The Unfulfilled Expectation of Horizontal Wells with Multistage Fracture Completions: A Solution
In Every Issue

CHAIR’S CORNER
Sunil Lakshminarayanan

VOLUNTEER SPOTLIGHTS
Abhishek Sharma
Thomas Shattuck

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April 2019

MEMBERSHIP REPORT
February 2019

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Buddy Woodroof

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GENERAL MEETING
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WESTSIDE
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DRILLING
A New Robotics Business Model for Oil and Gas

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WASTE & WATER MANAGEMENT
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EDUCATION
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YOUNG PROFESSIONALS
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YOUNG PROFESSIONALS
Earth Day Celebration

CONTINUING EDUCATION
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AWARDS AND SCHOLARSHIPS BANQUET
2019 SPE Gulf Coast Section Awards and Scholarships Banquet

Special Events

DATA ANALYTICS
Data Science Convention

GOLF COMMITTEE
46th Annual Golf Tournament

PERMIAN BASIN
2019 Permian Basin Symposium

RESERVOIR
Reservoir Technology Symposium

HSSE-SR
High School STEM Outreach

DIGITAL TRANSFORMATION
Digital Transformation Annual Congress

ELECTRIC SUBMERSIBLE PUMP (ESP) SYMPOSIUM
2019 SPE Gulf Coast Section Awards and Scholarships Banquet
Renew Your SPE Membership Today!
Stay connected with SPE-GCS activities during 2019

Join up with the brightest minds – 15,000 local members and more than 143,000 international members – in the industry!

Grow your technical skills at our local and international conferences, workshops, and training courses.

Participate in SPE Gulf Coast Section’s events, meetings and activities.

Submit a technical paper for presentation or publication.

Receive discounts on journals, reference books, OnePetro and other SPE publications.

Expand your network with managers, engineers, scientists, and other professionals locally and worldwide.

Develop leadership skills and contribute to the profession through our programs and activities.

Give back to our community and the E&P industry through volunteer opportunities.

For inquiries, please contact the SPE-GCS Membership Team at membership@spegcs.org.

RENEW YOUR MEMBERSHIP ONLINE

ENGINEERS OF ALL DISCIPLINES

Want to get Professionally Registered but have not passed the FE Examination and have been out of college more than four years? Then contact us to find out how to get prepared and pass the FE Exam the first time. The technique has a 98% + pass rate to date. The FE Exam is now a Computer Based Test. You pick your own date to take the FE Test.

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

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As we enter into the second quarter of 2019, we get into the busiest season for our section. Several of our legacy and new one-day events are set to take place in the next two months. The study groups and committees have put in a lot of effort to plan these events and I wish them the best for a successful execution! Please refer to the events calendar at www.spegcs.org for event information.

This season also calls for action from our members and board officers. We’re preparing to identify candidates to fill the vacant positions in the board for 2019–2020. We’re also in the process of selecting our most deserving volunteers for the annual section awards. Our nominations and succession committee, headed by Trey Shaffer, has begun work on both of these items, and your help is needed to make sure we find the right individuals.

**Annual Awards Banquet**

Our annual awards banquet will be held May 23. These awards are highly prestigious and recognize excellence within our section. We request that all members nominate a deserving volunteer for the section awards, which will be handed out during the banquet. Awards include:

1. Section Service
2. Exemplary Volunteer
3. Outstanding Study Group
4. Outstanding Committee

**Board Nominations**

We’ve begun our nomination process to elect several key board positions. The nominating committee will prepare a slate of candidates for each office, and the date and location of a vote for the following positions: one candidate each for the position of vice chair, secretary, vice treasurer and three at-large directors. The committee will also nominate one candidate for each director position, (key committee chair), to be appointed by the chair.

A slate of candidates will be presented at the May 2019 board of directors meeting for approval and the results will be published via e-mail or the newsletter following the June board meeting. All nominees must meet the qualifications for section membership defined in Article IV of the Gulf Coast Section bylaws.

*Please submit both award and board position nominations to Trey Shaffer at trey.shaffer@erm.com and Taylor Wright at spe-gcs@spe.org by April 15.*

**New Website**

By now, you’re likely familiar with our new website. It’s a huge upgrade from our old website and it’s taken a lot of planning and hard work to execute. I would like to thank Mrs. Lindsey Newsome and Mrs. Karin Gonzales for their stupendous efforts in pulling it off in record time. I would love to hear from all of you about your experience with the new site. Please feel free to reach out to me directly.

**Innovation and Entrepreneurship Symposium (IES)**

The second annual Innovation and Entrepreneurship Symposium (IES) took place Feb. 27-28 and was organized by the Innovate committee. The event was a grand success, with around 250 professionals from various organizations attending. Attendees from various subsets in our industry were enlightened about new innovations from startup organizations. The event also featured the “Shark Tank,” where a select few startups showcased their concepts and companies and received feedback from peers, investors and potential clients. I would like to congratulate the IES chairman, Mr. Chris Reinsvold, and his team for a highly successful event.

**Inter-Corporate TopGolf Tournament**

The Young Professionals (YPs) led by Mr. Shakti Sehra organized the first annual Inter-Corporate TopGolf Tournament on Feb. 21. Professionals from various corporations enjoyed a lovely evening playing golf along with networking with other professionals in our industry. Considering the success of this event, we expect this to become an annual tradition in our section with more companies participating in the coming years!

All the best!

“The best way to find yourself is to lose yourself in the service of others.” – MAHATMA GANDHI

SUNIL LAKSHMINARAYANAN, 2018 – 2019 SPE-GCS CHAIR

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All the best!
ERIC WILLIAMS

How did you first get involved with SPE?
My wife, Vera, and I started attending a lot of community outreach events back in 2016 when we first moved to Houston in order to meet people and help in the community.

What SPE study groups, committees, or volunteer events have you been involved in?
I’m one of the organizers for the SPE TopGolf Tournament and Networking Event. Last year, I helped with community outreach events before officially joining the board.

What is your current role with SPE?
I’m the YP networking events chair.

What is your REAL job and educational background?
I currently work in supply chain for Marathon Oil as a category manager for drilling.

What is your favorite thing about SPE?
I’ve met so many awesome people with SPE who all share the same goal of showing how much the oil and gas industry does to help its communities.

GUSTAVO RIOS

How did you first get involved with SPE?
I joined SPE in 2013 as a petroleum engineering student at the University of Houston.

What SPE study groups, committees, or volunteer events have you been involved in?
I’ve volunteered at numerous SPE events since joining the SPE student chapter at the University of Houston. I became part of the SPE-GCS Reservoir Study Group last summer after being introduced to the group by my mentor, colleague and friend Rex Yalavarthi, who served as chair of the group from 2017-2018.

What is your current role with SPE?
I’m currently serving as the SPE-GCS Reservoir Study Group Sponsorship Vice-Chair.

What is your REAL job and educational background?
I’m a reservoir engineer at Unit Petroleum Company. My team manages the company’s exploration and production activities in the Gulf Coast region. In addition to my reservoir engineering duties, I’m also heavily involved in completions and production operations. I hold a BS in petroleum engineering from the University of Houston.

