



# CONNECT

SPE GULF COAST SECTION NEWSLETTER

# THE HONORABLE RYAN SITTON TEXAS RAILROAD COMMISSIONER

SENERAL MEETING P. 1.

ARTIFICIAL LIFT FOR THE LIFE OF WELLS IN UNCONVENTIONAL PLAYS

NORTHSIDE P. 9

COST-EFFECTIVE RECOVERY OPTIMIZATION OF WATERFLOODS

RESERVOIR P. 16

PRACTICAL HYDRAULIC FRACTURING STIMULATION DESIGN MODELS

COMPLETIONS & PRODUCTION P. 18

MEMBERS IN TRANSITION INITIATIVE (MIT)

**THIRD SEMINAR SERIES P. 27** 

# CHAIR'S CORNER



**DR. IVOR ELLUL** 2015 - 2016 SPE-GCS Chair

s I write this, CERAWeek has just kicked off with an interesting array of key individuals imparting wisdom on the current state of the oil and gas industry and what will happen in the near and medium term. Amid all the posturing, we who make a living in the industry deal with the day-to-day ramifications of the low commodity price and the challenges that this brings.

The SPE Gulf Coast Section has embraced the need to support our members as they face these challenges, and I would like to brief you on the status of some of these initiatives.

Members in Transition (MiT): We have made tremendous progress on the MiT initiative thanks to the excellent work of C. Susan Howes and the MiT leadership team. The seminar series, which includes topics of interest to SPE members who are transitioning between jobs or who are looking for new career opportunities, is off to a great start. The agenda for the February event included "How to Start Your Own Business," "The Large Company Hiring Process," and "Networking Effectively to Build Beneficial Relationships." We received very encouraging feedback from the first seminar, which I have distilled here (see right sidebar). As a result, we are planning further seminars that will include the following topics:

**APRIL:** Intellectual Property for Startups and Small Businesses

Texas Workforce Commission and Workforce Solutions Resources

The Business of Your Career: Managing Your Career as a Business Enterprise

**JUNE:** Review of Courses Offered by University of Houston Small Business Dev. Center

Negotiation & Conflict Resolution - Proven Techniques to Achieve

a Win/Win Solution

An Entrepreneur's Guide to Attracting Startup Capital

Ideas Launch Pad (ILP): The ILP is part of the MiT initiative, and is intended to assist those who have entrepreneurial ideas that could be candidates for funding and eventual launching as a commercial business. We have partnered with the Houston Technology Center (HTC), which is the eventual vehicle for incubating and launching ideas that come through to the GCS. In February, the ILP committee reviewed five ideas, two of which were selected for referral to HTC. The owners of the two ideas have met with the HTC and have subsequently initiated the application process.

Industry Support: Industry support for MiT has been very encouraging. Drillinginfo has offered to provide its software to unemployed SPE-GCS members and will grant individuals passwords to use Drillinginfo until the end of the year. A brief tutorial for the software will be provided, if needed. Wild Well Control has offered SPE the use of its auditorium for SPE events. The Indus Entrepreneurs (TiE) Houston offered SPE members a discount for their workshop, "How to Reinvent Yourself in a Downturn Market." The Houston Geological Society publicized SPE MiT events in its newsletter.

#### **Accelerated Learning Tutorials (ALTs):**

We have had great success with our first ALTs, which were introductions to gas lift systems (November), managed pressure drilling (January), and reservoir simulation (February). We have four more to go: introductions to flow assurance (April), PVT analysis (May), oilfield geomechanics (June), and nodal analysis (TBA). These one-day courses are proving to be an excellent means of rapidly immersing oneself in a topic.

As the year progresses, I'll advise on more initiatives. So, as always, watch this space...



"Thanks for a most informative workshop.
All three topics were well on target and well received. Overall the workshop was well planned and executed. As a webinar participant, I felt connected and engaged throughout the discussion."

"I continue to congratulate myself for choosing to attend the workshop in person. It was a great value and very beneficial. Thank you for your effort organizing it. It ran very smoothly! I would like to attend the following one also, so hope to see you again!"

"Thanks for arranging the SPE Members in Transition Seminar last Friday. I found the presentations, discussions and networking pretty valuable."

"It was incredibly valuable to get this insight at this time in my career. A lot of things have changed since the last time I was interviewing for jobs. Thank you very much for the needed update!"

#### **GCS ENERGY TICKER**

DJIA	~~
WTI PRICE	<u> </u>
HH SPOT PRICE	~
US PRODUCTION	
RIG COUNT	

Please visit **spegcs.org** for more information!

# **April**

# CONTENTS

#### STUDY GROUPS

Northside 4.5.16

Artificial Lift for the Life of Wells in Unconventional Plays

10 Research & Development 4.7.16

Houston Technology Center Supports Energy Innovation and Entrepreneurs: Putting an End to Desalination Challenges

11 International 4.12.16

How Low Prices Are Shaping Corporate Strategy

4.14.16 General Meeting

The Honorable Ryan Sitton, Texas Railroad Commissioner

**15** Westside 4.20.16

Effect of Hydraulic Fracture Growth on Nearby Natural Fractures

**16** Reservoir 4.21.16

Cost-Effective Recovery
Optimization of Waterfloods

Business Development 4.27.16

Royalty Transactions: Overcoming Gaps in a Downside Market

18 Completions & Production 4.27.16

Practical Hydraulic Fracturing Stimulation Design Models

#### COMMITTEES

20 Continuing Education 4.8.16

Networking and Mentoring to Build Beneficial Relationships

Auxiliary 4.8.16

Informal Lunch: Mia Bella Trattoria

21 Continuing Education 4.14.16

Accelerated Learning Tutorial: Introduction to Flow Assurance

Membership 4.14.16

SPE-GCS Networking Event & Membership Drive

22 Young Professionals

Distinguished Lecturer, Pete Naylor

Community Service 4.29.16

Volunteers Needed: The International Sustainable World Project (I-SWEEEP)

Continuing Education 5.17.16

Oil Patch Orientation

25 Education
SPE Scholarship Winner,
Thomas Belsha

Young Professionals
4.23.16 & 4.30.16
Rebuilding Together Houston Days

#### **MORE**

Scholarship
SPE-GCS Scholarship Fund
Update

27 Members in Transition Initiative (MiT)

Third Seminar Series

Annual Drilling Symposium 4.14.16

#### IN EVERY ISSUE

SPE-GCS Membership Report February 2016

Volunteer Spotlight
Art Schroeder

6 Then & Now
Buddy Woodroof

Went Recap
YP Math Counts
YP Energy4Me
HSSE-SR & YP Movie Night
UH Student Chapter
College & Career Expo

32 Student Chapter Section TAMU-SPE & Rice

**34** SPE Gulf Coast Section Directory

### **BOARD OF DIRECTORS MEETING**

THURSDAY, APRIL 21<sup>ST</sup> | 7:30 TO 10:30 AM

**SPE HOUSTON OFFICE** 

10777 Westheimer Rd. | Ste. 1075 | Houston, TX 77042

CONTACT KATHY MACLENNAN

713-457-6821 | 713-779-4216 FAX | kmaclennan@spe.org

# Navigate uncertain times. Rethink how you work.



# Entero MOSAIC Reserves, Economics, and Decline Software

Isn't it time to stop manipulating data through the backend, creating manual queries to report in Excel, questioning your application security, getting frustrated with poor scenario comparisons, or using 3rd party tools to enter and edit data?

Entero MOSAIC delivers ASSET INTELLIGENCE to help you do your work faster, with less effort. It is **one comprehensive solution** that supports corporate, project, and well level processes for reserves, economics, and declines.

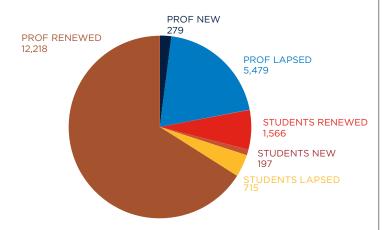
- **EFFICIENCY:** Experience up to 50% in productivity gains
- SPEED: Go from weeks to hours in entry, editing, evaluating, reconciling, and reporting
- INTEGRITY: Have confidence in your data with better visibility
- TRUST: Improve security through role based user/data management
- INSIGHT: Built-in stored results with scenario comparisons at the portfolio level

Learn more at www.entero.com/mosaic, or call toll-free at 877.261.1820.

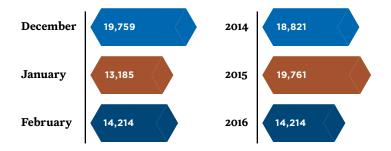


# SPE-GCS MEMBERSHIP REPORT Though February 2016

#### TOTAL SPE-GCS MEMBERSHIPS



#### **CURRENT MEMBERSHIP TRENDS**



#### STUDENT MEMBERSHIPS

STUDENTS	RENEWED	NEW	TOTAL
НСС	71	28	99
Rice	43 10		53
Texas A&M	973	56	1029
UH	433	60	493
Unassigned	46	43	89
TOTALS	1566	197	1763

<sup>\*</sup>This chart does not reflect lapsed student memberships

DON'T MISS OUT
RENEW YOUR DUES TODAY!



### VOLUNTEER

# **SPOTLIGHT**

**ART SCHROEDER** 

his month, SPE Gulf Coast Section is delighted to feature
Art Schroeder as the Volunteer of the Month.
Art started attending SPE meetings right out of
college, but really got involved with the organization
when he moved to Houston and joined the Gulf Coast
Section in the mid-1980s. Over the years, he has held numerous
positions with various committees, including the e-Commerce Study
Group, which he co-founded and for which served as Vice Chairman and
Chairman; the eBiz Conference & Tradeshow, which he co-chaired; and
the Petroleum Leadership and Outlook Conference (PLOC) Committee.

Additionally, Art served the Gulf Coast Section as a board member from 2002-2006, was a member of the Long Range Planning Committee, and sat on the eSPE Advisory committee overseeing knowledge management and the website. He was also on the Strategic Planning Committee and the Chair of the Board of Financial Advisors, for which he served as Treasurer and Vice-Treasurer. He has been a frequent participant in SPE forums.

