): Quantifying the Impact of Rock Texture and Its Mineral Composition
- Electrical and Acoustic Properties Evaluation of Reconsolidated Mudrocks as a Function of Organic Matter Content

### **Theme 4: Structure/Geomechanics: Rifting and Extension (AAPG)** Co-Chairs: D. Ferrill and W. Sassi

- Evolution of Syn-Rift Crustal Architecture in Foz do Amazonas Basin, North Brazil
- Seismic Geomorphology of Cretaceous Megaslides Offshore Namibia (Orange Basin): Insights Into Segmentation and Degradation of Gravity-Driven Linked Systems
- The Effect of Polygonal Faults on Petroleum Systems and Reservoir Quality – The Case Study of the Eastern Mediterranean Levant Basin
- Multi-Stage Rifting Evolution of the Colorado Basin, Offshore Argentina: Implications for Understanding the Mesozoic Breakup of Southwest Gondwana and the Evolution of the Passive Margins of the Southern South Atlantic
- Late Cretaceous Magmatism and Source-to-Sink Configuration in the Northwestern Gulf of Mexico
- New Insights Into the Structure and Tectonic Provenance of the Chukchi Borderland Terrane: Implications for Arctic Reconstructions
- Post-Breakup Magmatism in the Northern and Western Gulf of Mexico

## **Technical Program Monday**

- Migrating Twin Left-Lateral Faults System Along the North Caribbean Boundary – Implications on Geodynamics Around the Haiti-Cuba Boundary
- South Kwanza Basin (Offshore Angola) as a Major Cornerstone of West African Margin
- Mesoscale Extensional and Contractional Structures in the Rough Creek Graben, Midcontinent Rift, Central United States: An Integrated DEM Analysis, 3-D Structural Modeling and Field-Based Approach
- A New Type of Flower Structures in a Divergent-Wrench Fault Zone, Tan-Lu Fault Zone, East China
- The Roles of Magmatism and Loading in the Formation of Seaward Dipping Reflectors: Insights From Abandoned Volcanic Segments
- Tan-Lu Fault Zone and Hydrocarbon Accumulations in Offshore Bohai Bay Basin, Eastern China
- Tectono-Stratigraphic Evolution of the Centaur 3-D Survey, Exmouth Plateau, North West Shelf, Australia
- Structural and Tectonic Evolution of Cenozoic Basins in the Southern South China Sea

# Theme 4: Structure/Geomechanics: Crustal Architecture & Rifting (AAPG)

### Co-Chairs: J. Solum and S. Oldfield

- · Post-Rift Tectonics in Rifted Margins and Surrounding Domains
- Strain Partitioning and Variation in Style of Deformation During Continental Extension, Eastern Baffin Bay, West Greenland
- Quantitative Approach to Extension and Fault Characterization Within the Central and Northern Llanos Basin, Colombia
- Integrating Crustal Architecture and Syn-Rift Plate Kinematics
- The Florida-Bahamas Lineament and Gulf of Mexico Opening: To Move or Not to Move?
- Interaction of Crustal Structures and Geodynamics on Passive Margin Evolution: Insights From Manet Ridge, Norway
- Crustal Architecture of the Argentinian Atlantic Margin
- Using SDRs to Identify Changes in Breakup Mode Along the South Atlantic Southern Segment
- An Enigmatic Transverse Structural Domain of the Northwest
   Passive Margin of Australia
- Extensional Fault Kinematics and Basin Segmentation in Highly-Extending Terrains: A Case Study From Western Turkey
- The Northern Vøring Segment of the Mid-Norway Passive Margin: Crustal Structure and Pre-Breakup Tectonic Evolution
- Influence of Fault Separation on the Structural and Geomechanical Characteristics of Paired Crestal Grabens Developed Over an Uplifted Fault Block
- Control of Strike-Slip Derivative Structures on the Hydrocarbon Accumulation in the Bohai Sea, Eastern China
- Comparative Interpretation of Regional Seismic Profiles Offshore Portugal, West Iberian Margin

### **Monday Afternoon Oral Presentations**

# Theme 6: Unconventional: Advances in Unconventional Petroleum Systems and Source Rocks (EMD/AAPG)

### Co-Chairs: H. Cander and I. Arango

- Definition, Modes of Occurrence and Pitfalls in Understanding the Term 'Bitumen' in Conventional and Unconventional Petroleum Systems
- Pores Observed in Organic Matter in Mudrocks: A Ten-Year Retrospective
- Artificially-Induced Changes to Organic Matter Properties as a Consequence of the Act of Observation
- Multiscale Characterization of Organic Hosted Porosity in Gas Bearing Shales
- Bridging the 'Gap' to Unconventional Permeabilitys: Insights to Unconventional Tight Oil Techniques, Advancements and Understandings
- HC Migration and Trapping in Unconventional Plays
- Oil Recovery Potential From Organic Nanopores in Source Rocks
- Are You Leaving Liquids Behind? Diamondoid Analysis to the Rescue!
- Using Produced Oils to Predict Quality of Shale Oil and Gas Petroleum Systems

### **Discovery Thinking II**

### Co-Chairs: C. Sternbach and P. Weimer

- The Future of Exploration The Next Decade
- The Petroleum System of the Mauritania-Senegal Basin
- Opening New Oil Basins: A Pattern of Discoveries
- The Greater Gorgon Area, Northwest Australia: Exploration to Production

### Theme 6: Unconventional: New Approaches to Improving Performance of Unconventional Reservoirs (EMD/AAPG) Co-Chairs: A. Collie and A. Douds

- High Resolution Azimuthal Diffraction Imaging of Natural Fracture
  Zones in Unconventional Shales
- Integrated Characterization and Multi-Well Flow Simulation of Tight Oil Shale Resources
- Improving Horizontal Well Placement and Completion Effectiveness in Deltaic Tight Sands A Case Study in Anadarko Basin
- Seeing the Forest for the Trees: A Simplified Workflow for Target Optimization Utilizing Correlation Matrices: An Example From the Bakken Formation
- Seismic Monitoring of Hydraulic Fracturing Activity in the Marcellus Shale
- Automatic Well Log Correlation
- Sonic Properties as a Signature of Overpressure in the Marcellus Gas Shale of the Appalachian Basin
- Geostatistical Methods for Unconventional Reservoir Uncertainty
   Assessments
- Performance Prediction and Benchmarking Using FIRM (Forecasting Through Inferred Reservoir Modeling) for Bakken, Wolfcamp and Bone Spring Plays



# **Technical Program Monday**

### Theme 2: Carbonates: Giant Carbonate Reservoirs and Their Basins (AAPG/SEPM)

### Co-Chairs: A. Al-Tawil and C. Lehmann

- The Margin of the Mishrif Platform, Rumaila Field, Southern Iraq
- New Insights Into Chalk Reservoir: The Valhall and Hod Fields of the North Sea, Norwegian Sector
- Recent Advances in Forward Stratigraphic Modeling of Giant Carbonate Reservoirs and Evaporite Systems
- Regional Stratigraphic Architectures and Depositional Settings of the Giant Shu'aiba Reservoir in the Arabian Basin and Their Implication in Reservoir Characterization and Exploration

### Theme 2: Carbonates: Microbial Carbonates – Modern and Ancient Analogs for Pre-Salt Deposits of the South Atlantic Margins (SEPM)

### Co-Chairs: A. Droxler and P. Harris

- New Insight Into the Shark Bay Microbial System, Part 1: Stromatolite Provinces
- Pore-Structure and Petrophysical Characteristics of Hamelin Pool Stromatolites and Associated Cemented Coguina Beds
- Fabrics and Interpretations of "Microbialites" Can Both Be Full of Holes
- A Review of Carbonate Continental Systems in Active Rift Settings (Offshore Angola) – A Combined Subsurface and Outcrop Study for Derisking Reservoir Presence
- Classifying Reservoir Carbonates When the Status Quo Simply Does Not Work: A Case Study From the Cretaceous of the South Atlantic

### Theme 8: Emerging Frontiers: Impact of Geologic Uncertainty on Pore Pressure and Implications for Well Design (AAPG) Co-Chairs: M. Kumar and S. Bordoloi

- Impact of Geologic Description on Pore Pressure and Well Design: Shah Deniz, Offshore Caspian Sea
- Seismic Pore Pressure Prediction Enhanced with Geomechanical Modeling
- · Pressure Stress Evaluation of Wells Drilled at the Angore field, PNG
- The Influence of Structure on Pore Pressure in Confined Sediments

# Theme 8: Emerging Frontiers: Seep Hunters: Validating Change in Wildcat Settings for Better Results (AAPG)

### Co-Chairs: D. Orange and R. Cash

- Using MBES Backscatter and Bathymetry to Assess the Distribution of Benthic Communities for Piston Coring Operations
- Evaluation of Near-Surface Gases in Marine Sediments
- The Mexican Gulf of Mexico "Gigante" Seep Hunting Program: Unprecedented Data Quality Underpins Unprecedented Success
- From Satellite Images to Reservoired Hydrocarbons: The In-Depth Investigations of the Marco Polo Seeps, Green Canyon, Gulf of Mexico
- · Oil Seep Hunting From Space: The Case of the Lower Congo Basin

# Theme 5: Deepwater Deposits: From Classic Models to Paradigm Shifts (SEPM/AAPG)

### Co-Chairs: Z. Jobe, A. Pontén and D. Hodgson

- The Channel-Lobe Transition Zone: A Template for Submarine-Fan and -Channel Evolution
- Imaging the Channel-to-Lobe-Transition Zone With High-Resolution AUV Bathymetry: Navy Fan Offshore Baja California
- The Transfer of Channel-Lobe Transition Zones Into the Stratigraphic Record: A Synthesis of Exhumed Examples From the Karoo Basin, South Africa
- The Impact of Slope Topography on Sediment Partitioning and Depositional Architecture in a Deepwater Lower Slope Setting
- The Stratigraphic Expression of Slope Channel Evolution: Insights From Qualitative and Quantitative Assessment of Channel Fills From the Cretaceous Tres Pasos Formation, Southern Chile
- Textural and Compositional Trends in Transitional Flow Deposits of the Proximal Brushy Canyon Formation, Texas
- Acquisition of Mud by Gravity Flows and the Development of Turbidites vs. Hybrid Event Beds: Insights From the Ponded Castagnola System (Northwest Italy)
- Bed-Scale Clay Distribution in Deepwater Sandstones and the Implications for Reservoir Quality
- Grain-Size Distribution and Sedimentary Transport Patterns in Deep Water Rift Basins: Plio-Pleistocene Syn-Rift of the Corinth Rift, Greece

# Theme 1: Siliciclastics: Innovative Techniques and Workflows (AAPG/SEPM)

### Co-Chairs: T. Sun, F. Laugier and J. Pugh

- Effect of Froude Supercritical Flow on Fluvial Facies, Geometries and Architecture
- Spectrum of Fluvial Systems and Depositional History From High-Resolution Study of Seismic Sedimentology (Lithology and Geomorphology), Neogene, SLT Area, Bohai Bay Basin, China
- Flow Simulations in a Detailed Facies Model of the Outcropping Pont de Montanyana Point Bar Deposits (Ypresian, Southern Pyrenees)
- · Conditioning of Stratigraphic Forward Modeling Using Geostatistics
- Investigating Controls on Submarine Channel Evolution Through Morphometric Scaling Relationships
- Saturations of Migrating Buoyant Fluids From Invasion Percolation Flow Simulation Using Small-Scale, High-Resolution Geologic Models With Realistic Heterogeneity
- Process-Based Modeling for Field Geologists Using Delft 3-D GeoTool: The Trials and Tribulations of Creating a Robust, Open-Source, Web-Based Platform
- Extraction and Analysis of Complex Geobodies in Faulted Deposits Using Relative Geological Time Model Attributes and Spectral Decomposition: Exmouth Sub-Basin, Australia
- Prospect Investigation and De-Risking Using Cognitive Interpretation Workflows, Offshore Equatorial Guinea

## **Technical Program Monday**

# Theme 4: Structure/Geomechanics: Structural Analysis in Fractured and Unconventional Reservoirs (AAPG)

### Co-Chairs: M. Ameen and S. Busetti

- Natural Fractures and Their Impact on the Tight Sand Plays of the Ordovician Sarah Formation, Northern Arabia
- A Monte Carlo Approach to Calculate Stress Orientations and Differential Stress Ratios From Microseismicity Using Elastic Dislocation Modeling
- Fracture Characteristics of the Wolfcamp Formation, Delaware Basin, Texas
- Modeling Laramide Deformation to Predict Fracture Orientations in the Big Sand Draw, Wyoming: Part 2 - Fracture Modeling
- Playing It Forward Modeling the Evolution of Deepwater Subsalt Fields on Passive Margins Using 2-D Finite Element Models
- Elastic Properties of Great Bahama Bank From Platform Top to the Toe-of-Slope
- Geomechanical Modeling of Pennsylvanian Carbonate Mound Complexes: Early Fracturing Related to Differential Compaction and Evolving Rock Properties
- Seeing the Big Picture How to Use Stress Shadowing to Drive Stage Spacing
- Oil-Field Structural Analysis Methods Applied to a Geomechanical Model: What Works

### **Monday Afternoon Poster Presentations**

### **SEPM Student Posters I**

### Co-Chairs: R. Sarg and H. Harper

- High-Resolution Sequence Stratigraphy, Shoreline Trajectory, Accommodation Successions and Facies Association in the Cretaceous Gallup System, Shiprock, New Mexico
- Measuring the Ratio of Storm Deposited Gutter Casts in a Shallow Marine Environment of the Cretaceous Gallup Sandstone, Shiprock, New Mexico
- Integrating a Deterministic Lithology Model for Subsurface Correlation, Eocene Green River Formation, Uinta Basin, Utah
- Sedimentological Characterization and High Resolution Chronostratigraphic Framework of Channel-Levee Systems Across a 135 km-Long Strike-Oriented Outcrop Transect, Cretaceous Nanaimo Group, Canada
- Re-Defining Depositional Model of the Buda Formation Utilizing Outcrops From West Texas and Cores From South and Central Texas
- Sedimentological and Petrographic Characteristics of a Mudstone-Dominated Succession Within a Sequence Stratigraphic Context: The Upper Cretaceous (Lower-Middle Turonian) Tununk Shale, South-Central Utah
- Micromorphological, Stable Isotope, NMR, Geomicrobial and Crystallographic Analysis of Quaternary Calcrete Formation, Puerto Rico

- Lateral Variability in Upper Slope, Shelf Edge and Shallow Marine Stratigraphy Along a 70-km Strike Transect: Karoo Basin, South Africa
- The Seismic Geomorphology, Distribution and Origin of the Quaternary Mass Transport Complexes in the Pearl River Canyon, South China Sea
- Modern Facies Change: The Replacement of Corals by Crustose Coralline Algae and Rhodoids in Southwestern Puerto Rico Reefs
- Regional Sequence-Stratigraphic Correlation and Basin Analysis of the Lower to Middle Triassic Moenkopi and Equivalent Formations, Arizona, California, Utah, Nevada: Insight Into Backarc Basin Formation
- Geostatistical Analysis of the Late Permian Sequences, Sydney Basin, NSW, Australia: Chemostratigraphic Constraints of Provenance
- Analysis of the Paleoclimate and Depositional Environment of the Kootenai 2 Formation, Southwestern Montana
- Revisiting Beachrock Cementation Processes
- Petrographic and Geochemical Characterization of the Upper Bakken Shale, Williston Basin

### Theme 1: Siliciclastics: Continental to Shallow Marine II: Fluvial, Deltaic and Aeolian (SEPM)

### Co-Chairs: R. Steel, A. Hartley and A. Fernandes

- Late Carboniferous Fluvio-Deltaic Deposits (Southeast Kentucky): Sedimentary Patterns and 3-D Digital Outcrop Reconstructions
- The Architecture and Connective Potential of Blowout Wings in Fluvio-Deltaic Environments
- Salinity Gradients and Catastrophic Freshwater Stress on Incipient Estuarine Ichnofossil Assemblages——Trinity Bay Head Delta: A Key to Defining Modern and Ancient Brackish Water Ichnofacies
- Fluvial-Eolian System Interaction on a Water Table-Controlled Lower Delta Plain, Skeidarársandur, Iceland
- Mixed Processes in an Asymmetic, Wave-Dominated Shelf-Edge Delta Lobe: The Pliocene Paleo-Orinoco Delta (Moruga Formation), Trinidad
- Controls on the Evolution of Late Cretaceous to Paleocene Coastal to Deltaic Systems of the Prince Creek and Schrader Bluff Formations, North Slope of Alaska
- Re-Evaluating the Asymmetry of Subsurface Wave-Influenced Deltaic Systems
- Unusually Well Preserved Tidal Signals and Tidal Constituents on Pliocene Paleo-Orinoco Delta, Trinidad
- Geometry, Distribution and Infill Character of Erosional Scours in a Thin-bedded, Distal Lower Shoreface Sandstone Reservoir Analog: Grassy Member, Blackhawk Formation, Book Cliffs, East-Central Utah
- Paleoenvironmental Reconstruction and Geocellular Model of a Heterogeneous Reservoir Analogue: The Sego-Neslen Formation Transition Near Harley Dome, Book Cliffs, Utah
- Fluvial-Aeolian-Evaporitic Interactions in Arid Continental Basins: Implications for Basin-Scale Migration and Reservoir Characterization

# **Technical Program Monday**

- Stratigraphic Changes in Ichnopedofacies of the Upper Triassic Chinle Formation, Northeast Chinle Basin, Southeastern Utah: Implications for Depositional Controls, Valley Formation and Paleoclimate
- Compositional Changes Related to Fluvial-Fan Sedimentation, the Miocene Sedimentary Infill of the Central Argentinian Foreland (Mariño and La Pilona Formations, Mendoza Province)
- Acquiring Geometries and Heterogeneities of Blowout Dunes Using GPR (Ground Penetrating Radar)
- Depositional Facies and Potential Bounding Surfaces Along an Erg Axis to Erg Margin Transect, Permian Cedar Mesa Sandstone, Utah

### Theme 1: Siliciclastics: Source to Sink (SEPM)

### Co-Chairs: J. Covault and J. Pickering

- Transregional Sequence-Stratigraphic Correlation of the Maastrichtian Fox Hills Sandstone: Colorado, Wyoming, South Dakota, North Dakota and Montana
- Architecture of Deep Water Lacustrine Fans Fed by Multidirectional Clinoforms in Dacian Basin, Romania
- Reconstructing Pre-Salt Paleodrainage Pathways and Source Terrains for the Late Triassic Eagle Mills Formation, Northern Gulf of Mexico Basin
- Channel-Belt Scaling Relationship and Application to Lower Miocene Source-to-Sink Systems in the Gulf of Mexico Basin
- Southern Gulf of Mexico Wilcox Source-to-Sink: Investigating Siliciclastic Sedimentation in Mexico Deepwater
- Scaling Relationships in Linked Submarine Channel-Lobe
- Systems: Enabling Prediction of Reservoir Scales and Geometries in Deepwater Sediment Routing Systems
- Controls on Sediment Delivery to the Deepwater in Eocene Sourceto-Sink Clastic Systems of the South Pyrenean Foreland Basin, Spain
- Sequence Stratigraphy of Continental Successions, Multi-Approach Insight From Source-to-Sink Studies in the South Pyrenean Foreland Basin, Spain
- Influence of Forearc Development on Sediment Routing: Detrital Zircon Provenance of Paleogene to Neogene Strata, East Coast of New Zealand
- The Source is in the Sink: Deepwater Deposition From a Submarine Volcanic Arc, Taranaki Basin, New Zealand
- Tectonic Controls on Deepwater Sediment Routing Nanaimo Basin, Canada
- Modern Scaling Relationships as a Means to Evaluate Brackish Estuarine vs Fresh-Water Fluvial Environments of Deposition: The Lower Cretaceous McMurray Formation
- Spatial-Temporal Evolution of Sedimentary Systems, Transition Zones and Stratigraphic Sequences in a High-Latitude Basin Margin Succession
- Source-to-Sink Analysis of Marine Rift Basins Surrounding a Long-Lived Structural High: The Frøya High, Norwegian Continental Shelf

• Shelf-Margin Evolution in an Active Tectonic Setting: The Middle Miocene Western Baram-Balabac Basin, Northwest Borneo

# Theme 5: Deepwater: Contributions From Numerical and Physical Models (SEPM)

### Co-Chairs: J. Eggenhuisen, N. Fernandez and T. Gerber

- Numerical Modeling of Ancient Tides: The Impact of
   Paleogeographic Uncertainty on Shoreline Depositional Processes
- Grain Size Fractionation Within Self-Channelized Turbidity Current Deposits
- Physical Models of Subaqueous Transitional Sediment-Gravity Flows: Stacked Flow Interaction and Remobilization
- Development of Cutoff-Related Knickpoints in Submarine Channels: Insights From Kinematic Modeling and Implications for Reservoir Architecture
- Three-Dimensional Numerical Modeling of Eustatic Control on Continental-Margin Sand Distribution
- The Influence of Topography on Subaqueous Sediment Gravity Flows and the Resultant Deposits: Examples From Deepwater Systems in Offshore Morocco and Offshore Trinidad
- Turbidite Grading as a Proxy for Flow Generation and Proximality: Applications and Limitations
- Complementary Results on Experiment-Derived Classification of Submarine Sediment Gravity Flows
- Optimal Gridding Selection for Field-Scale Reservoir Simulation of a Channelized Deepwater System
- Downstream Grain-Size Coarsening in Proximal Lobe Deposits of the Karoo Basin Compared With Comparable Flume Experiments
- Are We There Yet? Geometric Modeling of the Controls on the Transit Time of River Deltas to the Shelf Edge
- The Kinematic Evolution of Stacked Strata on Experimental Shelf Margins
- Production of Coupled Sand-Mud Deposits by Remobilization in Subaqueous Transitional Flows
- Process Control on Grain Size Trends in Turbidite Levee Sequences
- A Forward Stratigraphic Model of Fluvial Meander Evolution, Point-Bar Facies Architecture and Heterogeneity: Subsurface

