

MAY 2018

ΥP Emerging Engineers Symposium

YOUNG PROFESSIONALS

NAFTA: America and **Oil's Tipping** Point

GENERAL MEETING

2018 SPE Gulf Coast Section Awards and Scholarships Banquet

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MAY 2018

D2 CHAIR'S CORNER



Part of my volunteer work was serving as the SPE HSSE-SR Technical Director on the SPE International Board of Directors

from 2014 to 2017. In my role, I traveled to South East Asia, Europe, the Middle East and the United States to deliver a presentation on "Adapting to the Challenge of Climate Change Risk". One key message focused on growing investor expectations related to climate risks and opportunities – especially in financial terms.

Recently, investors in major oil and gas companies have passed numerous shareholder resolutions. They have also started to single out the climate related investment risk in the boardroom. Since most of upstream sector's value lies in the monetization of future production, investors are concerned about the prospects of the industry. The debate is not if climate change is real. It's about the policy, legal, reputation and physical risks, and the technology and market changes. Investors are looking for opportunities like resource efficiency, markets and resilience. The expectation is that oil and gas companies will increase transparency and share more information related to climate change financial risk. As I predicted during my presentations to SPE members in 2015, governments and activists will have an impact but investors will drive change.

In 2016, the G20 Financial Stability Board Taskforce on Climate Related Disclosures was launched and cochaired by Bank of England chairman, Mark Carney and Bloomberg CEO, Michael Bloomberg. They noted that investors lacked the information needed to respond to climate change. "This must change if financial markets are going to do what they do best: allocate capital to manage risks and seize new opportunities." Carney and Bloomberg argued, "without the necessary information, market adjustments to climate change will be incomplete, late and potentially destabilizing."

"Climate change risk has arrived as an investment issue."¹ TREY SHAFFER, 2017 – 2018 SPE-GCS CHAIR

In February 2018, I participated in a roundtable discussion on this topic with ten organizations. The group primarily consisted of operators, and represented investor relations and environmental, health, safety, and sustainability leaders from across the industry. Our conversation focused on the emergence of investordriven pressure to assess and disclose climate related financial risks and opportunities.

During the roundtable, participants shared how this issue is playing out within their respective organizations, and how they see it evolving over time. The conversation framework employed the Chatham House Rule, and participants were able to share high-level takeaways from the conversation without attribution. I have captured the following summary including common themes, observations and insights:

Varying investor pressure for climate-related financial risk disclosure

- One participant noted that investors had not asked questions related to the topic at a recent capital markets meeting.
- Others noted players like BlackRock, State Street, WesPath and Vanguard continue to press on the issue both publicly and privately, and are getting increasingly sophisticated with the questions they are asking (i.e. challenging assumptions within scenario analysis, asking engineering-focused questions).
- Some pointed out the distinction between mainstream investment managers (e.g., Blackrock) and activist shareholders (e.g., CalPERS). Both groups are seeking greater disclosure but the mainstream investment managers want to use the information for more informed investment decisions while certain activists are seeking to put oil and gas out of business.
- There was some discussion around changing demographics and millennial investors' preferences for climate-friendly products carrying increasing weight.

Continued on page 3



Chair's Corner, Continued from page 2

Increasingly unrealistic expectations for analysis and disclosure

- Frustration was expressed around the topic of scenario analysis and disclosure. A number of comments illustrate the challenge:
 - Investors are encouraging oil and gas companies to prepare scenarios as a way to consider future pathways that differ from business as usual. However, companies can potentially create any scenario, thus coloring itself in the best light. How do investors compare across these scenarios and do investors even know how to use the information properly?
 - Some of the publicly available scenarios are unreliable.
 - There is a disconnect on time horizons there is a need to be ready for quarterly analyst calls, and there is an expectation to look 20 years ahead. Small changes in assumptions (i.e. average MPG for passenger vehicles in the future) can have massive impacts over a 20-year horizon.
 - Investors are painting the entire industry with the same brush. The same investors driving mid-tiers' strategies to keep a concentrated portfolio are also asking for climate-related scenario analysis then chastising them for a lack of diversity in the portfolio.
- It was clear from the conversation that "the ask" from investors continues to evolve. One participant noted that as soon as they had produced a report in response to shareholder pressure, the mainstream investment managers immediately asked what was next...their interest evolving from scenario analysis to targets.
- The need to communicate with shareholders on this topic will be ongoing. Some noted the nature of questions have started to change—increasingly focused on resiliency and investment strategies for specific oilfields based on carbon intensity.

Increasing internal collaboration and other changes within the business

• Many commented on this issue driving collaboration between traditionally distinct functions within the business (i.e. EHS/Sustainability, investor relations, finance, and operations). • Some participants noted there are more conversations about climate change at the executive level and an increased focus on integrated processes, while others said environmental aspects are now a component of every investment prospectus, carbon prices are applied to all capital projects, and climate change performance is built into the performance scorecard of every employee.

Emerging needs

- Board/Executive training on climate-related financial risk.
 - Many noted their boards' lack of preparedness to understand and address this issue. However, getting the board engaged has helped with investors by increasing the company's credibility.
- There was interest in developing high-level, industryby-industry consensus, and potentially standardized approaches, to scenarios.
- A need was expressed for guidance regarding scenario analysis, including how to deal with performance fluctuations over long time horizons, and what set of questions oil and gas companies should be asking themselves.
 - More detailed analysis of the physical impacts of climate change (i.e. sea level risk at legacy onshore facilities).
 - Analysis and comparison of the carbon intensity/ life cycle of other potential business areas (i.e. power generation).
- How can Enterprise Data Management Software systems tie back to climate risk reporting and input to climate risk analysis, metrics, and reporting?
- Guidance on strategy and governance, as well as a process for adapting to a changing marketplace as part of the low carbon energy transition.
- Translation of what investors are actually asking for. There is a communication breakdown between investors and companies, and companies and rating/ranking organizations.

Takeaways

There was a clear consensus within the group that investordriven pressure regarding this issue will continue to evolve and will likely remain a top-level issue for executives across oil and gas. This pressure has triggered changes within the industry, such as increased collaboration and action across business functions, and climate change as a focus at the highest levels of management. While strategies for addressing this issue will vary across companies, there is a set of growing needs:

• Industry consensus on consistent approaches to scenario analysis.

- Sophisticated and integrated approaches to data management.
- Better understanding of information needs and constraints between industry and investors.
- Executive- and Board-level fluency on the various facets of climate change and their implications for the business.

SPE's approach to Climate Change

On March 7, 2016, the SPE International Board of Directors formed a Climate Change Task Force. The strategic Task Force was charged to identify key aspects and public perceptions of climate change, research what analogous professional organizations have done in relation to climate change, and to recommend actions, if any, for SPE to take.

On March 26, 2017, the Task Force recommended that SPE's climate change strategy maximize alignment with the existing mission and vision while positioning SPE to expand its mission and vision (should the landscape change further during the 21st Century). Given that SPE does not have technical expertise or mandate for assessing climate science or guiding policy, the Task Force did not recommend that SPE develop a public positioning statement on these matters. However, strategy included "taking steps to inform SPE members about climate change issues and their connection to what members do, the technologies they know and apply, and the partnerships and communities to which they belong or could belong."