What is your favorite thing about SPE?
The friendships and connections I’ve made. In my experience, the events organized by the SPE study groups provide a remarkable opportunity to meet other oil and gas professionals who are as passionate and enthusiastic about their work as I am.
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**Upcoming Special Events**

Mark Your Calendars

- **05.10.19** DIGITAL TRANSFORMATION ANNUAL CONGRESS
- **05.13—05.17.19** SPE-GCS ELECTRIC SUBMERSIBLE PUMPS SYMPOSIUM
- **05.22.19** BUILDING WINNING TEAMS: MVP HOUSTON ASTROS DRAFT DAY
- **05.23.19** SPE-GCS AWARDS AND SCHOLARSHIPS BANQUET
- **06.07.19** 19TH ANNUAL SPORTING CLAYS TOURNAMENT
- **06.20.19** 2019 ROUGHNECK CAMP
Membership Through February 2019

- 784 RENEWED STUDENTS
- 3,634 LAPSSED PROFESSIONALS
- 371 NEW PROFESSIONALS
- 10,621 PROFESSIONALS RENEWED
- 10,992 TOTAL MEMBERSHIP as of February 2019

Current Membership Trends

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WHEN: April 18, 7:30 – 10:30am
WHERE: SPE Houston Office: 10777 Westheimer Rd, Ste 1075 Houston, TX 77042
R.S.V.P: Taylor Wright
T (713) 457-6821
F (713) 779-4216
spe-gcs@spe.org

Study Group Pricing

- MEMBERS: $40/$55 Walk-in
- NON-MEMBERS: $55
- STUDENTS/Mit/Retired SPE: $25

The Gulf Coast Section (GCS) was established on April 13, 1935. The mission of GCS is part of our Bylaws which were amended by vote of the Board of Directors on April 16, 2017, and by vote of the general membership on April 20, 2017.

SPE-GCS MISSION

The mission of the Section shall be the promotion of mutual cooperation in furthering the objectives of the Society of Petroleum Engineers International, Inc.

This shall be accomplished by:

I.
Providing forums that afford members the opportunity to upgrade and maintain professional competence.

II.
Providing social interaction that increases member participation in Section activities as a whole, while striving to maintain the integrity of the Section.

III.
Supporting programs in local primary and secondary schools to encourage students to develop their abilities in science, technology, engineering and mathematics.

IV.
Supporting engineering programs at the university level.

V.
Enhancing the image of the Oil and Gas Industry by sponsoring community service programs.
THE REST OF THE YARN

This month, we continue our look back at the rise and fall of wildcatter Glenn McCarthy, as the opening night of the Shamrock Hotel turns into the media event McCarthy had yearned for.

When bedlam broke out as opening night invitees scrambled to get to their tables, comic Ed Gardner attempted to engage the crowd by naming some of the stars in the audience–but it didn’t work. In an act of comic desperation, he began calling an imaginary horse race: “And a big crowd is here tonight at Santa Anita...” That didn’t work either. Dorothy Lamour pleaded for him to stop and ultimately fled to her suite in tears. She later recounted that even while on the road with Bing Crosby and Bob Hope she never experienced anything like opening night at the Shamrock.

The dinner service was a comedy, as waiters weaved through the crowd. There had been considerable speculation surrounding the menu, given the $42-a-plate price tag, which one writer labeled “astronomical.” Dinner turned out to be beef and a fruit cocktail called “pineapple surprise.”

A ceremony featuring Pat O’Brien and Texas Governor Beauford Jester finally began around midnight, three hours behind schedule. Meanwhile, someone stole Mayor Oscar Holcombe’s chair, forcing Holcombe and his wife to sit in a hallway for two solid hours. “It was the worst mob scene I ever witnessed,” he fumed afterward. A reporter for Time magazine wrote that the party “combined the most exciting features of a subway rush, Halloween in a madhouse, and a circus fire.” The Chronicle’s society editor described it as “bedlam in diamonds.”

Next month, bedlam or not, the Shamrock’s opening night is all about “the new Texas.”
HISTORY QUIZ
Which of the following wildcatters has buildings named in his honor at six different Texas universities?

a.) Hugh Roy Cullen
b.) Sid Richardson
c.) Clint Murchison
d.) H.L. Hunt

If you would like to participate in this month’s quiz, e-mail your answer to contest@spe.org by noon, April 15. The winner, who will be chosen randomly from all correct answers, will receive a $50 restaurant gift card, courtesy of the ProTechnics Division of Core Laboratories.”

ANSWER TO MARCH’S QUIZ
Joseph Cullinan was the former Standard Oil executive who moved to Texas and formed an independent operating company that would later become a major E&P company – Magnolia Petroleum, (which later became Mobil Oil). Cullinan built the first refinery west of the Mississippi and formed another operating company that became a second major E&P company – The Texas Co., (which later changed its name to Texaco).

CONGRATULATIONS TO FEBRUARY'S WINNER.
Bill Liddell with Anadarko Petroleum.

SCALE GUARD
 SCALE WORKOVERS FOR NEARLY 2 YEARS

A single application of SCALEGUARD proppant-delivered scale-inhibiting technology has maintained production rates and eliminated costly workovers for nearly two years in previously scale-prone wells in Manitoba, Canada. Similarly impressive results have been achieved in over 200 wells across North America.

The numbers speak for themselves
For more production enhancing technologies that improve your initial production, EUR and ROI numbers, talk to CARBO.

Read the full story carboceramics.com/manitoba
Integrating Technologies to Evaluate Limited-Entry Treatment Effectiveness

This presentation reviews a case study of plug-and-perf horizontal well treatments in an unconventional shale play in which various diagnostic methods were used to better understand and quantify the factors that determine limited-entry effectiveness. Three diagnostic methods were implemented, including injection step-down tests and pressure analysis of the fracturing treatments; video-based perforation imaging; and distributed acoustic sensing (DAS). Stress shadowing and perforation erosion were determined to have a significant impact on slurry allocation. Other undesirable effects, such as heel-side flow preference, were also observed. Camera images readily confirmed proppant-induced erosion at the scale of individual perforations. Measurements from the digital images provided comparison points for predictive software using surface pressure measurements. DAS results provided cluster level proppant distribution values. Correlations were also observed between treatment allocation values from DAS data and values derived from perforation friction calculated from Bernoulli’s equation using image-based entry hole diameter data.

Dave Cramer

Dave Cramer is a senior engineering fellow with the Global Completions Engineering team at ConocoPhillips in Houston, TX, specializing in hydraulic fracturing applications. He has published 52 technical papers and holds two US patents, and is a registered Professional Engineer in Colorado. Cramer is the 2011 recipient of the SPE International Completions Optimization and Technologies Award.
GENERAL MEETING

Using Downhole Fiber Optic Temperature Sensing Technology to Monitor, Control and Improve Well Performance

Downhole sensing technology provides engineers continuous measurements for flow condition diagnosis. Measurements include temperature, pressure, acoustic and strain, with distributed temperature sensors (DTS) and distributed acoustic sensors (DAS) being more commonly used as optical fiber technology has advanced.

From downhole flow condition characterization, we can diagnose problems and monitor, control and optimize well performance and treatments. One of the keys to applying downhole sensing technology is developing models and methodologies to interpret sensor measurements. But this is challenging, as data collection, processing and model development are extremely mathematical and computationally intensive.

In this lecture, we’ll review the current status of downhole sensing technology and explain the available models and approaches for interpretation. We’ll also present field application examples, including production profiling, horizontal well flow control, matrix acidizing optimization and multi-stage hydraulic fracture diagnosis. The lecture will illustrate the power of DTS as a tool for production problem diagnosis and well performance optimization.