### Theme 2: Carbonates: Carbonate Diagenesis and Paleohydrologic Modeling (SEPM)

### Co-Chairs: C. John, J. Bishop and M. Frazer

Applications

- Massive Dolomite on the Upper Jurassic to Lower Cretaceous Carbonate Shelf, Northeastern Saudi Arabia: Insights From Reactive Transport Modeling
- Stratabound and Cavern Porosity in Upper Triassic Peritidal Carbonates From Sicily (Italy)
- Diagenesis, Facies and Reservoir Quality in a Sequence Stratigraphic Framework: The Visean-A Platform in Tengiz Field, Republic of Kazakhstan

## **Technical Program Monday**

- Novel Lidar XRF Integration for Routine Outcrop Elemental and Mineralogic Analysis: Examples From the Florida Pleistocene and New Mexico Permian
- Facies Control on Dolomitisation Within the Neogene Succession of Bonaire, Netherlands Antilles
- Controls on Convection Along Fault Systems and Implications for Hydrothermal Dolomitization in a Cenozoic Rift System
- Spatial Variations in the Stoichiometry and Geochemistry of Miocene Dolomite From Grand Cayman: Implications for the Origin of Island Dolostone
- Diagenetic Evolution of the Cherry Valley Member of the Oatka Creek Formation, Marcellus Subgroup, New York
- Modeling Carbonate Diagenesis for Reservoir Quality Prediction: Predicting Cementation and Compaction as Functions of Mud Content Using Petrographic Data From a Carbonate Reservoir in a Giant Oil Field
- Reservoir Heterogeneity and Quality of Khuff Carbonates (Central Saudi Arabia)
- Evidence of Exposure of the Upper Cretaceous Congost Carbonate Platform and Implications for Emergent Surfaces Identification From Subsurface Data
- Control of Stratigraphic Sequence on Karst Reservoirs: A Case Study on the Ordovician Carbonate Reservoirs in the North Tarim Basin, China
- Experimental Dissolution of Carbonate Rocks at Shallow to Deep Burial Environment: Evolution of Porosity, Permeability and Pore Structure
- Identification of Diagenetic Footprint and Associated Development Challenges in the Deep Conventional Naturally Fractured Carbonate Reservoirs of North Kuwait
- Diagenesis and Pore Evolution of an Evaporate-Related Carbonate Reservoir – the Middle Triassic Leikoupo Formation, Sichuan Basin, China

### Theme 3: Geochemistry/Petroleum Systems: New Technologies and Workflows in Geochemistry and Basin Modeling I (AAPG) Chair: A. Callejon

- Attempt Using Carbonate Clumped Isotopes to Reconstruct the Thermal History of Sichuan Basin
- Infrared Spectroscopy and Chemometrics: What Can They Tell Us About Petroleum Systems?
- Geochemical Screening Using Infrared Spectroscopy and Multivariate Calibration: Mudrock Mineralogy, Major Element Chemistry and Organic Content
- Unravelling Provenance of Condensates and Associated Natural Gases in the Almond Formation Carbonaceous Shales and Sandstone Reservoirs, Southwestern Wyoming
- Characterization of Crude Oils by High Resolution Mass Spectrometry and Its Geochemical Significance
- Activation Energies of Kerogen in the Eagle Ford Shale Estimated From Rock-Eval Pyrolysis Data: Comparison of Methods Using Single and Multiple Heating Rates

- Geochemical Factors Controlling the Phase Behaviour of In-Situ Petroleum Fluids in the Eagle Ford Shale
- High-Resolution Geochemical Analysis of Cycles of the Vaca Muerta Formation, Neuquén Basin
- High-Resolution Geochemical Assessment of Two Wolfcamp Formation Cores in the Southern Delaware Basin
- Micro-FTIR Imaging and Confocal Microscopy for Quantitative Characterization of Organic Rich Mudstones
- U-Pb Dating of Diagenetic Carbonates in Petroleum Reservoirs: Recent Advances and Perspectives
- Multi-Element Determination of Crude Oil by Mineralization Using Q-ICP-MS, ICP-OES and QQQ-ICP-MS
- Controls on Fluid Quality Variations Across Four Producing Fields in the Deepwater Gulf of Mexico
- Effects of Salt Chlorides on the Hydrocarbon Generation of Source Rocks
- High Resolution Analysis of Organic Matter Deposition in the Qingshankou Formation, Upper Cretaceous, Songliao Basin (NE China): Implication From Geochemistry and Astronomical Cycles

### Theme 3: Geochemistry/Petroleum Systems: New Technologies and Workflows in Geochemistry and Basin Modeling II (AAPG) Co-Chairs: H. Carvajal and M. Rahman

- An Integrated Source Rock Prediction Model
- Advanced Modeling of Gas (Methane Through Pentane) Compositions and Carbon Isotopes in Petroleums and Petroleum Mixtures
- A New Kinematic Tool for Petroleum System Modeling in Complex Structural Settings
- Simulation of Laboratory and Geological Maturation of Petroleum Source Rocks using TRESORS
- Estimating the Ultimate Expellable Potential of Source Rocks: Defining "World-Class" for Aquatic Organofacies With Examples From the Arabian, West Siberian, Bohai and Williston Basins
- Geochemically Distinct Oil Families in the Middle Magdalena Valley, Colombia Based on Chemometric Analysis of Source-Related Biomarker and Isotopic Ratios
- Application of Advanced Technologies for Improving the Petroleum Systems Modeling in Foreland Fold-and-Thrust (FFT) Belts: The Llanos Basin Case Study
- Effects of Carrier Bed and Reservoir Heterogeneity on Hydrocarbon Migration, Charging and Accumulation, Hadexun Oilfield, Tarim Basin, China
- Constraining Burial History and Fluid Pressures Through Combined Structural, Clumped-Isotope and Fluid-Inclusion Analyses
- Characterization of Organic Compounds in Produced Water From Unconventional Reservoirs Using Nuclear Magnetic Resonance Spectroscopy and Carbon Isotope Analysis
- High Resolution Stratigraphic Framework Establishment of Lacustrine Shahejie Shale in Jiyang Depression, Eastern China

# **Technical Program Monday**

- Three-Phase Darcy Migration in Basin Modeling
- Statistical Comparison of Hydrocarbon Gas Composition and Isotopic Ratios From Multiple Sampling Methods
- Possible Origins for Low Thermal Maturity, High-Nitrogen Natural Gases
- · A Geochemical Probe of Formation Waters and Associated Crude Oils in a Source Shale Bed Toward an Understanding of the Role of Water-Mineral Interactions During Hydrocarbon Generation

### Theme 7: Energy & Environment: Fossil Fuel Demands, **Environmental and Mitigation Best Practices (DEG)** Chair: B. Byrd

- Geochemical and Foraminiferal Responses to Anthropogenic Activities Along the Coastal Regions of Matagorda and Brazoria Counties, Texas
- H2S Generation and Release in Salt Cavern Gas Storage
- Preliminary Evaluation of Coal Bed Methane (CBM) Resources in Sindh, Pakistan
- U.S. Energy Trends and Projection
- The Use of Non Toxic Oil Based Cement for Coal Gas Capture
- · Health Safety and Environmental Aspect in Petroleum Industry in Africa
- Architecture Analysis of Underwater Distributary Channels—A Case Study of S2L4 in Wen 79 Southern Block
- Fuzhou "Yu Quan": Warning From Chinese Ancient to the **Exploitation of Geothermal Resources in Contemporary China**
- Has the Initial Development of the Haynesville Gas Play Impacted the Overlying Carrizo-Wilcox's Water Quality?
- Variable Density Flow: Velocity Potential or Force Potential?
- A Model for Predicting Organic Compounds Concentration Change in Water Associated with Horizontal Hydraulic Fracturing
- Geophysical Delineation of Megaporosity and Fluid Migration Pathways for Geohazard Characterization Within the Delaware Basin, Culberson County, Texas
- The Geochemical Characteristics and Origin of Deep Geothermal Water in Baxian Sag, China
- · Monitoring of Groundwater Levels Using GRACE, GLDAS and Hydrometeorological Stations: Analysis in the Eastern Llanos Basin, Colombia

### Theme 11: Future of Energy: Exploration and Essential Tools for the Next Generation (AAPG)

### Co-Chairs: P. Carragher and S. Nwoko

- The Exploration Challenges and Opportunities Left in the Mature of the West Java Basin Area, Indonesia
- Integrating and Adopting Economic Uncertainty in Upstream Investment Decision Making
- U.S. Geological Survey Assessment of Undiscovered Hydrocarbons in the Deep Tertiary of the U.S. Gulf Coast Region
- Oil Industry Scenarios for Brazil Opportunities and Challenges for Brazil as a World Oil Player

- The Keys to New Sub-Igneous Oilfield Discovery in Offshore Bohai Bay Basin, China
- Organic Carbon Isotopes and Silurian Chronostratigraphy in Eastern Europe
- · Using Global Reservoir Analogs and Stochastic Modeling to **Estimate Prospect Resources**
- How Have Well Economics and EURs Reacted to Low Commodity Prices and Falling Service Costs Within the United States Oil Plays?
- Decision Quality Applications for Prospect Ranking and Sequential **Exploration: A Case Study in Offshore Brazil**
- Giants in the Rift: Petroleum System Elements of Rift-Basin Hosted Giant Fields
- Reservoir Forecast Quality Impact of Reservoir Modeling, Uncertainty Assessment of Sparse Data and Decision Bias
- Production Trend Analytics: Utilizing Big Data to Minimize **Geoscientist Capital Input**
- Post-Appraisal the Key to Confidence in Forecasting

### Theme 4: Structure/Geomechanics: Contractional Structure and **Tectonics (AAPG)**

### Co-Chairs: C. Guzofski and N. Eichelberger

- · Large-Scale Tectonic and Structural Controls on Ordovician Black-Shale Distribution (Utica and Martinsburg) During the Taconian Orogeny, Northern Appalachian Basin, USA
- · Sinu Basin Tectonostratigraphy Between Two Fold Belts and Timing of the Panama Arc-South America Collision
- · Kinematics and Growth of Supra-Salt Faulting in the Paradox Basin: A Field and Subsurface Analysis
- Evidence of Cretaceous Plate Collisions Along the Falkland Plateau Basin - Ramifications to Petroleum Systems and **Reservoir Quality Risk**
- The Tectonic Evolution of the Pegasus Basin and Implications for the Transition From a Subductive to Transform Plate Boundary, **Offshore New Zealand**
- · Reconstructing the Evolution of the Pamir Lower Crust: Zircon U-Pb and Trace-Element Petrochronology of UHP/UHT Xenoliths
- · Long-Wavelength Compressive Related Deformation Causes Large Relative Sea Levels Shift Along the Inner Mid Norwegian Passive Margin
- Analog Modeling of the Hides Anticline, PNG: Structure of a Giant Gasfield
- Application of 3-D Structural Analogue Modeling to Hydrocarbon Exploration: Examples From Subandean Bolivia, the Gulf of Mexico and Papua New Guinea
- Unravelling the Influence of Throw and Stratigraphy in Controlling Sub-Seismic Fault Architecture of Fold-Thrust Belts: An Example From the Qaidam Basin, Northeast Tibetan Plateau
- · Geodynamic Control on the Deposition of Siliciclastics and Carbonates in West-Directed Subduction Settings: An Example From Eastern Offshore of Tobago Island, Southeastern Caribbean

## **Technical Program Monday & Tuesday**

- New Insight of Fold-Thrust Belt Evolution as Implication of Hydrocarbon Prospect in the West Timor Island, Indonesia
- Geology of Northern Alto Relex Area, Roy's Peak Quadrangle, Big Bend National Park, Brewster County, Texas
- Integrated Regional Geophysical Analysis of the Deep Structural Framework of the Permian Basin
- Assessment of Structurally Compatible Interpretation in Fold-Thrust Belts: An Example From Offshore Northwest Borneo

# Theme 6: Unconventional: New Technologies and New Concepts in Unconventionals II (EMD/AAPG)

### Co-Chairs: T. Diggs and O. Egbue

- $\bullet$  The Study on Characteristics of Low Permeability TZ/ROZ via  $\mathrm{CO_2}$  Displacement
- The Effect on Permeability of Step-Wise Removal of Organic Material Using Digital Rock Methods
- Permeability of Mudrocks Effects: Lithology, Texture and Pore Fluid Salinity
- Nano- to Micron-Sized Pore Types and Pore Size Distribution in Fluvial, Lacustrine, Transitional and Marine Tight to Shale Oil and Gas Plays in China and U.S.
- Evaluation of Clay Conductivity From CEC Measurement Using Destructive and Non-Destructive Techniques
- Hydraulic Refracturing Feasibility and Timing for Hydrocarbon Shale Reservoirs
- The Effects of Downspacing on Recovery Factor Using Type Curve Analysis and Accounting for Adsorbed Hydrocarbon in a Multi-Phase Unconventional Reservoir: Eagle Ford Case Study
- Issues Concerning Application of Horizontal Well Data in 3-D Modeling of Shale Reservoirs
- A New Approach Solving Lateral Wells Complexity, Integrating Borehole Acoustics Reflection Survey and Facies Derived Borehole Images for a Better Completion Strategy, Wolfcamp, West Texas
- COMSOL Modeling of Non-linear Transport Properties in Low Permeability Samples
- Characterizing Tri-linear Deformation for Hydraulic Fracture Stimulations Utilizing Microseismicity
- Quantitative Stratigraphic Applications in Mudstones Using a Combined Wavelet and Compositional Data Analysis Approach (CDA-WA): Case Study in Eagle Ford Group Mudstones of South and West Texas With Implications for Sequence Stratigraphy and Cyclostratigraphy
- 1-D NMR Data Inversion
- Stratigraphic and Geochemical Variability of The Cenomanian to Turonian Eagle Ford Group in Southwest Texas: Implications for Identifying Potentially Productive Hydrocarbon Pay Zones
- Nano-Scale Pore Characterization of the Eagle Ford Shale, Texas

### **Tuesday Morning Oral Presentations**

### **Theme 6: Unconventional: Permian and Eagle Ford (EMD/AAPG)** Co-Chairs: T. Kosanke and W. Camp

- · US Tight Oil: What's Behind the Competitive Cost Curve?
- Conventional and Unconventional Petroleum Systems of the Delaware Basin, USA
- Optimization of Horizontal Wells Utilizing Multivariate Analytics of Seismic Inversion in the Wolfcamp Formation of the Midland Basin
- Modified Methods of Petrophysical Pore Pressure Prediction and Static Geomodel Integration in the Delaware Basin: Modeling Overpressure Generated by Fluid Expansion
- Permian Stacked-Pay Potential Assessment Using Multi-Disciplinary Analytics
- Quantifying Organic Porosity and Predicting Estimated Ultimate Recovery (EUR) in the Eagle Ford Formation
- Permeability of the Eagle Ford Shale: Organic Matter "Cement," Matrix Storage, Limestone Fractures and the Importance of Choke Management
- Organic Facies and Reservoir Characterization of Eagle Ford Shale as Determined by Stratigraphy, Source Rocks and Oil Geochemistry
- Eagle Ford Petroleum System as an Exploration Analog

### Theme 11: Future of Energy: Previous Predictions and Future Trends (AAPG)

### Co-Chairs: P. Carragher and J. Courtier

- Evolution of E&P Risk Analysis
- The Future of Total Exploration: One Ambition
- The Exploration Dilemma Threshold for a New Paradigm?
- Does It Pay to Innovate? An Economic Lookback at the Lifecycle of the Amplitude Play in the Deepwater Gulf of Mexico
- Base Rate Neglect: A Common Logical Fallacy of Oil and Gas Explorers?
- The Upstream Sector Adjusts to the New Economics of Exploration
- Future of Energy Exploration
- Exploration Assurance Team Best Practices
- Is Hydrocarbon Exploration Running Out of Resources to Find or Ideas to Find It?

### Theme 12: SEPM Research Symposium: How Seismic and Sequence Stratigraphy Have Advanced: 40 Years After AAPG Memoir 26 and 30 Years After SEPM Special Publication 42 Co-Chairs: K. Ehman and H. Posamentier

- · Evolution and Effects of Sequence Stratigraphy
- Advances in Sequence Stratigraphy–Insights From 35 Years of Studying the Other 80% of the Stratal Record: Mudstones
- A Simplified Guide For Sequence Stratigraphy: Nomenclature, Definitions and Method
- Defining Aquifer Architecture Using Seismic and Sequence Stratigraphy in the Los Angeles Basin, California: A Foundation for Future Assessment and Management of Groundwater Resources

# Technical Program Tuesday

- New Time Constraints on the Karoo Deepwater Physical Sequence Hierarchy
- Stratal Stacking Patterns of Continental Margin Successions in Low-Accommodation and Low-Sediment-Supply Settings
- Sequence Variability in Shallow Marine/Deltaic Syn-Rift Systems: Impact of Fault Network Evolution and Sediment Supply Variations, Plio-Pleistocene of the Corinth Rift
- Stratigraphic Evolution of the Barrow Group (Northern Carnarvon Basin, North West Shelf, Australia): Controls on the Architecture of a Shelf-Margin During a Syn-Rift to Post-Rift Transition
- Deepwater Turbidites in Not-so-Deep Basins

### Theme 5: Deepwater: Non-Turbidite Deepwater Units as Key Petroleum System Elements (SEPM/AAPG)

### Co-Chairs: D. Sawyer, K. Ogata and F. J. Hernández-Molina

- Seismic Stratigraphic and Seismic Geomorphologic Case Study of Deepwater Slope Deposits: Processes and Products
- · Contourite Terraces: Sedimentary and Conceptual Implications
- Diversity of Large-Scale, Deepwater Bed Forms in Mexico Offshore Areas: Neogene to Modern
- Discovery of Coarse-Grained Carbonate Drifts in the Maldives Implications for Ancient Deposits
- Turbidite-Contourite Interactions on Continental Margins: New Insights From the Cretaceous Uruguayan Margin
- Products of Slope Failure Processes as Potential Petroleum System Elements – Seismic Examples From Offshore Northwest Shelf of Australia
- Influence of Substrate and Bathymetry on the Emplacement of Mass-Transport Complexes: Insights From the Magdalena Fan, Offshore Colombia
- Using Ultrahigh-Resolution 3-D Seismic Data to Better Delignate Mass-Flow Deposits Within Complex Salt Structures
- Visualizing a Sub-Salt Field With Image Logs: Image Facies, Mass Transport Complexes and Reservoir Implications From Thunder Horse, Mississippi Canyon, Gulf of Mexico

### Theme 10: International Regions: Latin America (AAPG)

### Co-Chairs: V. Vega and U. Hernandez-Romano

- Exploration Trends in Latin America
- Colombia Caribbean Basin: From a Frontier Area to a New Hydrocarbon Province
- The Giant Perla Field: Discovery and Impact in the Western Caribbean
- Peru, A High Potential Hydrocarbon Exploration Opportunity
- The Punta del Este Half Grabens, Offshore Uruguay: The Next Exploration Frontier in the South Atlantic
- Pemex and the Energy Reform: Experiences So Far and Perspectives in Exploration
- · Digging Old Data to Drill New Wells

# Theme 1: Siliciclastics: Quantitative Reservoir Quality Prediction and Clastic Diagenesis (SEPM)

### Co-Chairs: A. Thomas, A. Ozkan and A. Marchand

- Clastic Reservoir Quality Prediction Models: Past, Present and Future
- Reservoir Quality Prediction in Frontier Basins
- Geochemical Evaluation Mitigates Potential Productivity Loss in Gorgon Field, Offshore Western Australia
- Preservation of Reservoir Quality by Chlorite Grain Coats in High-Temperature Wilcox Sandstones, Rio Grande Delta System, Western Gulf of Mexico
- · Porosity Preservation in Deep, Hot Sandstone Reservoirs
- Structural and Diagenetic Evolution of Deformation Bands in Contractional and Extensional Tectonic Regimes & Implications for Sandstone Diagenesis
- Does Vertical Effective Stress Influence Quartz Cementation?
- Mechanical Compaction of Sand and Clay: Constraints From Experimental Compaction, Chemical Reactions and Fluid Flow During Burial – An Overview
- Rapid Compactional Progression in Sand and Mud: Data From the Nicobar Fan, Indian Ocean

### Theme 2: Carbonates: Pore Networks: From Nano-Scale to Touching Vug & Fracture Systems (SEPM) Co-Chairs: N. Hurley and S. Fullmer

- Microporosity Quantification Using Confocal Microscopy
- Facies Independent Porosity, Permeability and Production Trends in the Micropore-Dominated Word Field (Edwards Formation), Lavaca County, Texas
- · Carbonate Pore System Influence on Displacement Behavior
- Synthetic Digital Rock Methods for Exploring the Properties
   Associated With Complex Rock Textures
- Improved Multi-Scale Petrophysical Properties Assessment Through Directional Rock Fabric Evaluation
- Assessing Flow Potential in a Fringing Reef Matrix-Vug Dual Pore System
- Scale Dependency of Pore Space and Its Impact on Flow Dynamics Within Carbonate Reservoirs
- Digging Beneath the Soil: Examining the Generation of Vuggy Porosity in Eogenetic Limestones by Organic Carbon Oxidation in Vadose Zones and Water Tables
- Porosity in Vuggy Platform Carbonates Measured Over Six Orders of Magnitude