The Task Force recognized that the "Paris Agreement² over the course of the 21st century is expected to bring change. It has the potential to support ongoing efforts in the industry to reduce methane emissions through energy efficiency and improved energy efficiency. The Paris Agreement has the potential to usher in changes for SPE members. Change may come through the deployment of carbon dioxide capture, utilization and storage (CCUS) and may further accelerate the use of natural gas as an alternative to coal, change the loading on infrastructure as natural gas becomes an essential component of a more flexible power generation system, and push oil into different markets as it is displaced from some of its current uses, such as transportation."³

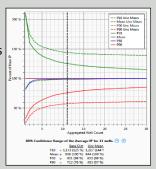




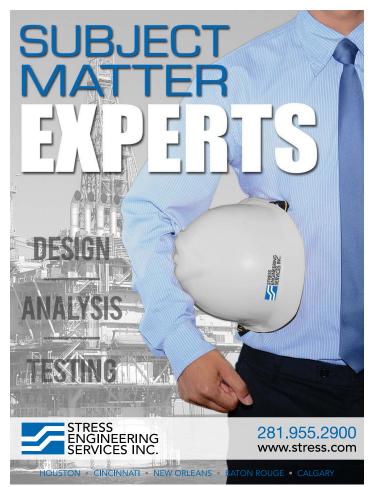


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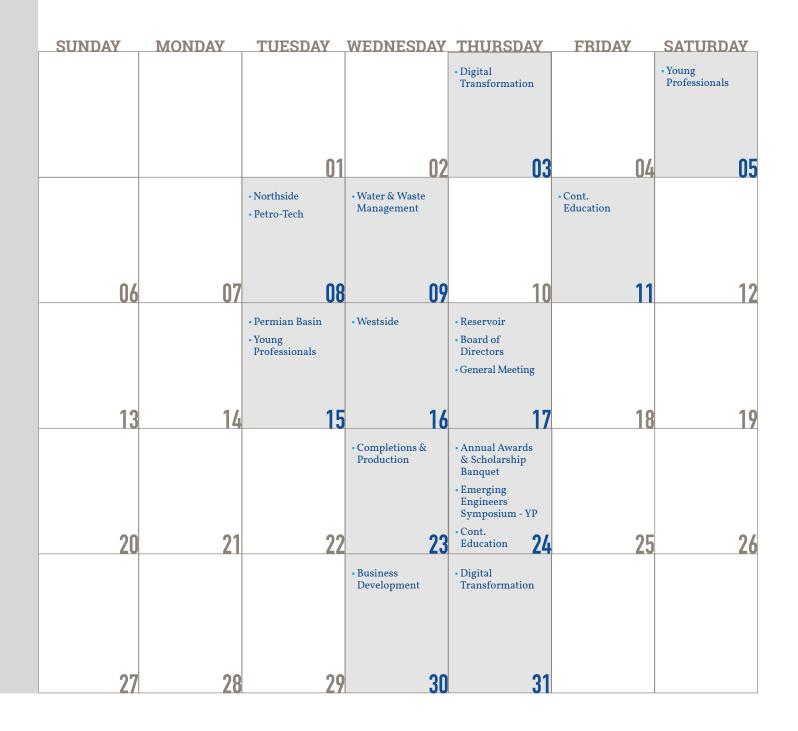
Contact us at www.roseassoc.com or 713-528-8422 LSi, the software company of Rose & Associates



³Climate Change Task Force: Recommendation to the SPE Board of Directors. Approved by the SPE Board of Directors 26 March 2017 in Bangkok, Thailand

MAY CALENDAR

MAY 2018



Upcoming Special Events

Mark Your Calendars

5.24.18 ANNUAL AWARDS BANQUET

5.24.18 YP EMERGING ENGINEERS SYMPOSIUM

6.1.18 MIT SEMINAR 28

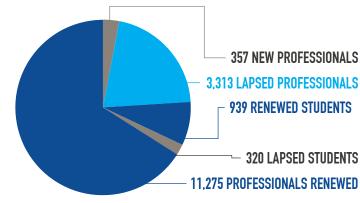
6.8.18 18TH ANNUAL SPORTING CLAYS TOURNAMENT

7.18 & 7.19 TRAINING: UNCONVENTIONAL OIL AND GAS RESOURCES EXPLOITATION AND RESERVOIR DEVELOPMENT



Membership Through March 2018

MEMBERSHIP REPORT



Current Membership Trends



Board of Directors Meeting	WHEN WHERE R.S.V. P.	May 17, 7:30 – 10:30am SPE Houston Office: 10777 Westheimer Rd, Ste 1075 Houston, TX 77042 Taylor Wright T (713) 457-6821 F (713) 779-4216 spe-gcs@spe.org
0.		

Unless specified separately in the registration website: MEMBERS: \$40/\$55 Walk-in NON-MEMBERS: \$55

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STUDENTS/MiT/Retired SPE: \$15

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SWATHIKA JAYAKUMAR



Swathika Jayakumar is a Regional Engineering Advisor with the ProTechnics division of Core Laboratories. She partners with oil and gas operators to address tough challenges and optimize development strategies. Her expertise ranges from completions, reservoir, and enhanced oil recovery projects, both

onshore and offshore worldwide.

Swathika joined SPE at Texas A&M University in 2009 and has been involved with the Gulf Coast Section Reservoir Study Group since 2014. She was part of the team that organized the first SPE Student Summit at A&M. She thoroughly values SPE because attending the ATCE after she graduated college was key to securing her first job

Swathika is committed to SPE's mission by publishing SPE papers, actively participating at SPE conferences, and promoting education through scholarships. It is "a worthy cause and I am proud to be a part of it," she says.

TONY WEBB



Tony Webb is the Project Manager with the Lower 48 Business Development group at BP. Previously he was a Reservoir/Production Engineer for ARCO. He was responsible for onshore, shelf and deepwater projects. While he enjoys

the technical aspects of our industry, he became interested in business/contractual issues and got his MBA in 1990.

Tony attended the BD Study Group for several years before volunteering at SPE. He joined the Publicity Committee, then became Publicity Chair in 2007. He serves as a member of the Programs Committee.

When asked about his experience volunteering he replied, "I have enjoyed being part of a team that delivers informative presentations while having the privilege of meeting so many incredible people."

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UNCONVENTIONAL RESOURCES



THEN & NOW

MAY 1957

The API funds a research project that comes up with an equation for forecasting the weather, as developed by a retired MIT professor of meteorology (anxious to see how well it does forecasting tornados in Oklahoma!).

A large contingent of oil men participate in an all-day session devoted to discussing ways in which the oil business can improve its deplorable public relations. They vote to keep that meeting secret and to exclude the oil writers.

East Texas crude: \$3.25/bbl US rig count: 2,233

THE REST OF THE YARN

This month we continue our look back at the rise and fall of wildcatter Glenn McCarthy as he begins the promotional campaign for his monumental hotel.

His campaign began with a "coming out" spread in the Houston Chronicle, a long valentine wrapped around a family portrait. The hotel's groundbreaking was the big event that introduced much of Houston to the McCarthy whirlwind. Named the Shamrock after the Houston Post ran a naming contest, the Irish-themed hotel was to dwarf anything built in Texas up to that point. McCarthy had hoped to break ground on Saint Patrick's Day, March 17, but

MAY 1977

After drilling 14 wildcats in the Vizcaino Desert, Pemex considers a major drilling play in Baja California, where officials say geology is favorable for "enormous crude deposits."