Art is the CEO of Energy Valley Inc., a company that provides money, marketing and management to commercialize and advance energy-related technologies. He has over 25 years' experience in operations, engineering, construction, strategy development, and crisis management.

Art is also a Principal of Safe Marine Transfer, LLC, a startup company funded and supported by DOE/NETL, RPSEA, DeepStar, Baker Hughes, and other industry partners to deliver subsea chemical storage (3000+ bbls) and injection at up to 10,000 fsw as a service.

Art has served on numerous professional, corporate and civic boards. He has published over 100 technical papers and has been granted patents on his innovations. Art graduated from Georgia Tech with BS and MS degrees in chemical engineering with a minor in environmental engineering, and from the University of Houston with an MBA, majoring in finance and international business.

Art is passionate about lifelong learning. He strives to learn something new every day, and his involvement with SPE helps facilitate this passion. He is thankful for the people he has met and the relationships he has built through his involvement with SPE.

Thank you for all of your contributions to SPE, Art!

COLUMN BY BUDDY WOODROOF

#### APRII

#### 1936

Governor Marland threatens to place state property across the street from Oklahoma City's capitol under martial law if city authorities continue trying to block planned drilling activities on the site.

Flooding originating from the Ohio River overwhelms oil production, refining, and marketing in western Pennsylvania, with damage estimates in the Pittsburgh area alone running as high as \$200 million (serious money in those days).

What are some of the hot exploration areas in North Texas circa 1936? Would you believe Shackelford, Callahan and Young counties (no "sideways" drilling and no shale targets at this time)?

Some relatively complex chemical compounds are being deployed to drill oil and gas wells in this era, but when lost circulation problems occur, drillers opt for "sophisticated" lost circulation materials such as wood fibers, shredded bark, cottonseed hulls, beet pulp, and sugarcane fibers.

East Texas crude oil - \$1.15/bbl

#### APRIL

#### 1966

A reportedly hot, new oil-finding tool is on the verge of being released to the industry, namely a "borehole gravimeter," which is being touted to detect nearby reservoirs that have been missed in drilling.

The world's most unusual drilling structure is planned for downtown Los Angeles to conceal two rigs and equipment that will drill 64 wells on a 1.5-acre site, while looking for all appearances like a modernistic office building.

Meanwhile, Standard of California's Island Esther, the human-made island encompassing only 0.83 of an acre of space off Seal Beach, CA, will deploy two rigs to drill 128 wells on one of the world's tightest oil sites.

The Bureau of Mines reports plans to deepen a corehole that may have cut the thickest oil-shale deposit yet found in Colorado: 1,650 feet of continuous shale in the Piceance Creek basin.

US active rig count - 1,267

#### APRIL

#### 1996

Tenneco, which previously reported plans to divest its shipbuilding unit, is now looking to sell, spin off, or form a strategic alliance for its energy unit.

French refiners are joining together to cut excess refinery capacity by closing or selling some of their refineries along the Mediterranean coast. (After all, the French are much better at refining cognac and sherry than they are at refining gasoline and diesel.)

An Oklahoma independent operator reports first gas sales from western Indiana's New Albany shale. (Don't look now, but there is renewed activity in this play.)

Two once-great players, UPR and Amoco, form a joint venture to press the limits of horizontal technology to ramp up Austin Chalk exploration and development across Louisiana.

Light sweet crude oil - \$24.39/bbl; Natural gas - \$2.34/MMbtu; US active rig count - 747

### THE REST OF THE YARN

This month, we begin a look back at the legacy of Theodore Roosevelt.

residents come and go, but monuments are always with us. There's a reason Theodore Roosevelt is the only 20th century president whose face is carved into Mount Rushmore, the only one who could hold his own with Washington, Lincoln and Jefferson. Roosevelt not only remade America, but charmed the pants off everybody while he did it. And more than a century after he left the White House, in 1909, the collective memory of his strength, intellect and charisma still lingers.

How many times over the years have Americans settled their affections on some thoughtful, vigorous man who reminded them a

bit of Roosevelt? What was Ernest Hemingway if not a later edition of Teddy, without the burden of office but still equipped with TR's literate machismo. Is it any surprise when recent presidents try to borrow a bit of his personal appeal? Bill Clinton had Teddy's bust on his desk. Barack Obama laid out his vision of middle-class values in the same Kansas town where TR had spoken of his own reform plan as "the square deal."

Teddy stays with us because he seems so much like one of us. Although he was born in 1858, it's the 20th century he decidedly belongs to, the century he brought America into on his terms.

When he arrived at the White House, he already understood the

energies that had been building in the US for decades since the Civil War: the explosion of its industrial power, as led by the likes of Rockefeller, Carnegie and Ford. Along with those energies came the urge by those same industrialists to expand to the point of monopolization. He used his presidency to temper those energies in ways that left the US profoundly changed. Again and again, he framed the questions we still ask: How much influence should the government have over the economy? How much power should the US exert globally? What should we do to protect the environment? The answer to those questions that he kept coming up with was "more," and not everyone agreed with him, nor do they today.

Next month, we examine where TR's impact was the greatest.

# QUIZ

Who was the first Soviet woman petroleum engineer?

#### **ANSWER TO MARCH'S QUIZ**

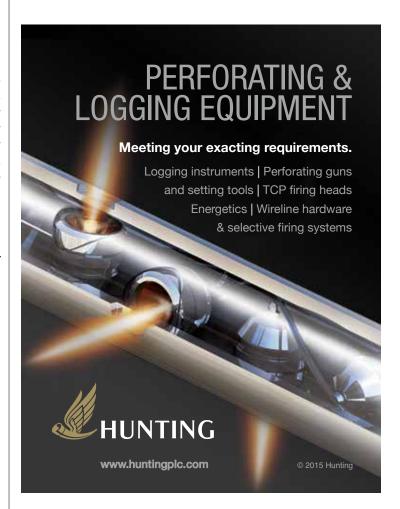
The average octane rating of "premium grade" gasoline, circa 1936, was 75, with the lowest-grade gasoline at that time having an average octane rating of 52. (Is it any wonder why they needed lead antiknock additives in the gasolines of that era?)

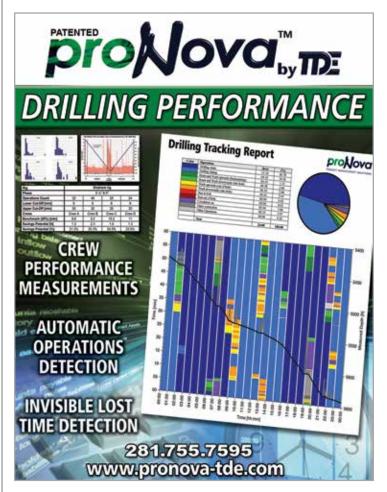
#### FEBRUARY'S WINNER

#### Judy Snelling with BHP Billiton Petroleum

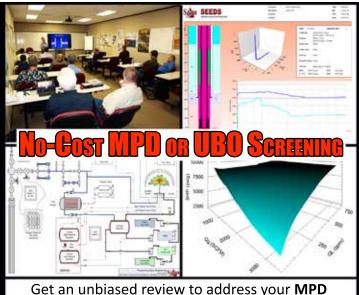
If you would like to participate in this month's quiz, e-mail your answer to contest@spe.org by noon April 15. The winner, who will be chosen randomly from all correct answers, will receive a \$50 gift card to a nice restaurant.











For details on these or our other 250 sessions in the Gulf Coast, contact

Patty Davis, (832) 426-1203 or patty.davis@petroskills.com, or see

details and full selection at www.petroskills.com

# needs using ADVANCED HYDRAULIC SOFTWARE

- Get insight into managing your challenging wells
- Review your best-fit solution: Conventional, MPD, UBO
- Get a blueprint for all vour service needs (training, execution, personnel, analytics)

Signa Engineering Corp. Houston, TX USA, 281.774.1000 www.signaengineering.com



- Walk away with your analysis and results
- No-obligation consultation
- By appointment only, Thursday afternoons in Houston, TX, USA

Contact: Dr. Sagar Nauduri, PE 281.774.3116 snauduri@signa.net

### **Integrated Directional Drilling Services**

Innovative **Directional Drilling** services centered around

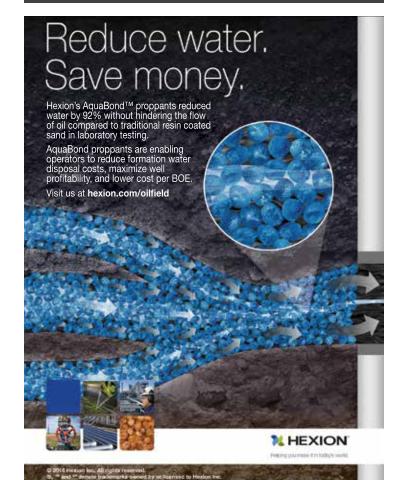
**High Performance Rigs** 

Unearth additional performance gains when you pair a rig with a downhole toolset - designed to work together. Learn more:

#### www.precisiondrilling.com/directional

- high quality people
- lower well costs and HSE risk
- higher quality wellbore





### **NORTHSIDE**

# Artificial Lift for the Life of Wells in Unconventional Plays

Operators of unconventional wells have different approaches to the field development from well construction, completion, stimulation, and finally production. The production phase of unconventional wells from the early flowback to the lower flow rate at the late life of the well brings significant challenges to operators in determining the timing and type of artificial lift system to use. The steep production decline is not the only problem that needs to be addressed in the production phase. To complicate the artificial lift operations, there is often an increase in the gas-to-liquid ratio (GLR) and significant amount of solids.

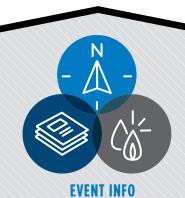
While the flexibility of artificial lift systems has been significantly broadened with new technologies, there is still not a silver bullet or a unique system that can effectively address the challenges throughout the life of the well. This presentation includes case studies from operations on different unconventional plays using transitional artificial lift systems. It will also look at the advantages and disadvantages from the operation standpoint and the estimated comparison of cumulative production among different artificial lift approaches for a well.