DING ZHU - SPE DISTINGUISHED LECTURER

Ding Zhu is a professor in the Petroleum Engineering Department at Texas A&M University. Zhu’s research areas include production engineering, well stimulation, intelligent well-modeling and complex well-performance optimization. She holds a BS in mechanical engineering from the University of Science and Technology in Beijing, China, and both an MS and PhD in petroleum engineering from the University of Texas at Austin.
The Unfulfilled Expectation of Horizontal Wells with Multistage Fracture Completions: A Solution

This lecture presents approaches for increasing production from horizontal wells with multistage fracture (HWMSF) completions in conventional reservoirs. HWMSF completions are now regularly being drilled and completed in low-to-mid-permeability, oil-bearing conventional reservoirs (k<10 md) where the oilfield is under waterflooding. Although the industry has closed the HWMSF technology gap of drilling and completing these wells, productivity has been below the expected level and the lessons learned in unconventional reservoirs are not pertinent to conventional formations.

Krešo Kurt Butula is reservoir management advisor to Schlumberger’s president for Russia and Central Asia. He has a master’s degree in petroleum engineering from the University of Zagreb, Croatia, and is based in Moscow. With more than 27 years of worldwide onshore and offshore experience, he is currently responsible for the assessment and integration process for complex subsurface projects, and for defining the company business model and technological solutions.
### BUSINESS DEVELOPMENT

#### How New Entrants Are Driving the Haynesville Revival

Following the drop in natural gas prices in 2009, the Haynesville rig count declined substantially. However, thanks to productivity gains and increased demand, the Haynesville is back! Production has grown dramatically, and today the play is producing ~10 billion cubic feet per day, with no slowdown in sight. With private companies looking to monetize their investments and international players looking to secure a low-cost gas supply, the Haynesville is well positioned for future mergers and acquisitions. Our panel will discuss the outlook, opportunities and challenges of working in the Haynesville and the Ark-La-Tex Basin in general.

We will kick off with our popular networking happy hour followed by the presentation, including a Q&A session.

**SEASON PASS HOLDERS:**
You do not need to register for this event, as your Season Pass has automatically registered you for all 2018-2019 business development events.

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#### ALAN SMITH

Alan Smith is the president and CEO of Rockcliff Energy, a privately held, independent oil and gas company in Houston, Texas. Prior to joining Rockcliff, Smith held a number of executive roles at energy-focused investment companies including Quantum Resources Management, Quantum Energy Partners, and Chalker Energy Partners. He holds a BS in petroleum engineering from Texas Tech University.

#### FRANK TSURU

Frank Tsuru currently serves as president and CEO of Indigo Natural Resources and is co-founder and CEO of Momentum Midstream. As a petroleum engineering graduate from the University of Kansas, he started his career with TXO Production before running Red Cedar Gathering and Aka Energy. Tsuru is also actively involved with numerous philanthropic organizations.

#### PRESTON PHILLIPS

Preston Phillips is responsible for Aethon’s acquisition and divestiture processes and commercial activities, including midstream and marketing. He previously led efforts to develop a greenfield refinery project and a joint development study of oil fields in the Middle East. Phillips graduated from Texas A&M University with a BS in electrical engineering and earned his MBA from the University of Texas at Austin.

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### EVENT INFO

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<th>WHEN</th>
<th>Wednesday, April 17, 2019 5:00pm – 7:00pm</th>
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| SPEAKER    | Alan L. Smith  
*President and Chief Executive Officer*
*Rockcliff Energy*  
Frank D. Tsuru  
*President and Chief Executive Officer*
*Indigo Natural Resources*  
Preston Phillips  
*Vice President, A&D and Commercial*
*Aethon Energy*  
| LOCATION   | Four Seasons Hotel  
1300 Lamar  
Houston, Texas 77010 |
| CONTACT    | Heidi Epstein – 281-415-1154  
heidi.epstein@energynet.com |

**REGISTER ONLINE**
DRILLING

A New Robotics Business Model for Oil and Gas

Robotics and automation are enabling new approaches and business models in oil and gas. This presentation will discuss opportunities in subsea inspection and maintenance and repair, and the resulting changes in traditional business delivery methods.

MATTHEW ONDLER

Matthew Ondler has more than 30 years of experience in engineering, management and leadership in both government and industry. He is the president, CEO and co-founder of Houston Mechatronics Inc. Previously, Ondler served 28 years with NASA at the Johnson Space Center, where he was the recipient of NASA’s Outstanding Leadership Medal and Exceptional Achievement Medal. He holds a BS in aerospace engineering from the University of Colorado and an MBA in finance from the University of Houston.

THE DISTINGUISHED LECTURER NOMINATION SEASON FOR 2020-21 IS NOW OPEN

Have you seen an exciting lecture on a topic relevant to the E&P industry? Was the speaker a leader in their field and an outstanding public speaker? If so, help us identify the best lecturers for your region and discipline for the 2020–21 SPE Distinguished Lecturer season by nominating them for the SPE Distinguished Lecturer program.

• Find out more about this exciting program.
• Review the nomination procedures.

Submit your nomination by 15 April!
Well Intervention Challenges to Service Unconventional and Extended-Reach Wells

Advances in drilling technology allow construction of wells that set new records in measured depth versus true vertical depth ratios and horizontal section lengths. They deliver sophisticated and versatile — yet often operationally complex — completions. Experience suggests that common well intervention technologies can’t fully address all possible intervention needs for wells that are being drilled and completed.

This talk will present an overview of available well intervention technologies, outline the limitations of each, and cover case histories from challenging interventions.

Curtis G. Blount

Curtis G. Blount is a senior engineering fellow in the Global Completions Engineering group at ConocoPhillips. Blount specializes in applying and advancing technology for use in challenging and harsh environments. He has been active in CT and well intervention research and applied technology development for more than 30 years.
Oilfield Technology Trends: Improving Efficiencies to Drive Growth and Scale Operations

Join industry experts to discuss trends in oilfield technology that improve efficiencies to drive growth and scale operations. The panel will be moderated by Mark LaCour, host of the number one oil and gas podcast, “Oil and Gas This Week.”

Panelists for this discussion are experts on oilfield technology and operational issues, and include John Gibson, Billy Roberts, David Bateman and Cory Hall. With such a depth of knowledge on the panel, this presentation is sure to offer a lively discussion about how technology is changing the way companies operate and manage their business to improve and scale their operations.

**JOHN GIBSON**
John Gibson is the chairman of energy technology for Tudor, Pickering, Holt & Co. He is an expert on energy development and digital innovation, with decades of experience in oil and gas.

**BILLY ROBERTS**
Billy Roberts is the president of ReStream Solutions, an oilfield technology company that helps companies increase production while improving operational efficiencies.

**DAVID BATEMAN**
David Bateman, CEO of SitePro, leads an oilfield automation software company on the cutting edge of the use of technology to improve operational efficiencies.

**CORY HALL**
Cory Hall, president and CEO of Aquaterra Water Management, has years of operations and management experience. He was the first operator to use extensive automation and concrete containment facilities throughout the Permian Basin.
WHERE ARE THEY NOW?

Past Scholarship Winner: Grace Howley

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 Grace Howley’s story:

Through the scholarship, I was offered the incredible opportunity to work as a pre-college intern. That internship convinced me that I wanted to be a petroleum engineer.

During college, I enjoyed the late nights I spent studying with my friends. We always found a way to make it fun, and it made us a family. I held the roles of president and treasurer of the UT SPE student chapter. My first internship was for Anadarko in Gulf of Mexico (GoM) business development. I interned at Linn Energy as a field intern in Brea, CA, and at Noble Energy in GoM completions and subsea engineering in 2015, followed by a 2016 internship at Noble in GoM reservoir engineering.

I’m now in Noble Energy’s rotational engineering program. I started in 2017 in the Operations Excellence group, then worked as a field engineer in Pecos, Texas. In 2019, I moved into global deepwater completions in Equatorial Guinea.