Russia pledges to export 20,000 bbl/ day of oil to India during the next 4 years (actually coming from Iraq), while negotiating to buy 20,000 bbl/ day from Iran (hidden agendas?).

US rig count: 1,968

MAY 1997

Apache's new Egyptian field discovery on its Khalda concession adds substance to their reported need for a second pipeline to serve the area's growing gas reserves.

In another reflection of surging activity offshore, Conoco and Reading & Bates will build a second ultradeepwater dynamically positioned drillship. This joint venture aims to address Conoco's 15 million acres of deepwater tracts worldwide.

Light sweet crude: \$20.03/bbl Natural gas: \$2.18/MMbtu US rig count: 881

chose to delay to March 22, so actor Pat O'Brien could be the master of ceremonies.

At 4:30 on March 22, 1949, three thousand people crowded the 15acre building site while McCarthy, O'Brien, and a host of Texas dignitaries, including two former governors, gave speeches from a flag-decked platform. "I'm a little bit choked up," McCarthy said after several speakers praised his vision. To me this symbolizes the future greatness of Houston," O'Brien told the crowd, "and the eyes of the other 47 states are upon Texas and this project." The crowd cheered and grew so rowdy that the actual groundbreaking never happened. McCarthy and O'Brien were mobbed as they went for their shovels and had to be quickly hustled into a

limousine. The press coverage of the event was breathless, even by Texas standards, with speakers hailing the Shamrock as the symbol of a new era. A headline in the Chronicle described the project as "perhaps the greatest ever undertaken by an individual in Texas."

Next month, McCarthy's funding comes up short.

MAY 2018

HISTORY QUIZ

What was the estimated US "service" station population circa May 1977 (within +/- 10,000 stations)? (They actually pumped the gas for you back in that day!)

If you would like to participate in this month's quiz, e-mail your answer to <u>contest@spe.org</u> by noon May 15. The winner, who will be chosen randomly from all correct answers, will receive a \$50 gift card to a nice restaurant (courtesy of the ProTechnics Division of Core Lab).

ANSWER TO APRIL'S QUIZ

By 1970, approximately 75% of the fracturing fluids being employed were water-based."

CONGRATULATIONS TO MARCH'S WINNER

Darrell Knight with Goodrich Petroleum.



Email Taylor Wright today: SPE-GCS@SPE.ORG



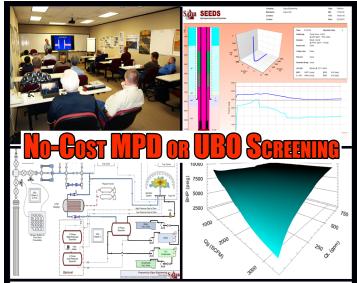
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DIGITAL TRANSFORMATION Blockchain in Oil & Gas

What is Blockchain? Why should the Energy Industry care about it? Current activity happening in the Energy Industry:

STUDY GROUP

- How mature (or immature) is the understanding of the various pillars of DT by O&G operators and service companies today?
- Who is doing what in that space?

REBECCA HOFMANN



Rebecca is an accomplished finance and compliance leader with over 16 years of industry experience. She works for Statoil's Operations Excellence group and is responsible for the development and improvement of processes to support domestic US onshore and offshore operations. She leads the Blockchain digitalization strategy for Statoil US and founded the US Oil & Gas Blockchain Forum for Operators.

CLAUDE BAUDOIN



Claude Baudoin is Owner and Principal Consultant at cébé IT & Knowledge Management, a consulting company based in the San Francisco Bay Area offering consulting in IT strategy and sourcing, enterprise architecture, cloud adoption, business process analysis, innovation management, and knowledge management and communities of practice. He has 43 years of experience in these domains, including 26 years at Schlumberger in France and the US.

JEAN PIERRE FOEHN



From 2002 to 2005 Jean-Pierre Foehn was COO at Trade Ranger, the first Internet platform enabling oil and gas producers and suppliers to exchange digital business transactions. He founded Amalto Technologies in 2005 to develop frictionless B2B transaction exchanges with a focus in oil and gas. In January 2018, Jean-Pierre became the CEO of Ondiflo, a Blockchain platform that automates all

ticketing-based services for the industry.

- The extreme speed at which things are evolving.
- The need to partner to develop innovative solutions.
- A blockchain based platform dedicated to the automation of all ticket-based processes in the oil and gas industry.

EVENT INFO

WHEN

Thur, May 3, 2018 11:30am – 1:00pm

SPEAKER

Rebecca Hofmann Operations Excellence Management System/Blockchain Strategy – Statoil

Claude Baudoin Partner Cebe IT & Knowledge Management LLC

> Jean Pierre Foehn CEO Ondiflo

LOCATION

Statoil 2107 City West Blvd Houston, TX 77042

CONTACT

Philippe Flitchy 713-240-4879 philippe.flichy@energyembassy.com



NORTHSIDE

Maximizing Value Through Re-Stimulation with New Diversion Technology

This presentation covers the process and results of a new refrac technology application used in Noble's South Texas Eagle Ford asset. One challenge when designing a refrac completion is diverting proppant and fluid throughout the entire lateral. Refracs have had little success due to disproportionately treating the heel and leaving the

remaining lateral unstimulated. To combat this, the team used SlickFrac, a knotted wax encapsulated rope that is pumped down the wellbore during the re-stimulation. The conclusions will drive design improvements and build a foundation for future programs seeking to capture value left behind in unconventional shale plays.

0

MARY GARZA

Mary Garza is a completions engineer for Noble Energy's South Texas business unit, focusing on design and execution for the Eagle Ford development program. Mary is passionate about leveraging new technology to improve well performance and efficiency in unconventionals, pioneering diverting materials, dissolvable plugs, and coiled tubing fracturing. Mary graduated from Texas A&M University with a BS in petroleum engineering.

PETRO-TECH

Tableau-Focused Presentation

To stay at the forefront of an ever evolving, data-driven industry, we must be able to absorb great amounts of metadata in an easily understood way. The capability to spot, analyze, and (most importantly) understand specific trends in a given area is a skill that will set you apart. As a very customizable visual analytic program, Tableau gives the average user the ability to make sense of vast amounts of data in a relatively short time frame. This program is extremely flexible and can be utilized anywhere, from the smallest private equity backed groups, to the largest asset teams.

GREGORY E. FAGAN



Mr. Fagan is an Engineering Associate in Houlihan Lokey's A&D practice within the Oil & Gas Exploration and Production Group. He's responsible for statistical play research, constructing and maintaining an array of client-oriented production databases, engineering analysis, forecasting performance trends, and technical execution for the firm's advisory activity. Mr. Fagan holds a BBA in accounting from Sam Houston State University.