#### DIEGO A. NARVAEZ



Diego A. Narvaez is North America Technical Manager, Artificial Lift, for Schlumberger. He has 23 years of experience in the oil and gas industry, working first for an operator and currently with a service company. Narvaez has held a number of technical roles in several international assignments with REDA Pumps and Schlumberger since 1996. He has a degree in mechanical engineering from the Escuela Politécnica Nacional, Quito-Ecuador and an MBA from the University

of Phoenix. Narvaez holds several patents on technology inventions related to artificial lift.



Tuesday 4.5.16

11:30 AM - 1:00 PM

#### **SPEAKER**

Diego A. Narvaez Technical Manager, Artificial Lift Schlumberger

#### LOCATION

SWN 10000 Energy Dr Spring, TX 77389

#### **EVENT CONTACT**

Sumitra Mukhopadhyay 281-784-5742 smukhopadhyay @superiorenergy.com

#### **MEMBERS**

\$35/\$50 Walk-In

NON-MEMBERS \$40/\$50 Walk-In

# INTEGRATED ENERGY SERVICES

Petrophysicist Log Analysis and Completion Optimization Advisory Services and Short Courses

#### ROBERT E. BARBA

- 3305 Northland Drive Suite 100b Austin, Texas 78731
- www.integrated-energy-services.com
- 713.823.8602
- 713.583.9400 (fax)
  - n 🧧 rbarba75@gmail.com





Thursday 4.7.16

#### **SPEAKERS**

Nick Tillmann
Director, Client Acceleration
Energy Sector
Houston Technology Center

Bill Capdevielle, P.E.
President & Founder,
Bill Capdevielle Enterprises LLC
Board of Advisors, Magna Imperio
Systems Corporation

#### LOCATION

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

#### **EVENT CONTACT**

Skip Davis 281-359-8556 skip.davis@pega.com

MEMBERS

\$4C

NON-MEMBERS \$45

### RESEARCH & DEVELOPMENT

### Houston Technology Center Supports Energy Innovation and Entrepreneurs: Putting an End to Desalination Challenges

Houston Technology Center has developed a partnership with SPE. The center's Nick Tillman will give us a short presentation on what HTC is all about. Bill Capdevielle is on the board of a company HTC has assisted.

One would be hard-pressed to say that water management isn't a significant problem in the upstream oil and gas industry. It represents a huge operating expense and a socio-economic challenge to the industry. What if there was a simple process for treating produced water to near-drinking water quality directly at the wellsite? The positive impact on OPEX and cash flow could drastically drive down the break-even oil prices for much of US onshore production. What if the process had an extremely low energy footprint and an unusually high process efficiency? This event will be the first public presentation of a new technology dubbed Electrochemical Nano-Diffusion (END).

 $\label{lem:magna} {\it Magna Imperio Systems Corp.} is honored to be the first client of the Houston Technology Center - North Campus in The Woodlands.$ 

#### **NICK TILLMANN**



Nick Tillmann is Director of Client Acceleration for the Energy Sector at the Houston Technology Center. Named by *Forbes* as one of "Ten Technology Incubators Changing the World," the Houston Technology Center provides education, insight and access to capital that entrepreneurs need to move toward commercialization. Tillmann is a seasoned energy executive whose experience includes more

than 25 years with ConocoPhillips. He managed the company's \$500 million global petroleum coke business, led strategy management for European businesses, and started the company's operations in Poland. Tillmann has served as Chairman of the Biofuels Taskforce for the Great Houston Partnership, and he is a Director with Silver Fox Advisors.

#### BILL CAPDEVIELLE, P.E.



Bill Capdevielle is an oil and gas consultant with over 40 years' experience. He earned a BS in petroleum engineering from the University of Southwestern Louisiana in 1971, and an MS in systems management from the University of Southern California in 1975. He retired from Mobil in 2000 and from Hess in 2014. Capdevielle specializes in finding nanotechnologies used in other industries and

applying them to the upstream oil and gas industry. He sits on the Board of Advisors for a start-up nanotechnology company, Magna Imperio Systems Corporation, and offers consulting in field development planning, facility operability, and project support. Capdevielle is a Registered Professional Engineer in Texas and Louisiana.

### INTERNATIONAL

# **How Low Prices Are Shaping Corporate Strategy**

In a US\$30/bbl world, the priority for companies in 2016 is survival. Budgets continue to be slashed and projects delayed. Further deferrals can be expected, but companies also need to start thinking about how to adapt their portfolios to make money at low prices as well as high. Could this be a golden moment for companies to invest against the cycle to reposition portfolios for lower prices and lower costs?

#### RUARAIDH MONTGOMERY



Ruaraidh Montgomery has over 10 years of upstream commercial valuation experience with Wood Mackenzie. He is a Principal Analyst in its Corporate Research team, which provides detailed analysis and opinion of the operational performance, strategy, and future potential of 60 of the world's largest E&Ps. Prior to joining Wood Mackenzie, Montgomery spent 2 1/2 years working as an engineer with Hess.



#### **SPEAKER**

Ruaraidh Montgomery Principal Analyst Wood Mackenzie

#### LOCATION

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

# EVENT CONTACT

Barry Chovanetz 214-477-5771 bchovanetz@yahoo.com

#### **MEMBERS**

\$35

NON-MEMBERS \$40

**ONLINE REGISTRATION:** spegcs.org/events/



# Build Real and Lasting Skills with McCalvin Institute for Knowledge

We act as *Partners In Your Success* as we offer hands-on training in...

- Workplace Accountability
- ♦ Communication Skills for Job Seekers
- Presentation Skills
- Oilfield Production International Specifications

(281) 302-5812 | success@mccalvininstitute.com | Stafford, TX

# ProTechnics

# KNOW WHERE PRODUCTION IS COMING FROM

Maximize Production
+++Increase Revenue



#### Fluid Diagnostic Tracer

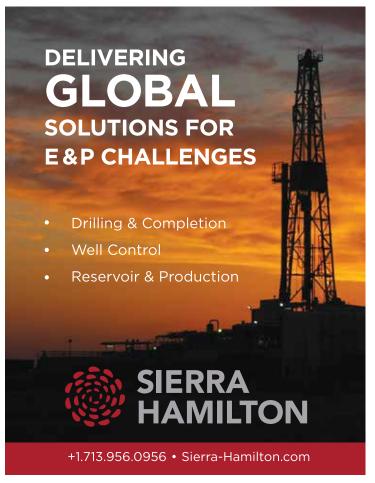
The industry's first comprehensive after-frac flow profile tracer technology that simultaneously evaluates both frac fluid clean-up and hydrocarbon production over time.

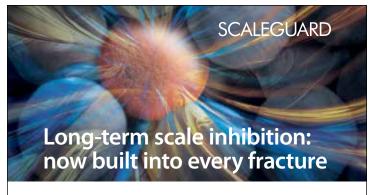
FLOWPROFILER provides critical information such as:

- Simultaneous Zonal Clean-Up & Production
- Hydrocarbon Production Indexed to Geologic Horizons
- Hydrocarbon Production Over Time
- Well Spacing Insights



For more information on FlowProfiler, visit us at www.corelab.com/protechnics or call us at 713-328-2320





#### SCALEGUARD proppant-delivered scale inhibition

SCALEGUARD® technology is an encapsulated ceramic proppant infused with scale-inhibiting chemicals to maintain optimum production and recovery rates from scale-prone wells, while reducing well costs and chemical usage.

SCALEGUARD technology features an engineered internal porosity and can be blended with any product from our high quality proppant portfolio, without compromising the high conductivity of the proppant pack. Scale-inhibiting chemicals infused within the proppant are released into the fracture only on contact with water to deliver highly efficient production assurance.

Now long-term scale prevention is available throughout your entire production system from a single, simple treatment while you frac.



carboceramics.com/scaleguard

Production. Enhanced.

### GENERAL MEETING

# The Honorable Ryan Sitton, Texas Railroad Commissioner

The Honorable Ryan Sitton, a member of the Texas Railroad Commission, will present this month's program, which is entitled "The Energy Race". He will cover topics including important issues facing the Texas oil and gas industry and the role the Texas Railroad Commission will play in resolving those issues.

#### **HONORABLE RYAN SITTON**



Ryan Sitton is a native Texan who grew up in the Irving area. At Texas A&M University, he earned a degree in mechanical engineering, and he met his wife, Jennifer. Following college, Sitton went to work as an engineer in the energy industry.

In 2006, the Sittons founded Pinnacle Advanced Reliability Technologies, an engineering and technology company focused on

reliability and integrity programs for the oil, gas and petrochemical industries. Since 2006, Pinnacle has grown substantially, and today it employs more than 600 people. In three separate years, *Inc.* magazine recognized Pinnacle as one of the 1,000 fastest-growing, privately held companies in the world. For four consecutive years, Pinnacle was one of the recipients of the coveted Aggie 100 designation, which celebrates and recognizes the fastest-growing Aggie-owned or Aggie-led businesses in the world.

With almost 20 years of experience in the oil, gas, and petrochemical industry, Sitton is considered a leading expert in his field, having served on the board of several energy trade associations and as an expert in both regulatory and civil court cases. He currently serves on the board of the Texas A&M Energy Institute.

Last year, Sitton was recognized as one of the Houston area's 40 most influential leaders under the age of 40. In addition, he became the youngest person ever identified as a Distinguished Engineering Alumnus by Texas A&M. He is the first engineer to serve as a Railroad Commissioner in over 50 years.