Receiving the SPE scholarship impacted my path in many ways. Through the scholarship, I was offered the incredible opportunity to work as a pre-college intern. That internship convinced me that I wanted to be a petroleum engineer. My manager gave me a lot of advice that helped me succeed as a PE student that still helps me today. I got to start college ahead of the game knowing that I was in the right place. My advice to students is to be active in SPE in college. It’s a great community of people you will know for your whole career, and it provides a connection to the industry that you won’t get from only going to class.

Petroleum Engineer,
Noble Energy
• Kingwood High School
• The University of Texas at Austin, BS, Petroleum Engineering
EDUCATION

SPE-GCS High School STEM Tutoring Program: Volunteers Recognition

The High School STEM Education Tutoring Program places engineers and scientists in high school science or math classrooms. Volunteer tutors help explain concepts to students and give them individual attention. Currently, about 30 volunteers are helping at 12 high schools in the greater Houston area.

This month, we are recognizing two volunteers, both of whom have been dedicated to the program for more than two years. We are also hearing from a Katy ISD teacher who has benefitted from this SPE program.

DR. ERIC LAINE, Physics Volunteer, Taylor High School (Katy ISD)

How did you get involved in the program?
Giving back, education, and serving as a professional example are important to me. An ad in the Connect alerted me to the program.

What do you find most rewarding or enjoyable about it?
The teachers always appreciate the assistance, and a surprisingly large percentage of the students ask for help. Explaining basic physics is fun.

JOHN WATSON, Math & Science Volunteer, Lamar & Yates High Schools (Houston ISD)

How did you get involved in the program?
The ExxonMobil retirement club posted a “volunteers wanted” notice in late 2016. The program with the high schools was just what I was looking for. It’s not easy to volunteer for HISD – you need to find an established program like this one to get past school bureaucracy.

What do you find most rewarding or enjoyable about the program?
It’s great to give back to the teachers and to teach some simple methodology to the students. If it were not for a caring math teacher in high school and several very good ones at university, I would never have gone into engineering.

KYLE BROWN, Physics Teacher, Taylor High School (Katy ISD)

Do you feel the program has helped the students better understand the presented materials?
One hundred percent. By having extra, knowledgeable people in the classroom, we’re able to differentiate our instruction on a more individual level. Sometimes the volunteers work with students on fundamental skills, such as basic algebra or graphing. Other times, they pull from their industry background to help students see the concepts they’re studying being used in realistic settings.

We have volunteers in the classroom during instruction or homework time, walking around helping individual students as we lecture or work with larger groups. Oftentimes, volunteers stay after school near testing dates to help with tutoring. Volunteers sometimes bring in stories, diagrams or data to show concepts that we teach being applied in real-world industries.
MEMBERS IN TRANSITION (MiT)

MiT Seminar Series #35: Joint Event with Petro-Tech Study Group

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

PROGRAM 1

Mental Wellness through Fitness and How it Can Benefit Your Daily Work Life

Given the cyclical nature of the oil and gas business, companies downsize and merge to prevent folding up. Employees are constantly in a state of stress and anxiety, not knowing when the next round of layoffs will be coming. Scientific studies have shown that exercise has multiple health benefits, including alleviating stress and anxiety.

KINGSLEY EKWOROMADU

Born and raised in Nigeria, Kingsley Ekworomadu is an alumnus of The Pennsylvania State University. He has been a petroleum and natural gas engineer in Houston, TX, for more than 12 years.

PROGRAM 2

Entrepreneurship

Kemal Farid will discuss his thirty-year journey as an entrepreneur and his current endeavors as a venture capitalist. He'll cover topics including the challenges of entrepreneurship, what it takes to build a successful company, and the role of capital in technology ventures.

KEMAL FARID

Kemal Farid is a technology investor and 25-year veteran of the oil and gas industry. He is a managing director of BlueVine Ventures, a venture capital firm in Silicon Valley focused on industrial and scientific technology.

PROGRAM 3

The Hedgehog's Dilemma

German philosopher Arthur Schopenhauer and psychologist Sigmund Freud used a tale called the "Hedgehog's Dilemma" as a metaphor to describe human interactions and relationships. In combination with other techniques, they can be effective for coaching and motivation, conflict resolution and understanding how individuals learn best. Aspects of the more widely used assessments will be discussed.

JUDY SCHULENBERG

Judy Schulenberg is experienced in seismic acquisition; seismic interpretation and prospect generation; training and development; geological and geophysical supervision; and recruiting and mentoring. Schulenberg is AAPG-certified in both geology and geophysics and certified in Myers-Briggs personality assessments.

EVENT INFO

WHEN
Friday, April 5, 2019
10:00am - 3:00pm

SPEAKERS
Kingsley Ekworomadu
Senior Production Engineer
BHP Billiton

Kemal Farid
Managing Director
BlueVine Ventures

Judy Schulenberg
Consulting Geoscientist

LOCATION
SPE GCS Office
10777 Westheimer Road, Ste 1075
Houston, TX 77042

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

Yetunde Okediji
817-845-5876
yetunde.okediji@gmail.com

EVENT PRICING
Members/Non-Members: $40/$50
Students/MIT/Retired: $15

REGISTER ONLINE
Perforating Design Impacts on Hydraulic Fracturing

This presentation will cover perforating techniques and designs and their effect on hydraulic fracturing in horizontal well completions. Fracture diagnostic tests used to evaluate perforating designs will be presented, along with current and emerging perforation technologies. Case histories comparing different perforating designs and techniques will be discussed, as well as ways to reduce well completion costs.

PHIL SNIDER

The majority of Snider's career has been focused on providing technical assistance to drilling, completion and production engineers. Snider is a past SPE Distinguished Lecturer and he currently leads a project on proppant transport and works as a project coordinator between operators and GEODynamics, in addition to assisting with technical sales.

PHIL SNIDER

Event Sponsor: GEO Dynamics

Or DynaStage™

DynaStage is the single-source perforating system that simplifies your entire supply chain and reduces logistical headaches. This fully factory-assembled system significantly reduces your working capital requirements, marking a whole new era in perforating solutions. www.dynastage.com
CONTINUING EDUCATION

Learning Tutorial: Field Development
This tutorial will provide an introduction to the oilfield development process, including exploration, field development, production and abandonment. We’ll focus on what it takes to bring hydrocarbon to market after initial discovery, including the appraisal and development of the system to get the product to midstream. We’ll explore the design, evaluation and decisions required for a project at various levels of the organization, and highlight the link between the discovery of resources, the development process and the economics governing field development. We’ll cover the subsystems and components that influence the decision to go forward and 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. He has worked for oil service companies in directional drilling, surveying, LWD, wireline, product development, training and completions. Mellah chaired the API HT/HP validation subcommittee and was part of the development stages of various deepwater, high pressure fields with Chevron and Shell.

EVENT INFO
WHEN
Friday, April 12, 2019
9:00am - 3:00pm
SPEAKER
Khedher Mellah
Business and Technology Director
Ingenious Well
LOCATION
Newpark Drilling Fluids Office
21920 Merchants Way
Katy, TX 77449
CONTACT
Mike Redburn - 281-754-8629
mredburn@newpark.com
EVENT PRICING
Members/Non-Members: $175/200
Students/MiT/Retired SPE: $50
REGISTER ONLINE

YOUNG PROFESSIONALS

McGovern Centennial Gardens Clean-Up
McGovern Centennial Gardens in Hermann Park is a paradise for garden lovers, and the Hermann Park Conservancy counts on volunteer support at its events throughout the year. The SPE-GCS YP Community Outreach team will be helping with the garden clean-up on April 13. Projects range from weeding and mulching to raking trails and removing invasive plants. Projects are subject to change depending on the needs of the park at the time of your visit. Snacks and water will be provided. Please see the event page for more details.