EVENT INFO

WHEN

Tues, May 8, 2018 11:30am – 1:00pm

SPEAKER

Mary Garza Completions Engineer, Noble Energy

LOCATION

SWN Campus 10000 Energy Dr, Spring, TX 77389

CONTACT

Jon Spencer – 281-291-7769 jon.Spencer@tracerco.com

Matt Boothe - 281-731-3140 matt_Boothe@swn.com

REGISTER ONLINE

EVENT INFO

WHEN

Tues, May 8, 2018 11:30am – 1:00pm

SPEAKER

Gregory E. Fagan Engineering Associate, E&P A&D Houlihan Lokey

LOCATION

SPEI Training Center 10777 Westheimer Ste 1075 Houston, TX 77042

CONTACT

Vanessa Mills – 832-251-0553 vmills@collarini.com



WATER & WASTE MANAGEMENT Shell Permian Water Management: Sourcing, Recycle and Disposal

Shell acquired their Delaware basin lease positions in early 2013. Shell operates 10 SWD surface facilities, 17 SWD wells, and operates a recycle facility with 700k bbls total storage and >50k bwpd feed. Shell is planning to construct another recycle facility this year. Lessons learned for recycle operations will be shared. Frac water sourcing demands that the exceeding recycle water supply is all brackish groundwater. The groundwater is supplied from areas where it is plentiful and a quantitative sourcing risk assessment has confirmed adequate supply. Costs have decreased significantly, making Shell highly competitive in the region.

ERIK HANSEN

Erik Hansen is the Water Manager for Shell's Permian asset in the Delaware Basin. He's focused on integrated solutions for short- to long-term water management and opportunities around water sourcing, recycling and disposal. He has 28 years with Shell and prior work experience in hydrogeology, soil/ groundwater risk assessment and remediation, reservoir seals/containment, and water sourcing for projects domestically and overseas.

PERMIAN BASIN Why Rocks Matter

This talk will cover how traditional mapping methods have failed to predict production trends in the midland basin. Pay maps have been the starting point for industry geologists when evaluating new plays and identify play potential. However, traditional net pay mapping leaves a lot to be desired. This talk discusses how petrophysical multi-mineral models have broken down seemingly homogenous black rocks into highly detailed facies, making it possible to tease out the shales that are going to produce the best. New mapping has unlocked the secret of shales and demonstrates that rocks matter in the unconventional world.

MARK SOOBY



Mark Sooby, Managing Director at Deutsche Bank has 35 years of E&P banking experience. Mark joined Deutsche Bank in October 2017. He has worked on more than 60 M&A and corporate finance transactions totaling \$138 billion. Before joining Deutsche Bank, Mark worked with Sempra Energy, ARCO, and Bank of America. He has his MBA and a BS in nuclear engineering.

EVENT INFO

WHEN

Wed, May 9, 2018 11:30am – 1:00pm

SPEAKER

Erik Hansen Water Manager, Delaware Basin, Shell

LOCATION

Marathon Oil Tower & Conference Center 5555 San Felipe Rd, Houston, TX 77056

CONTACT

Reshmy Mohanan- 713-309-5238 reshmy.mohanan@ griffindewatering.com

REGISTER ONLINE

EVENT INFO

WHEN

Tues, May 15, 2018 11:30am – 1:00pm

SPEAKER

Mark Sooby Managing Director, Deutsche Bank

LOCATION

Norris Center – Westchase 9990 Richmond Ave, Ste 102 Houston, TX 77042

CONTACT

Aaron Burton waaronburton@uogtraining.com



WESTSIDE

Optimizing Well Completion Design and Well Spacing in Unconventional Reservoirs– A Permian Basin Case Study

This presentation will discuss how to stage fract use the latest modeling technologies to speed up the optimization process of model comwell spacing and well completions in and corres unconventional reservoirs. Using the using mode case history of a well completed in the should saw Wolfcamp formation, we built a 3-D on well cogeological and geomechanical model projects and and a full wellbore fracture propagation decisions. model, then calibrated it with the multi-

stage fracturing pumping history. The results showed that we can reasonably model complex fracture propagation and corresponding well performance using modeling technologies. This should save significant time and money on well completion and spacing piloting projects and speed up field development decisions.

DR. HONGJIE XIONG



Dr. Hongjie Xiong is the Director of Production Enhancement for the Texas Oil and Gas Institute. Before joining TOGI, Dr. Xiong was the Global Reservoir Engineering Advisor for ConocoPhillips, where he evaluated company-wide exploration and field development projects, and appraised and developed unconventional resource plays. He holds a PhD in petroleum engineering from A&M, where he is an adjunct professor.

EVENT INFO

WHEN

Wednesday May 16, 2018 11:30am – 1:00pm

SPEAKER

Hongjie Xiong Director of Production Enhancement Texas Oil and Gas Institute

LOCATION

Norris Center – Westchase 9990 Richmond Ave, Ste 102 Houston, TX 77042

CONTACT

Bharath Rajappa 832-486-3122 bharath.rajappa@ conocophillips.com



RESERVOIR

Fit for Purpose Completions in Key North American Oil and Gas Plays

Fit for purpose is a trend that promotes the optimization of capital efficiency and profitability metrics rather than simply growing production. This presentation will focus on basics such as completion compartmentalization, well placement, frac surface area, complexity and conductivity, and how to ensure these are optimized for specific reservoir types while avoiding over (or under) capitalization. Key North American unconventional oil and gas plays will be discussed.

DAVID ANDERSON



David Anderson is the Director of Anderson Thompson Reservoir Strategies, a business unit of NCS Multistage. David was previously a managing partner at Fekete Associates and was one of the original designers of Fekete's Rate Transient Analysis software. David has 20 years industry experience and is a recognized expert in the area of well performance analysis.

GENERAL MEETING NAFTA: America and Oil's Tipping Point

In this discussion we'll review NAFTA issues such as Canada's "proportionality agreement" (an overlooked footnote in the current NAFTA agreement and a sticking point moving ahead), the growing pains in Mexico (which has more opportunity to grow crude oil production but a lack of commercial fuel to support this growth), and the economic and oil production implications for all countries involved. We'll also challenge the road ahead for America and our increasing move toward oil exports. The uncertainty may not be confined to oil prices, but the Administration that now has power over supply rather than demand.

CARL LARRY



Carl Larry has been a noted speaker at symposiums and conferences around the world. He has spoken at OPEC meetings and consulted individual member countries. He was a guest speaker discussing topics around oil, macroeconomics and strategy at APPEC in Singapore, the Argus Crude Conference in Houston, the London Business School, Texas A&M and the CT Bauer School of Business.

EVENT INFO

WHEN

Thurs, May 17, 2018 11:30am – 1:00pm

SPEAKER

David Anderson Director Anderson Thompson Reservoir Strategies

LOCATION

Fleming's Prime Steakhouse 2405 W Alabama St Houston, TX 77098

CONTACT

Swathika Jayakumar - 713-328-2374 swathika.jayakumar@corelab.com

REGISTER ONLINE

EVENT INFO

WHEN

Thurs, May 17, 2018 11:30am – 1:00pm

SPEAKER

Carl Larry Markets Specialist – Commodities Thomson Reuters

LOCATION

The Petroleum Club of Houston 1201 Louisiana St, 35th Floor Houston, TX 77002

CONTACT

Barry Faulkner – 281- 627-8790 barryf1944@gmail.com





COMPLETIONS & PRODUCTION

Fracture-Driven Communication (Frac Hits): Causes, Prevention and **Remediation Possibilities**

Fracture-driven well-to-well communication (FDC) was first used between fractured vertical wells in the 1950's. There's been an increase in FDC as horizontal wells with closely spaced transverse hydraulic fractures in naturally of the interference and evaluate ways to fractured formations, such as shale,

increase. This presentation summarizes investigative work carried out by Apache in the past two years. It will look at significant causes, workable methods to decrease the frequency and magnitude restore production.