# Theme 3: Geochemistry/Petroleum Systems: Basin Modeling and Geochemistry Along the Value Chain (AAPG)

- Co-Chairs: D. Xia and A. Stankiewicz
- The Whys and Wherefores of Geochemistry and Basin Modeling From Exploration to Production
- · Source Rocks in the Caribbean Plate
- Carotenoid-Derived Biomarkers as Geochemical Tools for Petroleum Exploration and Paleoreconstruction



- A Comparative Study of the Primary Geological and Geochemical Controls on Coal-Sourced Natural Gas Accumulations in the U.S. and China
- Geochemistry and Origin of Formation Waters From the Lower Eagle Ford Shale, South Central Texas
- Guidelines for Kinetic Input to Basin and Petroleum System Models
- San Andres Play in the Northwest Shelf: A New Insight on Its Petroleum Systems From Oil Geochemistry
- Unravelling Complex Petroleum Filling History of Great White Field by 4-D Integrated Petroleum Systems Approach
- Petroleum Systems Modeling of the Perth Basin, Western Australia

### Theme 11: Future of Energy: New Discoveries in the Solar System: Implications for Energy and Mineral Resources (AAPG) Co-Chairs: W. Ambrose and D. Cook

- Living on the Moon: Lessons for Mars
- Asteroid Mining: The State of the Industry and Our Future in Space
- Water in the Asteroid Belt: Dawn Mapping of Vesta and Ceres
- OSIRIS-REx Asteroid Sample Return Mission
- The InSight Mission HP3 Experiment: The First Heat-Flow Determination on Mars and an Opportunity for Collecting Parameters for Use of Heat-Pumps on Mars

### **Tuesday Morning Poster Presentations**

### **AAPG Student Posters II**

### Co-Chairs: A. Sullivan and A. Janevski

- Quantitative Characterization of Submarine Mass Transport Deposit (MTD) Top Surface Topography and Its Influence on "Healing Phase" Post-emplacement Sedimentation
- · Impact of Petrophysical Properties on Hydraulic Fracture Analysis
- Digital Outcrop Model of the Eagle Ford Group, Lozier Canyon, Terrell County, West Texas
- Apatite Geochemistry and Detrital Zircon Application in Provenance Studies of the Modern Mississippi
- Petroleum Correlation in the Tampen Spur Area, North Sea: A New Approach from Molecular and Stable Carbon Isotopic Data of Light Hydrocarbons
- Morphological and Geological Characterization of Mass-Transport Deposits in the Deepwater Fold and Thrust Belt (DWFTB) of Offshore Malaysia
- Source Indicators to Unravel Mixtures of Oils in the South Viking Graben, North Sea: A Study Based on  $\delta$ 13C of Individual Hydrocarbons, PAHs and Sulfur Aromatic Hydrocarbons
- Determining Paleoenvironmental Conditions of Late-Cambrian to Pennsylvanian Sediments From the Central Kansas Uplift Using Trace Element Analysis
- Fundamentally Different Proximal and Distal Lobe Stacking Styles Within the Same Stratigraphic Interval: Upper Broto System, Jaca Basin, Spain

- Re-defining Depositional Model of the Buda Formation Utilizing Outcrops from West Texas and Cores From South and Central Texas
- Seismic Facies Classification and Characterization of Deep Water Architectural Elements: A Case Study, North Carnarvon Basin Australia
- Incised Valleys in the Parkman Sandstone, Wyoming: New Sequence Analysis Opens Up New Exploration and Development Opportunities in the Powder River Basin

### Theme 1: Siliciclastics: Challenging Basins/Mixed Systems (SEPM) Co-Chairs: J. Francis and C. Sanchez

- Stratal Architecture and Stratigraphic Evolution of Ancient Mixed Siliciclastic-Carbonate Slope Deposits of the First Isaac Carbonate, Neoproterozoic Windermere Supergroup, Southern Canadian Cordillera
- Comparison of Stratigraphic Elements and Their Spatial Distribution in a Mixed Deep-Marine Continental Slope System, Windermere Supergroup, Canadian Cordillera, British Columbia
- Controls on the Distribution of Intra and Post-Volcanic Sediments, West of Shetland
- Correlation of Faunally Poor Clastic Successions Using Heavy Minerals: An Example From the Triassic Skagerrak Formation of the Central North Sea
- Cenozoic Evolution of Siliciclastic Sediments and Implications for Hydrocarbon Prospectivity in Southwestern Barents Sea
- Mixed Carbonate-Siliciclastic Systems: Dynamics and Controls, Eocene-Oligocene Browse Basin
- Depositional Process Controls on Mixed Siliciclastic-Carbonate Deepwater Reservoirs: Middle Pennsylvanian Cherokee Group, Anadarko Basin, Texas Panhandle
- Arid Continental Rift Systems: Exploration of the Rio Grande Rift
  Basin Complex
- The Link Between Carbonates, Evaporites and Siliciclastics in Arid Rift Basins; El Qaa Fault Block, Suez Rift, Egypt
- Mixed Carbonate and Siliciclastic Deepwater Systems Modified by Large-Scale Inflections in Slope Angle Below the Shelf Break
- Upper Ordovician Incised Valley (Karst) Fill Deposits of Central Missouri: A Reinterpretation of "Pennsylvanian Filled Sinks"
- · Sediment Transfer Along a Modern Carbonate Slope
- Seismic Characterisation of "Prospect B": A Possible Carbonate Build-Up From the Late Syn-Rift (Barremian) of the Lüderitz Basin, Namibia
- Synthetic Seismic Profile of Lateral Variation in the Sobrarbe Delta (Pyrenees, Northern Spain)
- Mixed Carbonates and Siliciclastics North of the Mahakam Delta, Offshore East Kalimantan, Indonesia



# **Technical Program Tuesday**

### Theme 2: Carbonates: Depositional Models for Carbonate and Evaporite Systems I (SEPM)

### Co-Chairs: T. Correa, C. Miller and R. Phelps

- Element Geochemical Characteristics and Its Paleo-environmental Significance of Permian Carbonate in Khorat Basin, Thailand
- Heterozoan, Biosiliceous and Organic-Rich Deposits of Jurassic (Oxfordian) Hanifa Formation, Saudi Arabia
- Neogene Evolution of Isolated Carbonate Platforms in the Southwest Indian Ocean - Influence of Tectonic and Rejuvenated Volcanism
- Identification of OAE1B on the Comanche Shelf, Central Texas and Implications for the Impacts of OAE on Shallow Water Carbonate Depositional Systems
- Re-Defining Depositional Model of the Buda Formation Utilizing Outcrops From West Texas and Cores From South and Central Texas
- The Terrestrial-Marine Transition in the Phosphoria Rock Complex
   of the Bighorn Basin, Wyoming
- Sedimentary Dynamics and High-Frequency Sequence Stratigraphy on the Slope of Great Bahama Bank
- Recent Carbonates-Evaporites of Southern Arabian Gulf: An Analogue to the Jurassic Reservoirs Peri-Tidal and Evaporite Cycles of Arabian Basin
- Gypsum Stromatolites From Sawda Nathil: A Geological Relict From Salinas Along the Fourth Coastline of Qatar
- Salina Group Lithofacies in the Michigan Basin: Development of an Improved Depositional Model From Core Analysis

### Theme 2: Carbonates: Depositional Models for Carbonate and Evaporite Systems II (SEPM)

### Co-Chairs: T. Correa, C. Miller and R. Phelps

- Palaeogeographic Reconstruction and Hydrocarbon Reservoir Prediction Using Sedimentary Architectures of Different Carbonate Platform Margins: A Case Study of Carbonate Platform Margins in Feixianguan Period of the Early Triassic, Northeast Sichuan Basin, China
- Comparing and Contrasting Controls on Sediment Patterns in Contemporary Isolated Carbonate Platforms as Analogs for Ancient Examples – Case Studies From South East Asia
- Determining Lithologic Variations, Provenance and Depositional Environments of the Del Rio Formation in West Texas
- Mixed Carbonate Yeso Formation Development in Vacuum Field, Lea County, New Mexico
- Depositional Controls and Sequence Stratigraphy of Lacustrine to Marine Transgressive Deposits in an Active Rift Basin, Lower Cretaceous Bluff Mesa, Indio Mountains, West Texas
- High Resolution Foraminiferal-Based Biostratigraphy of the Aalenian-Bajocian Transition in the Western and Southeastern Iberian Plate
- Lithofacies, Sequence Architecture and Petrophysical Characterization of the Lower Desert Creek Zone (Middle Pennsylvanian, Paradox Formation) in the Greater Aneth Field, Southern Paradox Basin, Utah

- Grayburg Formation Reservoir-Scale Architecture and Sequence Stratigraphy, Permian Basin
- Equatorial Atolls of Republic of Kiribati (Equatorial Pacific): Impact of Physical and Chemical Oceanographic Processes on Sedimentology and Geomorphology
- Depositional Setting and Reservoir Quality of the Lockhart Limestone (Lower Paleocene) in the Hazara-Kashmir Basin (NW Lesser Himalayas, Pakistan)

# Theme 2: Carbonates: Depositional Models for Carbonate and Evaporite Systems III (SEPM)

### Co-Chairs: C. Miller, T. Correa and R. Phelps

- Evolution of Halokinetic Sequences Adjacent to the Pine Ridge Salt Diapir, Paradox Basin, Southeast Utah: Implications for Salt Controlled Development
- The Upside Potential of the Early Miocene Kujung-1 Carbonate, Offshore East Java, Indonesia
- Upper Permian Reef and Shelf Facies of the Southern Margin of the Yangtze Platform, South China Provide Insight Into Reef Ecology and Environments Prior to the End-Permian Mass Extinction
- Pisolite Facies in the Wuchiapingian Isolated Reefs of Western
   Poland
- Stratigraphic Model for Lower and Upper Cretaceous Strata of the East Texas Basin – Constraints From Core, Wireline-Log and 2-D Seismic Data
- A Predictive Model of Dolomitization and Its Control on Reservoir Quality and Seismic Attributes in the Viola Formation, Morrison Northeast Field, Clark County, Kansas
- Preliminary Chemostratigraphic Record for the Devonian Three Forks Formation and Associated Units, North Dakota
- High-Resolution Sequence Stratigraphy During the Mulde Event (Silurian), Midcontinent, USA
- Successful Horizontal Well Placement With Limited Data Control in the Deep Toarcian Age Carbonate Reservoir of North Kuwait: A Case Study

### Theme 7: Energy & Environment: Induced Seismicity, Hydro Fracturing and Other Oil Recovery Best Practices (DEG) Chair: S. Nwoko

- Evaluation of Earthquake Potential Associated With the Injection of Wastewater Disposal Wells in Shale-Gas Reservoirs, Oklahoma
- The Influence of Wastewater Injection Wells on Induced Seismicity in the Denver Basin Combined Disposal Zone, Weld County, Northeast Colorado
- Geosteering in a RAMSAR Convention Site Using Tridimensional Modeling of Geochemical Data (HHXRF) From Cutting Samples – Neuquén Basin, Argentina
- Multidisciplinary Characterization of Geomechanical Properties and Flow Behavior of the Coupled Arbuckle-Basement System, Payne County, Northern Oklahoma

- Identifying Areas at Risk for Injection-Induced Seismicity Through Subsurface Analysis: An Example From Southern Kansas
- Properties of High-Pressure Gas Flows Near a Wellbore in a Fractured Well During Well Test
- · Fluid Injection and Earthquake Size in Faulted Reservoirs
- Re-Examination of the Wellbore Mechanics Basis for Interpreting Leak-off Tests – Impacts on Stress State and Pore Pressure Determinations

### Theme 7: Energy & Environment: Reclamation and Greenhouse Gas Sequestration Techniques and Best Practices Chair: S. Nwoko

- Earth Stress and Seismic Hazard From the Size-Frequency Distribution of Seismic Events
- Predicting the Potential for Fluid-Induced Fault Reactivation: An Example From Wellington Field, Sumner County, Kansas
- Permeability Prediction and Distribution in the Confined South Georgia Rift Red Beds With Implications for CO<sub>2</sub> Storage
- Onshore/Offshore Carbon Sequestration in the Southeastern United States
- Offshore CO<sub>2</sub> Storage in Continental Shelf Stratigraphy Global Research Needs, Storage Potential and Technical Challenges
- $\bullet$  Experimental Investigation Into Fracture Closure in Caprocks in CO  $_{\rm 2}$  Storage Reservoirs
- Evidences of Localized CO<sub>2</sub>-Induced Diagenesis in the Cretaceous Quantou Formation, Southern Songliao Basin, China

# Theme 4: Structure/Geomechanics: Salt Structure and Tectonics (AAPG)

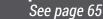
### Co-Chairs: F. Peel and T. Dooley

- · Bucket Welding: Where Does All That Salt Go?
- The Structural Evolution of Hamilton Creek/Dry Creek Anticline and Its Relationship to the Southeast Termination of Paradox Valley, Southwest Colorado
- The Temporal and Lateral Facies Variability and Internal Geometries of Syn-Rift Salt: Insights From the Early Mesozoic Orpheus Rift Basin, Offshore Eastern Canada
- Stress, Deformation and Failure Associated With Salt-Sheet
   Emplacement
- Forward Hydro-Mechanical Modeling of a Rising Salt Diapir Considering the Effect of Basin Sand Layers
- Jurassic Gravitational Shelf Spreading in the Western DeSoto Canyon Salt Basin, Mobile, Viosca Knoll and Destin Dome Areas, East-Central Gulf of Mexico
- The Kuqa Fold-and-Thrust System: Geometry of a Deformed Multilayered System Involving Coal and Salt Décollements
- Geomechanical Forward Modeling as a Trap-Seal Risking Tool in Rifted Margin Salt Tectonics: Applications in a Layered Evaporite Sequence (LES), Red Sea
- High-Resolution Multibeam Reveals Surficial Character of the Perdido, Mexican Ridges and Campeche Fold Belts; Deep Water Mexican Gulf of Mexico

- Role of Supra-Salt Decoupling on Mesozoic Graben Formation in the United Kingdom Southern North Sea
- Evaluating Exploration Potential of Suture Zones or Encased Minibasins Using an Outcrop Example From the Neoproterozoic Patawarta Salt Canopy, Central Flinders Ranges, South Australia
- From Outcrop to Reservoir: Improving Exploration in Diapiric Provinces
- Raft-Related Structures of the Albian Madiela Formation, Offshore South Gabon
- The Origin of Salt-Encased Sediment Packages: Observations From the Southeast Precaspian Basin (Kazakhstan)

### Theme 4: Structure/Geomechanics: Structural Analysis in Fractured and Unconventional Reservoirs (AAPG) Co-Chairs: J. Gale and R. Goteti

- New Type of Kinematic Indicator in Bedding-Parallel Veins and Vertical Fracture Abundance and Timing in Vaca Muerta Formation, Argentina
- Distribution of Natural Deformation in Organic-Rich Petroleum Systems: Reservoir Implications From Outcrop Analysis, Turonian Second White Specks Formation, Highwood River, Southwest Alberta
- Direct Computation of the Oda Fractured Rock Mass Permeability Tensor From Digital Outcrop Datasets
- Modeling Laramide Deformation to Predict Fracture Orientations in the Big Sand Draw, Wyoming: Part 1 Structural Evolution
- The Impact of Inheritance on the Architecture of Natural Fracture Networks – A Multi-Scale Study From Southeastern Australia
- Fracture Systems Prediction for Exploratory Prospects Using Multiscale Data Integration - Application in a Mesozoic Carbonate Reservoir in the Southeastern of Mexico
- Timing of Opening and Cementation of Bedding-Parallel and Vertical Fractures, Vaca Muerta Formation, Argentina
- Geometries, Structures and Petrography of Tumey Injection Complex, California
- Mechanical Stratigraphic Controls on Natural Fracture Spacing and Penetration
- Using Structural Restoration Techniques and Strain Tracking to Predict Fracture Distributions
- Investigating the Effect of Deformation on Hydrocarbon Retention in Shale Plays
- Counter-Regional Detachment Structures in Southwestern Pennsylvania, Central Appalachian Basin: Implications for Marcellus Shale Gas Exploration and Production
- Borehole Image Based Aperture Characterization to Identify
   Primary Versus Secondary Fracture Opening
- Mapping Reservoir Stress Conditions Using Hydraulic Fracturing Microseismicity
- Characterization of Microseismic-Derived Discrete Fracture Networks Through Topological Approaches





### Theme 3: Geochemistry/Petroleum Systems: Risk Analysis and Hydrocarbon Charge Assessment of Unconventional Plays (AAPG) Co-Chairs: F. Lin and G. Sulistyo

- Petroleum Resource Assessment Through Classifying Hydrocarbon Migration Stages and Their Associated Accumulation Types
- Predrill Prediction of Proximal Charge From a Dry Hole: An Example From the Barents Sea
- The Influence of Regional Uplift and Exhumation Upon Paleo and Active Petroleum Systems, Libya
- Analysis of Petroleum Systems and Its Implication for Exploration
   in the Zagros Foreland Basin
- The Helium System: A Modification of the Petroleum System for Inert Gases
- Our Current Working Model for Unconventional Tight Petroleum Systems: Oil and Gas
- Source Rock of Woodford Tight Oil Play on the Cherokee Platform (Oklahoma)
- Petroleum Geochemistry of Woodford-Sourced Oils From the Mid-Continent Region, USA
- Inorganic Elemental Analysis of Woodford and Mississippian Mudrocks: Implication for Petroleum Systems Analysis
- Utilizing HHXRF to Assess Variable Bottom Water Anoxia Within the Late Devonian Woodford Shale in the Arkoma Basin, Southern Oklahoma
- Fine-Scale Spatial Distribution of Organofacies in the Mowry Shale, Wind River Basin, Lander, Wyoming
- Deciphering Interplay of Tectonism and Redox Conditions on Temporal Variation in Total Organic Carbon Content in the Marcellus Shale: Evidence From Multiple Geochemical Proxies
- Thermal Maturity Assessment for Source Rock and Producible Fluid in the Eagle Ford Shale
- Methane Re-Saturation in Barnett Shale Core Plugs and Determination of Post-Coring Gas Loss
- Lead Isotope Analyses of Crude Oils and Their Source Shale Beds Could Prove Useful in Determining the Time of Formation of Oil

# Theme 6: Unconventional: Plays of the Americas: Canada and Argentina (EMD/AAPG)

### Chair: M. Abrams

- Integrated Multidisciplinary Workflow for Shale Play Characterization: Towards Selecting Best Landing Points in the Vaca Muerta Formation, Neuquen Basin, Argentina
- Pore Systems in a Volcanogenic-Grain-Bearing Mudrock: The Jurassic-Cretaceous Vaca Muerta Shale of Argentina
- Advanced Mud Gas and Fluid Inclusion Analysis—Vaca Muerta Horizontal, Argentina
- Hydraulically Induced Fracturing Response of the Vaca Muerta Formation From Borehole-Based Microseismic Monitoring and Subsequent Single-Well Moment Tensor Analysis

- Comparison of the La Luna Formation Unconventional Resource Shale in Middle Magdalena Basin, Colombia and Lago de Maracaibo Basin, Venezuela
- An Emerging Vaca Muerta Formation Unconventional Development, Sierras Blancas and Cruz de Lorena Blocks, Neuquen Basin, Argentina
- Chemostratigraphic Characterization of the Vaca Muerta Formation in the Neuquén Basin, Argentina: Implications for Depositional Environment and Stratigraphic Distribution of Hydrocarbon Play Elements
- Characterization of Carbonate-Rich Intervals Within the Vaca Muerta Formation, Neuquen Basin, Argentina
- Investigating the Effect of Thermal Maturity on Geomechanical Properties in Shale Reservoirs: An Example in Upper Devonian Duvernay Formation, Western Canada Sedimentary Basin
- Mineralogical and Petrophysical Characterization of the Reservoir Facies of Doig Formation in British Columbia, Triassic of Western Canada Sedimentary Basin
- Regional Scale Reservoir Characterization and Thermal History of Upper Devonian Organic-Rich Shales in the Horn River and Liard Basins and Adjacent Western Alberta
- Experimental Workflow Applied to Marine Source Rocks Sampled in the Montney-Doig Formations of the Western Canada Sedimentary Basin
- High Resolution Stratigraphic Variability in Black Shale Geochemistry: Horn River Group, British Columbia
- TOC Distribution and Prediction in the Vaca Muerta Formation, Neuquén Basin, Argentina

### Theme 9: Geophysics: Seismic Stratigraphy - Techniques and Interpretation: Case Studies in Deepwater, Subsalt, Carbonates and Conventional Plays (AAPG)

### Co-Chairs: S. Ul Haq and L. Ma

- Subsalt Imaging: An Integrated Approach to Image Improvement
   of Vintage Data
- Subsalt 3-D Modeling and HC Reservoir Prediction With Scarce 2-D Seismic Datasets: Can We Obtain Reliable Results?
- Key Technologies for Processing of Seismic Data in Gas Cloud Area
- Stratigraphic Reanalysis of Seismic Data of Northern Brooks Range Alaska: Comparison of Unit Volumes and Slopes
- Sequence Stratigraphic Boundary Delineation Based on Adaptive Seismic Decomposition
- Ocean Bottom Seismic Inspires Major Structural Update at South Arne Field, Danish North Sea
- Volumetric Fault Imaging Based on Seismic Geometry Analysis
- Interpreter-Assisted Interactive Delineation of Salt Domes Using Phase Congruency and Gradient of Texture Attributes
- An Improved Seismic Coherence Technology for Characterizing
   Faults
- A Seismic Method for Estimating Subsurface Vp/Vs Ratio Based on Converted Waves: A Case Study From Arabian Gulf