EVENT INFO
WHEN
Saturday, April 13, 2019
9:00am - 12:00pm
LOCATION
1700 Hermann Drive
Houston, TX 77004
CONTACT
Matt Mayer - 713-979-7864
matt_mayer@hotmail.com
REGISTER ONLINE
**YOUNG PROFESSIONALS**

**Earth Day Celebration**

The SPE-GCS YP Community Outreach team of volunteers will work with Houston Arboretum & Nature Center staff to provide guests with a fun and exciting Earth Day celebration. Our group will assist staff in running nature craft activities, manning activity booths, helping guide groups on nature walks, face painting and providing assistance with fundraising activities on more than four miles of trails.

The Houston Arboretum & Nature Center is a 155-acre non-profit nature sanctuary with miles of walking trails through forest, meadow and wetland habitats. The arboretum is free and open to the public for this exciting annual event. Volunteers will help educate guests about the arboretum and their mission of nature conservation and education. Activities are physically active and require the ability to navigate uneven surfaces in walking and working. Please see the event page for more details.

**EVENT INFO**

**WHEN**
Saturday, April 20, 2019
9:30am - 2:00pm

**LOCATION**
Houston Arboretum &
Nature Center
4501 Woodway Dr.
Houston, TX 77024

**CONTACT**
Verashokhina@gmail.com

**REGISTER ONLINE**

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**CONTINUING EDUCATION**

**Accelerated Learning Tutorial:**
**Introduction to Petroleum Geology**

This one-day tutorial is structured to give attendees a broad overview of the fundamental geological concepts in the context of petroleum exploration and production. Topics of discussion include an overview of the processes of petroleum generation and accumulation, and the variables within depositional systems that affect hydrocarbon recovery.

**MAGGIE DALTHORP**

Maggie Dalthorp most recently served as exploration manager for Murex Petroleum Corporation, where she was actively involved in assessing the Three Forks play. Prior experience includes running her own company, Moorhouse Associates, Inc., a natural resource planning and oil and gas exploration company. Dalthorp holds a doctorate in coastal and marine system science from Texas A&M University-Corpus Christi, an MBA from Texas A&M University-Corpus Christi, and a bachelor's in geology from The University of Texas at Austin.

**EVENT INFO**

**WHEN**
Thursday, May 2, 2019
8:30am - 4:00pm

**SPEAKER**
Dr. Margaret Dalthorp, PhD
*Exploration Manager*
Murex Petroleum Corporation

**LOCATION**
Newpark Drilling Fluids Office
21920 Merchants Way, Katy, TX 77449

**CONTACT**
Matt Mayer - 713–979–7864
matt_mayer@hotmail.com

**EVENT PRICING**
Members/Non-Members: $175/200
Students/MiT/Retired SPE: $50

**REGISTER ONLINE**
AWARDS AND SCHOLARSHIPS BANQUET

2019 SPE Gulf Coast Section Awards and Scholarships Banquet

Every year, the Society of Petroleum Engineers Gulf Coast Section holds a banquet to honor SPE-GCS Scholarship recipients, the Young Professionals Group, Legion of Honor, and recipients of the SPE regional and Gulf Coast Section awards. Join the SPE-GCS as we celebrate another year of successful students, emerging professionals, established industry leaders and longtime members and supporters!

Scholarship and Legion of Honor award recipients and their guests are invited to attend the banquet free of charge. Company table sponsorships make this banquet possible.

MUKUL M. SHARMA

Mukul M. Sharma has been a professor at the University of Texas at Austin for 34 years, where he holds the “Tex” Moncrief Chair in the Department of Petroleum and Geosystems Engineering. His current research interests include hydraulic fracturing, oilfield water management, formation damage and improved oil recovery. Sharma has published more than 450 journal articles and conference proceedings and holds 21 patents. He has served as an SPE Distinguished Lecturer and consulted for more than 50 companies worldwide.

EVENT INFO

WHEN
Thursday May 23, 2019
5:30pm - 9:00 pm

SPEAKER
Mukul Sharma, PhD
Hildebrand Department of Petroleum and Geosystems Engineering
Professor and “Tex” Moncrief Chair
University of Texas at Austin

LOCATION
Hess Club
5430 Westheimer Ct
Houston, TX 77056

CONTACT
Sally Ebrahimzadeh
sallyz@T5Energy.com
Taylor Wright
twright@spe.org

EVENT PRICING
Regular Attendees: $50
Students/MIT/YP Boardmembers: $25
Table Sponsorship: $600
Full Table Sponsor: $1000

REGISTER ONLINE
DATA ANALYTICS

Data Science Convention: Transforming the Upstream Oil & Gas Industry with Advanced Data Science Solutions

SPE-GCS will host a one-day Data Science Convention intended for upstream oil and gas professionals, academia scholars and students with an interest in emerging data science, machine learning and artificial intelligence applications. The agenda will include presentations from leading professionals, major operators, suppliers, technology startups and academia to showcase applications and advancements of big data analytics in the oil and gas industry.

We will also be hosting startup and technology companies who will exhibit their state-of-the-art and emerging products. With up to 400 attendees, there will be ample networking opportunities during lunch and coffee breaks, which are covered in your registration fees.

KEYNOTE SPEAKERS
Rob Kelly (BP)
Detlef Hohl (Shell)

SPEAKERS
Sarah Karthigan (XOM) - Reimagining Oil and Gas with AI
Kathy Ball (Devon) - Going Beyond the Hype in Data Science for the Oil and Gas Industry: Artificial Intelligence, Deep Learning and Digital Transformation
Mojtaba Shahri (Apache) - Data Analytics in Action: Case Studies from Drilling to Production
Cheng Zhan (Anadarko) - Applying Machine Learning in Long-Term Oil Production Forecasting
Justin Clark (Calif Resources) - Interrupted Time Series for Estimating Intervention Response
Florian Basier (Emerson) - Limitations of Naïve Machine Learning Approaches in Geosciences: The Example of Grain Size Prediction from Microresistivity Logs
Franzika Ball (Uber) - Accurate Forecasts at a Touch-of-a-Button: From Event Forecasting to Real-Time Anomaly Detection
Sammy Haroon (Alpha X) - You Want the Truth? Adapting O&G Organizations to Make Digital Transformation Successful

PANELISTS
David Bowly (Oxy) - Advanced Analytics: Moving from Theory into Mainstream Practice
Susan Morgan (Baker Hughes) - Solving Complex Challenges Using Advanced Analytics and AI
Michael Gaines (NOV) - Data Day Living (NOV’s Predictive Analytics Applications for Plant Efficiencies and Equipment Maintenance, BOP’s etc.)
Preston Cody (Wood Mackensie) - Discovering Value in Data through Industry Collaboration

EVENT INFO

WHEN
Thursday, April 4, 2019
7:00am – 6:00pm

KEYNOTE SPEAKERS
Rob Kelly
Head of Upstream Digital Functions
British Petroleum

Detlef Hohl
Chief Scientist,
Computation & Data Science
Shell

LOCATION
Norris Conference Center
816 Town and Country Blvd Ste 210
Houston, TX 77024

CONTACT
Suri Bhat - 832-419-3304
suri_bhat@hotmail.com

EVENT PRICING
Members: $175
Non-Members: $200
Students/MI/T/Retired SPE: $125

EVENT SPONSORS

REGISTER ONLINE
2019 46th Annual SPE Gulf Coast Section Golf Tournament

Now in its 46th year, the annual SPE-GCS golf tournament is one of the section’s most important fundraisers. Please join us at the beautiful courses of Kingwood and Deerwood Country Clubs to enjoy a wonderful day of golf in support of SPE-GCS scholarships. These scholarships benefit young engineers embarking on the adventure of an oilfield career.