GEORGE E. KING



George E. King is a Registered Professional Engineer in Texas and Oklahoma with 47 years of experience. His background includes research on energized fracturing, workovers, chemicals, well integrity, horizontal well completions and unconventional formations. He has a BS in chemistry and chemical engineering and a master's in petroleum engineering from University of Tulsa.

EVENT INFO

WHEN

Wednesday May 23, 2018 11:30am – 1:00pm

SPEAKER

George E. King Distinguished Engineering Advisor Apache Corporation

LOCATION

Norris Center – Westchase 9990 Richmond Ave, Ste 102 Houston, TX 77042

CONTACT

Reza Safari 346-804-8916 reza.safari@weatherford.com





BUSINESS DEVELOPMENT

The Powder River Basin (PRB): The Resurgence of a True Premium **Return Basin (PRB)**

The PRB is back on the map after taking a hiatus due to the commodity price crash in Nov 2014. Activity has gone from one rig in the basin, to 16 rigs. Deal CHK, Anadarko) who are leading activity has also returned, with active BLM leasing, and SM Energy's recent divestiture to Northwoods Energy. This comes after a lull in A&D activity since Devon's acquisition of RKI in 2015. The application of enhanced completions and the latest D&C technology has resulted in eye catching well results, on par or better than the Delaware

Basin and SCOOP/STACK. The play is also receiving attention from the key public operators (EOG, Devon, development of the conventional formations (Turner, Parkman, Frontier, and Shannon) and unconventional plays (Niobrara and Mowry). The panel discussion will include presentations from several operators currently in the play and the successes and challenges faced in the recent PRB "boom".

EVENT INFO

WHEN

Wed, May 30, 2018 5:00pm - 7:00pm

HOST

Wells Fargo Securities

SPEAKER TBD

LOCATION

Four Seasons Hotel - Houston 1300 Lamar St, Houston, TX 77010

CONTACT Heidi Epstein - 832-679-7182 heidi.epstein@ihsmarkit.com

REGISTER ONLINE

DIGITAL TRANSFORMATION Sucker Rod Pump Edge **Analytics Implementation**

This presentation describes the results of the first IoT pilot for beam pump surveillance covering traditional IoT topics such as the use of edge and fog analytics, low bandwidth LoRaWANTM

LOUIS DESROCHES

communication and cloud applications in the context of well surveillance and optimization. Additionally, results of the advanced power meter-based analytics will be shared.



Louis Desroches is currently the Senior IoT Solutions Manager for Process Industries at Intel Corporation. His responsibilities include the building of an extensive ecosystem of partners that enable end-to-end IoT solutions adapted to the Process industries specific needs.

Louis is an accomplished oil and gas executive with over 37

years of domestic and international experience in all aspects of strategy, planning, corporate business development, M&A, sales & marketing, and operation management gained through multiple assignments covering over 75+ countries.

EVENT INFO

WHEN

Thurs, May 31, 2018 11:30am – 1:00pm

SPEAKER

Louis Desroches IoT Solution Manager OMV-Intel

LOCATION

SAP Americas 2601 Westheimer Rd Houston, TX 77098

CONTACT

Philippe Flitchy - 713-240-4879 philippe.flichy@energyembassy.com

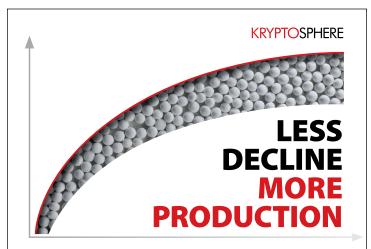


RESEARCH & DEVELOPMENT Making Actionable Information and Automated Decisions from **Real Time Drilling Data**

The objectives of this talk are to discuss six projects in Shell and then draw some conclusions about using real time drilling data for both decision-making and automation. This will be followed by a question and answer session, as well as an open discussion with the audience.

MARK ANDERSON

Mark Anderson has been the Manager of Drilling Mechanics Technologies at Shell International Exploration and Production for over 14 years. Previously, he worked as the Drilling Engineer for Shell Gabon, Shell Expro-Aberdeen and Al Furat Petroleum Company - Damascus.



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- Flowback and fines control
- Proppant pack consolidation without closure stress

Find out more

- Frac fluid clean-up Scale-inhibition
- Inert proppant detection



EVENT INFO

WHEN

Thursday June 7, 2018 11:30am – 1:00pm

SPEAKER

Mark Anderson Manager of Drilling Mechanics Technologies, Shell International **Exploration and Production**

LOCATION

Norris Center - Westchase 9990 Richmond Ave, Ste 102 Houston, TX 77042

CONTACT

Mark Sokolow 281-286-9749 mtsokolow@yahoo.com

REGISTER ONLINE

carboceramics.com/kryptosphere

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YOUNG PROFESSIONALS Emerging Engineers Symposium: Leading Digital Transformation



Emerging Engineers Symposium is an annual full-day event organized by the SPE Young Professionals at Gulf Coast Section. This year, EES focuses on "Leading Digital Transformation" and is going to host approximately 200 young professionals.

- Learn why Digital Transformation is paramount to the industry and how you can lead it!
- Participate in interactive talks given
 by executives that are leading the digital transformation.
- IoT on our industry.Gain insights about start-ups that are changing the energy landscape.

augmented reality, AI, drones, and

· Learn the impact of blockchain,

• Network with peers at "Lunch with Executives".

CONFIRMED SPEAKERS



DR. NANSEN SALERI *Chief Executive Officer, QRI*



GEORGE DANNER President, Business Laboratory



JASON PIGOTT Executive VP - Operations and Technical Services, Chesapeake



LORI-LEE EMSHEY Chief Executive Officer, Futuresight



SUSAN SABBAGH Vice President, Marketing & Communications, Halliburton



PRABU PARTHASARATHY Vice President Intelligent Operations, Wood Group



MICHELLE PFLUEGER General Manager for Digital Innovation and Acceleration, Chevron



ERIC ABECASSIS Chief Information Officer, Schlumberger

MARK MADDOX Chief Information Officer, Apache

BEN AMABA Chief Innovation Officer, IBM

VIVEK CHIDAMBARAM Managing Director, Accenture

PHILIPPE HERVE Vice President Solutions, Sparkcognition

ROY NEUMANN Director of Sales, FieldBit

RAMANAN KHRISNAMOORTI Chief Energy Officer, University of Houston

EVENT INFO

WHEN

Thursday May 24, 2018 8:00am – 4:00pm

LOCATION

Chevron Auditorium 1500 Louisiana St Houston, TX 77002

PRICE

Early Bird Registration Members: \$100 Non-Members: \$125 Students/MIT/Retired: \$65

CONTACT

Young Professionals EES Committee Benin Chelisky beninchelinsky@gmail.com

> Elcin Aktas eaktas@slb.com

Ryan Strubeck ryan.strubeck@gmail.com





REGISTER ONLINE

MAY 2018

And more speakers to be confirmed.