EVENT INFO

Thursday 4.14.16

#### **SPEAKER**

Honorable Ryan Sitton Commissioner Texas Railroad Commission

#### LOCATION

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

# EVENT CONTACT

Barry Faulkner 281-627-8790 barryfaulkner@earthlink.net

**MEMBERS** 

\$35

NON-MEMBERS \$40

#### **ONLINE REGISTRATION:** spegcs.org/events/3087/





# **Measure oil and** gas stage flow... optimize future well development.

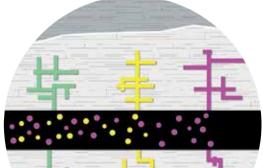
A Tracer Production Log™ gives continuous data to help plan your next well:

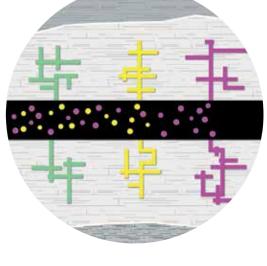
- · Clean out efficiency
- · Compare geology with oil and gas productivity
- · Assess stimulation design effectiveness
- · Well trajectory and spacing optimization



To learn more about our local field and lab capabilities contact: 4106 New West Drive, Pasadena, TX 77507, USA

Tel: +1 281-291-7769 | Fax: +1 281-291-7709 | www.tracerco.com/reservoir-characterisation



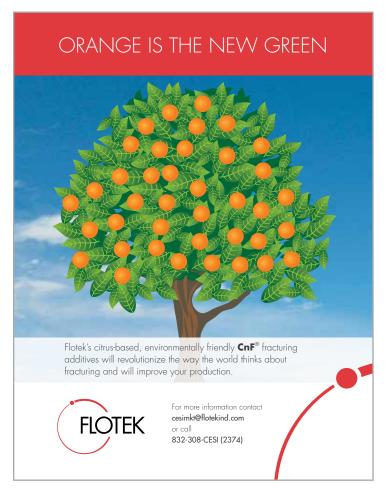




Tracerco

Providing Insight Onsite





### WESTSIDE

# Effect of Hydraulic Fracture Growth on Nearby Natural Fractures

Nearly all fracturing literature attributes the productivity of unconventional reservoirs to the presence of a distributed fracture network within the body of the reservoir. The hydraulic fracture is assumed to be the main conduit connecting these natural fractures to each other and to the wellbore.

Based on a rigorous analytical solution, this presentation reviews the conditions required to activate natural fractures that lie within the body of the formation and away from the propagating hydraulic fracture. It will show that the most likely cause of the activation of these natural fractures is by tensile extension, which occurs when the natural fracture falls within the influence zone of the tip of the growing hydraulic fracture. This causes an increase in the effective formation permeability around the main fracture, which ultimately results in increased well productivity. This presentation will show that single fractures are more likely to cause natural fracture activation than multiple fractures created in plug-and-perf completions. Furthermore, natural fractures closer to the hydraulic fracture are more likely to become activated by it. Some of the findings in this presentation differ from commonly held beliefs in the fracturing community.

#### **ALI DANESHY**



Ali Daneshy is President of Daneshy Consultants International and adjunct professor in the Cullen College of Engineering at the University of Houston, where he teaches a graduate course on hydraulic fracturing. He has over 45 years of experience in the technology and application of hydraulic fracturing and has published numerous papers on the subject. He is co-Editor-in-Chief of the *Hydraulic Fracturing* 

*Journal*, a quarterly publication dedicated to the technology of hydraulic fracturing. His main focus is on research, consulting, and teaching short courses related to horizontal well fracturing



Wednesday 4.20.16

#### **SPEAKER**

Ali Daneshy President Daneshy Consultants International

#### LOCATION

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

# EVENT CONTACT

Stephen Loving
713-328-2244
Stephen.loving@corelab.com

#### **MEMBERS**

\$40/\$45 Walk-In

NON-MEMBERS \$45







Thursday 4.21.16
11:30 AM - 1:00 PM

#### **SPEAKER**

Kerry Sandhu
Principal Advisor, Business
Consulting Group
Gaffney, Cline & Associates

#### LOCATION

Sullivan's Steakhouse 4608 Westheimer Rd Houston, TX 77027

#### **EVENT CONTACT**

Alexsandra Martinez 956-249-0994 adinorah.martinez@gmail.com

#### **MEMBERS**

\$35/\$45 Walk-In

#### **NON-MEMBERS**

\$40/\$45 Walk-In

### RESERVOIR

# **Cost-Effective Recovery Optimization of Waterfloods**

In a low oil price environment, minimizing costs while maximizing recovery typically becomes a high priority for most operators. There is a need to focus on reservoir surveillance and monitoring to improve existing waterfloods rather than focusing on exploration and the design of new secondary recovery schemes.

This talk will focus on quick analytical methods for performing waterflood diagnostics on fields and patterns to ensure maximum sweep efficiency is being achieved with current waterflood field development plans. It will also demonstrate a reservoir engineering workflow that is used to conduct surveillance and analyze waterflood performance.

By conducting analytical waterflood diagnostics and optimization potential on waterflood field case studies, the concept of communication analysis will be introduced at a pattern/individual well level to pinpoint areas with upside potential (water cycling/channeling, poor communication, etc.) where techniques such as gel treatments and pattern reconfigurations would be ideal. Lastly, a case study outlining various water shutoff techniques used to increase oil recovery from mature waterfloods will be presented.

#### **KERRY SANDHU**



Kerry Sandhu is a Reservoir Engineer/Project Manager with over 14 years of technical experience in the international oil and gas industry. In addition, he has over five years of operations manager experience and has led two international subsurface consulting offices in Calgary and London. Sandhu has developed expertise in reservoir characterization/analytics/simulation in the areas of primary

production of light and heavy oil, horizontal multi-stage frac wells for shale/tight oil, light/heavy tight oil, water and gas flooding, and EOR such as CO2, polymers, and thermal recovery (steam, CSS, SAGD). Upon completing 100+ waterflood optimization simulation projects, he showcased his expertise by teaching an industry-respected waterflood surveillance/optimization course to 300+ professional geologists and engineers in the last few years, as well as heavy oil and EOR courses.

Sandhu is a Principal Advisor in the Business Consulting group of Gaffney, Cline & Associates. He uses his technical reservoir engineering experience to provide operational and strategic insight to business consulting projects.





### BUSINESS DEVELOPMENT

# Royalty Transactions: Overcoming Gaps in a Downside Market

Please join us at 5 PM April 27 at the Four Seasons Hotel in Houston as Scott Noble discusses his success in managing the ups and downs of our industry through the management of royalty and mineral interests. He will also discuss the various gaps that have to be overcome to successfully close transactions in this environment.

#### **SCOTT NOBLE**



Scott Noble's 30 years of experience in the oil and gas industry began with exploration and transitioned into mineral and royalty acquisitions. He is the Founder, President and CEO of Noble Royalties and Compass Royalty Management. Since 1997, Noble Royalties has completed more than 200 acquisitions in over 145,000 distinct royalty interests in 30 states with a value greater than \$2 billion — making Noble one

of the nation's largest independent oil and gas royalty buyers in the industry. Compass Royalty Management handles all aspects of managing the royalty and mineral estates. Noble studied geology at the University of Texas in Austin.



**EVENT INFO** 

Wednesday 4.27.16
5:00 PM - 7:00 PM

#### SPEAKER

Scott Noble Founder, President and CEO Noble Royalties and Compass Royalty Management

# LOCATION

Four Seasons Hotel 1300 Lamar St Houston, TX 77010

#### **EVENT CONTACT**

Cody Felton 281-221-3042 Cody.Felton@energynet.com

#### **MEMBERS**

\$40/\$50 Walk-In

**NON-MEMBERS** 

STUDENTS/RETIRED/TRANSITIONING: \$10 \$45/\$55 Walk-In

# 2015 PROFESSIONAL ENGINEERING EXAM RESULTS FOR PETROLEUM ENGINEERING

First Timers 61% Second+ Timers 32% National Average Pass Rate 54%

PE Exam Application Deadline Date: July 1, 2016 Next Petroleum PE Exam Date: October 28, 2016

2016 HOUSTON COURSES AUGUST 22 – 26, SEPTEMBER 26 – 30

P: 405-822-6761 | E: bingwines@cox.net winrockengineeringinc.com

### ARMSTRONG ASSOCIATES

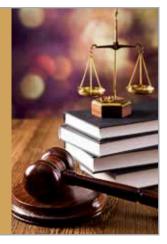
SERVING ENERGY PROFESSIONALS

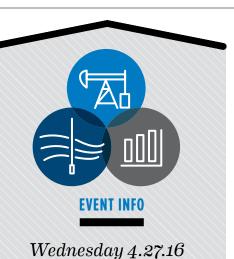
CONTRACT REVIEW / NEGOTIATION

EMPLOYMENT

SEVERANCE
CIVIL RIGHTS LITIGATION

440 LOUISIANA STREET, SUITE 900 HOUSTON, TX ARMSTRONGATLAW.COM





# 11:30 AM - 1:00 PM

#### **SPEAKER**

Dr. Sau-Wai Wong Advisor for Unconventional Resources Technology Shell

#### LOCATION

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

#### **EVENT CONTACT**

Shree Krishna 919-413-9670 shreekrishna@gmail.com

#### **MEMBERS**

\$35/\$40 Walk-In

#### **NON-MEMBERS**

\$35/\$40 Walk-In

### COMPLETIONS & PRODUCTION

# Practical Hydraulic Fracturing Stimulation Design Models

The technology of multi-stage, multi-frac horizontal wells (MFHW) is arguably the most important technology that unlocks the potential of unconventional shale gas and liquid rich shale oil systems. The fracture stimulation process involves placing multiple fractures stage-by-stage along the horizontal well using diverse well completion technologies. However, there is still a lack of understanding on how multiple hydraulic fractures would grow and develop in highly heterogeneous rock formations.

Clearly, the scarcity of adequate fracture stimulation design models has not hindered the successful application of MFHW in exploiting unconventional resources. The technology is typically appraised and continuously improved in the field –made possible because of the large number of wells employed. This field optimization process is not always cost effective, and the present low oil price environment acutely points to the need for competent design models that will aid in the application design and optimization of MFHW.