As always, there will be fabulous door prizes for everyone and a chance to enter a raffle for electronics and United Airlines and Lufthansa flight vouchers. It’s all courtesy of our generous sponsors. You will also love the wonderful food provided out on the course by our fabulous oilfield cook teams. So bring your customers out for the day and treat them to a fun experience they won’t forget!

Your support goes directly to funding scholarships for Gulf Coast Section students majoring in petroleum engineering or related fields. We know how tough these times are, but we all know that we still need to attract new talent to this great industry. Every penny made by the golf tournament is invested in the drive to educate more young engineers.

Thank you for your support!
Gulf Coast Section Golf Committee
PERMIAN BASIN SYMPOSIUM

The 2019 Permian Basin Symposium is on April 11, 2019

With the recent downturn, our industry has been forced to find new and innovative ways to develop oil & gas resources economically. The PBS 2019 continues to provide a networking forum to discuss and disseminate the latest innovations and technological advances that drive Permian Basin resurgence despite the uncertain market conditions. Acknowledging the current market climate, this year’s theme is Permian: The Driver of American Oil Resurgence.

Sign up today! You don’t want to miss this speaker line-up:

- George King – GEKengineering
- Richard Spears – Spears & Associates
- Travis Harris – Packers Plus
- Adetola Abatan – Shell
- Todd Bush – Energent Group
- Ross Craft – Approach Resources Inc.
- Sam Reynolds – Marathon Oil
- Joseph Triepke – Infill Thinking
- Lisa O’Connell – Core Lab
- And more!

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Scientific Drilling

Silver

Tenaris

G2 Energy Services

MicroSeismic

Stim-Lab

DOW

SUN

SIDLEY

EVENT INFO

WHEN
Thursday, April 11, 2019
7:15am – 6:00pm

LOCATION
Norris Center CityCentre,
Red Oak Ballroom
801 Town & Country Blvd, #210
Houston, TX 77024

REGISTER ONLINE
2019 Reservoir Technology Symposium

The theme of the event this year is *Technology, Challenging our Normal*. Energy has seen some big changes in the last few years, coal has stumbled, renewables have surged, oil fell hard, then spent years clawing its way back up, but the biggest change in energy has been in technology. The shale revolution unlocked millions of barrels that had been trapped away in shale deposits for decades. Today, increased automation at drill sites has allowed drastic cost reductions; more sophisticated computer systems have allowed exploration/production companies to earn more from less; Blockchain platforms are streamlining supply chains and cutting out middlemen. What is now normal is significantly different from the norms of ten years past.

**AGENDA**

**Keynote Speakers**
Sanjay Paranj, *Vice President and Chief Technology Officer, Anadarko*
Thaimar Ramirez, *Director of Development, Oxy*
Sidd Gupta, *Co-founder and CEO, Nesh*
Richard Barclay, *Analytics Innovation Manager of ConocoPhillips*

**Technical Sessions & Speakers**
**SESSION 1 – Recent Advances in Unconventional Resource Development**
Medhat Kamal, *Retired Chevron*
Craig Cipolla, *Hess*
Dr. Wei Yu, *Simtech*

**SESSION 2 – Technology and Innovation**
Hamed Darabi, *QRI*
Sudhir Pai, *Former SLB*

**SESSION 3 – Reservoir Characterization and Performance Modeling of Unconventional Resources**
Neha Bansal, *Anadarko*
Dilhan Ilk, *DeGolyer and MacNaughton*

**SESSION 4 – EOR Technologies for Oil Reservoirs**
Safia Atan, *BHP*
Reza Ganjdanesh, *University of Texas at Austin*
Jeff Rutledge, *QPlus Energy, LLC*
David W. Hampton, *Oxy*

**Event Sponsors:**

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<td>Silver</td>
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Looking for sponsorship opportunities!

If you would like to sponsor, please contact Eric Laine (*SPE@ericlaine.com*) & Gus Rios (*gus.rios@unitcorp.com*).

We are a non-profit organization 501(c)3 (tax exempt).

Looking for sponsorship opportunities!

If you would like to sponsor, please contact Eric Laine (*SPE@ericlaine.com*) & Gus Rios (*gus.rios@unitcorp.com*).

We are a non-profit organization 501(c)3 (tax exempt).
HSSE-SR

High School STEM Outreach

This event will provide an introduction to SPE-GCS STEM scholarships; oil and gas careers, including a typical day in the life of an oil and gas environmental professional; and Marathon Oil’s malaria eradication program in Equatorial Guinea.

Jeanne Perdue will give an overview of the Society of Petroleum Engineers, showing the global demographics and mission of the organization. She’ll cover different types of jobs in the petroleum industry and the qualifications needed to apply for them, along with available scholarships that help students earn the necessary credentials.

Kathleen Sauvé will present on “Improving Public Health Through Malaria Control.” When Marathon Oil started operating on Bioko Island, Equatorial Guinea, more than 15 years ago, the company recognized the devastating health and economic impacts of the malaria epidemic on the community. The company joined with the Equatorial Guinea government and others in a partnership that has reduced malaria transmission by 78 percent, reduced under-five child mortality by 85 percent and saved thousands of lives.

JEANNE PERDUE

Early in her career, Jeanne was a chemist in the Texaco research labs, then became an oilfield journalist. She is now a technical writer at Occidental Petroleum, preparing field development plans, maintenance and operations procedures, best practices and concession proposals for the Middle East Support Team. She is a Distinguished Member of SPE.

RICHARD J. MURPHY

In his 33-year career, Murphy worked for Phillips Petroleum and Marathon Oil, holding management positions in international production, economic evaluations and exploration. In 2013, Murphy created a volunteer chemistry and physics tutoring program at Dulles High School, which expanded to 12 high schools and more than 30 volunteers with the help of SPE-GCS.

NINA R. MACAFEE

Nina McAfee is a health safety and environmental manager with more than 30 years of experience in oil and gas. In her current role with Kinder Morgan, McAfee manages the environmental compliance team for the Pacific Region Products Pipelines asset, providing strategic direction for implementing programs to comply with environmental regulations.

KATHY SAUVÉ

Kathleen Sauvé is manager of stakeholder and community engagement for Marathon Oil. In this role, she is responsible for managing the company’s sustainability efforts, corporate stakeholder engagement strategy, social investments and the employee political action committee.

EVENT INFO

WHEN
Thursday, April 18, 2019
7:30am - 11:30am

SPEAKERS
Jeanne M. Perdue
Technical Writer
Occidental Petroleum

Richard Murphy
STEM Tutor, Dulles High School

Nina McAfee
Health Safety and Environmental Manager, Kinder Morgan

Kathy Sauvé
Community and Stakeholder Relations Manager, Marathon Oil

LOCATION
Dulles High School
5550 Dulles Ave
Sugar Land, TX 77478

CONTACT
Angelo Pinheiro - 713-296-3820
abpinheiro@marathonoil.com

NOTE:
This event is not open to the public.

EVENT SPONSORS:

REGISTER ONLINE

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DIGITAL TRANSFORMATION

Digital Transformation Annual Congress

Tired of impractical theoretical solutions and hollow marketing presentations? Come experience proven digital transformation directly through live product demos and step-by-step case study reviews. Who says energy lags in digital transformation? This all-day event is focused on providing hands-on practical knowledge on the key trends in digital transformation for the oil and gas industry.