AWARDS BANQUET

2018 SPE Gulf Coast Section Awards and Scholarships Banquet

Join the SPE Gulf Coast Section as we celebrate another year of student success, emerging professionals, established industry leaders, and longtime members and supporters!

KEYNOTE SPEAKER



THOMAS BLASINGAME, PHD

Tom Blasingame is a Professor and the holder of the Robert L. Whiting Professorship in the Department of Petroleum Engineering at Texas A&M University. He holds a BS, MS, and PhD in petroleum engineering from A&M. In teaching and research activities, he focuses on petrophysics, reservoir engineering, analysis/interpretation of well performance,

unconventional resources, and technical mathematics.

Blasingame is a Distinguished Member of SPE and he is a recipient of the SPE Distinguished Service Award (2005), the SPE Uren Award (for technology contributions before age 45) (2006), the SPE Lucas Medal (SPE's preeminent technical award) (2012), the SPE DeGolyer Distinguished Service Medal (2013), the SPE Distinguished Achievement Award for Petroleum Engineering Faculty (2014), and SPE Honorary Membership (2015). Blasingame has served as an SPE Distinguished Lecturer (2005-2006) and is the SPE Technical Director for Reservoir Description and Dynamics (2015-2018).

EVENT INFO

WHEN

Thursday May 24, 2018 5:30pm – 10:00pm*

SPEAKER

Thomas Blasingame, PhD Professor Texas A&M University

LOCATION

HESS Club 5430 Westheimer Rd Houston, TX 77056

*Networking & cocktails 5:30pm – 6:30pm, followed by dinner & awards program







2018 AWARDS

GCS board of Directors would like to congratulate 2018 award winners for their support and dedication to SPE. - Trey Shaffer (GCS 2018 Chair), Deepak M. Gala (GCS 2017 Chair) and Dr. Ivor Ellul (GCS 2016 Chair)

GULF COAST SECTION AWARDS OUTSTANDING STUDY GROUP

- Data Analytics
- Reservoir

OUTSTANDING COMMITTEE

- Innovate
- MiT

SECTION SERVICE AWARDS

- Abe Abraham
 Permian Study Group
- Sumit Bhaduri
 Northside Study Group
- Cheryl Collarini
 Petro-Tech Study Group
- Cody Felton Business Development Study Group
- James Jackson Social Committee
- Pablo Perez
 International Study Group
- Rex Yalavarthi Reservoir Study Group

EXEMPLARY VOLUNTEER AWARD

- Oladapo Adejare
 Young Professionals
- Suri Bhat Data Analytics Study Group
- Bill Davis Board
- Saloumeh Ebrahimzadeh
 Young Professionals
- Heidi Epstein
 Business Development Study Group
- Karin Gonzalez Newsletter Editor
- Tom Howes Data Analytics Study Group
- Alexsandra Martinez Reservoir Study Group

- Juliette Pearson
 MiT Committee
- Mojtaba Shahri Drilling Study Group
- Jon Spencer Northside Study Group

GULF COAST REGION AWARDS REGIONAL TECHNICAL AWARDS

- Stephen Baumgartner Completions Optimization and Technology
- Deena Buford Health, Safety, Security, Environment and Social Responsibility
- James Deaver Projects, Facilities, and Construction
- Dale Jamison Drilling Engineering
- Rajesh Saini Production and Operations
- Rodney Sidle Reservoir Description and Dynamics
- Chicheng Xu
 Formation Evaluation

DISTINGUISHED ACHIEVEMENT AWARD FOR PETROLEUM ENGINEERING FACULTY

Konstantinos Kostarelos
 University of Houston

YOUNG MEMBER OUTSTANDING SERVICE

- Alejandro Lerza
- Prashant Sainani

THE REGIONAL SERVICE AWARDS

- Lisa Li
- Shahrazed Metouri
- Ernest Prochaska
- Michael Redburn
- Jose Villa

PUBLIC SERVICE AWARD

• Catalina Leal



YOUNG PROFESSIONALS SPE-GCS Young Professionals IAGTE at Rice with SWE-HA

In partnership with the Society of Women Engineers (SWE) Houston and Rice University Chapters, SPE GCS YP invites you to volunteer for Introduce a Girl to Engineering Day (IAGTE) at Rice University. This year SPE GCS YP is hosting an activity track designed to teach oil and gas engineering through hands-on experiments and contests! There is a morning shift from 8:30am to 12:00pm or an afternoon shift from 12:00pm to 4:00pm. Volunteers are encouraged to participate in both shifts (morning and afternoon). You will be assisting teams of seventh through ninth graders as they learn concepts like design, planning, the scientific method, the application of energy, and oil and gas principles.

Our partner and the sponsor of this event is:



CONTINUING EDUCATION

Accelerated Learning Tutorial: An Overview of Multistage Completion Systems for Hydraulic Fracturing

New multistage completion

• Benefits and considerations for each

• Refracturing options for existing wells

• Application specific solutions for

wellbore completion design

technologies

completion system

Attendees will receive a PDH certificate for 8 hours. Topics include:

- Hydraulic fracturing basics, theory and design
- Evolution of multistage completions
- Wellbore completion options for multistage hydraulic fracturing
- Plug-and-perf completions | Ballactivated completion systems (frac sleeves)
- Coiled-tubing-activated completions systems (annular fracturing)

AARON BURTON

Aaron Burton's career has been focused on the completion of shales and similar unconventional plays that require multistage hydraulic fracturing. In 2015, Burton started Unconventional Oil and Gas Training, a company specializing in training and consulting for unconventional multistage completions.

EVENT INFO

WHEN

Sat, May 5, 2018 8:30am-12:00pm & 12:00pm-4:00pm

LOCATION

Rice University 6100 Main St Houston, Tx 77005

CONTACT

Mollie Garvey garvey906@gmail.com

REGISTER ONLINE

EVENT INFO

WHEN

Fri, May 11, 2018, 8:30am – 4:30pm

SPEAKER

Aaron Burton Unconventional Oil and Gas Training

LOCATION

SPEI Houston Training Center 10777 Westheimer Rd Houston, TX 77042

CONTACT

Mike Redburn - 281-754-8629 garvey906@gmail.com

PRICE

Members: \$350 Non-Members: \$375 Students/MIT/Retired: \$50

24 COMMITTEES

YOUNG PROFESSIONALS

The Digital Oilfield

THE BOSTON CONSULTING GROUP

The digital oilfield is a complex ecosystem of operators, oilfield service companies, and technology entrants, both startups and established industry titans. Digital is changing the way customers, suppliers and employees interact, creating new business models, attracting new players and increasing competition. Please join us to:

- Learn about BCG's view on the 12 digital domains reshaping the energy world.
- Deep dive into digital case studies from real BCG client engagements.
- Hear how BCG is contributing to the digital oilfield transformation.
- Discuss hot topics facing the digital oilfield today and into the future.

This event is sponsored by Boston Consulting Group.