It is challenging to model the development of these fractures, which are subject to the dynamic process of geomechanical stress changes induced by the fracture stimulation treatment itself, and the interaction with multiple other processes, including wellbore mechanics and fluid mechanics. For practical engineering application, we aim to capture key physical processes in computation models, at least in the "first-order;" apply a "manageable" numerical approach, and rely on appropriate model calibration with field data.

This presentation offers a brief overview of one such practical computation modeling approach, outlines the coupled processes that are important, and paints the vision to leverage the model and field data (e.g., injection pressures and microseismic data) to gain better understanding and improve the design of multi-fracture stimulation.

#### DR. SAU-WAI WONG



Sau-Wai Wong is Advisor for Unconventional Resources Technology in Shell's R&D organization based in Houston, and the Principal Technical Expert on Geomechanics for the company's worldwide operation. He started his career in Shell as a researcher in The Netherlands some 25 years ago, and subsequently took up multiple international assignments in Oman, The Netherlands, Malaysia and US. He was the

Subsurface Technology Manager for Unconventional Oil and later the R&D Manager for Unconventional Gas Technology. He is Honorary Professorial Fellow at the School of Earth Sciences, The University of Melbourne (Australia). He holds a BS in civil engineering and a PhD in engineering from The University of Manchester, UK.





www.rpsea.org/GexCon

Partnership to Secure Energy for America



**VISIT US AT OTC BOOTH #S18** 

# **Networking and Mentoring to Build Beneficial Relationships**

Networking is one of the most powerful tools for accelerating and sustaining successful careers. Networking is about making the right connections and building beneficial relationships. Learn how to grow your networking skills to influence change and build collaborative relationships that can add value for both your career and for your employer.

Mentoring will always be an integral part of our development. This relationship-based process for the transmission of knowledge (relevant to work, career or professional development) enables us to gain personal and professional skills to face the challenges ahead. Mentoring's importance becomes evident as we recognize the value of the networking, advice and support a mentor can give us.

#### C. SUSAN HOWES



C. Susan Howes is a reservoir management consultant in Houston. She was formerly a reservoir management consultant at Chevron, with a prior role as learning and organizational development manager at Anadarko. She has co-authored several papers and articles on uncertainty management, risk management, and talent management for SPE conferences and publications. Howes is chair of the SPE

Soft Skills Committee and previously served as SPE Regional Director for Gulf Coast North America. She received the SPE Distinguished Service Award and is an SPE Distinguished Member. Howes holds a BS degree in petroleum engineering from the University of Texas.

#### **PEGGY RIJKEN**



Peggy Rijken is the team leader for the Productivity Enhancement team in the Reservoir and Production Engineering department at Chevron, with prior assignments as a hydraulic fracture engineer and as a geomechanics specialist. Rijken holds a PhD in petroleum engineering from the University of Texas and a Master's in mining and petroleum engineering from Delft University of Technology in The

Netherlands. Rijken serves on the SPE Talent Council Committee and is chair for the Annual Technology Conference and Exhibition SPE Reservoir Engineering Committee. She previously served on the ATCE Well Completions Committee and served on the ATCE SPE Well Stimulation Committee prior to becoming the committee chair. Rijken also serves as a technical editor for the SPE Production and Operations SPE editorial review and is the 2015 recipient of the UT Austin PGE Distinguished Alumni Award.

#### Committee: Auxiliary

The SPE-GCS auxiliary will not have a formal luncheon and program in April. Meet us at Mia Bella for conversation and friendship, with separate checks. Please note a new e-mail address for Nancy Hill.

#### **EVENT CONTACTS**

Evelyn Earlougher Nancy Hill 281-419-1328 281-435-1619

eearlougher@comcast.net ben-81-rth@comcast.net

#### **DEADLINE FOR RSVP** Tuesday, April 5

# EVENT INFO

FRIDAY

4.8.16

8:30 AM - 4:30 PM

#### **SPEAKERS**

C. Susan Howes Reservoir Management Consultant

Peggy Rijken Team Leader - Productivity Enhancement Team Chevron

#### LOCATION

SPE Houston Training Center 10777 Westheimer Rd, Ste 1075 Houston TX 77042

#### **EVENT CONTACT**

Sunil Lakshminarayanan 281-248-1443 sunil\_lakshminarayanan@oxy.com

#### **REGISTRATION**

spegcs.org/events/3190/

MEMBERS \$50/\$60 Walk-In

NON-MEMBERS \$55/\$60 Walk-In

#### **EVENT INFO**

TUESDAY

4.8.16

#### **EVENT LOCATION**

Mia Bella Trattoria 110 Vintage Park Blvd Houston, TX 77070

# Accelerated Learning Tutorial: Introduction to Flow Assurance

This accelerated tutorial will introduce flow assurance to engineers and geoscientists who may be aware of it, but are not familiar with the salient details. It will cover the basic business and technical aspects of why this topic is important in field development. The event will also include a discussion of the origin of flow assurance, as well as the primary areas of manifestation of flow assurance challenges. A look at how these challenges are addressed will include an introduction to the software simulation tools that represent state-of-the-art solution methodology. Finally, case studies will demonstrate real-life instances of how flow assurance problems are assessed and the appropriate engineering analysis deployed. Attendees will receive a certificate for eight Professional Development Hours (PDH).

#### DR. IVOR ELLUL



Dr. Ivor Ellul began his career in the oil and gas industry in 1980, in West Germany, as a design engineer on pipeline and storage tank systems. After specializing in the modeling of multiphase flow in pipelines, he worked for a number of years in numerical modeling of single- and multi-phase pipelines. He has conducted a comprehensive number of pipeline simulation studies for clients worldwide. Recent experience

includes various executive positions in the upstream area of the oil and gas industry.

Ellul is visiting Professor to the Petroleum Engineering Department of Imperial

College London, where he lectures the MS course on pipeline and process engineering.

He currently serves as Chairman of the Pipeline Simulation Interest Group as well as

Chair of the SPE-GCS.

Ellul holds a BS in mechanical engineering from the University of Malta and MS and PhD degrees in petroleum engineering from Imperial College London. He is a registered Chartered Engineer in the United Kingdom and a registered Professional Engineer in the state of Texas.

#### **EVENT INFO**

THURSDAY

4.14.16

8:30 AM - 4:30 PM

#### **SPEAKER**

Dr. Ivor Ellul Managing Director CiSK Ventures, Ltd.

#### **LOCATION**

SPE Houston Training Center 10777 Westheimer Rd, Ste 1075 Houston TX 77042

#### **EVENT CONTACT**

Sunil Lakshminarayanan 281-248-1443 sunil\_lakshminarayanan@oxy.com

#### **REGISTRATION**

spegcs.org/events/3189/

#### MEMBERS/NON-MEMBERS \$350

A limited number of subsidized passes for this one-day tutorial are available for students/retired professionals and professionals with no corporate support.

Committee: Membership

# **SPE-GCS Networking Event & Membership Drive**

Please join us for the SPE-GCS Networking Event & Membership Drive! Hors d'oeuvres and beverages will be served, and there will be a cash bar. Attendance is free of charge.

**REGISTRATION LINK** spegcs.org/events/3164/



#### **EVENT INFO**

TUFSDAY

4.14.16

6:00 PM - 9:00 PM

#### **EVENT LOCATION**

Houston Texans Grille - CityCentre 12848 Queensbury Ln, Ste 208 Houston, TX 77024

#### **EVENT CONTACT**

E. Faye York efayeyork@aol.com

# Making Better Appraisal and Development Decisions: Using DRA & VOI

Behavioral science suggests that human nature favors decisions that satisfy (good enough is good?), not necessarily those that optimize. Often value is left on the table, particularly when risks & uncertainties are involved.

More than fifty years ago an approach was born which helps to overcome this human limitation, namely Decision Risk Analysis (DRA), which helps us to optimize not just survive. DRA is a structured process involving both facilitation and modelling that helps stakeholders optimize their decision making in the face of risks and uncertainties.

This presentation will introduce DRA and also focus on one tool in the armory known as Value of Information analysis (VOI). The when, why and how of VOI will be explained. If you are facing a number of decisions where outcomes are uncertain and there is an opportunity to acquire additional information which costs money and/or time, then you should consider undertaking a VOI analysis and this talk will be of interest to you.

#### PETE NAYLOR

Pete Naylor has a Physics BSc, a Chemical Engineering PhD and is a Chartered Scientist, a Chartered Engineer and a Fellow of the Institution of Chemical Engineers. He has 30 years of experience in oil & gas and for the past 15 years has led DRA studies to optimize significant investment decisions. He also leads Project Risk Management studies helping managers to achieve their objectives on time and budget. Pete has worked within integrated teams on major decisions including field appraisal and development strategies, refurbishment of facilities and asset integrity management.

**STUDENTS/TRANSITIONING:** 5 Slots Available

#### **EVENT INFO**

WFDNFSDAY

4.20.16

11:00 AM - 1:00 PM

#### **SPEAKER**

Pete Naylor SPE Distinguished Lecturer, BG Group

#### **EVENT LOCATION**

1415 Louisiana St, 39th Floor Houston TX 77002

#### **EVENT CONTACT**

Sahil Malhotra 832-854-7885 sahil.malhotra@chevron.com

#### MEMBERS

\$20/\$30 Walk-In

NON-MEMBERS \$30

Committee: Community Service

# The International Sustainable World Project (I-SWEEEP)



SPE-GCS will volunteer to judge at the I-SWEEEP science fair competition. I-SWEEEP, The International Sustainable World (Energy, Engineering, and Environment) Project, is open to high school students. It is the largest science fair event of its kind worldwide. With the support of leaders in industry and higher education, I-SWEEEP works with local, national and international science fair organizations to bring top-ranking participants and qualifying projects to Houston each year.

SPE-GCS is looking for 5-10 judges to be part of I-SWEEEP. Volunteer judges will evaluate research projects of young scientists. If you are interested, please register now. If you have any questions or concerns, marissa.brower@gmail.com.