- The Research of Hydrocarbon Accumulation Regularity of the Sandy Conglomerate in Haiwaihe Nearshore Submerged Fan
- Quantitative Description of Different Facies Belts of Paleogene Volcanic Rocks in BZ349 Oilfield, Bohai Bay Basin
- A New Method for Predrill Pore Pressure Prediction Using Seismically-Derived Impedance
- Application of 2-D Resistivity Imaging and Seismic Refraction Tomography in Engineering Site Characterization
- · Multi-Scale Fault Interpretation in the Mississippian Lime

### Theme 9: Geophysics: Seismic Attributes Interpretation and Integration in Exploration: Advanced Techniques and Worldwide Case Studies (AAPG)

### Co-Chairs: K. Bradford and R. Wiener

- Attribute-Assisted Interpretation of Fractured Vuggy Carbonate in the Tarim Basin
- High-Resolution Sequence Architecture and Seismic Sedimentology Interpretation of Fan Delta
- Enhancing Seismic Data Resolution With Multi-Attribute Analysis Using Both Well Log Data and Seismic Data – A Case Study
- Integration of 3-D Multi Seismic Attributes in Exploration: Sweet Spot Identification and Well Location Optimization for Stratigraphic Traps of Unayzah Reservoirs in Central Saudi Arabia
- Looking for Seismic Facies Expression of Fault and Related
  Deformation Zones in 3-D Seismic Volumes
- 2-D Seismic Reflection Imaging of the Bennett Thrust Fault in the Indio Mountains of West Texas
- Integrating Sedimentology and Quantitative Rock Physics for Reservoir Characterization and Modeling in Field Development: A Case Study of an Onshore Field in Niger Delta, Nigeria
- Investigating the Deep Structure of Igneous Basement Beneath a CCS Site, Illinois Basin
- Optimizing Subsurface Predictions With Limited Capital Investment
- 3-D-Basin Modeling of the J Block of Da'an Oilfield Under the Control of Terminal Fan
- A Method to Interpret Cycle Stratigraphic Framework at Wireline Log-Resolution Using Seismic Data
- Development of an Early Miocene Carbonate Formation From Integrated Well Data, Modern Analogs and Geophysical Information: Case Study From Batujara Formation, South Sumatera Basin, Indonesia
- Investigation Up-scaled Petrophysical Measurements Using Several Micro-Level Field-Of-View (FOV) Petrographic Images on Kapuni Group in Maui Sub-basin, Taranaki Basin, New Zealand
- The Study of the Influence of Stratigraphic Structure on Seismic Attribute Analysis

• Geophysical Characterization of Carbonates Reservoir Using Advanced Interpretation Techniques: Applications to Abenaki Formation, Penobscot Block, Nova Scotia

### **Tuesday Afternoon Oral Presentations**

# Theme 6: Unconventional: Emerging and Mature North American Plays (EMD/AAPG)

### Co-Chairs: S. Gaswirth and L. Canter

- Identifying Remaining Bakken/Three Forks Prospects Using Geologic, Engineering and Dynamic Well Spacing Data
- · Source of STACK & SCOOP Fluids: Evidence From Fluid Inclusions
- Depositional Interpretation and Sequence Stratigraphic Control on Reservoir Quality and Distribution in the Meramec STACK Play: Anadarko Basin, Oklahoma
- The Latest Scoop: Investigating the SCOOP/STACK Trend Using Geological, Geochemical, Economic and Financial Analysis
- Characterization and Correlation of the Kreyenhagen Formation in the Northern San Joaquin Basin, California: A Chemostratigraphic Perspective
- Characterization and Integration of the Ellenburger, Viola and Barnett Sections in the Northern Fort Worth Basin: Thoughts on Flow of Water From the Ellenburger Into Barnett
- Compositional and Sedimentary Fabric Control on Hydraulic Fracture Stimulation, Tight Light Oil Sandstone Reservoirs of the Cardium Formation, Western Alberta, Canada
- The Montney Turbidite Complex of Northwest Alberta and Northeast British Columbia: Evolution of an Oil and Gas Play From Conventional to Unconventional

### Panel: The Next 100 Years of Global Energy Use: Resources, Impacts and Economics (DEG/EMD)

### Co-Chairs: S. W. Tinker and W. Camp

- Global Population, Energy Demand and Future Technology
- · Global Petroleum Resources and Transportation Fuel Options
- The Global Power Fuel Mix and the Carbon Transition
- · Atmosphere, Air, Land, Water and Energy Density
- · Energy Diversity, Carbon Tax and Economic Realities
- Global Energy Security and Poverty

### Theme 12: SEPM Research Symposium: How Seismic and Sequence Stratigraphy Have Advanced: 40 Years after AAPG Memoir 26 and 30 Years after SEPM Special Publication 42 II Co-Chairs: R. Sarg and L. Wood

- Carbonate Sequence Stratigraphy An Historical Perspective
- Carbonate Sequence Stratigraphy First Principles Accommodate the Unruly Carbonate System
- Build-and-Fill Stratigraphic Sequences in Carbonates
- Chemical Diagenesis and Biota in Stratigraphic Context: The Phosphoria Rock Complex (Permian), Rocky Mountain Region
- Advances in Seismic Stratigraphy of Carbonate Platforms and the Importance of Integrated Interpretation Using Time- / Depth-slice and Well Calibration Data



# **Technical Program Tuesday**

- Sequence Stratigraphy and Modeling Carbonate Heterogenity
- Ancient Processes in Modern Data: Quantitative Seismic Geomorphology for Evaluating the Sedimentary Processes That Characterize the Ancient Earth
- Combining Full-Volume 3-D Seismic Interpretation With Quantitative Seismic Geomorphology and Modern Process-Based Analogue Databases: The Next Generation Tools for Stratigraphic Analysis and Reservoir Characterization
- Predictive Stratigraphic Methods and Their Development: New Global Geological Concepts Driven by Technology Advances

# Theme 4: Structure/Geomechanics: Salt Structure and Tectonics (AAPG)

### Co-Chairs: M. Rowan and T. Hearon

- An Overview of Allochthonous Salt Tectonics
- Exploration Ramifications of Bowl Weld Variances in the Northern Gulf of Mexico
- Structural Evolution of Encapsulated Oligocene Minibasins and Allochthonous Salt in the Northern Gulf of Mexico
- Lateral Mobility of Minibasins During Shortening: Insights From the Southeast Precaspian Basin, Kazakhstan
- Influence of Deep Salt on the Style of Major Structures in Northeast Saudi Arabia
- Salt Tectonics in Fold and Thrusts Belts: Examples From the Zagros, Pyrenees and Kuqa Basin
- Tectono-Stratigraphic Development of Ramp Syncline Basins
- 3-D Experimental Modeling of Megaflaps Developed During Differential Loading: Application to the Gulf of Mexico
- The Paradox Salt Basin, Utah and Colorado: Recognition of New Types of Salt Features and Their Impact on Salt-Related Traps

# Theme 10: International Regions: Europe (AAPG)

- Co-Chairs: F. MacAulay and J. Craig
- The History of Oil and Gas Exploration and Development in the Wessex and Weald Basins, Southern England
- Exploration Revival From Multi-Vintage Diverse Source Dataset -Bay of Biscay
- Valencia Trough (Offshore Spain): Petroleum Systems and Play Types
- Salt Tectonics and Salt-Sediment Interaction Around the Bakio
   Diapir, Basque-Cantabrian Basin, Pyrenees
- Inception of the Continental Scale Danube River: On the Time of Its Arrival Into the Black Sea Basin as It Formed From Segmented Paratethyan Basins
- · Evolution of the Danube Delta and Deepsea Fan in the Black Sea
- Regional Crustal Structure and Heat-Flow Prediction of the Mediterranean Using Gravity Inversion
- Review of Mesozoic Exploration Plays in the Montenegro -Northwest Albania Segment of South Adriatic Basin
- Salt Tectonics of the Norwegian Barents Sea and the Northeast Greenland Shelf

### Theme 9: Geophysics: Integration of Geophysics With Geology: Theory, Workflow and Case Studies (AAPG) Co-Chairs: H. Zeng and S. Getz

- Expanding the Use of Seismic Amplitude and AVO From Fluid Prediction to Stratigraphic Architecture Definition
- Integrated Analysis of Borehole Microseismic, Completion and Production Data to Characterize Reservoir Depletion and Determine Infill Well Spacing in Tight Sands
- A Multidisciplinary Workflow to Detect Fractures at Multiple Scales by Integrating Borehole Images, Core and Seismic Data, Case Studies From Saudi Arabia
- Joint Estimation of the Column Height and Reservoir Distribution by Integrating AVO-Inversion and Overpressure-Driven Seismic Velocities
- Extrapolation of Reservoir Properties From Wells Using Depositional Environment Information From 3-D Seismic Data
- Improving Tight Reservoir Definition Using Seismic Object Detection Within the Woodford Formation
- Efficiently Integrating Seismic Data Into the Geosteering Process to Accurately Position Wells for Increased Production
- Use of Pore Pressure Modeling to Constrain Seismic Velocities
- Through the Seismic Looking Glass: Challenges of Using Reflections as Geomorphic Surfaces

# Theme 1: Siliciclastics: Continental to Shallow Marine I: Alluvial, Fluvial and Aeolian (SEPM)

### Co-Chairs: C. Hern, J. Moody and A. Owen

- Supply Dominated Fluvial Sequences: Implications for Sequence Stratigraphy in Continental Settings
- The Role of Source-Area Climate and Weathering on Sedimentation Along the Paleogene Gulf Coast: Onshore Wilcox Group, Texas
- Quantification of the Geometry and Compartmentalization of Fluvial Meander-Belt Reservoirs: Empirical Insight From Ancient and Modern Analogs
- Fluvial Architecture and the (Mis)use of Lithostatigraphy in Actively Deforming Salt Basins: Chinle Formation, Paradox Basin, Utah
- Connecting the Backwater Dynamics of Large Rivers to the Composition and Shapes of Channel Belts in the Coastal Zone
- Detrital Zircon U-Pb Geochronology of the Blackhawk-Castlegate Succession, Book Cliffs and Wasatch Plateau, Utah
- Facies-Specific Reservoir Rock Properties of a Back-Barrier Lagoon Deposit Interpreted From a Core-to-Outcrop Study in the Kaiparowits Plateau
- · Fluvio-aeolian Interactions at a Sand-Sea Margin
- Exceptional Mechanisms for Preservation of Eolian Successions

### Theme 3: Geochemistry/Petroleum Systems: Risk Quantification Through Petroleum System Analysis (AAPG)

### Co-Chairs: M. Flannery and R. Patience

- Hydrocarbon Migration Phenomena and Their Relation to Charge Efficiency: A Review
- Probabilistic Hydrocarbon Migration Modeling in the Utsira High Area, Norwegian North Sea
- Analysis of a Secondary Migration of Hydrocarbons in the Ordorician Yingshan Formation in the Tazhong Uplift, Tarim Basin, China
- Minimize Exploration Risk: The Impact of Hydrocarbon Microseepage Surveys for Distinguishing Hydrocarbon-Charged Traps From Traps Without Hydrocarbons
- H2S Risk Assessment at the Basin Scales
- Hydrogen Sulfide in the Permian Basin
- Application of Oil Gravity and Sulfur Content Relationships to Oil Typing and Source Rock Kinetics
- · Constraints on Biogenic Gas Generation and Entrapment
- Risk Analysis in Unexplored Areas: Application of a Response Surface Model Based Tool on the Canadian Offshore

### **Tuesday Afternoon Poster Presentations**

### Theme 2: Carbonates: Pore Networks: From Nano-Scale to Touching Vug & Fracture Systems (SEPM)

Co-Chairs: S. Fullmer and N. Hurley

- Carbonate Pore System Characterization and Porosity Prediction
   Using Multi-Scale Data
- Morphological and Topological Characterization of Coquinas' Porous System Through X-ray Computed Tomography and Its Correlation With Depositional Cycles
- Permeability Estimation Based on Pore Characterization and Flow Modeling From Thin-Sections Image Analysis of Grain-Dominated Carbonates
- Implications of Facies and Pore Architecture on NMR-Response in Carbonate Mudrock Reservoirs: Mississippian-Lime Play Case Study
- Complex Carbonate Pore Systems of the Carboniferous Hodder Mudstone Formation, Bowland Basin, United Kingdom
- · Spectrum of Carbonate Nano- and Micropores and their Origin
- Flow Experiments on 3-D Printed Rock Proxies: Investigating Porosity-Permeability Relationships
- Fracture Development in the Interior of a Stable Carbonate Platform: New Evidence From the Distribution of Karst Features on Andros Island, Great Bahama Bank
- Quantitative Microporosity Evaluation Using Mercury Injection and Digital Image Analysis in Tight Carbonate Rocks: A Case Study From the Ordovician in the Tazhong Palaeouplift, Tarim Basin, Northwest China
- Insight on the Complexity of a Paleokarst Reservoir: Examples From a World-Class Outcrop Analogue (Southern Italy)

- Gravitationally Induced Fracture Systems in Rimmed Flat-Topped Carbonate Platforms
- Characterization and Modeling of Fine-Grained Limestones: Lessons From Four Decades of Progress in Hydrocarbon Reservoirs
- Characteristics of Lower Palaeozoic Marine Carbonate Rocks in Dongying Sag, East Bohai Bay Basin
- Integrated 3-D Seismic and Core Data for Characterization of Natural Fractures of the Hunton Limestone and the Woodford Shale in Central Oklahoma
- The Effect of Roughness of Pore Surfaces on Elastic Wave Velocity in Pore-Scale Modeling
- An Improved Method to Discriminate the Carbonate Reservoir Types Combing the Empirical Model Decomposition and Energy Entropy Classification
- Characterization of Deep Tight Carbonate Gas Plays With an Integrated Interpretation - Case Study From North Kuwait
- Reservoir Characteristics, Formation and Gas Accumulation of Ordovician Ultra-Tight Paleokarst Carbonates in Eastern Ordos Basin, China

# Theme 1: Siliciclastics: Clastic Diagenesis, Reservoir Quality & Geochemistry (SEPM)

### Co-Chairs: A. Thomas, T. Diggs and D. Nandy

- Improving Prediction of Porosity Preservation in Thermally-Stressed Deep Marine Sandstones: A Synthesis of Grain-Coating Chlorite Observations
- Clay-Coated Sand Grains in Petroleum Reservoirs: Understanding Their Distribution Using an Analogue Holocene Estuarine Fill Succession
- Predicting Clay Mineral Distribution in Sandstone Reservoirs Using an Analogue Holocene Estuarine Succession
- Origin of Chlorite Coating and Its Effect on Reservoir Quality of the Lower Tuscaloosa Sandstones at Cranfield Field, Mississippi, USA
- Predicting Sedimentary Facies Using Non-Destructive Core Log X-ray Fluorescence Geochemistry: Comparing the Brent Group and Cook Formation, North Sea
- Characterization of Properties in Deformation Bands
- Reservoir Characterization of a Complex Alluvial System at Regional Scale: Impact on Oil Recovery Factor Improvement (Barrancas Formation, Cuyana Basin, Argentina)
- Diagenetic Controls on Reservoir Quality and Gas Composition of Lower Permian Collyhurst Sandstone, East Irish Sea Basin, United Kingdom
- Petrography, Fluid Inclusion, Isotope and Trace Element Constraints on the Origin of Quartz Cementation and Feldspar Dissolution and the Associated Fluid Evolution in Arkosic Sandstones
- An Integrated Sedimentological and Geochemical Analysis of a Lacustrine Sedimentary Cycle in the Triassic Cow Branch Formation of the Dan River Basin



# **Technical Program Tuesday**

- Chemostratigraphy, Mineral Association and Water Chemistry Modeling of the Green River Formation, Piceance Basin, Colorado: An Integrated Method to Unveil the Evolution of the Uinta Lake
- Lithofacies, Diagenesis and Reservoir Quality Evolution of Wolfbone Sandstone-Siltstone Successions in the Delaware Basin, West Texas
- Constraining the Importance of Authigenic Carbonate in the Global Carbon Cycle: A Case Study From the Bakken Formation
- Integrated Reservoir Characterization for Enhanced Oil Recovery, Tar Springs Formation, Illinois Basin
- Understanding Reservoir Properties of the Organic-Rich Qusaiba Shale, a Potential Shale Gas Reservoir, Northwest Saudi Arabia: An Outcrop Approach

# Theme 1: Siliciclastics: Continental to Shallow Marine III: Aeolian to Shallow Marine (SEPM)

### Co-Chairs: J. Klimek and P. Flaig

- Sand Sheet and Protodune Development and Preservation in Aeolian Systems
- A Multiscale Analysis of the Entrada Formation From Erg Reconstruction to Geomodeling of a Wet Eolian Reservoir Analogue
- Toward a Higher Resolution Understanding of Fluvial to Shallow Marine Clastic Reservoir Analogues as Resolved by GPR
- Morphologic and Hydrodynamic Controls on the Occurrence of Tidal Bundles in an Open-Coast Macrotidal Environment, Northern Gyeonggi Bay, West Coast of Korea
- Predicting the Distribution of Shallow Marine Facies Within Halokinetically Controlled Basins: Insights From the Upper Jurassic Fulmar Formation, UKCS
- Analysis of Shallow Seismic Data for Improved Understanding of
   Sediment Geobodies
- Evaluating the Application of Process-Based Models as Training Images for Multiple Point Statistics
- Evolution and Origin of a Large Mud Diapir in the Wilkins Peak Member of the Green River Formation
- Estimating Rates of Subsidence Using Sedimentation Over the Trinity River Incised Valley, Galveston Bay, Texas and the Potential Implications for Geohazards

# Theme 1: Siliciclastics: Insights from Mexico to Nova Scotia (AAPG)

### Co-Chairs: J. Pugh, L. Nguyen and C. Bartolini

- Two-Phase, Full-Fit, Triassic-Mesozoic Reconstruction of the Gulf of Mexico Basin, Its Continental Margins and Twin Salt Basins
- Upper Triassic-Middle Jurassic Strata of Plomosas Uplift and Sierra Samalayuca, Chihuahua, Mexico: Onshore Record of Syn-rift Gulf of Mexico Fault History
- Evolution of Post-Albian Plate-Margin Uplift and Clastic Sedimentation in the Southern Gulf of Mexico Based on Outcrop Studies in Mexico and Guatemala

- Late Cretaceous-Tertiary Shortening and Uplift History in Southern Mexico and Implications for Sedimentation in Southern Gulf of Mexico: Part 1, Tectonic Framework
- Onshore Mature Field Rejuvenation on Golden Lane, Mexico: Reducing Cycle Time Through an Integrated Approach
- Structural Analysis of Upper Cretaceous Carbonate Reservoirs Using Curvature Attributes, Campeche Sound, Gulf of Mexico
- Calibrating Apparent Resistivity Traces, Lines and Volumes Derived From Lightning Strike Data in South Texas
- Integrated Reservoir Modeling for Water Flooding in Deepwater GOM
- Adopting Improved Well Data Standardization Methods and Workflows to Reduce Cycle Time and Risk in the Deepwater Gulf of Mexico Basin
- Development of Middle Cretaceous Canyons in the Nova Scotian Margin: Significance/Nature of Gravity-Driven Deposits and Their Relationship With Slope Background Sedimentation
- Structural Heritage and Salt Deposits Impact on the Sable Subbasin Architecture
- Salt-Sediment Interaction in Sable Sub-Basin, Nova Scotia, Canada

# Theme 1: Siliciclastics: Impact of Structures on Sedimentary Systems (SEPM/AAPG)

### Co-Chairs: A. Hartley and J. Pickering

- The Enigma of Missing Jurassic and Cretaceous Rocks Episodic Deposition and Unroofing of the United Kingdom and Adjacent Continental Shelves During the Mesozoic and Tertiary
- Impacts of Regional Allogenic Forcing on a Single Depositional System: Example From the Sherwood Sandstone Group, United Kingdom
- Controls on the Distribution of Channel Sands in a Fluvial Fan System: The Effects of Tectonic Deformation and Discharge Variation on the Stratigraphic Architecture of the Brahmaputra Fan Delta
- Rift Shoulder Erosion and Basin Deformation Associated With the Wichita Uplift (Mountain Front): Anadarko Basin, Oklahoma and Texas
- Origin of Mound-Like Structures on the Outer Continental Shelf Off-Central Israel
- Lateral Variability Along the Margin of an Ediacaran Salt-Withdrawal Minibasin, South Australia

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### Theme 5: Deepwater: Deep-Marine Deposits: New Insights Relevant to Worldwide Deepwater Exploration and Production (AAPG)

### Co-Chairs: B. Prather, B. Romans and C. Carvajal

- Seismic Expression and Sedimentology of Deepwater Carbonate Sandy Fans Adjacent to Isolated Carbonate Platforms (Mozambique Channel, Southwest Indian Ocean)
- Application of 4-D Integrated Technologies to a Submarinefan Channel System in the Niger Delta Basin: Insights Into the Reservoir Heterogeneity and Its Controls on the Fluid Flow During Development
- · Continental Slope Evolution in Tertiary: Northwest Australia
- Characterizing Deep-Marine Sedimentary Architecture: A Database-Driven Meta-Analysis Approach
- Strike-Slip Tectonic Controlled Deepwater Channel Sedimentation
   in Western Border of Kendeng Basin, Java
- Tectonic Development, Sedimentation and Palaeoceanography of the Mozambique Channel During the Tertiary
- Baiyun Deepwater Fans in the Pearl River Mouth Basin, South China Sea: Architectures, Genesis Mechanism and Exploration Direction
- Macroscopic to Microscopic Criteria for Assessing Spatial Changes in Material and Bounding Surface Character of Mass-Transport Deposits and Implications for Seal Quality
- Seismic Facies Classification of the Internal Architecture of Mass Transport Deposits: Implication for Reservoir Seal Competence
- The Potential Impacts of Substrate Erosion and Facies Heterogeneity of Blocky MTDs on Reservoir Volumes and Seal Quality: Insights From the Ventimiglia Flysch Formation (Eocene, Northwest Italy)
- The Cretaceous/Paleogene Boundary Deposits and Paleogeography at the Southeastern Gulf of Mexico-Cuba Area
- A Submarine Depositional System With Straight Channels and Slope Aprons: Niger Delta Continental Slope
- Primary Depositional Controls on Reservoir Architecture, Facies and Quality in Deepwater Wilcox Sands, Gulf of Mexico
- The Upper Cretaceous Post Rift Petroleum Systems of the West African Transform Margin and MSGBC Basin (Benin to Mauritania), Learnings From the Past, the Present and the Identification of Future Plays
- Deep Lacustrine, Sand-Rich, Turbidite Fans: Elevated Heterogeneity and Evidence for Partial Confinement in Examples From the North Falkland Basin, Falkland Islands