EVENT INFO

WHEN

Tuesday May 15, 2018 5:30 – 7:30pm

LOCATION

Boston Consulting Group 1221 McKinney St, Ste 3000 Houston, TX 77010

CONTACT

Eric Kinsey Regel 504-920-8392 eregel@gateinc.com

REGISTER ONLINE

CONTINUING EDUCATION

Field Development Tutorial

This tutorial is an introduction to the oilfield development process. It will provide an introduction to the field lifecycle: exploration, field development, production, and abandonment. During the session, we will consider the field as a system under development. We will explore the different subsystems and components that influence the decision to go forward. In addition, we will take a look at some of the current practices through participants' experiences.

KHEDHER MELLAH

Khedher Mellah holds a master's degree in mechanical engineering from the University of Minnesota and has worked for oil service companies in directional drilling, surveying, LWD, wireline, product development, training and completions. He chaired the API HT/HP validation subcommittee and was part of the development stages of various Deepwater, high pressure fields with Chevron and Shell. He also oversaw the development of new technologies and hold two patents.

EVENT INFO

WHEN

Thurs, May 24, 2018 9:00am – 3:30pm

SPEAKER

Khedher Mellah

LOCATION

Newpark Drilling Fluids Office 21920 Merchants Way Katy, TX 77449

CONTACT

Mike Redburn - 281-754-8629 mredburn@newpark.com

PRICE

Members: \$350 Non-Members: \$375 Students/MIT/Retired: \$50



MEMBERS IN TRANSITION (MIT)

SPE MiT Initiative: 28th Seminar Series

The SPE Members in Transition Seminar Series features topics of interest to members who are transitioning between jobs during the current industry downturn or who are looking for new opportunities.

PROGRAM 1

Optimizing Brownfield Production Using Machine Learning, Reservoir Physics, And **Advanced Mathematics**

Generating production growth from brownfields does not have to link to capital spending or aggressive reservoir management. Digital Oil Recovery™ provides an alternative. Machine learning, reservoir physics, and advanced mathematics are used to create a model of the reservoir, optimize development, and deliver gains up to 20% without capital investment.



ADAM DUFFY-FAGAN

Adam Duffy-Fagan is a Senior Consultant with Deloitte's Energy & Resources practice and focuses on mergers & acquisitions within the oil and gas and mining sectors. Adam completed his MBA at the Yale School of Management and an Honours Bachelor of commerce

degree at McGill University.

PROGRAM 2

Landing Stories Panel

This panel of former SPE Members in Transition will share their landing stories. Learn from these seasoned professionals what worked best in executing a successful job search during their time.



ASHISH GHOTEKAR

Ashish Ghotekar is a Vice President with ABN AMRO and evaluates oil and gas assets for Reserves Based Lending. He has over nine years' experience conducting reservoir and production engineering projects with multiple consulting firms. Ashish has a MS in petroleum

engineering from University of Alaska Fairbanks and BS in chemical engineering from University of Mumbai, India.



CARLOS PINEDA

Carlos Pineda is a well completions leader with 20+ Years of sales experience. Carlos is a respected leader with experience working in the operator and service sectors. Carlos has extensive senior management experience in onshore, offshore, subsea, USA, and

international completions.



ALAN KENDALL

Alan Kendall has served as Project Interface Lead, Project Risk Lead, Project Assurance Lead and has also led Decision Documentation, Management of Change and Lessons Learned for major capital projects of \$1B to \$20B. He is a graduate of Rice University (Physics) and McCombs School of Business (MBA, University of Texas, Austin).

EVENT INFO

WHEN

Friday June 1, 2018 10:00am – <u>3</u>:00pm

SPEAKERS

Adam Duffy-Fagan Senior Consultant Deloitte Consulting LLP

Ashish Ghotekar *Vice President – Petroleum Engineer* ABN AMRO Bank N.V.

Carlos Pineda Global Technical Account Manager **Stage Completions Inc**

> Alan Kendall Risk Interface Coordinator Chevron

LOCATION

Houston Technology Center 410 Pierce St Houston, TX 77002

CONTACTS

Susan Howes 713-553-5020 c.susan.howes@gmail.com

Ashish Fatnani 832-415-6835 ashish.fatnani@halliburton.com

PRICE

Members: \$40/\$50 Walk-In Non-Members: \$50 Students/MIT/Retired: \$15

Registration Cap: 70



SPORTING CLAYS

SPE-GCS 18th Annual Sporting Clays Tournament

The 18th Annual Society of Petroleum Engineers Gulf Coast Section Sporting Clays Tournament and 5th Annual Food Frenzy will be held on Friday June 8, 2018 at Westside Sporting Grounds. The Sporting Clays Tournament is a large provider to the SPE-GCS Scholarship Fund. Last year, this successful tournament contributed more than \$17,000 to the SPE-GCS scholarship fund and \$5,000 to the Bright Light Foundation. This charity is made possible because of organizations and people like you! The 2018 tournament is limited to the first 48 teams. Entry cost is \$800.00 per five-man team, including shooter gift. Please help make the 2018 tournament a success by supporting a team, purchasing a sponsorship, or donating door prizes/entry gifts. Your support is an integral part of the SPE-GCS scholarship fund and charitable contribution to Bright Light Foundation. We look forward to seeing everyone on June 8!

FOOD FRENZY COMPETITION

Along with the Sporting Clays Event, we are pleased to announce the continuation of the Food Frenzy Competition. This contest is based on food and side events that each contestant will provide (at their own booth). Each shooter will be able to vote for the best food booth and Food Frenzy Champion.

Tournament registration and sponsorship forms can be downloaded online. You may send them by mail or email.

Email: spe-gcs@spegcs.org

Mail: SPE Houston Office 10777 Westheimer, Suite 1075 Houston, TX 77042



EVENT INFO

WHEN

Friday June 8, 2018

Flight #1 8:00 am Flight #2 1:00 pm

LOCATION

Westside Sporting Grounds 10120 Pattison Rd Katy, TX 77493

CONTACT

Prue Smith - 949-285-9615 PrueE.Smith@bp.com

PRICING

Members: \$160 per person \$800 per 5-person team

Non-Member: \$160 per person \$800 per 5-person team

Students/MiT/Retired SPE: Contact committee for pricing



JOINT COMMITTEE EVENT: CONTINUING EDUCATION & MIT

SAVE THE DATE Unconventional Oil and Gas Resources Exploitation and Reservoir Development

This training course will be hosted by SPE-GCS Members in Transition and Continuing Education Committees.

The comprehensive training will cover the latest advances in the exploitation and development of unconventional resources, with an emphasis on shale. All aspects of the process will be addressed, from data mining and accounting, to drilling, completion, stimulation, production, and environmental issues. It offers in-depth coverage of sub-surface measurements and their interpretation. It discusses the use of microseismic, fiber optic, and tracer reservoir monitoring technologies and JewelSuite[™] modeling software. It also explores future trends in reservoir technologies.

Be sure to look for more details later.

EVENT INFO

WHEN

Wednesday & Thursday July 18 & 19, 2018

SPEAKERS

Usman Ahmed Aaron Burton

LOCATION

Newpark Drilling Fluids 23119 Colonial Pkwy Katy, TX 77449

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WHERE ARE THEY NOW?