#### **EVENT INFO**

FRIDAY

4.29.16

9:00 AM - 1:00 PM 2:00 PM - 5:30 PM

#### **LOCATION**

George R. Brown Convention Center 1001 Avenida De Las Americas Houston, TX 77010

#### **EVENT CONTACT**

Marissa Davis 979-285-7209 marissa.brower@gmail.com

#### MORE INFORMATION

isweeep.org/judge/

### **Oil Patch Orientation**

This seminar is one of the most popular SPE programs! The course is designed as a nontechnical, audiovisual guided tour through the oil patch, illustrating the basic equipment and techniques used in the discovery, development and production of petroleum.

#### **Outline:**

- Introduction
- The economics and future of the petroleum industry
- Theory of the origins of hydrocarbons
- Reservoir parameters (eg: porosity/permeability)
- Geology of petroleum and geophysics
- · Drilling basics
- · Well logging
- · Well completions
- · Reservoir drive mechanisms
- Production equipment (sub-surface and surface)
- Midstream and downstream topics

**JOHN FARINA** provides petroleum engineering consulting and technical training to the international and domestic petroleum industry. He has over 30 years' experience in production and reservoir engineering. He has a BS in petroleum engineering from West Virginia University, and has previously worked for Shell Oil and Schneider and Merkle Associates.

**RON HINN** is a Vice President of PetroSkills, a worldwide leader in training and development of E&P technical professionals. He specializes in knowledge management, competency development and technical training. A petroleum engineering graduate of Tulsa University, Hinn is very active within SPE, having served in positions at the worldwide, regional and local levels.

**C. SUSAN HOWES** is a reservoir management consultant in Houston. She was formerly a Reservoir Management Consultant at Chevron, with a prior role as Learning and Organizational Development Manager at Anadarko. Howes is chair of the SPE Soft Skills Committee. She holds a BS degree in petroleum engineering from the University of Texas.

**KEN ARNOLD** is a Senior Technical Advisor at WorleyParsons with 50 years of experience in projects, facilities and construction related to upstream oil and gas developments. He spent 16 years at Shell in engineering and engineering research management. In 1980, he formed Paragon Engineering Services, which had a staff of 600 when it was acquired by AMEC in 2005.

MARTY STETZER leads EKT Interactive Inc. in Houston, an e-training company specializing in design and delivery of large-scale, customized safety and technical content training programs. He has worked with national and international oil and gas companies in the Middle East, Russia, India, Italy and Europe. Stetzer has a BME from Kettering Institute in Michigan and an MBA from Carnegie Mellon University.

**DR. TERRY N. GARDNER** is a mechanical engineer who spent over 35 years with Exxon and BP working to advance deepwater technology. He has taught undergraduate engineering at Cornell and Rice.

#### **EVENT INFO**

#### TUESDAY

5.17.16

8:30 AM - 5:30 PM

#### **SPEAKERS**

John Farina Ron Hinn C. Susan Howes Ken Arnold Marty Stetzer

Dr. Terry N. Gardner

#### **LOCATION**

SPE Houston Training Center 10777 Westheimer Rd, Ste 1075 Houston, TX 77042

#### **EVENT CONTACT**

Regina Eco reginaeco@gmail.com

MEMBERS/NON-MEMBERS \$350



# 055 DAYS

# DAYS DAYS

**WORKOVERS** 

# Reduce your LOE with the longest-lasting scale inhibition treatment by far...and counting

SCALEGUARD® proppant-delivered scale-inhibiting technology is a unique, long-term well maintenance solution that assures optimal production and significantly reduces LOE.

Each treatment can be designed to last the life of the well, and one Uinta operator is saving over \$160,000 per well in maintenance costs each year.



carboceramics.com/scaleguard





# Where Are They Now?

PAST SCHOLARSHIP WINNERS

The Scholarship Committee recently 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 for a summer 2016 pre-college internship, you'll be glad to know that the program has enjoyed considerable success over the past six decades. Here's winner **Thomas Belsha's** story:

I decided to pursue petroleum engineering in 1998 and received an SPE-GCS scholarship. That scholarship gave me the opportunity to work as a "marine roustabout" for Diamond Offshore on a drilling platform, about 100 miles offshore in the Gulf, the summer between high school and college. That was a fantastic experience and increased my desire to pursue petroleum engineering.

Getting as much practical, hands-on field experience prior to and during college is one of the best ways to enhance your career. The Petroleum Department at Texas A&M was very focused on us finding internships. Because of my SPE scholarship internship experience, I was able to get a field internship with Burlington Resources. I worked as a lease operator in the Louisiana swamps and was invited back as a Production Engineer.

My final summer, I worked as a reservoir geology intern in Farmington, NM, for Burlington in the San Juan Basin. I was offered a full-time position in for Burlington and spent four years working as a Production/Completion Engineer.

I shortly transferred into Business Development, and after Burlington was acquired by ConocoPhillips, I spent a year in the field as a drilling engineer/company man in the ETX Deep Bossier play and moved to Reservoir Engineering. In 2007, I took a position as a BD Engineer with LINN Energy. I then transferred to Operations and spent the next three years as a Production Manager over field operations.

In 2014, I started an Integration/Data Management team to improve our integrations and data issues resulting from over 60 acquisitions. I lead a multi-disciplined team of operations, accounting and IT personnel.

The SPE scholarship I received helped me decide to pursue petroleum engineering, and the summer internship after high school gave me a great advantage early in my career. My advice to students is to make a plan and strive toward that goal. Even if the plan changes later on, you will learn and grow much more by working toward the path you chose. Also, be a sponge and get significant field experience early in your career.

#### THOMAS BELSHA

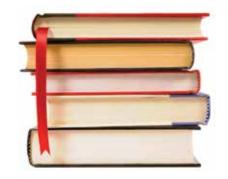


Thomas Belsha is an Integration Manager at LINN Energy. He graduated from Katy Taylor High School in 1998 and then earned a BS in petroleum engineering from Texas A&M University.

For Corporate
Registration & Information:
spegcs.org/sponsorship-opportunity/

For Individual Scholarship

Donation Information:
spegcs.org/spegcs-scholarship-fund/



# **SPE-GCS Scholarship Fund Update**

As promised on the SPE-GCS Scholarship Fund Page, we are excited to announce the first status update of our fundraising efforts – as of February 18, 2016 we have raised \$72,760 to support our scholarship program! We thank all our donors for their support and generosity.

For more information about our scholarship fund, scholarship program or our current donor list, please visit www.spegcs.org/spegcs-scholarship-fund/. You will find testimonials from past scholarship recipients and learn the impact that SPE-GCS scholarships had on their lives and professional careers. If you have not yet donated, we invite you to visit our website and support our efforts as a fellow member of the SPE-GCS family and fellow industry professional. As a reminder, all donations are tax-deductible. We also encourage you to find out if your company has a matching program that could make your individual donation go even further!

SPE-GCS Scholarhip Fund Status Raised 74,960 as of March 4, 2016





**NOW EVEN MORE POWERFUL WITH** 



# PHORMS

Reserves Management System

The <u>complete solution</u> for evaluating, managing, and reporting reserves and performance data.

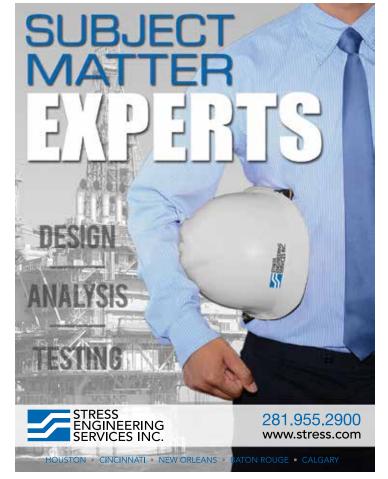
Schedule an ON INC presentation

TRC Consultants, LC

888-248-8062

www.phdwin.com





### **Members in Transition Initiative**

#### THIRD SEMINAR SERIES

The SPE Members in Transition Seminar Series includes topics of interest to SPE members who are between jobs during the industry downturn or who are looking for new career opportunities. The agenda for the third seminar in the series is below.

#### **Program 1: Intellectual Property for Startups and Small Businesses**

To succeed in today's economy, most new ventures need an effective intellectual property (IP) strategy that addresses registering intellectual property, publishing information, and preserving information as a trade secret. Learn the basics to help you create an IP strategy, including how to perform cost-benefit analysis regarding both domestic and foreign IP filings. The presentation includes a case study of the application of petroleum E&P technology into other industries to create dual use technology.



**GARY KATZ** received his law degree from Rutgers University-Newark and his geology degree from Rutgers University-New Brunswick. Prior to his current role as Partner at FisherBroyles, he worked as a patent attorney for Matthews, Lawson, McCutcheon & Joseph, PLLC and served as in-house patent counsel at ExxonMobil.

#### **Program 2: Texas Workforce Commission and Workforce Solutions Resources**

The Texas Workforce Commission and Workforce Solutions offers a wide variety of resources for those in career transition, including unemployment information and seminars covering topics such as writing resumes, interviewing, and rebranding your skills. Many services are offered via the Internet.



**SAMMY CAROLINA** received his degree from OU. He provides unemployment information to employers, community organizations, elected officials, claimants, and labor organizations.



**CHRYSTAL BROUSSARD** received her degree from OU. She provides unemployment information to employers, community organizations, elected officials, claimants, and labor organizations.

#### **Program 3: Managing Your Career as a Business Enterprise**

In this seminar, we will explore an integrated, strategic, lifelong career management system. This system will enable you to build, operate and navigate the business of your career to achieve your maximum, authentic professional success.



KIM SAWYER has over 20 years of experience starting businesses, leading companies, and being involved in almost every aspect of a business enterprise. He owns and manages the Wealth Source, a firm that provides coaching programs for individuals, teams and enterprises. He holds an entrepreneurship BBA from UH and an MS in organizational development from UT.

#### **EVENT INFO**

#### FRIDAY

4.1.16

8:00 AM - 1:00 PM

#### **SPEAKERS**

Gary P. Katz Managing Partner Katz Law Group, LLC.