There are many dimensions to digital transformation – edge, cloud, software-defined automation systems, AI, mobility, drones, security and more. The cloud and the edge are working together. Machine learning, deep learning and smart sensors are enabling more efficient and effective operations. Who should attend? Decision makers in upstream oil and gas and teams focused on digital transformation to drive improvements across operations.

ÅSHILD HANNE LARSEN

Åshild Hanne Larsen is currently focused on creating business value from IT and supporting Equinor’s transformation journey using IT as a key enabler to improve operational efficiency and transform the oil and gas industry.

CHRISTINE R. BOLES

Christine Boles’s organization is responsible for Intel’s industrial IoT business within the manufacturing, energy, logistics and commercial building segments, including product and ecosystem strategies for this rapidly evolving space.

2019 AGENDA

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<th>Event</th>
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<td>Breakfast &amp; Networking + Tech Pavilion</td>
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<td>8:30 – 9:15am</td>
<td>Keynote CIO Equinor Åshild Hanne Larsen</td>
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<td>9:15 – 10:30am</td>
<td>Break + Tech Pavilion</td>
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<tr>
<td>10:30 – 11:15am</td>
<td>Keynote VP IoT Intel Christine Boyles</td>
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<td>11:15 – 12:45pm</td>
<td>Lunch + Tech Pavilion</td>
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<tr>
<td>12:45 – 2:00pm</td>
<td>Panel: Leaving SCALA Behind &amp; Scaling up IoT</td>
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<tr>
<td>2:00 – 2:30pm</td>
<td>Break + Tech Pavilion</td>
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<tr>
<td>2:30 – 3:45pm</td>
<td>Panel: Beyond the Hype, Unlocking the Real Value of Blockchain Applications for O&amp;G</td>
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<td>3:45 – 4:00pm</td>
<td>Break + Tech Pavilion</td>
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<td>4:00 – 5:15pm</td>
<td>Panel: Digital Transformation and the Evolving Worker – How Digital Transformation Affects People &amp; Organizations</td>
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<td>5:15 – 6:30pm</td>
<td>Networking Cocktail</td>
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</table>
**ELECTRIC SUBMERSIBLE PUMP (ESP) SYMPOSIUM**

**Electric Submersible Pump Symposium**

**REGISTRATION NOW OPEN**

Now is the time to register for the 2019 SPE-GCS ESP Symposium. The ESP Symposium is the industry’s largest and most coveted exhibit and technical program. Do not miss this opportunity to see the latest in technology and network with industry experts.

**Special events include:**

- Continuing Education taught by industry leading experts
- Breakout sessions and Technical demonstrations on interesting and relevant industry topics
- Two Evening Networking Receptions
- New features for more interactive technical sessions
- Golf Tournament – sign up now! Great prizes

The SPE Gulf Coast Section Electric Submersible Pumps Symposium brings ESP technical experts from around the world together - both from operators and manufacturers - to share innovative information and lessons learned pertaining to ESP technology, production, and operations.

**EVENT INFO**

**WHEN**
Monday – Friday
May 13-17, 2019

**LOCATION**
Marriott Waterway Hotel and Convention Center
1601 Lake Robbins Dr
The Woodlands, TX 77380

A limited number of hotel rooms at the special conference rates are available, book yours now!

**CONTACT**
Leon Waldner - 403-808-2445
leon.waldner@intl.cnoocltd.com

**ENDORSING ORGANIZATION**

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SAVE THE DATE:
SPE-GCS 19th Annual Sporting Clays Tournament

Bust some clays for SPE-GCS scholarships! The 19th annual SPE-GCS Sporting Clays Tournament and 6th Annual Food Frenzy will be held at Westside Sporting Grounds in Katy, TX, the first week in June. The Sporting Clays Tournament is a large provider to the SPE-GCS Scholarship Endowment Fund. Last year, this successful tournament generated more than $50,000 in revenue, with profits going directly to the scholarship fund and $5,000 to the Bright Light Foundation.

It is only with the support of SPE-GCS individual members and organizations that this event is possible. Last year, we raffled a Benelli Vinci Tactical semiautomatic shotgun and had drawings for five Baretta M9, 9mm handguns. Entry fees are based on a five-man team, including a shooter gift.

Please help make the 2019 tournament a success by supporting a team, purchasing a sponsorship or donating door prizes and entry gifts. We look forward to seeing everyone on June 7!
2019 Roughneck Camp: Pumpjacks, Pipelines, Projects – Understanding the Big Picture of Energy

Roughneck Camp (RNC) is a one-day conference that empowers young professionals, interns and students with the knowledge to choose and plan appropriate career paths as they become valuable contributing members to their companies. RNC 2019 will primarily focus on understanding the big picture of the energy industry, from the drilling of oil to the search for renewable and alternative energy. The key question we are trying to answer is, “Where do I fit in in this business?” This will be accomplished through keynote speakers, panels, break-out sessions and networking. Topics include understanding how energy is sourced and used; the lifecycle of an energy project; the latest trends and technology; and how to become a successful engineer.

**AGENDA**

- Arrival, Registration, LinkedIn Photography, Breakfast
- Introduction (Opening Remarks)
- Keynote No. 1 (The Future of Energy)
- Keynote No. 2 (The Life of a Project)
- Break and Networking
- Panel
- Lunch and Networking
- Break-out Sessions
- Break
- Break-out Sessions
- Concluding Remarks, Raffle, Social Directions
- Social Time

**EVENT INFO**

**WHEN**
Thursday, June 20, 2019
8:00am - 4:00pm

**SPEAKERS**

**KEYNOTE SPEAKER**

Robert Palmer
Senior Vice President, Technical Support
Occidental Oil and Gas

**SESSION SPEAKERS**

Duane Cuku
Vice President, Sales – Rig Technology
Precision Drilling

Siddhartha Sen
Director, Energy Research & Analysis
IHS Markit

**LOCATION**

ExxonMobil Spring Campus
22777 Springwoods Village Pkwy
Spring, TX 77389

**CONTACT**

Yan Song - 832-726-2099
sawyersongy@gmail.com

**REGISTER ONLINE**
A Full February at TAMU

February was packed full of great opportunities for Aggies. We had our first installment of the semester’s research and development series, when Dr. Marisela Sanchez-Nagel discussed geomechanics over dinner. The next week included a half-day workshop with Unconventional Oil and Gas Training owner Aaron Burton, who discussed multistage completion systems for hydraulic fracturing.

Mr. David Hamilton from Denbury Energy and Ms. Alexsandra Martinez from our very own SPE-GCS spoke on unconventional ways to find an internship. They discussed how to excel in cold calls, interviews and resumes, even without a 4.0 GPA. The month finished off with a great presentation from Karen Olson of Southwestern Energy. She spoke on water use and how to be environmentally friendly when utilizing water in the field.

Officer elections were officiated, and we’re pleased to congratulate the new TAMU SPE officer team! Our thanks go to all of the students transitioning out of their positions for the dedication and hard work they put in. They made the 2018-2019 year a great success.

STUDENT CHAPTER DIRECTORY

HOUSTON COMMUNITY COLLEGE
Iskandar Rahbani: iskandar.rahbani@gmail.com

RICE UNIVERSITY
Éric Vavra: edv1@rice.edu

TEXAS A&M UNIVERSITY
Magy Avedissian: magylouise@tamu.edu

UNIVERSITY OF HOUSTON
Nicholas Dunbar: president.uhspe@gmail.com

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SPE Supports Girls Exploring Math and Science (GEMS)

SPE-GCS exhibited at the Girls Exploring Math and Science (GEMS) annual event at the Houston Museum of Natural Science, where there was a turnout of more than 2,250 visitors. The event is designed to encourage student interest in STEM subjects, and our community booth provides a great opportunity for students to learn about SPE and careers in science, technology, engineering and math. Our booth included rock and fluid samples, and Xiaodan Ma and Lisa Li served as SPE-GCS community booth hosts.