### Theme 8: Emerging Frontiers: Emerging Basins (AAPG)

### Co-Chairs: B. David and N. Piggott

- Controls on the Evolution of Ancient, Deep Lacustrine, Sand-Rich, Fan Systems: Early Cretaceous Hydrocarbon Reservoirs of the North Falkland Basin, Falkland Islands
- The Largest Frontier of the Atlantic: Offshore USA
- · Hunting "Elephants" in the Rio Grande Rift A New Frontier

- Developing a New Understanding of the Evolution of the Newfoundland-Iberia Conjugate Margins and Its Impact on Petroleum Prospectivity
- High Impact Exploration Inventory in an Emerging Hydrocarbon Province, Morandava Basin, Offshore Madagascar
- High Resolution, Regional, Earth Systems Modeling in the Predictive Mapping of Reservoir and Source Rock Environments in the Caribbean
- Is Hinterland Basin of the Hill Ranges in North Pakistan Overlooked Geological Province for the Hydrocarbon Exploration?
- Basin Analysis and Hydrocarbon Potential of the Papuan Basin, a Frontier Basin in Papua New Guinea
- River-Gulf System: The Most Important Place for Global Marine Petroleum Accumulations
- A New Exploration Direction of North in Tarim Basin, China: An Enlightenment From Geochemical Characteristics of Deep Natural Gases
- Guyana-Suriname Basin, South America: Hot Ultra-Deepwater Exploration Opportunities and Liza Field: Worldwide Largest 2015-2016 Hydrocarbon Discovery
- Chronostratigraphy Across a Conjugate Margin Source-to-Sink: UruguaySPAN and NamibiaSPAN—Why Stop at Basement?
- Multi-Staged Golden Zones of Hydrocarbon Exploration in Superimposed Petroliferous Basin China
- Allochthonous Blocks and Thrust Tectonics Effects to Petroleum Exploration in the Ulus Basin, Western Black Sea of Turkey

# Theme 6: Unconventional: Plays of the Eastern Hemisphere (EMD/AAPG)

### Chair: T. McClain

- The Jurassic Organic Rich Carbonate Mudstones of the Tauride Belt (Turkey): Their Unconventional Oil and Gas Systems
- Evaluation of Coal Bed Methane Play in the Eastern Part of the Central Kalahari Karoo Basin (Botswana)
- Fracture Characterization and Data Analysis of the Poland Unconventional Shale Play and Relation to Other Unconventional Plays
- Paleozoic Evolution of the Eastern European Platform in Poland and Shale Gas Potential
- Geological Setting of the Shale Gas in Polish Carpathians
- The New Opportunity of Gas Exploration From Tight Mudstone and Shale Dominated Sequences in Miocene, Carpathian Foredeep, Poland
- Comparative Analysis of Shale Gas/Oil Resources in the Baltic and the Lublin Basins (Poland) Based on 3-D Static Modeling
- New Unconventional Potential of the Mature Petroleum Provinces in Poland
- Application of Spectrometry Gamma Measurements to the Hydrocarbon Anomalies in Shale Drilling Cores at Pomerania Region, Poland
- Surface Geochemical Prospecting of Hydrocarbon in Brejeira and Mira Formations, South Portuguese Zone (SPZ), Portugal

# Technical Program Tuesday

- Conducting Integrated Reservoir Studies in the Quartzite Hamra Reservoir-Tight Oil, Southern Periphery of Hassi-Messaoud Field, Algeria
- Method and Data-Acquisition Workflow for Rock-Type Definitions in the Lower Carboniferous Resource Play, Northwest England
- Dead Oil Viscosity Model Based on SARA Analysis for South Ratqa
   Oil Field
- NMR Applications for Bazhenov Shale Core Samples Analysis and Filtration Experiments Under Reservoir Conditions
- Geomechanics and Geological Characteristic of Unconventional Plays in the South Sumatra Basin, Indonesia

### Theme 4: Structure/Geomechanics: Fault Seal and Fault Zone Modeling (AAPG)

### Co-Chairs: S. Laubach and C. Ginn

- New Approach in Conducting Fault Seal Analysis: Case Study of Northwest Java Basin, Indonesia
- Characteristics and Petroleum Significance of the Miocene Polygonal Fault System in Beijiao Sag of the Qiongdongnan Basin, South China Sea
- Tectonic-Geomorphologic Modeling of Paleo-Landscapes in Rifts
- The Fault Zone Architecture of Buried Reverse Faults in Sedimentary Basin: A Case From the Hong-Che Fault of Junggar Basin, China
- The Genesis and Mechanism of Polygonal Fault Systems in Jinghai Sag of The Pearl River Mouth Basin
- Advances in the Understanding of Key Parameters Determining Carbonate Fault Rock Permeability
- Fault Zone Development, Architecture and Fluid Migration Properties in Heterogeneous Clastic & Carbonate Strata
- Faults in High Porosity Carbonates
- Hydrothermal Venting-Induced Structural Compartmentalization in Vøring Basin, Norwegian North Sea
- Fault Seal Analysis Effects in Delineating the Movement Of Water Injection and Identifying New Infill Locations and Possible Upside Locations – Near Field Exploration, Ras Budran Field - Gulf of Suez
- Fault Length, Connectivity and Reservoir Compartmentalisation Testing Workflows With Seismic Forward Modeling
- Reservoir Compartmentalisation and Seismic Interpretation
   Uncertainty
- Multi-Resolution Stacking of Seismic Attribute Calculations Based on Post-Stack Seismic Characteristics to Enhance Image Quality
- Non-Seismic Constraints in Structurally Complex Regions
- Influence of Tectonic Stress Regime on Fracture Porosity of Tight Carbonate Reservoirs

# Theme 5: Deepwater: Insights from Circum-GOM Studies and Associated Petroleum Systems (AAPG)

### Co-Chairs: C. Bartolini, G. Diaz and I. Kane

- Mapping the Jurassic Norphlet Sandstone along the Northern Margin of the Yucatan Peninsula
- Impact of Geological Heterogeneity on Recovery Efficiency in Deepwater Reservoirs: Insights From an Integrated Subsurface (Wilcox Fm.) and Outcrop (T. Karoo) Study
- High-Resolution Multibeam Backscatter Reveals Dramatic Basin-Floor Fans of Varying Character in the Deep Water Mexican Gulf of Mexico
- Stratigraphic Development of the Upper Fan From the Brazos-Trinity Slope System (Basin IV), Western Gulf of Mexico
- Seismic Stratigraphic Analysis of the Yoakum/Lavaca Canyon System, South Texas
- The Late Triassic-Late Cretaceous Flooding of the Gulf of Mexico From the Pacific Through Mexico
- Pre-Salt in the Deepwater Gulf of Mexico: Evolution and Play Potential in the Syn-rift and Sag Fill in Offshore Mexico
- Structural, Stratigraphic and Geomorphologic Reconstruction of an Early Stage Late Miocene-Early Pliocene Raft System in Viosca Knoll-Mississippi Canyon, GOM, Using 3-D Seismic Data
- Seismic Geomorphology and Overpressure Variation in the Shallow Water Flow (SWF) Prone Sand Units in the North-Central Gulf of Mexico
- Channel Complex Fills in the Distal Palaeogene Wilcox Play (GoM): Spatial Organization and Conceptual Model
- Latest Quaternary Regional Sedimentation Processes in the U.S. Gulf of Mexico Exclusive Economic Zone (EEZ)
- The Siliciclastic Upper Cretaceous Play of Eastern Mississippi Canyon
- Submarine Landsliding into the Orca Basin Brine Pool, Walker Ridge, Gulf of Mexico
- Paleogene Carbonate Dissolution Events and Their Link With Wilcox Formation Deep Water Sands
- Evolution Infill of a Ponded Basin and Implications for Reservoir Development, Gulf of Mexico

# Theme 5: Deepwater Deposits: From Classic Models to Paradigm Shifts (SEPM/AAPG)

### Co-Chairs: J. Clark, S. Hubbard and A. Fildani

- Beyond the Channel-to-Lobe Transition Zone: Off-Axis Facies Distribution and Implications for Stratigraphic Pinch-Outs
- New Insights on the Variability of Submarine Lobe Deposits
- Stratigraphic Evolution of an Ancient Channel-Lobe Transition Zone (CLTZ) in the Windermere Turbidite System and Implications for Reservoir Development
- Some Controls on the Distribution of Slurry-Flow Deposits
- Lateral Variability of Turbidite-Debrite Couplets in Submarine-Lobe Fringes: Example From the Maastrichtian Lewis Shale, Washakie Basin

# **Technical Program Tuesday & Wednesday**

- Three-Dimensional Characterization of Complex Depositional Architectures of Seismic Scale High Energy, Unconfined Aggradational Slope Turbidites Deposited Along Narrow Margins of the Fish Creek-Vallecito Basin, South-Central California – Outcrop Example of a Supercritical Fan?
- Stratigraphic Architecture of Bypass-Dominated Slope Channel Deposits, Tres Pasos Formation, Chilean Patagonia
- Frequency Distribution of Bed Thickness in Slope-Channel Fills: New Insights From the Cretaceous Tres Pasos Formation, Chile
- Froude Supercritical Flow Bedforms in Deepwater Slope Channels, Eocene Forearc Basin, California: Recognition Criteria and Field Examples in Conglomerates, Sandstones and Fine-Grained Deposits, Their Morphological Changes of Bedforms From Shelf-Edge Channels to Middle Slope Channels
- Deducing Reservoir Connectivity via Analysis of Slope Channel Fills Along a 35-km-long Longitudinal Transect of a Shelf Margin System, Tres Pasos Formation, Chile
- Quantification of Submarine Channel Facies Architecture Using Drone-Derived Geomodels, Miocene Modelo Formation, California
- The Long-Term Evolution of an Exhumed Deepwater Stepped-Slope Profile
- Vertical Intercalation of Matrix-Rich and Matrix-Poor Sandstones
   A Reflection of a Compensationally-Stacked Lateral Facies Change in a Deep-Marine Channel-Margin Succession, Isaac Formation, Windermere Supergroup, British Columbia
- Multiphase Deepwater Slope Channel-Lobe Evolution: Cerro Toro Formation, Silla Syncline Area, Magallanes Basin, Chile
- Depositional Reservoir Quality of Deepwater Channels and Lobes: Aínsa and Jaca Basins, Spain

### Theme 13 SEPM Student Posters II

### Co-Chairs: R. Sarg and H. Harper

- Giant Foresets and Giant Sediment Waves in the Taranaki Basin, New Zealand
- Re-Equilibration of Mg Isotopes Between Calcite and Dolomite During Burial Metamorphism: Outlook of Mg Isotopes as Geothermometer and Seawater Proxy
- Lithofacies Distribution of the Middle to Upper Devonian Ohio Shale in the Southern Appalachian Basin, Kentucky
- Characteristics and Origin of Tight Oil Reservoir within the Middle Permian Lucaogou Formation of the Junggar Basin, Northwest China
- Geomorphology Classification and Architecture Characterization of Braided River Reservoir: A Case Study From Guantao Upper Formation of Gudong Oilfield, Bohai Bay Basin, China.
- Chemoprovenance of the Chattanooga and Woodford Shales of Oklahoma

### Wednesday Morning Oral Presentations

### Theme 1: Siliciclastics: Source to Sink II: Global Examples (SEPM) Chair: J. Covault

- Paleogeography of the Arctic Implications for Mesozoic Sediment Routing and Basin Fill
- Source to Sink Investigation of the Central Scotian Basin Using Integrated Forward Stratigraphic Modeling Approaches
- Complex Sediment Dispersal in the Campeche Deepwater Province, Offshore Southern Mexico – An Example of a Hybrid Tectonically Active Margin
- 3-D Forward Stratigraphic Modeling of Mixed Carbonate/ Siliciclastic Systems in Frontier Deepwater Basins: The East-Mediterranean Levant Basin Case-Study
- Submarine Sediment Routing Systems on the Western Niger Delta Slope: Autogenic and Allogenic Signal Propagation and Preservation

# Theme 1: Siliciclastics: Continental to Shallow Marine II: Tidal to Shelf (SEPM)

### Co-Chairs: R. Steel, A. Hartley and A. Fernandes

- Mid-Jurassic Shelf-Margin Growth in Neuquen Basin: Coarse-Grained, River-Tide Interaction at the Shelf Edge
- Extremely Rapid Progradation of Shelf Margin Clinothems in the Pre-Land Plant World: The Sediment-Supply-Driven Early Silurian Succession of Arabia
- Ambiguity of GoogleEarth Images as Shallow Marine Reservoir Analogs
- Variability of Wave-Dominated and Wave-Influenced Coastlines in the Holocene Lessons for the Subsurface

### DEG/DPA Forum: The Future Best Practices for Extraction Industries in a Lower Carbon Environment

### Co-Chairs: Jeremy Boak and Chandler Wilhelm

- Creating a Social Contract to Operate A Necessity in the Post COP 21 World
- Sub-Surface injection of fluids and Induced Seismicity Best Practices: Future Best Practices in the Deep Water Offshore
- Mitigating Methane Emissions: The Role of Science, Data Transparency and Innovative Technology
- Building Social Acceptance and Trust at the Community and National Levels

# Theme 5: Deepwater: Major Deepwater Fields of the Offshore U.S. Gulf of Mexico (AAPG)

### Co-Chairs: C. Moore and M. Shuster

- Effective Field Development in Challenging Subsalt Environment, Gunflint Field, Gulf of Mexico
- · Lucius Field, 5 Years From Discovery to First Oil in the USGOM
- Stampede Field, USGOM: An Integrated Approach
- Thunder Horse: A Winning Bet in GoM
- Jack and St. Malo, USGOM: Similarities and Differences in Two Co-Developed Deepwater Wilcox Fields
- Perdido: A Frontier Paleogene Development 15 Years Post-Discovery



# **Technical Program Wednesday**

### Theme 2: Carbonates: Depositional Models for Carbonate and Evaporite Systems I (SEPM)

### Co-Chairs: C. Miller and G. Eberli

- Complexity of the Intra-MIS 5e Stratigraphic Record: Challenge to the One SL Pulse-One Cycle Model, West Caicos, Caicos Platform, BWI
- Sensitivity of Steep-Rimmed Carbonate Platforms to Early Deformation With Respect to Changes in Mechanical Rock Properties, Slope Angle and Sea Level
- Morphometric Comparison of the Pleistocene Miami Oolite and Modern High-Energy Sand Bodies of Great Bahama Bank
- Stable Isotopic and Trace Elemental Composition of Mollusks From the "Inland Sea" Lagoon and Channel System, Southeastern Qatar
- Complex Interplay Between Depositional and Petrophysical Environments on a Holocene Tidal Flat (Al Ruwais, Qatar)
- Cenozoic Neritic Carbonates in the Maldives Controlled by Sea Level and Ocean Currents
- Current-Related Platform Drowning in the Maldives and the Indo-Pacific Realm
- Tectonostratigraphy of Cretaceous Carbonate Platform and Slope in the Santaren Channel, Bahamas
- Precambrian Carbonate Platforms: A Database Approach to Querying Carbonate Deposition Through Time

### Theme 10: International Regions: Asia Pacific (AAPG) Co-Chairs: P. Grant and P. Lloyd

- The Emergence of Myanmar as the New Focus for Exploration in the Region – Fact or Fiction?
- Japanese Deepwater Plays and Gas Hydrate Potential: Submarine-Fan Turbidite Explorations in Forearc and Backarc Regions
- Correlation Across the South China Sea Using VIM Transgressive Regressive Cycles
- Timing, Distribution and Tectonics of Unconformities in the South China Sea

### Theme 10: International Regions: Africa (AAPG)

### Co-Chairs: A. Akinpelu and D. Blanchard

- Africa Exploration Why Does It Continue to Deliver?
- The Outstanding Exploration Successes of Rovuma Basin After 60 Years of Disappointing Results in East African Coastal Basins
- 50 Years of Conventional Oil and Gas Exploration and Production in the Western Desert (Egypt) and Still Going Strong
- From Stranded Marginal Fields to (Integrated) Medium Sized Assets: Contributions of Indigenous Independents to the Changing E&P Landscape of Nigeria's Petroleum Industry
- Why Not Both Conventional and Unconventional Exploration in Sub-Saharan Africa?

### Theme 9: Geophysics: Non-Seismic Methods, Time Lapse Seismic and Rock Physics: Techniques, Integration Approach and Case Studies (AAPG)

### Co-Chairs: D. Johnston and C. Dumitrescu

- · Adding Value to Seismic With Non-Seismic Techniques
- Atlantic Margin, Stratigraphic Play: An Integrated CSEM-Seismic Approach to De-Risk Fluids?
- Tectonics and Hydrocarbon Prospectivity Through the Integration of Airborne Gravity Gradiometer, Magnetic and 2-D Seismic Data in the Canning Basin, Western Australia
- Tobago: Implications of 4-D Seismic in an Ultra-Deep Water Setting
- Changes in Acoustic Properties and Velocity Anisotropy in a Very Organic-Rich Marine Shale With Increasing Temperature
- · Gassmann With Texture Dependent Effective Grain Moduli
- Mineralogy, Porosity and Water Saturation From Simultaneous Impedance Inversion in a Turbiditic Oil Reservoir
- Amplitude of Pair Correlation Function to Understand Heterogeneity From Well-Log and Seismic Data
- Seismic Characterization of the Upper Unayzah Fairway in Eastern Saudi Arabia

### Theme 3: Geochemistry/Petroleum Systems: Hydrocarbon Charge Assessment of Unconventional Plays (AAPG) Co-Chairs: N. Rodriguez and O. Huvaz

- Petroleum Systems Modeling Applied to Unconventional Resource Plays
- Geochemical Characterization of Potential Source Rocks in the Anadarko Basin, Oklahoma
- Advanced Pyrolysis Data and Interpretation Methods to Identify Unconventional Reservoir Sweet Spots in Fluid Phase Saturation and Fluid Properties (API Gravity) From Drill Cuttings and Cores
- Gas Geochemistry of the Spraberry and Wolfcamp Formations in the Midland Basin
- Is the Tuscaloosa Marine Shale Self-Sourced? Preliminary Oil-Oil and Oil-Source Rock Correlation Studies in the Upper Cretaceous Tuscaloosa Group, Southern Mississippi
- Fluid Geochemistry Data Providing Key Calibration for Eaglebine Play Maturity and Sweetspot Mapping
- Assessing Oil-In-Place and Oil Mobility in Liquid Rich Unconventional Resource Plays Using Multi-Step Thermal Extraction
- Derivation of Hydrocarbon Head Potential, a New Workflow for Petroleum System Analysis: Application to the Eagle Ford Formation, Southeast Texas
- Oil-Cracking Kinetic Parameters Play a Crucial Role in the Assessment of Shale Gas Plays

# **Technical Program Wednesday**

### Theme 4: Structure/Geomechanics: Rifting and Extension (AAPG) Co-Chairs: S. Naruk and F. Dula

- Constraining Basin Models Using Fit-for-Purpose Crustal Architecture Workflows
- The Effect of Large-Scale Tectonic Activity on Rifted Marginal Basin Petroleum Systems
- Equatorial Atlantic Deepwater OCT Structure and Crustal Type From Satellite Gravity Inversion
- Asymmetrical Conjugate Margins of the South Atlantic: Effects of Variable Basement Architecture and Magmatic Additions on the Continental Rifting Process and Petroleum Systems
- Investigation of Rift Evolution Through Examining Scaling Properties of Fault Populations Within the Central Kenya Rift
- The Influence of Pre-Existing Thrust Faults on Normal-Fault Development in Two-Phase Experimental Models
- Recent High Resolution Seismic, Magnetic and Gravity Data Throws New Light on the Early Development of the Gulf of Mexico
- Exhumation on the Passive Margin of Eastern North America Results From Sonic Transit-Time and Vitrinite-Reflectance Analyses in the Newark Rift Basin
- Anomalous Arching During Rifting, Breakup and Drifting: Evidence on the Passive Margin of Eastern North America for Distal Magmatic Underplating

### Wednesday Morning Poster Presentations

### AAPG Student Posters III

### Co-Chairs: A. Sullivan and A. Janevski

- · Petrophysical Analysis of the 3rd Bone Spring Formation
- Stratigraphic Architecture and Evolution of Submarine Canyons and Other Sediment Conduits in the Southeast Loppa High, Barents Sea
- Fracture Characterization on Virtual Outcrop Model of Mississippian Boone Formation
- Combining Sequence Stratigraphy with Artificial Neural Networks to Enhance Regional Correlation and Determination of Reservoir Quality in the "Mississippian Limestone" of the Mid-Continent, USA
- Hydrocarbon Generation Potential of Late Eocene Enping Formation Mudstones in the Huilu Area, Northern Pearl River Mouth Basin, South China Sea
- Seismic Geomorphology and Characterization of Deep Water Architectural Elements and Its Applications in 3-D Modeling: A Case of Study, North Carnarvon Basin Australia
- Evaluation of Reservoir Potential of Glaciomarine Sandstones in the Victoria Land Basin, Antarctica: Insights from Diagenesis in Cape Roberts Project Drillcores
- Assessment of Lithium-Rich Brine from the Smackover Formation by Analyzing Core, Geochemical, Petrophysical and Productivity Data: Insights from Deep Evaporite-Carbonate Transitions
- Characterization of the Pore System and its Storage Capacity in Devonian Black Shale of Appalachian Basin