Sammy Carolina Regional Unemployment Specialist Texas Workforce Commission

Chrystal Broussard Workforce Account Executive Workforce Solutions

Kim Sawyer Owner theWealthSource®

#### LOCATION

SPE Gulf Coast Office Training Room 10777 Westheimer Rd, Ste 1075 Houston, TX 77042

#### **EVENT CONTACT**

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

Alex McCoy 713-366-5653 Alexander\_McCoy@oxy.com

MEMBERS/NON-MEMBERS \$15

#### NOTE

Registration is capped at 30





Stop squeezing. Start expanding.



Success Rate						
Solutions Matrix	Cement Solid Squeeze Expandable					
Longevity	Low	High				
Isolation	Low to Medium	High				
Integrity	Low to Medium	High				

Save the cement! Contact the expandable tubular experts at Enventure to maximize the efficiency and value of your well.

www.EnventureGT.com











# **Cost-Saving Innovations to Improve Drilling Economics and Well Integrity**

ANNUAL DRILLING SYMPOSIUM

The Annual Drilling Symposium is hosted by the Drilling Study Group to disseminate knowledge and technology to achieve the many objectives of drilling operation, including understanding risk and hazard mitigation, real-time application, and new technologies. This year, we focus on cost-saving innovations to improve drilling efficiency. This symposium is also a great opportunity to network with oil and gas industry professionals in an engaging and dynamic environment.

#### PRELIMINARY AGENDA

Keynote Speaker - Steven L. Mueller, Southwestern Energy CEO

**Adapting Wells Automation Efforts to a Low Oil-Price Environment** 

- David Blacklaw, Shell

Evaluating Barriers to Manage Drilling Cost and Risks - Prosper Aideyan, TOTAL

Onshore Well Control Intervention Trends - Daniel Eby, Blowout Engineers

Next Generation Kick Detection During Connections: Influx Detection at Pumps Stop (IDAPS) Software - Brian Tarr, Shell

Well Integrity: What Completions and Production Engineers Need from Drillers to Make the Well Successful - George E. King, Apache

From the asset to the enterprise: scalable and actionable real-time analytics

- Moray Laing, SAS

Stuck Pipe Prediction Using Automated Real Time Modeling and Data Analysis

- Curtis Cheatham, Weatherford

From Historical Drilling Data to Optimized Drilling Operations Using an Integrated Drilling Guidance System and Novel Machine Learning Algorithm

- Enrico Ladendorf, Pason Systems

An Instrumented Top Drive Sub System: Enabling Greater Drilling Efficiencies Via Innovative Sensing Capabilities" - Thomas M. Bryant, APS Technology Inc.

Double the performance improvements When You Combine Automation and Optimization - Tony Pink, National Oilwell Varco

**Drilling Optimization and Hazard Mitigation Solutions** 

- Akshay Sagar, Halliburton

Applied Drilling Automation With the Coal to improve Safety and Performance

- Eric Maidla, TDE Petroleum Data Solutions, Inc.

High Frequency Drilling Measurements and Drilling System Model Work Together

- Yezid Arevalo, Schlumberger

#### **EVENT INFO**



THURSDAY

4.14.16

8:00 AM - 5:00 PM

#### **HOSTED BY**

**Drilling Study Group** 

#### LOCATION

Southwestern Energy Office 10000 Energy Drive Spring, TX 77389

#### **EVENT CONTACTS**

Symposium Co-Chairs Mojtaba Pordel Shahri 713-849-1818 mojtaba.pordelshahri @weatherford.com

Sean Wu 832-337-6576 xianping.Wu@shell.com

Board Liaison Deepak M. Gala 281-731-8632 deepak.gala@shell.com

MEMBERS \$80/\$125 Walk-In

NON-MEMBERS

\$115/\$125 Walk-In

#### SPE-GCS CONNECT

#### EVENT

# RECAP

On February 13, twelve YPs volunteered at the MathCounts competition to help motivate students do well in math. MathCounts is a competitive middle-school math program that promotes mathematics achievement nationwide. Participating schools select students to compete individually and as part of a team in written and oral competitions. After a full morning spent solving math problems and an exciting countdown round, local winners were selected. Congratulations to all the participants!  $\blacktriangledown$ 









Derrick Klutsey, Manoj Devashish, Sagar Asalapuram, and Danny Marquez delivered a lecture from the Energy4Me website to a highly enthusiastic group of fifth-graders at Codwell Elementary. They shared their individual experiences with over 70 students who eagerly asked insightful questions into how engineering and energy work. The volunteers did a remarkable job of motivating the students and getting them excited about energy. To learn more about how you can volunteer for an Energy4Me lecture, contact Danny Marquez at dannymarquez0@gmail.com.











The University of Houston SPE Student Chapter prepared a UH Game Day basket as a silent auction item for the Engineer of the Year Gala. Special thanks to Melati Amtar, Social Media Chair of the UH Student Chapter, for putting together such a nice donation, which included tickets to the next UH vs. OU football game and a football autographed by UH Football Coach Tom Herman.

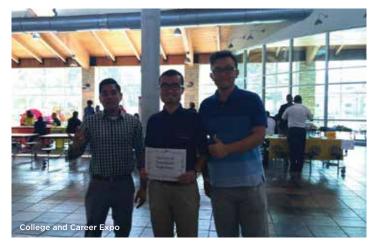














Committee: Young Professionals

# **YP - Rebuilding Together Houston Days**

SATURDAY, APRIL 23 & SATURDAY, APRIL 30 7:30 AM - 5 PM

For questions or inquiries, please contact Danny at dannymarquezO@gmail.com, Catalina at catalina.leal@bakerhughes.com or John Matheus at john.matheus@entercoms.com

#### **EVENT INFO**

#### **REGISTRATION**

To register for event on April 23 spegcs.org/events/3160/

To register for event on April 30 spegcs.org/events/3161/

#### SPE-GCS

### TAMU STUDENT CHAPTER

#### TRAINING FOR THE FUTURE

Every semester, our Technical Training Committee organizes field trips, lectures, and workshops to supplement our members' classroom experience with real-world knowledge.

In January and February, the committee hosted five workshops exploring several software packages. At each workshop, a group of 20 students learned about these powerful industry tools, including StimPlan, which is used for designing and analyzing hydraulic fractures; PipeSim, which simulates multiphase flow in wells; and Fekete-IHS, which is applied for production analysis and reserves evaluation.





The Technical Training
Committee also organized
two field trips. First, students
traveled to Weatherford's
facility in Katy, TX.
They learned about how
Weatherford produces surface
pumping units and how the
different artificial lift pumps
work. Additionally, a group of
TAMU-SPE members traveled

to Clariant's facility in The Woodlands, TX, where they learned more about the chemistry behind the oil and gas industry. During this field trip, student members learned how certain chemicals are manufactured and then utilized to maximize oil and gas production.

Thank you to everyone who is helping us to prepare for our futures with these opportunities





### RICE STUDENT CHAPTER

#### INTRODUCTION

The Rice University SPE student chapter is a student arm of SPE International. As a student organization, our mission is to provide each affiliate with opportunities for personal and professional development through the SPE student membership benefits and through technical and social activities. Each year, we organize guest lectures, industrial visits, and seminars by distinguished members from academia and from the petroleum industry. Our faculty advisor, Dr. George Hirasaki, had a 26-year career with Shell before joining Rice in 1993. Here are just a few of the activities we've been involved in over the past year:

#### **Paper Contest**

On April 25, 2015, the chapter hosted the 2015 SPE-GCS Regional Student Paper Contest. Undergraduate, master's and PhD students from Texas A&M University, Rice University, and University of Houston presented their research projects and networked with each other during the contest.



#### **Resumania and Mock Interview Workshop**

Last fall, the committee hosted career development events such as Resumania and a mock interview workshop. Industry representatives gave insightful suggestions on how to modify members' resumes to catch employers' eyes.

#### Field Trips

Last fall, Rice Chapter hosted field trips to FEI and Newpark Technology Center, which provided students with valuable learning experiences outside their everyday activities.

A Halliburton facility tour on March 23 gave students insights into product enhancement, cementing, wireline and perforating, completion tools, and baroid.

#### **Distinguished Guest Lecture**

On February 22, the chapter invited C. Susan Howes to give a lecture on networking to build beneficial relationships. Howes showed students how to build their networking skills to boost their careers and benefit their employers.

#### **Conference Attendance**

Rice Chapter sponsored 20 members for the 2015 Annual Technical Conference and Exhibition and 2016 SPE Student Symposium in Houston to bridge academia and the petroleum industry.

#### A Special Invitation: Advisory Board

The committee plans to launch 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 Yongchao Zeng at yz42@rice.edu.



#### **Student Chapter Directory**

#### **HOUSTON COMMUNITY COLLEGE**

Raymond McCoy rqm3rd@yahoo.com

#### RICE

Yongchao Zeng yz42@rice.edu

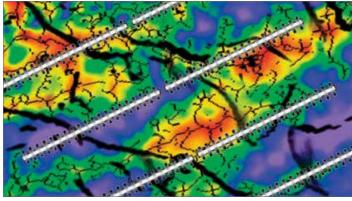
#### **TEXAS A&M**

Shawn Guice SPE\_President@pe.tamu.edu

#### UNIVERSITY OF HOUSTON

Mohamad Salman president@uhspe.org





High resolution fault and fracture information provided by the integration of 3D seismic attributes and patented processing of Ambient Seismic. Quick delivery of seismic attributes allows for customized well planning and optimized completion design.

# AST. ACTIONABLE. AFFORDABLE

- Innovative 3D design makes acquisition fast and affordable days in the field rather than months.
- Nodal acquisition is fast and leaves minimal environmental footprint easier permitting; happier landowners.
- Acquire both active and Ambient Seismic to maximize the understanding of faults, fractures and stress fields.
- Quick delivery of high resolution fault images and rock property attributes timely and actionable information.
- Affordable data for customized well plans and optimized completion designs.