2019 SPE-GCS Science Fair Winners

On February 23, Alex Gephart, Jeanne Perdue and Anna Wei served as special award judges at the 2019 Science & Engineering Fair of Houston. Each year, SPE-GCS scours hundreds of science fair entries to find the best projects on topics of interest to our industry, and 1st place gets $200, 2nd place gets $100, and 3rd place gets $50.

The science fair awards ceremony was held March 2, 2019. The event’s keynote speaker, astronaut Mike Grissom, recounted his childhood love for nature, the stars and the oceans. He told of how he applied seven times and interviewed five times to become an astronaut, and he urged students to be persistent. Eventually, Grissom helped design, build and command the International Space Station.

Winning students, along with their parents, will be invited to share their projects at our 2019 SPE-GCS Annual Awards Banquet in May.

**FIRST PLACE**

Neel Narayan
- No. 3139, “Highly Porous Metal Bio-Polymer Frameworks for CO2 Capture”
- Narayan is a home-schooled junior and a non-paid researcher at Rice University.

**SECOND PLACE**

Zhi-Wei “Steven” Zeng
- No. 3141, “Facile Synthesis of Super Hydrophobic Sponge for Underwater Oil-Water Separation”
- Zeng is also a home-schooled junior and is the SPE selection for a paid summer internship at the Houston Museum of Natural Science.

**THIRD PLACE**

Betul Kaya
- No. 1284, “Don’t Mess With Nanosponge!”
- Kaya is an eighth grader at Harmony School of Excellence – Sugar Land. Her poster and speech were better than many senior-division exhibitors.

**HONORABLE MENTION**

Lochana Kalyanaraman
- No. 3216, “The Quest for Oil – A Statistical Analysis”
- Young Women's College Preparatory Academy High School
- Kalyanaraman used analytics to find a correlation between offshore water depth and reserves using Tableau software.
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sunil.laksminarayanan@oxy.com

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trey.shaffer@erm.com

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Simeon Eburi, Chevron
simeon.eburi@chevron.com

TREASURER
Brian Sinosic
bsinosic@hotmail.com

VICE TREASURER
Reza Safari
reza.safar@weatherford.com

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Newpark Drilling Fluids
mredburn@newpark.com

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Karin Gonzalez, Chevron
karin.gonzalez@chevron.com

COMMUNITY SERVICES
Lisa Li, Houston EP
yuli2008@comcast.net

EDUCATION
Mohammad Tabatabaei
Newfield Exploration
mtabatabaei@newfield.com

MEMBERSHIP
Jessica Assunto
Corrosion Resistant Alloys
jbadger@cralloys.com

PROGRAMS
Bill Davis
bdavis0819@gmail.com

SOCIAL ACTIVITIES
 Jasen Gast
jgast25@icloud.com

YOUNG PROFESSIONALS
Shakti Sehra, IHS Markit
shakti.sehra@ihsmarkit.com

DIRECTORS AT LARGE 2017 – 2019
Marise Mikulis
mikulis@energyinnova.com
Nils Kageson-Loe
nilskl@yahoo.com
Adrian Reed, Tellurian Inc
adrian.reed@tellurianinc.com

DIRECTORS AT LARGE 2019 – 2020
Prashant Sainani
CIBC
Prashant.sainani@cibc.com
Steve Loving
Core Laboratories, Inc.
stephen.loving@corelab.com
Kim Thames Padelleti
BHP Billiton
kim.padelleti@gmail.com

Committee Chairs

AWARDS BANQUET
Sally Ebrahimzadeh,
Triple Five Energy Resources
sallyz@T5Energy.com

GOLF CHAIR
Marc Davis, Champions Cinco Pipe
mdavis@ccpipellc.com

ESP SYMPOSIUM
Leon Waldner, Nexen Energy
leon.waldner@intl.cnoocltd.com

MEMBERS IN TRANSITION (MiT)
Yetunde Okediji
yetunde.okediji@gmail.com

NEWSLETTER
Sarah Sameei
editor@spegcs.org

PUBLICITY
Zafar Kamal
szkamal@hotmail.com

SCHOLARSHIP
Eric Robken, Ashland Global
erobken@ashlandinvest.com

SPONSORSHIP
Fabian Vera
fevera07@gmail.com

SPORTING CLAYS
Prue Smith, BP
pruee.smith@bp.com

TENNIS
Erin Chang, BP
erin.chang@bp.com

WEB TECHNOLOGY
Lindsey Newsome
Newsome Marketing Group
lindseynewsome@gmail.com
CISH
Misael Uribe
misaelub@yahoo.com

IN-CLASS STEM TUTORING
Richard Murphy
stancal@windstream.net

SOCIAL MEDIA
Davis Scott, Schlumberger
daviswsd@gmail.com

Study Group Chairs

BUSINESS DEVELOPMENT
Heidi Epstein, IHS Markit
heidiepstein@gmail.com

COMPLETIONS & PRODUCTION
Reza Safari, Weatherford
reza.safari@weatherford.com

COMPUTATIONAL FLUID DYNAMICS (CFD)
Madhusuden Agrawal, BP
madhusuden.agrawal@bp.com

DATA ANALYTICS
Suri Bhat
suri_bhat@hotmail.com

DRILLING
Mohammed Dooply
Schlumberger
mdooply@slb.com

GENERAL MEETING
Robert Saucedo, SLC Technologies
robertsaucedo@gmail.com

INNOVATE
Mikhail Alekseenko
mikhailalekseenko@gmail.com

HSSE & SOCIAL RESPONSIBILITY
Angelo Pinheiro, Marathon Oil
abpinheiro@marathonoil.com

INTERNATIONAL
Pablo Perez, Bardasz
pablo.perez@bardasz.com

NORTHSIDE
Kelsey Ridpath
Southwestern Energy
kelsey_ridpath@swn.com

PERMIAN BASIN
Aaron Burton, Unconventional Oil and Gas Training
waaronburton@uogtraining.com

PETRO-TECH
Cheryl Collarini
Collarini Energy Experts
ccollarini@collarini.com

RESEARCH & DEVELOPMENT
Amit Patil, OneSubsea
apati14@onesubsea.slb.com

RESERVOIR
Alexsandra Martinez
DeGolyer and MacNaughton
adinorah.martinez@gmail.com

WATER & WASTE MANAGEMENT
Kelly Steinberg, Test America
kelly.steinberg@testamerica.com

WESTSIDE
Bharath Rajappa, ConocoPhillips
bharath.rajappa@conocophillips.com

WOMEN IN ENERGY (WIN)
Riteja Dutta, Drilling Info
riteja@gmail.com

Newsletter Committee

CHAIR
Sarah Sameei
editor@spegcs.org

AD SALES
Taylor Wright
twright@spe.org

BOARD LIAISON
Karin Gonzalez
karin.gonzalez@chevron.com

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www.designgood.com

SPE-GCS Office

GULF COAST SECTION ADMINISTRATIVE ASSISTANT
Taylor Wright
twright@spe.org

HOURS & LOCATION
10777 Westheimer Rd. Ste 1075
Houston, TX 77042
Monday – Friday
8:30am to 5:00pm

CONTACT
T 713 779 9595
F 713 779 4216
For comments, contribution or delivery problems, contact:
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