- Petrophysical and Paleo-environmental Assessment of a Mississippian Rock Interval from Central Kansas, (Mid Continent-U.S.) Using Thin Sections
- Integrated Basinal-Scale Study on Potential Shale Plays in Abakaliki Fold Belt and Calabar Flank, Nigeria
- Morphology, Classification and Controlling Factors of the Late Quaternary Submarine Canyon System on the Northern Margin of the South China Sea

### Theme 12: SEPM Research Symposium: How Seismic and Sequence Stratigraphy Have Advanced: 40 Years after AAPG Memoir 26 and 30 Years after SEPM Special Publication 42 Co-Chairs: K. Ehman and R. Sarg

- 3-D Volumetric Interpretation Advancing the Way We Interpret Seismic Stratigraphy and Geomorphology
- Seismic Stratigraphy of the Toe-Thrust Region of the Niger Delta Slope: Linking Structural Evolution to Basin Fill History
- WheelerLab: An Interactive Program for Sequence Stratigraphic Analysis of Seismic Sections and the Generation of Dynamic Chronostratigraphic Sections
- FischerLab: An Interactive Program for Generating Dynamic Fischer Plots From Wireline Logs and Stratigraphic Data
- Stratigraphic Architectures of Deltas Formed During Forced and Normal Regressions, Ferron Sandstone (Turonian), Southeast Utah
- 3-D Sequence Stratigraphic Modeling of Shallow Marine Systems in Syn- to Post-rift Settings
- Finding the Sequence Missing Link: Recognition of the RST in Clastics and Carbonates in Outcrop, Borehole and Seismic Stratigraphy
- Three-Dimensional Variation in High-Relief Shelf Margin Clinoform Architecture With Implications for Sediment Delivery to the Deep-Sea, Cretaceous Alaskan North Slope
- From Lithostratigraphy to Sequence Stratigraphy: Still Chasing the Elusive Time Surface
- The Protagonists of Sequence Stratigraphy Caught on Video
- Space, Things, Time and Events: Horacio Harrington, Derek Ager and the Dichotomous Future of Sequence Stratigraphy
- Bio-Stratigraphy Disproves Eustacy as a Primary Factor in the Accumulation of Middle Paleozoic Rocks Around the Transcontinental Arch of North America
- A Successful Test of the "Standard" Depositional Sequence Model at a Lacustrine-Fluvial Setting and Application to Paleogeographic Reconstruction of Upper-Triassic Zhangjiatan Shale, Ordos Foreland Basin, China
- Reading the Sedimentary Record: A Multiple-Hypotheses Working Methodology



# **Technical Program Wednesday**

### Theme 9: Geophysics: Integration of Geophysics and Geology for Reservoir Characterization: Case Studies (AAPG) Chair: A. Morcote

- An Integrated Approach to Evaluate Carbonate Pore Structures of Early Triassic Reservoir, Puguang Gas Field
- Application of Unconformity Identification and Evaluation in the Optimizing of Offshore Oilfield Development Plan: A Case Study of CFD Oilfield in Bohai Bay Basin
- An Integration of Genetic Inversion and Seismic Frequency Attributes to Delineate Reservoir Targets in Offshore Northern Orange Basin, South Africa
- Seismic Texture Analysis Applied to Unconventional Reservoir Characterization and Calibration: A Case Study in Central Pennsylvania, North Central Appalachian Basin
- Studying Seismic Signatures of Fluid Substitution in Reservoir Characterization
- Study on Intercalation of Shallow Water Delta by Integration of Logging and Seismic Data
- A New Method of Making the Thickness Map of the Shallow Sand Body Constrained by Seismic Attribute
- A New Approach to Effectively Identifying Deep Fan-Delta Sandbodies
- Efficiency Gains in Inversion-Based Interpretation Through Computer-Driven Classification
- Fluvial Reservoir Architecture Characterization of Mature Oilfields With Seismic Sedimentology Method
- Integrated Reservoir Characterization of Thin Bed Reservoir in Desert Area
- Lower Triassic Tight Sand Reservoirs Prediction Technology Combined of Post- and Pre-stack Seismic Inversion in MX Area, Junggar Basin
- An Effective Thin Reservoir Prediction Method Which Combines Spectral Inversion and Wide-Band Ricker Wavelet Filtering
- Reservoir Pore Structure Classification of Carbonate Rocks Based on Lithology Analysis and NMR Experiments
- Applying PCA in Seismic Attribute Analysis for Interpretation of Evaporite Facies: Lower Triassic Jialingjiang Formation, Sichuan Basin, China

### Theme 4: Structure/Geomechanics: Geomechanics (AAPG) Co-Chairs: J. Gale and R. Goteti

- Induced Earthquakes on Basement Faults Caused by Injection Into Sedimentary Reservoirs
- Seismic Efficiency vs. Fracability; Effects of Mechanical Properties on Radiated Elastic Waves With Application to Hydraulic-Fracturing-Induced Microseismicity
- · Benchmarking and Calibration of 3-D Geomechanical Models
- Least Principal Stress Prediction Using a Viscoplastic Stress Relaxation Model Applied to Stacked Pay in the Permian Basin
- Structural Analysis of Strike-Slip Faulting in Ernst Tinaja Canyon, Big Bend National Park, Texas

- Is Siltstone Geomechanics on the Mixing Line Between Sandstone and Shale? Example From the Western Canada Sedimentary Basin Montney Formation
- Influence of Lithology and Diagenesis on Mechanical and Sealing Properties of the Thirteen Finger Limestone and Upper Morrow Shale, Farnsworth Unit, Texas
- Casing Deformation Caused by Hydraulic Fracture Stimulation
- Numerical Modeling of the Deformation and Displacement of Salt Bodies With Embedded Carbonate or Anhydrite Stringers
- High Stress Anisotropy Associated With the Highly Deformed Kohat Basin, Northwest Himalayas, Pakistan: Its Importance and Implication in the Hydrocarbon Exploration and Developmental Strategies
- The Behavior of Fractures and Weak Planes During Drilling, Fracturing and Production
- Induced Seismicity Implications for Addressing Regulatory Requirements for Design, Analysis and Monitoring of Underground Injections and Hydraulic Fracturing
- Coupled Geomechanics-Transient Fluid Flow Model to Predict Intact Zone Failure Mechanism and Sand Production: Case Study in Field X
- Integrating Mineralogy, Process Sedimentology and Geomechanics for Development of a Mechanical Stratigraphy Model of the Bakken Formation
- An Investigation of Static and Dynamic Data Using Multistage
   Triaxial Test

# Theme 3: Geochemistry/Petroleum Systems: Petroleum Systems of China (AAPG)

### Co-Chairs: Y. Wang and D. Tian

- Source Rock Characteristics and Hydrocarbon Potential of Middle Permian P2p Source Rocks in the Kelameili Area, Eastern Junggar Basin, Northwest China: Implications for Tight Oil Exploration
- Processes of Petroleum Accumulation in the Enping Depression, Pearl River Mouth Basin, South China Sea: Insights From Basin Modeling and Fluid Inclusion Analysis
- Sequence Architecture and Its Controlling Factors of Middle Jurassic Fluvial Successions in Western Sichuan Foreland Basin
- The Relationship Between Tempo-Pressure Evolution and Accumulation Process of Deep Carbonate Reservoir in the Central Paleo-uplift, Sichuan Basin, Southwest China
- Gas of Biodegradation Origin and Their Pooling Characteristics in Shallow Reservoirs of Langgu Sag
- Charging of Heavy Oil Fields Surrounding the Southern End of Liaoxi Uplift From Multiple Lacustrine Source Rock Intervals and Generative Kitchens, Bohai Bay Basin, China
- Mechanisms of Petroleum Accumulation in the Liaodong Bay, Bohai Bay Basin, China: Origin and Occurrence of Crude Oils
- Hydrocarbon Sources and Charge History in the Ultra-Deep-Buried Cretaceous Sandstone Reservoir, Kuqa Depression, Tarim Basin

# **Technical Program Wednesday**

- Numerical Simulation of Fluid Flow in Fracture-Cave System Dominated Carbonate Reservoirs: Taking Akekule Nosing Structure (North Tarim Basin, China) for Example
- Secondary Migration of Petroleum Along Axis of Syncline: A Case Study on Southern Kuqa Foreland Basin
- · Paleo-Heat Flow Evolution of the Baiyun Sag, the Pearl River
- Charging of Oil Fields in Qionghai Uplift: Oil Generated From Multiple Kitchens and Source Rock Intervals
- Nearshore Along-Strike Variability: Characteristics, Controlling Factors and Importance for Stratigraphy and Sediment Delivery – A Case Study From the Luanping Basin, Northern China
- Integrating Geophysics With Geology to Predict Sand Body Distribution in Fault Basin
- Determination of Three Tectonic Styles in the Western Margin of Ordos Basin Using HD Seismic

### Theme 6: Unconventional: Plays of China I (EMD/AAPG) Chair: Z. He

- Geological Characterization of the Highly Matured Marine Shale Gas Plays in South China
- Scale-Dependent Nature of Porosity and Pore Size Distribution in Lacustrine Shales: An Investigation by BIB-SEM and X-ray CT Methods
- Overpressure Generation and Evolution in Wufeng-Longmaxi Shales of Jiaoshiba Shale Gas Field, Sichuan Basin, China
- Lithofacies and Deposition Environment of the Fine-grained Depositional Rocks in Saline Lake: A Case Study From the Permian Lucaogou Formation in Jimsar Sag, Junggar, China
- Pore Characterization and Shale Facies Analysis of the Ordovician-Silurian Succession of Northern Guizhou, South China: The Relationship Between Pore Distribution and Shale Facies
- Pore Characteristics of the Organic-Rich Marine Shales With High Thermal Maturity: A Case study of the Lower Silurian Longmaxi Gas Shale Reservoirs in Southern China
- A Combination of N2 and CO<sub>2</sub> Adsorption to Characterize Nanopore Structure of Organic-rich Lower Silurian Shale in the Upper Yangtze Platform, South China: Implications for Shale Gas Sorption Capacity
- 3-D Geological Modeling for Tight Sand Gas Reservoir in Braided River Facies
- Pore Evolution Behavior of Lacustrine Shales From the Upper Cretaceous Qingshankou Formation of the Songliao Basin, Northeast China
- The Discussion of Mechanism of Tight Sandstone's Formation by ShanXi Formation of the Eastern Part of the Ordos Basin
- Multiscale Characterization of Shale Oil Reservoirs Using XRF, SEM-EDS, Synchrotron-Based CT Imaging and DCM Modeling
- Source Rock Characteristics and Hydrocarbon Expulsion Potential of Lower Permian Fengcheng Formation in Fengcheng Area, Junggar Basin, Northwest China: Implications for Tight Oil Potential

### Theme 6: Unconventional: Plays of China II (EMD/AAPG) Chair: C. Mardi

- Lithofacies and Depositional Environment of the Eocene Kongdian Shale, Cangdong Depression, Bohai Bay Basin, China
- Pores Characteristics of Different Types of Shale in China
- Characterization of Pore-Throat Structure and Prediction of Sweet Spots of the Eocene Low Permeability-Tight Beach-Bar Sandstone Reservoirs in the Dongying Depression, Bohai Bay Basin, China
- Tight Sandstone Gas Reservoir Characterization of Kuqa Depression, Tarim Basin, China
- Characterization of Overall Pore Size Distribution Using N2AD, MICP, NMR: A Case From Chang 7 Tight Sandstone in Ordos Basin, China
- The Bright Prospect of Quantitative Grain Fluorescence Technique in Applications in Hydrocarbon Accumulation and a New Case Study of Tight Oil and Gas
- Characteristics of Two Types of Longmaxi Gas-Shale Reservoirs in the Southern Sichuan Basin
- Evolution of Tight Gas Sandstone Reservoir Properties and Driving Force in Eastern Kuga Depression, Tarim Basin
- Comparison of Fractal-Based Pore Structure Characteristics Between Marine and Continental Shales
- Tight Oil Reservoir Characterization of the Lower-Middle Permian Lucaogou Formation, Jimusar Sag, Junggar Basin, Northwest China
- Geological and Microstructural Characterization of the Wufeng-Longmaxi Shale in the Basin-Orogen Transitional Belt of Sichuan Basin, China

### Theme 6: Unconventional: New Technologies and New Concepts in Unconventionals III (EMD/AAPG) Chair: L. Evans

- Defining Lateral Lithostratigraphic and Chemostratigraphic Variability Within a Closely-Spaced Array of Drill Cores, Upper Cretaceous Strata, Austin, Texas
- Authigenic Mineral Formation Associated With Tasmanites Cysts, Radiolaria and Initial Depositional Porosity in the New Albany Shale, Illinois Basin
- Chronocorrelation of Eagle Ford-Equivalent Stratigraphy in West Texas Through Integration of Biostratigraphic, Chemostratigraphic and Astrochronologic Data With High Resolution U/Pb Zircon Geochronology of Ash Beds From the Ernst Member (Boquillas Formation: Big Bend National Park) and Eagle Ford Group (Lozier Canyon)
- Evaluation Method for Hydrocarbon Cleaning Effect in Kerogen-Rich Gas Shale
- Uniting Petrophysics and Stratigraphy to Decipher Classified Facies From a Pre-Stack 3-D Inversion: Wolfcamp and Spraberry, Howard County, Midland Basin
- High-Resolution Reservoir Characterization of the Mixed Carbonate-Siliciclastic Wolfcamp and 3rd Bone Spring Sand of the Delaware Basin, West Texas, Using Combined Chemostratigraphic and Mechanical Hardness Data



# **Technical Program Wednesday**

- Using LIDAR Images for Quantitative Analysis of Natural Fractures in Woodford Shale Outcrops Along I-35 in Southern Oklahoma
- New Method of Defining Net Thickness in the Bone Spring Sandstones to Identify Prospective Reservoirs Using Petrophysical Attributes and Stochastic Simulation Techniques in the Todd/Apache Areas, Delaware Basin, New Mexico
- Rock-Eval Basic/Bulk-Rock vs. Shale Play Methods for Characterization of Unconventional Shale Resource Systems: Application to the Eagle Ford Shale, Texas
- Laboratory Measurement of Mudrock on Porosity, Pore and Pore Throat Size and Permeability: Learnings From Comparison of Techniques
- Petrophysical Properties From Quantitative Multiscale Pore-Structure Characterization in an Unconventional Carbonate Reservoir: An Example From the Mid-Continent Mississippian Limestones

# Theme 6: Unconventional: New Technologies and New Concepts in Unconventionals IV (EMD/AAPG)

### Chair: T. Sun

- The Impact of Salt Precipitates on the XRF Measurement and the Mitigation Strategy Case Study of the Wolfcamp Formation, Delaware Basin
- Upscaling a Reservoir Pore System Across Multiple Scales in 3-D: An Example From the Haynesville-Bossier Shale, Southeast USA
- Stratigraphic, Sedimentological and Geochemical Variability in the Eagle Ford Group Across the Stuart City Paleo-Shelf Margin, South Texas
- Altered Mafic Tuff Mounds From the Upper Cretaceous of Central Texas: The First Economical Unconventional Reservoir?
- Advanced Analytical and Isotopic Technologies to Enhance Development Efficiency in Unconventional Resources
- Decoding Molecular Geochemistry of Kerogen From Marcellus
   Shale
- An Unconventional Exploration Tool for Unconventional Exploration
- The Effects of Lamination/Bedding on the Brittleness for the Woodford Shale Silica-Rich Intervals, From the Wyche-1 Core-Well Analysis, Pontotoc County, Oklahoma
- Integrated Kerogen Characterization in Terms of Source Rock Evaluation and SCAL - Case Study From North Kuwait
- Updated USGS Resource Assessment of the Spraberry Formation, Midland Basin, Texas
- Storm Bed Sequences and Depositional Environments: Sedimentary Model and Well Correlation for the Utica/Point Pleasant Formations of Eastern Ohio, Appalachian Basin, Ordovician

### Theme 1: Siliciclastics: Sea-Level, Climatic and Autogenic Controls on Coastal and Marine Stratigraphy: A Session Honoring the Career of John B. Anderson (SEPM)

### Co-Chairs: D. Wallace, J. Wellner and R. Minzoni

- High-Resolution Architecture of Proximal Basin-Floor Deepwater Clastics: Examples From Outcrop, Permian Upper Brushy Canyon Formation, West Texas
- Morphodynamic Modeling of Fluvial Channel Fill and Avulsion Timescales During Early Holocene Transgression, as Substantiated by the Incised Valley Stratigraphy of the Trinity River, Texas
- Understanding Estuarine Ravinement Processes at Monthly to Decadal Time Scales Through High-Resolution Geochronologies
- What Role Has the Presence of the Deweyville Terraces Played in the Formation of Galveston Island and West Galveston Bay?
- Shoreface Ravinement of Backbarrier Bay Deposits of Follets Island, a Transgressive Island Barrier Island Along the Northern Gulf of Mexico, Cannot Source Sand Needed for Island Growth
- Ground-Penetrating Radar Study of Gulf of Mexico Holocene Beach Ridges as Sea-Level Indicators
- Water Depths of the Mississippi River Delta Clinoform Break: Implications for Generating a Global Inventory of Post-LGM Relative Sea Level Rise Estimates
- Characterizing the Stratigraphy of Wave-Dominated Deltas at the Oxnard Plain, California and the Elwha Delta, Washington Using Insights From Ground-Penetrating Radar
- The Continental Shelf as a Conveyor or Filter: Sediment Character Analysis From Coeval Topset, Foreset and Bottomset Deposits
- Establishing Foraminifera Based Biofacies Within Shallow Marine Deposits, Carpinteria Slough, California: Implications for Southern California Sea-Level Studies
- Sequence Stratigraphic Analysis of the Turonian Tununk Shale Member, Henry Mountains Region, Utah: Implications for a Depositional Model of Shelfal Mudstones in Epicontinental Seas
- Defining Chronostratigraphic Framework and Clinothem Evolution Through Seismic Analyses of the Po River Lowstand Wedge (Adriatic Sea): Changes in Sediment Supply and Compartmentalized Basin-Floor Deposits
- Calibrating Deposition of a Tropical Mixed System: Cibao Basin, Dominican Republic
- Autogenic Response of Shoreline Migration to Sea Level Rise in the Incised Valley Depositional System
- Spatial-Temporal Variability in Stratigraphic Architectures of the Pearl River Mouth Continental Shelf, Northern South China Sea: An Interactive Response to Regional and Local Controls

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# **Technical Program Wednesday**

### Theme 2: Microbial Carbonates - Modern and Ancient Analogs for Pre-Salt Deposits of the South Atlantic Margins (SEPM)

### Co-Chairs: A. Droxler and P. Harris

- Abiogenic Carbonate Radial Fans and Spherulites Important Components of Microbialite Pre-Salt Reservoirs: Insights From the Lower Cretaceous Aptian Yucca Formation, Eastern Margin of the Chihuahua Trough, West Texas
- Pre-Salt Spherulites: Bacterially Induced Initiation of Precipitation
- Great Salt Lake, Utah: A Natural Laboratory for Assessing Potential Geobody Dimensions, Reservoir Architectures and Controls in Lacustrine Carbonate Systems
- Evidence of High Temperature Hydrothermal Regimes in the Pre-Salt Series, Kwanza Basin, Offshore Angola
- Upper Cambrian Microbial Reefs and Inboard/Outboard Facies Associations, Central Texas
- New Insight Into the Shark Bay Microbial System, Part 2: Carbonate Factory
- Integrated Workflow for Characterization and Modeling of an Outcrop Analog of Pre-Salt Series: Insights From the Yacoraite Formation, Salta Rift System (Northwest Argentina)
- Environmental and Sequence Stratigraphic Control on Microbialite Morphology and Microfacies in a Marine Mixed Carbonate Siliciclastic System, Upper Cambrian Point Peak Formation, Llano River and Mill Creek, Mason County, Central Texas
- Internal Structures and Fabrics of Upper Cambrian Microbial Buildups (Mason County, Central Texas)
- Ultimate Demise of Upper Cambrian Microbial Reefs Through
   Increasing Water Column Turbidity (Mason County, Central Texas)
- Computed Tomographic Core Scanning to Generate a Carbonate Diagenesis Log in Upper Cambrian Microbial Buildups (Mason County, Texas)
- Domal Thrombolitic Microbial Biostromes in the Upper Albian Devils River Limestone Along the Northern High-Energy Margin of the Maverick Basin
- Paleoecological Variations Recorded in a Shallow Lacustrine Formation: The Upper Eocene of the Issirac Basin (SE France)
- Stable Isotope and Elemental Geochemistry Reveal Environmental Controls and Diagenetic Modification of Microbialite Facies Within a Sequence Stratigraphic Framework, Upper Cambrian Point Peak Formation, Llano River and Mill Creek, Mason County, Central Texas
- Microfacies Analysis of the Microbial Thrombolite Buildup in the Oxfordian Smackover Formation, Little Cedar Creek Field, Alabama

# Theme 2: Carbonates: Giant Carbonate Reservoirs and Their Basins (AAPG/SEPM)

### Co-Chairs: A. Al-Tawil and C. Lehmann

- The Importance of Understanding Diagenesis for the Development of Pre-Salt Lacustrine Carbonates
- Integrated Core Studies of the Mishrif Formation, Rumaila Field, Southern Iraq
- Sequence Stratigraphy and Chemostratigraphy of the Upper Khuff Carbonates, Ghawar Field, Saudi Arabia