Fast, actionable, affordable - Global's **SEISMIC** on **DEMAND** makes high-resolution seismic a practical choice for pad-based operations.



For more information: www.globalgeophysical.com/DEMANDSEISMIC or Contact us at DEMANDSEISMIC@globalgeophysical.com



#### SPE-GCS CONNECT

### DIRECTORY

#### Gulf Coast Section 2016-2016 Board of Directors

#### **CHAIR**

Ivor Ellul, CiSK Ventures 713-240-2740 iellul@ciskventures.com

#### **VICE CHAIR**

Deepak Gala, Shell 281-544-2181 deepak.gala@shell.com

#### **PAST CHAIR**

Jeanne Perdue, Occidental 713-215-7348 jeanne\_perdue@oxy.com

#### **SECRETARY**

Gabrielle Guerre Morrow, Ryder Scott 713-750-5431 gabrielle\_guerre@ryderscott.com

#### **TREASURER**

Alex McCoy, Occidental 713-366-5653 alexander\_mccoy@oxy.com

#### **VICE TREASURER**

David Flores 281-381-5828 david\_p\_flores@yahoo.com

#### **Board Committee Chairs**

#### **CAREER MANAGEMENT**

Sunil Lakshminarayanan, Occidental 713-344-1249 sunil lakshminarayanan@oxy.com

#### COMMUNICATIONS

Subash Kannan, Anadarko 713-385-7242 Subash.Kannan@anadarko.com

#### **COMMUNITY SERVICES**

Marissa Davis, Baker Hughes 281-231-3418 marissa.davis@bakerhughes.com

#### **EDUCATION**

Simeon Eburi, Chevron 832-854-3134 simeon.eburi@chevron.com

#### **MEMBERSHIP**

Kris Pitta, Freeport-McMoRan Oil & Gas 713-579-6643 Kris Pitta@fmi.com

#### **PROGRAMS**

Fady Chaban 832-387-7249 chabanf@gmail.com

#### **SOCIAL ACTIVITIES**

Jim Sheridan, Baker Hughes - retired 281-740-0913 sherim@operamail.com

#### **TECHNOLOGY TRANSFER**

Greg Palmer, IBM GBS North America 281-386-2483 gpalmer@us.ibm.com

#### YOUNG PROFESSIONALS

Chiedozie "Dozie" Ekweribe, Chevron 832-854-7599 Dozie@chevron.co

#### **DIRECTORS AT LARGE 2014-2016**

Jenny Cronlund, BP 281-366-8966 jenny.cronlund@bp.com

Torrance Haggerty, T.R. Consulting 281-714-5472 thaggerty06@gmail.com

Eric Kocian, Exxon Mobil 832-624-7962 eric.m.kocian@exxonmobil.com

#### **DIRECTORS AT LARGE 2016-2017**

John "J.J." Jackson, Unimin Corp. 832-247-0233 jsjackson@unimin.com

Alvin Barber, Schlumberger 713-513-2431 abarberspe@gmail.com

Mark Fleming, Suntrust Robinson Humphrey 832-603-2305

Mark. Fleming@SunTrust.com

# SPE GULF COAST NORTH AMERICA REGIONAL DIRECTOR

J. Roger Hite, Inwood Solutions, LLC 713-385-5343 hite@inwood-solutions.com

#### **SECTION MANAGER**

Kathy MacLennan, SPE-GCS 713-457-6813 kmaclennan@spe.org

#### **GULF COAST SECTION COORDINATOR**

Open

#### **Committee Chairs**

#### **AUXILIARY**

Nancy Giffhorn 281-360-4631 rgiffhorn@aol.com

#### **AWARDS BANQUET**

Jeremy Viscomi, Petroleum Technology Transfer Council 785-864-7396 jviscomi@pttc.org

#### **CASINO NIGHT**

Rini Assad 713-447-7478 riniassad@gmail.com

#### **ESP WORKSHOP**

Noel Putscher, Newfield 281-674-2871 nputscher@newfield.com

#### **GOLF CO-CHAIRS**

Cameron Conway, KB Industries 281-217-0660 cconway@kb-industries.com

Marc Davis, Champions Pipe and Supply 713-248-3956 mdavis@championspipe.com

Robin Smith, Halliburton 713-907-1694 robin.smith@halliburton.com

#### **INTERNSHIPS**

David Li, DSL Ocean Group 713.299.7568 dsl6625@yahoo.com

#### **NEWSLETTER**

Lynn Ponder, Frontline Group 281-352-9164 editor@spegcs.org

#### **PUBLICITY**

Pablo Perez, Bardasz 713-498-6733 Pablo.perez@bardasz.com

#### **OILFIELD GAMES**

Lindsey Ferrell, The Frontline Group 512-913-7112 spevolunteer@frontline-group.com

#### **SCHOLARSHIP**

Jennifer Pinnick, Chevron 713.372.1737 gcs-scholarship@spemail.org

#### INDUSTRY COLLABORATION

Bryan Marlborough 985-232-0318 bryanmarlborough@gmail.com

#### **SPONSORSHIP**

Ricardo Sotto, Consultant 713-724-2212 risotto@aol.com

#### **SPORTING CLAYS**

Paul Conover, NOV 713-346-7482 paul.conover@nov.com

James Jackson, Halliburton - retired 832-444-2383 Jjackson5223@gmail.com

#### **WEB TECHNOLOGY**

Shivkumar Patil, Aker Solutions 713-369-5352 Shivkumar.Patil@akersolutions.com

### **Study Group Chairs**

#### **BUSINESS DEVELOPMENT**

David Pantoja, Citi A&D Group 713-821-4715 david.pantoja@citi.com

#### **COMPLETIONS & PRODUCTION**

Jonathan Godwin 713-259-9726 jongodwin@hotmail.com

#### **DIGITAL ENERGY**

John Reichardt 713-586-5950 John.Reichardt@rpsgroup.com

#### **DRILLING**

Ernie Prochaska, NOV Downhole 832-714-3842 ernie.prochaska@nov.com

#### **GENERAL MEETING**

Robert Saucedo, ASHMIN 281-773-4135 rsaucedo@ashmin.com

#### **HSSE AND SOCIAL RESPONSIBILITY**

Trey Shaffer, Environmental Resources Management (ERM) 281-704-3664 Trey.Shaffer@erm.com

#### **INTERNATIONAL**

Barry Chovantez, Santander 713-850-9955 bchovanetz@yahoo.com

#### **NORTHSIDE**

Robert Estes, Baker Hughes 713-879-4414 robert.estes@bakerhughes.com

#### **PERMIAN BASIN**

Amy Timmons, Flogistix 832-538-7976 atimmons@flogistix.com

#### **PETRO-TECH**

Jessica Morgan, Blackstone Minerals 713-929-1633 jmorgan@blackstoneminerals.com

#### PROJECTS, FACILITIES, CONSTRUCTION

Mark Faucher, TFG, LLC 713-212-9067 mfaucher@all-llc.com

#### **RESEARCH & DEVELOPMENT**

Kitty Harvey, Cameron 281-901-3245 Kitty.Harvey@c-a-m.com

#### **RESERVOIR**

Mohammad Tabatabaei, Marathon 713-553-5642 mtabatabaei@marathonoil.com

#### **WATER & WASTE MANAGEMENT**

Barbara Denson. Weston Solutions 713-985-6764 Barbara.Denson@WestonSolutions.com

#### **WESTSIDE**

Steve Loving, Core Laboratories, LP 713-328-2244 stephen.loving@corelab.com

# CONNECT **INFORMATION**

NEWSLETTER COMMITTEE

CHAIR | Lynn Ponder

editor@spegcs.org

AD SALES | Pat Stone starlite1@sbcglobal.net

**BOARD LIAISON | Subash Kannan** 

#### **NEWSLETTER DESIGN | DesignGood Studio**

designgoodstudio.com

SPE HOUSTON OFFICE

#### **GULF COAST SECTION MANAGER**

Kathy MacLennan | kmaclennan@spe.org

#### **GULF COAST SECTION COORDINATOR** Open

#### **HOURS & LOCATION**

10777 Westheimer Rd, Ste 1075 Houston, TX 77042 P 713-779-9595 | F 713-779-4216 Monday - Friday 8:30 a.m. to 5:00 p.m.

#### PHOTO SUBMISSIONS

We are looking for member photos to feaure on the cover of upcoming issues! Photos must be at least 9" by 12" at 300 DPI. Email your high-resolution picture submissions to: editor@spegcs.org

#### CHANGE OF ADDRESS

To report a change of address contact: SPE Member Services Dept. P.O. Box 833836 Richardson, TX 75083-3836 1.800.456.6863 | service@spe.org

#### CONTACT

For comments, contributions, or delivery problems, contact editor@spegcs.org.

#### **ADVERTISE YOUR BUSINESS IN THE SPE-GCS NEWSLETTER**

Connect is printed 12 times per year and contains premium positions for advertisers wanting to reach some of the most influential oil and gas professionals in the world.

For information on advertising in this newsletter or on the SPE-GCS website, please contact: Pat Stone, Star-Lite Printing Inc. 281-530-9711 / starlite1@sbcglobal.net





NON-PROFIT ORGANIZATION U.S. POSTAGE PAID PERMIT NO. 6476 HOUSTON, TX

# SOCIETY OF PETROLEUM ENGINEERS GULF COAST SECTION

10777 Westheimer Road Suite 1075 Houston, TX 77042

# CALENDAR

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
					Members in Transition (MiT)	
					(1117)	
					1	2
		Northside		Research & Development	Auxiliary	
					Continuing Education	
3	4	5	6	7	8	9
				General Meeting		
		International		Membership		
				Continuing Education		
10	11	12	13	Annual Drilling Symposium <b>14</b>	15	16
		12	19	Symposium 14	19	
			Westside	Board of Directors		Young Professionals
				Reservoir		
	_					
17	18	19	20	21	22	23
	I	l I	Business Development	l I	Community Service	Young Professionals
			Completions &		Community Service	Toding Froressionals
			Production			
24	25	26	27	28	29	30