Past Scholarship Winner: Alexandria Kathleen Truby

The Scholarship Committee conducted a survey of past recipients of the SPE-GCS scholarship. If you're considering donating to the SPE-GCS scholarship fund or hiring an SPE-GCS scholarship winner, you'll be glad to know that the program has enjoyed considerable success over the past six decades. Here is Alexandria Kathleen Truby's story:

"The SPE scholarship aided me in these endeavors by allowing me to attend an out of state school. "

During my four years at Mines, I would say that my three summer internships were the best thing I did to get my foot in the door with the industry. Because of internships, I had a good idea of what to expect when I entered the work force. I was able to gain experience in three different states and in three very different roles, which exposed me to different aspects of the industry. The SPE scholarship aided me in these endeavors by allowing me to attend an out of state school. Moving from Texas to attend Colorado School of Mines would have been much more of a struggle had I not received a scholarship from SPE.

After graduation I began working as a Production Engineer for Anadarko Petroleum in August of 2015 in Vernal, UT. And I recently transferred to another field location in Colorado last April. I have been able to make the most of my field experience by spending as much time as I can out in the field. I am seeing and learning things that I will take with me through the rest of my career. My advice to students is to make the most of your opportunities and to immerse yourself in the industry as soon as possible. Network, volunteer, attend industry events and apply for internships.



CAREER OVERVIEW

Production Engineer at Anadarko Petroleum Corporation

- Cinco Ranch High School 2011
- Colorado School of Mines, BS in Petroleum Engineering
 - Minor: Economics and Business
 - Minor: McBride Honors Program in Public Affairs

SPE International

CONTRIBUTE TO THE SPE-GCS SCHOLARSHIP FUND TODAY!

DONATE

EVENT HIGHLIGHTS

Young Professionals Committee: Houston Food Bank Volunteers

Thanks to all of our volunteers that helped out at the Houston Food Bank in February. We had a great turnout of SPE professionals, and members of the American Institute of Chemical Engineers (AIChE). The diverse group encouraged interaction between the two organizations while contributing to our community. Your generous time contribution allowed us to complete thousands of meals for those in need. To assert SPE's commitment to our community, we have several volunteering opportunities available. For more details, check out our event calendar at www.spegcs.org/events.



Drilling Study Group: Annual Drilling Symposium

The SPE-GCS Drilling Study Group organized the Annual Drilling Symposium on March 15 at the Southwestern Energy facility. This year, we focused on cost-saving innovations to improve drilling efficiency. The full-day event featured eight excellent speakers/presentations including keynote speaker Matt Ondler, CEO Houston Mechatronics Inc. We had a great turnout for this special event and would like to thank this year's sponsor, DrillScan.



EVENT HIGHLIGHTS

Permian Basin Symposium

The SPE-GCS Permian Basin Symposium 2018 held on Thursday, April 12th at the Norris Center - City Centre. We had a sold out crowd of more than 250 attendees with Executives from XTO, Pioneer, Apache and Oxy.











TEXAS A&M U N I V E R S I T Y

Texas A&M March Event Update

Texas A&M SPE hosted a number of events during the month of March, even with spring break. In early March, a different presentation was given each day during "Lunch and Learn Week", including a "Meet the Industry" talk. We also hosted a soft skills workshop entitled "The Hard Truth About Soft Skills".

Later in March, Texas A&M SPE hosted its annual Douglas Van Gonten Memorial Golf Tournament. Each year, student and industry teams compete. The proceeds help fund the Douglas Van Gonten Memorial scholarship for Texas A&M petroleum engineering students. The evening of the tournament, we hosted a panel discussion called "The Power Switch". During the panel, industry experts discussed future energy consumption trends.

Regional Student Paper Contest

Texas A&M University petroleum engineering won first place in all three divisions, and second place in two out of three divisions, at the SPE Gulf Coast North America regional paper contest, held March 31 at Rice University.

Bachelor's Division: first place, Miranda Jones; second place, Claire Fiorenzi.

Master's Division: first place, Tian Liu; second place, Romain Lemoine.

PhD Division: first place, Sheng Luo.

Jones, Liu, and Luo will advance to the international paper contest, held in September during the SPE Annual Technical Conference and Exhibition in Dallas, Texas. They will compete against regional winners from all over the world.



HCC Held Women in STEM

On March 23, 2018, the Small Business Development & Entrepreneurship Center invited Aileen Lu to speak at Women in STEM. The Office of Entrepreneurship Initiatives named Lu as "Woman of the Month" and featured her on the "Meet HCC" page of their website.

The event took place at the HCC Southeast Campus and included a panel of women with significant and distinguished careers in fields related to Science, Technology, Engineering, and Mathematics. Special guests included Dr. Maya Durnovo, Chief Entrepreneurial Officer; Brenda D. Rios, Director of Entrepreneurial Initiatives & Community Relations; Germaine Washington, Manager, SBDEC; and Ned Mueller, Entrepreneur in Residence. The audience actively participated in the discussion.

HCC Northwest Campus has extended an invitation to Ms. Lu to speak at future events.

STUDENT CHAPTER DIRECTORY

HOUSTON COMMUNITY COLLEGE

Aileen Lu: aileen.business.us@gmail.com

RICE UNIVERSITY

Eric Vavra: edvi@rice.edu

TEXAS A&M UNIVERSITY

Jordan Argamany: j.argamany@tamu.edu

UNIVERSITY OF HOUSTON

Tony Nowak: president.uhspe@gmail.com

PRAIRIE VIEW A&M

Natalie Russell: natalie.russell789@gmail.com



Field Trip to Schlumberger

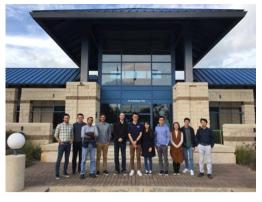
On February 1st 2018, we organized a field trip to Schlumberger oilfield service company in Sugar Land and were invited to visit the Schlumberger Campus.

Interactive to PropTester

On February 23rd 2018, we organized an interactive tour to PropTester. The tour included how proppant is being tested through several methods including conductivity testing, fluid testing, friction flow loop system, cementing services and other services.

A Special Invitation: Advisory Board

The committee is working on launching an advisory board to invite both Rice alumni and industry representatives to give student members advice and help them build personal connections. If you are interested and willing to support us, please contact Eric Vavra, edv1@rice.edu.





PROFESSIONAL REGISTRATION REVIEW COURSES FOR PETROLEUM ENGINEERING

The Courses covers topics on the Texas State Board Petroleum Engineering Professional Examination.

2018 HOUSTON COURSES

I August 20 - 24, 2018 II October 8 - 12, 2018

MORE INFORMATION:

PHONE:	405-822-6761
E-MAIL:	bingwines@cox.net
WEBSITE:	winrockengineering.com
WEBSITE E-MAIL:	winrockpe@gmail.com

NEED PROJECT AND VENDOR MANAGEMENT SUPPORT?

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SIMPLIFY Your Sand Supply



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	RUSH	Hi-Crush can <i>Simplify Your</i>

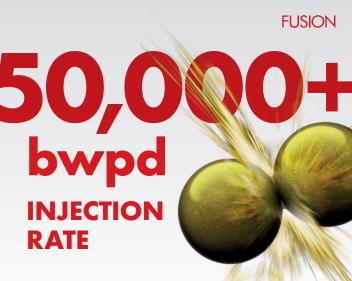
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