- Insights Into the Arab-D Carbonate Reservoir Permeability, Offshore Abu Dhabi
- Paleokarst System Controlled by Unconformities, Paleogeomorphology and Faults: A Case Study From the Tazhong Area, Tarim Basin, China
- Cambrian Hydrocarbon Migration System and Reservoir-Controlling Pattern of Anyue Gas Field, Sichuan Basin
- The Main Controlling Factors and Characteristics of Cambrian Pre-Salt Dolomite Reservoirs in Tazhong Area, Tarim Basin, Northwest China
- Discovery of Giant, Ultra-Deep Paleo-Reservoirs in the Tarim Basin and Geochemical Origin of Crude Oil
- Effect of Sea-Level Changes on Carbonate Reservoir Quality: A Case Study From the Gaoshiti-Moxi Gas Field in the Sichuan Province, China
- Palaeogeomorphology and Its Controlling Effect on Karst Reservoirs in Tahe Oilfield, Tarim Basin
- A New Method of Forecasting Seismic Facies Based on the Number of the Rock Structure Calculation
- Facies Characterization and Sequence Stratigraphy of Early Cretaceous Yamama and Sulaiy Formations, Northeastern Saudi Arabia

### Wednesday Afternoon Oral Presentations

# Theme 5: Deepwater: Insights From Circum-GOM Studies and Associated Petroleum Systems (AAPG)

### Co-Chairs: J. Snedden, P. Montoya and J. Ochoa

- Early Paleozoic to Recent Plate Animation of Gulf of Mexico Evolution as a Framework for Understanding Its Diverse Hydrocarbon Resources
- Basement Structure and Jurassic Evolution of the Southern Gulf of Mexico Salt Province
- Implications of Early Gulf of Mexico Tectonic History for Distribution of Upper Jurassic to Mid Cretaceous Source Rocks in Deep Water Exploration Areas of U.S. and Mexico
- New Hydrocarbon Plays in the Gulf of Mexico Potential of Jurassic Clastic Plays on Both the Yucatan and Florida Margins
- Late Cretaceous-Tertiary Shortening and Uplift History in Southern Mexico and Implications for Sedimentation in Southern Gulf of Mexico: Part 2, Restored Sections
- Spatial, Temporal and Detachment-Level Variations in Thin-Skinned Deformation, Gulf Basin, U.S. and Mexico
- Tectonic Evolution of a Mixed Salt-Shale-Detached Deepwater Fold and Thrust Belt in the Eastern Salina del Bravo Province, Western Gulf of Mexico
- Late Oligocene Reorganization of the Drainage Divide In Western Gulf of Mexico
- Tectonic Controls on the Lower Eocene Upper Wilcox Deepwater Fan System Offshore Northern Mexico: Implications for Reservoir Presence and Quality Prediction



# **Technical Program Wednesday**

• Structural Domain Mapping in the Mexican Perdido Fold Belt Trend, Deep Water Gulf of Mexico: Description and Characterization

# Theme 1: Siliciclastics: Source to Sink I: Emphasis on the Gulf of Mexico (SEPM)

### Co-Chairs: T. Sømme, A. Harris and Jesse Melick

- Global Geomorphological Relationships of Source to Sink Segments and Implications for Predicting Subsurface Reservoir Characteristics
- Sediment Dispersal Pattern of the Paleogene Wilcox Formation in the Deepwater Gulf of Mexico Basin Based on Detrital Zircon Analysis and Forward Modeling
- Quantifying Sediment Supply to Continental Margins: Application to Paleogene Wilcox Group Deposition, Gulf of Mexico
- Sediment Source of Lower Miocene Strata in the Gulf of Mexico Basin: Insight From Detrital Zircon U–Pb Geochronology and (U– Th)/He Thermochronology
- Small Rivers and Big Fans: New Geochonologic Constraints From the Miocene-Pliocene Deepwater Mexican Continental Margin
- Early Cenozoic Drainage Reorganization of the U.S. Western Interior-Gulf of Mexico Sediment Routing System
- Complex Response of Fluvial Systems to Extreme Global Warming at the Paleocene-Eocene Boundary
- Fluvial Systems: Scaling Relationships, Predictive Facies Models and Subsurface Application
- Integrating a Turbidity Current Process Model in Source to Sink Analyses: The EuroSEDS Sediment Budget Estimator App
- Sediment Dispersal Patterns in the Denver Basin Foreland: Insights From Detrital Zircon U-Pb Geochronology

### Theme 7: Energy & Environment: Induced Seismicity, Hydro Fracturing and Other Oil Recovery Best Practices (DEG) Co-Chairs: J. Boak and J. Aldrich

- Spatial Risk Analysis of Hydraulic Fracturing Near Abandoned and Converted Oil and Gas Wells
- · Geologic Characterization of Johnson County, Texas
- Induced Seismicity in the Denver Basin Prompts Updated Basement Stress and Fault Configuration Model
- Patterns of Induced Seismicity in Central and Northwest
   Oklahoma
- Operational Practices and Their Influence on Injection-Induced Earthquakes: Lessons Learned From a Statewide Survey of Brine Disposal in Kansas

### Theme 7: Energy & Environment: Climate, Environment and Challenges to the Industry (DEG)

### Co-Chairs: J. Rine and T. Murin

- A Comparison of Options for the U.S. Petroleum Industry in Dealing With Climate Change – Regulations, Carbon Fees or "Business as Usual"
- · Climate Risk and the Fossil Fuel Industry
- Examination of Factors Contributing to the Growth and Loss of Wetlands in Louisiana
- Offshore CO<sub>2</sub> Storage Resource Assessment of the Northwest Gulf of Mexico Inner Continental Shelf, Upper Texas – Western Louisiana Coast
- Recommended Practices for Baseline Sampling of Water Sources in Areas of Shale Oil and Gas Development

# Theme 2: Carbonates: Depositional Models for Carbonate and Evaporite Systems II (SEPM)

### Co-Chairs: T. Correa and N. Purcell

- Organic Carbon Isotopes From Halites: A New Approach to Studying Evaporite Sequences
- Carbonate-Dominated Hybrid Sediment Gravity Flows Within the Upper Wolfcamp, Delaware Basin, U.S.: Vectors for Transmitting Terrestrial Organics Into a Deep Marine Basin
- Bone Spring Formation High Resolution Sequence Stratigraphy, Northern Delaware Basin, Eddy and Lea Counties, New Mexico
- Yeso Formation Along the Northwest Shelf, Southeast New Mexico, U.S.: Conventional or Unconventional Reservoir Development?
- Diagenetic History of Lower Leonardian Strata in the Eastern Midland Basin: Implications for Fluid Flow and Predicting Reservoir Quality

### Theme 2: Carbonates: Carbonate Diagenesis and Paleohydrologic Modeling (SEPM)

### Co-Chairs: C. John, M. Frazer and J. Bishop

- Confocal and Transmitted Light Petrography of Cementation and Grain Types in a High-Energy Upper Shoreface to Foreshore Carbonate Strandline, Pleistocene (MIS 5e) West Caicos Island, Turks and Caicos, BWI
- Modeling Stratigraphic Controls on Dolomitisation at the Interwell Scale: The Assoul Formation Case Study (Central High Atlas, Morocco)
- Reconstructing Surface and Subsurface Paleohydrology Using Evidence From Caves, Paleosprings and Travertine in the Arbuckle Mountains, Southern Oklahoma
- Reservoir Implications of Clumped Isotope Investigation and Micro-CT Imaging of Early Dolomite
- Understanding the Scale of Calcite Mass Transfer in a Nanoporous Reservoir, Cretaceous Niobrara Formation, Denver Basin, Colorado

# **Technical Program Wednesday**

### Theme 11: Future of Energy: Essential Tools for the Next Generation of Geoscientists (DPA/AAPG)

### Co-Chairs: T. Rynott and S. Nwoko

- The Future of Energy and Geoscience Careers
- Looking Beyond the Bust: Energy Trends Into the Next 50 Years Geoscientists Will Continue to Meet the World's Energy Needs
- Global Implications of the U.S. Shale Scene: Millennials, It's in Your Hands Now
- · Professionalism and Ethics in Geology: Use It or Lose It!
- Ten Steps to Successful Exploration and Development
- · Opportunities for Geoscientists Beyond the Conventional
- Career Path Choices: Technical, Managerial or Something Else?
- A Simplified Competency Framework for Career Development of Earth Science Subject Matter Experts
- Breakthrough Business Opportunities in the Oil Industry for YPs and "Small Team" Geoscientists
- Pitfalls and Unicorns: Secrets to a Successful Career While Chasing Hydrocarbons

### Theme 1: Siliciclastics: Sea-Level, Climatic and Autogenic Controls on Coastal and Marine Stratigraphy: A Session Honoring the Career of John B. Anderson (SEPM)

Co-Chairs: A. Simms, P. Bart and A. Rodriguez

- The R/V Lone Star in Belize: A Strong Showcase of Siliciclastic-Carbonate Co-Habitation
- Partitioning of Longshore Versus River-derived Mud on the Inner Shelf of the Modern Asymmetric Wave-Influenced Brazos Delta, Texas Gulf Coast
- How to Make a 350-m Thick Lowstand Systems Tract in 17,000 Years: The Late Pleistocene Po River Lowstand Wedge
- From Paleohurricanes Through Source to Sink Research: Highlighting Recent Coastal Geology Contributions From John B. Anderson
- Coupled Barrier Island-Bay Collapse During the 8.2 ka Sea-Level Event and Future Implications
- Ecological Evidence of Holocene Flooding and Eutrophication in Texas Bays
- Stratigraphic Record of Washover Deposition Shows Rapid Response of Barrier Islands to Sea-Level Rise
- Bayhead Deltas and Shorelines: Insights From Modern and Ancient Examples
- Sediment Flux Variations Correlated With Climate Zones of the Gulf of Mexico for the Past 10kyr Testing the BQART Equation
- Mechanisms for Formation of "Isolated Shelf Sand Reservoirs": Synthesis of Insights Gained From 3-D Seismic, Outcrops & Core

### Theme 4: Structure/Geomechanics: Fault Seal and Fault Zone Modeling (AAPG)

### Co-Chairs: J. Liao and R. Locklair

- Toward the Creation of Models to Predict Static and Dynamic Fault Seal Potential in Carbonates
- Using Quantitative Fault Seal Analysis to Reduce Risk in Assessing Prospect Fill Scenarios: A Case Study From the Sole Pit Basin (Southern North Sea)
- 4-D Fault Seal Analysis by Fault Displacement Backstripping
- Fault History Diagrams: Rapid Analysis of Temporal Variations in Fault Throw and Lithological Juxtaposition
- Comparing Shale Gouge Ratio and Juxtaposition Analysis Using Stochastic Trap Analysis: Examples From Gippsland, Taranaki, Malay and Southern North Sea Basins
- Characterization of Faults on the Flanks of the Llano Uplift for Application to Understanding Seismogenic Faults in the Subsurface of the Fort Worth Basin
- A Quantitative Model of the Internal Structure of Fault Zones
- The Development and Applications of Elliptical Fault Flow: A New Kinematic Algorithm to Model and Restore Isolated Normal Faults
- Investigations Into the Mechanics and Kinematics of Extensional Fault Systems
- Practical and Efficient Three Dimensional Structural Restoration Using "Geological Knowledge-Oriented" Earth Models

# Theme 6: Unconventional: New Techniques for Understanding Unconventionals (EMD/AAPG)

### Co-Chairs: L. Bryndzia and C. Laughrey

- Brittleness in Siliceous Mudrocks: Part 1 Origins
- A Diagenetic and Paleomagnetic Study of the Woodford Shale, Oklahoma
- Advancement in Source Rock Porosity and Fluid Characterization
   Using Core NMR
- Correlative Study With Raman Microscopy and Optical Petrography for Investigation of Organic Matter Within Mudstones
- Comparing and Contrasting Analytically Quantified Porosity and Pore Size Distributions in the Wolfcamp Formation From SEM Imaging, Nuclear Magnetic Resonance (NMR) and Crushed Rock Core Analysis
- Understanding Controls on EUR in the Haynesville Shale Gas Play: It's All About the In-Situ Density and Pressure of Methane Gas
- Molecular and Isotopic Compositions and Origins of Sweet and Sour Gases From the Montney and Doig Phosphate Formations, Northeast British Columbia, Canada
- Calcite Vein Formation in the Utica-Point Pleasant Formations of the Appalachian Basin: Estimating Methane Density and Pressure Using Micro Laser Raman Spectroscopy and Timing of Vein Formation Using Fluid Inclusion (FI) Microthermometry
- Down-Hole Raman Reservoir Spectrometer (DRRS): A Novel New Raman Spectroscopy Logging Technology for the Rapid Appraisal of Shale Gas Resource Potential
- Quantitative Evaluation of Diagenesis and Porosity Evolution of Tight Sandstone Reservoirs: A Case Study of Yanchang Formation in the Ordos Basin, China



# **Technical Program Wednesday**

### Theme 10: International Regions: Middle East and Canada (AAPG) Co-Chairs: B. Kuchinski and M. Blair

- Tectono-Stratigraphic Evolution of the Southern Red Sea, Jizan Basin, Saudi Arabia
- Revisiting the Petroleum Potentials of Lebanon: What Did We Learn From Recent Studies and the New Major Discoveries in the Levant Region?
- Oman Challenging Geology: Success Never Ends
- Unconventional Petroleum Potential of Devonian-Carboniferous Shale in Yukon: Maximizing the Use of Limited Outcrop and Subsurface Data in a Frontier Jurisdiction
- Application of Forward Stratigraphic Modeling in Deepwater Shale Basins; Insights from the Devonian Horn River Basin, British Columbia, Canada
- Flow-Back Frac Water Composition Rock-Fluid Interaction in the Montney Shale Controlled by Faults and Maturity Domain
- Mechanisms for the Redistribution of Mud Across a Low-Gradient Basin: Colorado Group Shale, West-Central Alberta, Canada
- An Alternate Model for the Deposition of the Upper Ordovician Red River Formation (Bighorn Group; Canadocian/Ashgillian) in the Williston Basin of Southeast Saskatchewan, Canada



# **Earth Science Educator Program**

Interested in bringing advanced technology, new geologic discoveries and career pathways for your students into the classroom? The American Association of Petroleum Geologists (AAPG) invites middle-school, high-school and community college educators to help celebrate its 100th Anniversary by offering the Earth Science Educator Program. Participants will receive Gifted and Talented and Professional Development credit hours. Complimentary event registrations and daily stipend are available for a limited number of participants.

### Geologic Field Trips (Saturday, 1 April)

Spend a day in the field with a geoscience professional to investigate local geology. Channel your inner geoscientist: make observations, apply field methods, analyze data and interpret findings.

### Symposium (Sunday, 2 April)

Join colleagues for a day of interactive sessions exploring emerging fields, advances in technology and careers. Discussions will highlight data, resources and ways to bring content into the classroom

Interested educators are encouraged to contact stephanie.shipp.1@gmail.com or amanda.guzofski@chevron.com for registration promotional codes or other question.

# Short Courses at a Glance For detailed information visit ACE.AAPG.org

Pre-	Pre-Convention						
	Title	Instructor	Dates/Times	Fees			
1	Writing for the AAPG Bulletin: Having Fun While Avoiding Pitfalls (AAPG)	Gretchen Gillis (Aramco Services Company, Houston, Texas); John Lorenz (FractureStudies LLC, Albuquerque, New Mexico); Michael Sweet (ExxonMobil Research Co., Spring, Texas)	Saturday, 1 April 8:00 a.m.–5:00 p.m.	Professionals \$125 Students \$35			
2	Geochemical Evaluation of Unconventional Shale Reservoir Systems (EMD)	Daniel Jarvie and Andrew Pepper (Energy Institute at TCU, Humble, Texas)	Saturday, 1 April 8:00 a.m.–5:00 p.m.	Professionals \$300 Students \$150			
3	Sequence-Stratigraphic Analysis of Shales and Mudstones: Key to Paleoclimate Archives, Subsurface Fluid Flow and Hydrocarbon Source, Reservoir and Seal (SEPM)	Kevin Bohacs, Ovidiu Remus Lazar and Joe MacQuaker (ExxonMobil Upstream Research Company, Houston, Texas); Juergen Schieber (Indiana University, Bloomington, Indiana)	Saturday, 1 April 8:00 a.m.–5:00 p.m.	Professionals \$600 Students \$100			
4	Global Deepwater Siliciclastic Reservoirs (HGS)	Jon Rotzien (Basin Dynamics LLC, Houston, Texas)	Saturday, 1 April–Sunday, 2 April 8:00 a.m.–5:00 p.m.	Professionals \$385 Students \$190			
5	Monte Carlo Methods – The Need- to-Know Practical Primer (DEG)	Susan K. Peterson (Marietta College, Marietta, Ohio)	Saturday, 1 April–Sunday, 2 April 8:00 a.m.–5:00 p.m.	Professionals \$480 Students \$240			
6	Basin and Petroleum System Modeling in Conventional and Unconventional Petroleum Exploration (AAPG)	Ken Peters (Schlumberger and Standford University; Mill Valley, California) and Noelle Schoellkopf (Schlumberger Software Integrated Solutions, Danville, California)	Saturday, 1 April–Sunday, 2 April 8:00 a.m.–5:00 p.m.	Professionals \$795 Students \$195			
7	Advanced Geochemical Technologies: Methods That Reveal the Rest of Your Petroleum System (AAPG)	Mike Moldowan (Biomarker Technologies, Inc., Rohnert Park, California); Professor (Emeritus), (Department Geological Sciences, Stanford University)	Saturday, 1 April–Sunday, 2 April 8:00 a.m.–5:00 p.m.	Professionals \$650 Students \$150			
8	From Rocks to Models: Geological Reservoir Characterization and Modeling (HGS)	Matthew Pranter and Zulfiquar Reza (University of Oklahoma, Norman, Oklahoma)	Saturday, 1 April–Sunday, 2 April 8:00 a.m.–5:00 p.m.	Professionals \$795 Students \$390			
9	Quality Control Techniques for Reviewing Prospects and Acquisitions (DPA)	Robert Shoup (Subsurface Consultants & Associates, Houston, Texas)	Saturday, 1 April 8:00 a.m.–5:00 p.m. Sunday, 2 April 8:00 a.m.–4:00 p.m.	Professionals \$700 Students \$350			
10	Sequence Stratigraphy-graduate students (SEPM)	Morgan Sullivan (Chevron, Houston, Texas); Art Donovan (Texas A&M, Houston, Texas)	Saturday, 1 April–Sunday, 2 April 8:00 a.m.–5:00 p.m.	Students \$50			
11	Advanced Sequence Stratigraphy for E&P Professionals (SEPM)	Vitor Abreu (Consultant, Houston, Texas); Jack Neal (ExxonMobil, Houston, Texas)	Saturday, 1 April 8:00 a.m.–5:00 p.m. Sunday, 2 April 8:00 a.m.–4:00 p.m.	Professionals \$700 Students \$150			
12	Basin Analysis Methods (SEPM)	Oscar Lopez-Gamundi (P1C Consultants, Houston, Texas)	Saturday, 1 April 8:00 a.m.–5:00 p.m. Sunday, 2 April 8:00 a.m.–4:00 p.m.	Professionals \$775 Students \$150			

### **Register Early & Save Up to \$210**

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13	13 Petroleum Geochemistry for Basin Irene Arango and Norelis Sunday, 2 April Students \$50						
13			8:00 a.m5:00 p.m.				
14			Sunday, 2 April 8:00 a.m.–4:30 p.m.	Professionals \$465 Students \$125			
15	5 Black Belt Ethics (DPA) Consultants & Associates, Houston, Texas)		Sunday, 2 April 11:30 a.m.–12:30 p.m.	DPA Members \$45 Nonmembers \$70			
16Seismic Geomorphology and Seismic Stratigraphy: Extracting Geologic Insights from 3-D SeismicHenry Posamentie Houston, Texas)Data (SEPM)		Henry Posamentier (Consultant, Houston, Texas)	Sunday, 2 April 8:00 a.m.–4:30 p.m.	Professionals \$600 Students \$100			
Post	-Convention						
17	Principles of Mudrock Chemostratigraphy (BEG)	Harry Rowe (Bureau of Economic Geology, Austin, Texas); Bruce Kaiser (Bruker, Salt Lake City, Utah)	Thursday, 6 April 8:00 a.m.–4:30 p.m.	Professionals \$200			
18 Extracting Geology from Seismic Wiggles: Basic Seismic Interpretation for Non- Geophysicists (HGS)		Fred Schroeder (Consultant, Houston, Texas)	Thursday, 6 April 8:00 a.m.–5:00 p.m. Friday, 7 April 8:00 a.m.–4:00 p.m.	Professionals \$600 Students \$100			
19	Naturally Fractured Reservoirs (HGS)	John Lorenz and Scott Cooper (FractureStudies LLC, Edgewood, New Mexico)	Thursday, 6 April–Friday, 7 April 8:00 a.m.–5:00 p.m.	Professionals \$795 Students \$390			
20	3-D Seismic Interpretation for Geologists (SEPM)	Bruce Hart (Statoil, Houston, Texas)	Thursday, 6 April–Friday, 7 April 8:00 a.m.–5:00 p.m.	Professionals \$700 Students \$150			
21	Rock & Seismic Sequence Expression of Carbonate Systems – Exploration & Reservoir Characterization (SEPM)	Rick Sarg (Colorado School of Mines, Golden, Colorado)	Thursday, 6 April–Friday, 7 April 8:00 a.m.–5:00 p.m.	Professionals \$700 Students \$150			

### Important notes regarding short courses and field trips:

- Short courses and field trips are limited in size and are reserved on a first-come, first-served basis and must be accompanied by full payment.
- If you do not plan on attending the convention, a \$30 enrollment fee will be added to the short course or field trip fee. This fee may be applied toward registration if you decide to attend the convention at a later date.
- A wait list is automatically created when a short course or field trip sells out. The AAPG Convention Department will notify you if space becomes available.
- Before purchasing non-refundable airline tickets, confirm that the course or field trip will take place, as they may be canceled if undersubscribed.
- Please register well before **16 February 2017.** Short course and/or field trip cancellation due to low enrollment will be considered at this time. No refunds will be allowed on short courses and/or field trips after this date.
- We will continue to take registrations for short courses and/or field trips not canceled, either until they are sold out or closed.

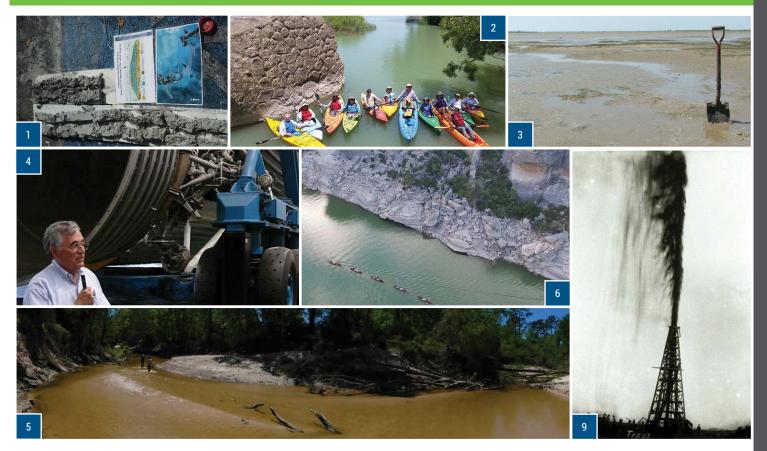
### Students:

There are a limited number of discounted registrations available for students on a first-come, first-served basis. If a discounted space is still available, it will show up during the online registration process. If discounted spots are no longer available, you may register at the full fee; if we are able to add additional discounted spots we will refund the difference at that time.

# Field Trips at a Glance For detailed information visit ACE.AAPG.org

Pre-	Pre-Convention						
	Title	Leader(s)	Dates/Times	Fees			
1	Unconventional Carbonate Mud Depositional Environments and Facies Distribution: A Modern Perspective (AAPG)	Harold Wanless (University of Miami, Miami, Florida) and Paul Crevello (Discovery Petroleum Ltd., Boulder, Colorado)	Sunday, 26 March, 6:00 p.m.– Saturday, 1 April, 10:00 a.m.	Professionals \$3,800 Students \$2,300 (Limit 3)			
2	Upper Cambrian Microbial Carbonate Mounds in Central Texas (Mason County) (SEPM)	Andre Droxler (Rice University, Houston, Texas); Dan Lehrmann (Trinity University, San Antonio, Texas), Bill Morgan (Morgan Consulting, Houston, Texas)	Thursday, 30 March, 3:00 p.m.– Sunday, 2 April, 6:00 p.m.	Professionals/Students \$1,430			
3	Fluvial and Coastal Clastic Sedimentology and Ichnology in Modern Environments and Core (SEPM)	Anton Wroblewski, Thomas Hearon (ConocoPhillips, Houston, Texas) Stephen Hasiotis (University of Kansas, Lawrence, Kansas) Peter Flaig (Bureau of Economic Geology, Austin, Texas)	Friday, 31 March, 9:00 a.m.– Saturday, 1 April, 6:30 p.m.	Professionals/Students \$600 (single occupancy); \$480 (double occupancy)			
4	Inside NASA Space Center Houston (AAPG Astrogeology Committee)	William A. Ambrose (University of Texas, Austin, Texas), Bruce Cutright (Thermal EP, Austin, Texas), Linda Sternbach (Star Creek Energy, Houston, Texas), Nic Brisette (Delta Oil & Gas, Fort Worth, Texas)	Saturday, 1 April, 8:30 a.m.−5:00 p.m.	Professionals \$250 Students \$150 (Limit 15)			
5	Investigating a Meandering Creek System in Houston's Backyard – Panther Creek, Montgomery County Preserve (HGS)	Erik Scott (E&P Geoscience, LLC, Houston, Texas)	Sunday, 2 April, 8:00 a.m.–4:00 p.m.	Professionals \$150; Students \$75			
Post	-Convention						
6	Shelf to Basin Sequence Framework and Facies Architecture of a Cretaceous Carbonate Ramp: Late Albian Maverick Intrashelf Basin, Southwest Texas (SEPM)	Charles Kerans (The University of Texas, Austin, Texas) and Laura Zahm (Statoil, Austin, Texas)	Wednesday, 5 April, 12:00 p.m.– Monday, 10 April, 8:00 p.m.	Professionals/Students \$1,750			
7	Unconventional Source Rock Reservoir Field Seminar: Eagle Ford Group (West Texas) (AAPG/EMD)	Art Donovan (BP, Houston, Texas), Mike Pope (Texas A&M, College Station, Texas), Rand Gardner (Total, Houston, Texas), Scott Staerker (BP, Houston, Texas)	Wednesday, 5 April, 1:00 p.m.– Saturday, 8 April, 3:00 p.m.	Professionals \$1,375 Students \$1,200 (Limit 8)			
8	Revised Stratigraphic Framework for the Cutoff Formation and Implications for Upper Bone Spring and Avalon Reservoirs (SEPM)	Greg Hurd (Chevron, Houston, Texas) and Xavier Janson (Bureau of Economic Geology, Austin, Texas)	Wednesday, 5 April, 7:30 p.m.– Saturday, 8 April, 2:00 p.m.	Professionals/Students \$1,400			
9	Spindletop (HGS)	Rosemary Laidacker (CGE Consulting, Houston, Texas) Robert Pledger (Ashford Oil & Gas Company, LLC, Houston, Texas)	Thursday, 6 April, 7:45 a.m.–6:30 p.m.	Professionals/Students \$150			
10	Modern Galveston Island and the Brazos River Delta as Reservoir Analogs (SEPM)	Julia Wellner (University of Houston, Houston, Texas) and Davin Wallace (The University of Southern Mississippi, Hattiesburg, Mississippi)	Thursday, 6 April, 8:00 a.m.−6:00 p.m.	Professionals \$175; Students \$75 (limited)			
11	Deepwater Deposits of the Pennsylvanian Ouachita Trough: Fans, Faults and Seafloor Failures (SEPM)	Lesli Wood (Colorado School of Mines, Golden, Colorado) Thomas McGilvery (University of Arkansas, Fayetteville, Arkansas)	Thursday, 6 April, 8:00 a.m.– Saturday, 8 April, 7:00 p.m.	Professionals/Students \$1,130 (single occupancy); \$800 (double occupancy)			

# Field Trip Pictures Photos tied to numbers from previous page



### Additional notes regarding field trips:

- It is important that you note your gender when registering for hotel room assignments.
- Prior to the field trip you will receive an itinerary with details of meeting points, transportation with the trip phone numbers and email addresses of hotels and trip leaders, etc.
- Proper clothing and supplies are needed for the outdoors (hat, windbreaker, sturdy footwear and rucksack).
- Depending on location, temperatures can range from 40 to 70 degrees Fahrenheit with or without rain. Participants are advised to check local weather forecasts for latest updates.
- Insect repellant and sun protection (sunscreen and hats) are recommended.
- AAPG, the sponsoring organizations nor field trip leaders and their employers maintain insurance covering illness or injury for individuals.



## Exhibiting Companies as of 17 November

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**RPS Group PLC RS Energy Group** Saudi Aramco SciOptic USA Seismological Society of America SeisWare Inc. Selman & Associates, LTD SEPM (Society for Sedimentary Geology) SEG (Society of Exploration Geophysicists) Southwest Research Institute Spectrum Springer Nature Stone Quilt Design StructureSolver Subsurface Consultants & Associates, LLC Sunburst Consulting System Development, Inc. (SDI) **TDI-Brooks International** Texas A&M University, College of GeoSciences TGS The Easy Copy Company The Geological Society of America (GSA) The University of Tulsa - CESE The University of Tulsa School of Energy TOTAL TRF Altamira Inc. United Oil & Gas Consulting University of Colorado Denver -**Global Energy Mana** University of Houston University of Kansas University of Manchester University of Miami, CSL Center for Carbonate Rese University of Oklahoma University of Texas at Austin. Jackson School of Geoscienses USGS Weatherford Laboratories WellSight Systems Inc. West Texas Geological Society Wildcat Technologies, LLC

### **Exhibition Hours**

Sunday, 2 April	5:00 p.m7:30 p.m.
	(Icebreaker Reception)
Monday, 3 April	9:00 a.m6:00 p.m.
Tuesday, 4 April	9:00 a.m6:00 p.m.
Wednesday, 5 April	9:00 a.m2:00 p.m.

# ACE 2017 Centennial Sponsor Packages Still Available

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### **Questions? Contact us!**

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# ACE at a Glance as of 17 November

All events take place at the George R. Brown Convention Center unless otherwise noted.

### Friday, 31 March

Friday, 31 March		Tuesday, 4 April
1:00 p.m5:00 p.m	Main Registration	7:25 a.m12:30 p.m
9:00 a.m6:00 p.m		7:30 a.m5:30 p.m
	(Hilton Americas-Houston Hotel)	8:00 a.m.–11:50 a.m
Saturday, 1 April		8:00 a.m3:00 p.m
	AAPG PROWESS-AWG-SEG Forum:	
1.00 u.m. 5.00 p.m.	Pioneering Women in Petroleum Geology	8:00 a.m11:50 a.m
7:30 a.m5:00 p.m		8:30 a.m12:00 p.m
8:00 a.m6:00 p.m		9:00 a.m6:00 p.m
	(Hilton Americas-Houston Hotel)	9:00 a.m6:00 p.m
	(	8:30 a.m5:00 p.m
Sunday, 2 April	Main Degistration	9:15 a.m10:15 a.m
7:00 a.m. –7:00 p.m.		11:30 a.m1:00 p.m
8:00 a.m6:00 p.m		12:00 p.m1:00 p.m.
12.00 n m -2.45 n m	(Hilton Americas-Houston Hotel)	12:45 p.m3:30 p.m
	History of Petroleum Geology Forum	1:15 p.m5:05 p.m
	Young Professionals Meet & Greet Imperial Barrel Award (IBA) Ceremony	1:15 p.m. – 5:05 p.m
	Opening Session and Awards Ceremony	1:15 p.m5:05 p.m
	Exhibition and Icebreaker Reception	1:30 p.m5:00 p.m
		2:30 p.m3:30 p.m
Monday, 3 April		3:30 p.m4:30 p.m
7:30 a.m5:30 p.m		5:00 p.m6:00 p.m 7:00 p.m 9:00 p.m
8:00 a.m3:00 p.m		7.00 p.m.= 9.00 p.m
	(Hilton Americas-Houston Hotel)	
	Discovery Thinking Forum I	Wednesday, 5 April
8:30 a.m 12:30 p.m		7:30 a.m2:00 p.m
8:00 a.m11:50 a.m		8:00 a.m11:50 a.m
	Poster Sessions (Morning)	8:00 a.m12:00 p.m
8:30 a.m5:00 p.m		
9:00 a.m6:00 p.m		8:00 a.m11:50 a.m
	Student and Faculty Lounge	8:30 a.m12:00 p.m
9:15 a.m10:15 a.m.		8:30 a.m2:00 p.m
10:00 a.m12:00 p.m		9:00 a.m12:00 p.m
11:30 a.m.–1:15 p.m.	All-Convention Luncheon: The Evolution	9:00 a.m2:00 p.m
10:1E n m 0:20 n m	of the American Shale Plays	9:00 a.m2:00 p.m
12:15 p.m3:30 p.m.		9:15 a.m10:15 a.m
	Oral Sessions (Afternoon) Discovery Thinking Forum II	11:30 a.m1:00 p.m
	Poster Sessions (Afternoon)	11:30 a.m1:00 p.m
2:30 p.m3:30 p.m		1:15 p.m.–5:05 p.m
4:00 p.m6:00 p.m		Thursday, 6 April
4.00 p.m. 0.00 p.m.	(Hilton Americas-Houston Hotel)	8:00 a.m12:00 p.m
5:00 p m –6:00 p m	End-of-Day Refreshments	Pre and post-convention
• •	Michel T. Halbouty Lecture	found on pages 58-61.
5:30 p.m7:30 p.m		lound on pageo oo on.
5.00 p.m. 1.00 p.m.	(Hilton Americas-Houston Hotel)	
6:00p.m8:00 n m	AAPG/SEPM Student Reception	
	(Hilton Americas-Houston Hotel)	
7:00 p.m10:00 p.m	SEPM Research Group Meetings and	
- F	Reception (Four Seasons Hotel)	
7:30 p.m.–12:00 a.m	100th Anniversary Gala Dinner and	
	Program	
	-	

7:25 a.m12:30 p.m	. Guest Tour
7:30 a.m5:30 p.m	Main Registration
8:00 a.m11:50 a.m.	SEPM Research Symposium
8:00 a.m3:00 p.m.	Guest Hospitality Suite
	(Hilton Americas-Houston Hotel)
8:00 a.m11:50 a.m.	Oral Sessions (Morning)
8:30 a.m12:00 p.m	Poster Sessions (Morning)
9:00 a.m6:00 p.m	Exhibition
	Student and Faculty Lounge
8:30 a.m5:00 p.m	
9:15 a.m10:15 a.m.	. Refreshment Break
11:30 a.m1:00 p.m	
	SEPM Business Meeting/Luncheon
12:45 p.m3:30 p.m	
	SEPM Research Symposium
1:15 p.m5:05 p.m	
1:15 p.m5:05 p.m	
	Poster Sessions (Afternoon)
2:30 p.m3:30 p.m.	
3:30 p.m4:30 p.m.	
5:00 p.m6:00 p.m.	
7:00 p.m.– 9:00 p.m	SEPM President's Reception and Awards
	Ceremony (Four Seasons Hotel)

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7:30 a.m2:00 p.m	Main Registration
8:00 a.m11:50 a.m.	DEG/DPA Forum
8:00 a.m12:00 p.m	Guest Hospitality Suite
	(Hilton Americas-Houston Hotel)
8:00 a.m11:50 a.m.	Oral Sessions (Morning)
8:30 a.m12:00 p.m	Poster Sessions (Morning)
8:30 a.m2:00 p.m	Career Center
9:00 a.m12:00 p.m	Guest Tour
9:00 a.m2:00 p.m	Exhibition
9:00 a.m2:00 p.m.	Student and Faculty Lounge
9:15 a.m10:15 a.m	Refreshment Break
11:30 a.m1:00 p.m	DEG Luncheon
11:30 a.m1:00 p.m	EMD Luncheon
1:15 p.m5:05 p.m	Oral Sessions (Afternoon)

..... AAPG Pitchapalooza

ion Short Courses and Field Trip information can be



# **How To Register**

All registration details and policies can be found on ACE.AAPG.org. You can also download a registration form online. For more information call +1 781 821 6732, Monday–Friday, 8:00 a.m.–5:00 p.m. (EST)

	Registration Type	On or before 2 February Midnight EST	On or before 2 March Midnight EST	After 2 March Midnight EST			
	Member *	\$545	\$650	\$755			
	Emeritus Member**	\$275	\$325	\$378			
	Join & Save	\$545 + dues	\$545 + dues \$650 + dues				
Four-Day Technical Program	Nonmember	\$650	\$755	\$860			
& Exhibition	Student Member*	\$55	\$55	\$75			
	Student Nonmember	\$70	\$70	\$90			
	Includes: Access to the Opening Session, Icebreaker Reception, Oral and Poster Presentations, Refreshment Breaks, End-of-Day Receptions and Exhibition as well as access to the Digital Library for the Abstracts.						
	One-Day Member *	\$355					
One-Day Technical Program &	One-Day Nonmember	\$420					
Exhibition (Select Day)	Includes: Access to the Oral and Poster Presentations, Refreshment Breaks, End-of-Day Receptions and Exhibition for the day you register as well as access to the Digital Library for the Abstracts. You will need to purchase a one-day Sunday Exhibition Pass in order to attend the Opening Session and the Icebreaker Reception. (Badge may only be picked up on the day for which you are registered.)						
	One-Day Member *	\$100					
One-Day	One-Day Nonmember	\$ 100					
Exhibition Only (Select Day)	Includes: Access to the Refreshment Breaks, End-of-Day Receptions and Exhibition for the day you register. You will need to purchase a one-day Sunday Exhibition Pass in order to attend the Opening Session and the Icebreaker Reception on Sunday. (Badge may only be picked up on the day for which you are registered.)						
	Guest	\$100					
	Guest of Emeritus Member**	\$50					
Guest	Includes: Access to the Opening Session, Icebreaker Reception, Oral and Poster Presentations, Refreshment Breaks, End-of-Day Receptions and Exhibition as well as a guest amenity. (May not be a member of any of the listed associations or a professional in the industry and must be accompanied by a convention registrant.)						
N 0	Field Trip/Short Course	\$30 + cost of trip/course					
Non-Convention Activity Fee	Includes: Access only to field trip(s) and/or short course(s) for which you register. If you do not register for the convention and exhibition in addition to the field trip(s) and/or short course(s), you will not receive access to any activities or events during the convention and exhibition.						

\* Member Rates apply to members of the following societies: AAPG (American Association of Petroleum Geologists), AASP (American Association of Stratigraphic Palynologists), AWG (Association of Women Geoscientists), CPC (Circum-Pacific Council for Energy & Minerals Resources, Inc.), GSL (Geological Society of London), GSA (Geological Society of America), HGS (Houston Geological Society), IAMG (International Association of Mathematical Geology), NABGG (National Association of Black Geologist & Geophysicists), SEG (Society of Exploration Geophysicists), SEPM (Society for Sedimentary Geology), SIPES (Society of Independent Earth Scientists), SPE (Society of Petroleum Engineers), SPWLA (Society of Professional Well Log Analysts), TSOP (The Society of Organic Petrology)

\*\* Emeritus Members must be current members of one of the above associations with 30 years and be 65 years old before you qualify.

### Confirmations

A detailed confirmation and barcode, including payment information and a receipt, will be sent via email within 24-48 hours. Should you not receive a confirmation, please contact the AAPG Registration Center/TPN by email at: aapgregistration@thepulsenetwork.com. Save yourself time and bring this confirmation with barcode when you arrive for faster registration service.

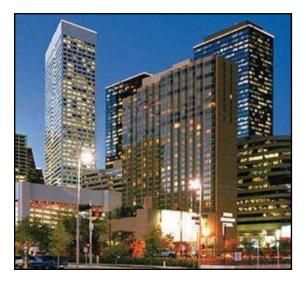
### **Cancellations/Refunds**

Cancellations can be made by following the instructions on your confirmation or contact the AAPG Registration Center/TPN by email (aapgregistration@ thepulsenetwork.com) by **16 February**. Cancellations received on or **before 16 February** will be fully refunded less a \$75 processing fee. Cancellations received **after 16 February** will NOT be refunded. Cancellations for Field Trips, Short Courses or Guest Tours received on or **before 2 March** will receive a full refund. Cancellations received **after 2 March** will not receive a refund.

# Where To Stay

Please book your rooms through the AAPG Housing Bureau to receive the special convention room rates listed below. This also helps AAPG meet hotel room block commitments and avoid penalties that could ultimately increase convention expenses. New hotel reservations must be booked with the Housing Bureau by **2 March**. Additional details, policies and deadlines can be found at ACE.AAPG.org.

Hotel	Address	Single/Double	Extra Person Charge	In-Room Dining	Parking (Daily)	Guest Room Internet
Hilton Americas-Houston Hotel (AAPG Headquarters)	1600 Lamar Street Houston, TX 77010	\$225/\$240	\$15	Yes	\$24/Self \$34/Valet	Free
Four Seasons (SEPM Headquarters)	1300 Lamar Street Houston, TX 77010	\$235	\$50	Yes	Valet only \$25 to \$45	Free



### Deposits

All reservations will require a credit card guarantee equal to the first night's stay, inclusive of tax, as a deposit. A valid credit card and expiration date should be provided with your room request. The hotel may cancel room reservations without notification if one night's deposit is not received prior to your scheduled arrival.

### Online

All reservations made online will require a valid credit card number and expiration date to guarantee your reservation. Make reservations online at ACE.AAPG.org.

### **Changes/Cancellations**

Changes and cancellations to existing reservations may be made online or by contacting the Housing Bureau prior to **9 March**. Any changes or cancellations after **9 March** must be sent directly to the hotel. Guaranteed room reservations not cancelled 72 hours prior to arrival and not used will subsequently be billed by the hotel to your credit card account.







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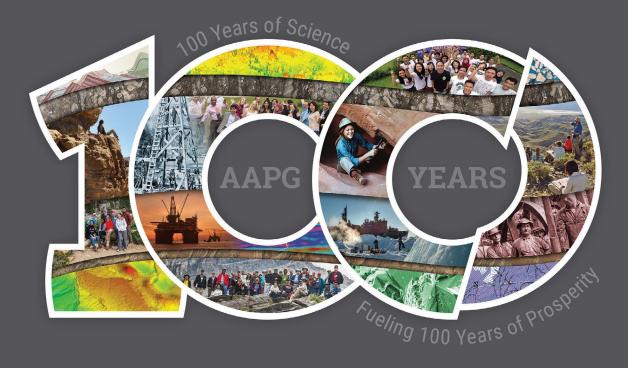


# **100** AAPG-ANNIVERSARY **ACE** 2017 ANNUAL CONVENTION & EXHIBITION



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