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CHAIR'S CORNER



JEANNE PERDUE 2014 - 2015 SPE-GCS Chair

Wow, the month of February was a whirlwind of activity!

he Executive Breakfast was a fabulous event, thanks to Kim Thames Padeletti and her committee. Even though we were worried that we wouldn't have a good turnout or any sponsors, we had 135 registered (expected 75) and had several generous sponsors and showed enough profit to give a one-year scholarship. We had three SPE presidents (past, present, and future) and the VP of technology for Baker Hughes as speakers, and I gave the State of the Section address, which was well received. A dozen of our GCS leaders did Table Talks – that was like speed dating (or shall we say SPE-ed dating?) to learn about our Section's various education, networking, and volunteering opportunities. And we got some excellent feedback from attendees on how to serve our industry better. That was a great event!

Next was SPE Movie Night at Studio Movie Grill at City Centre. We saw the documentary "Big Men", and we actually had one of the major players in Ghana's Jubilee project as one of the panelists to discuss the movie afterwards. It just so happened that one of our Board members, Nii Ahele Nunoo, a fellow Ghanaian, had met George Yaw Owusu while watching a Ghana soccer game and asked him to participate. As Rustom Mody, our keynote speaker at the Executive Breakfast, noted, with SPE you are only one degree of separation away — with Kevin Bacon, it's six degrees of separation!

Next we had our monthly Board Meeting, where we discussed everything from our financial health to our alcohol policy to nominations to upcoming events to re-imagining our study groups. Everyone is invited to attend these meetings, held on the third Thursday of the month from 7:30 to 10:30 am at the SPE Houston Office. Just go to our calendar of events on our website and RSVP so we have enough breakfast for everybody. You can also listen in via webinar while you multitask in the comfort of your own office. You will be amazed at how much real business we cram into a three-hour meeting!

Next came Engineers Week, and I attended the Young Engineer of the Year Banquet at Maggiano's on Monday and the E-Week Gala at the University of Houston on Tuesday. At the Petroleum Engineering Advisory Board meeting right before the Gala, I learned that there are now 877 BS PetE students and 112 MS PetE students enrolled at UH, making up fully one-third of the College of Engineering! Of the 50 students receiving awards at the UH E-Week Gala, 29 of them were in the petroleum engineering program. All these new students need professors, so if you have a PhD and have ever wanted to be a professor, please apply now at UH to prepare the next generation for our industry.

I also had the opportunity to be a judge at the Science Engineering Fair of Houston at the University of Houston, along with judging the accompanying Science Writing Contest the weekend before. SPE-GCS awards first, second, and third prizes for the best oil-related science fair projects, and these will be on display at our Annual Awards Banquet at the Rice Hotel on May 21.

Oh, and I also have a real job at Oxy, a family, and church meetings to squeeze in around all this SPE stuff. I'm sure my hubby is getting tired of fixing his own hot dogs for supper. Not to worry, honey-bunny, there are three extra days in the month of March, and two extra days in April!

Speaking of one degree of separation, that \$100,000 check we donated to Houston Community College for the RigOne roustabout training program has already benefited one of my FOJs (Friends of Jeanne).

It turns out that Denis Ganz, the son of Susan Ganz of Schlumberger, was one of our HCC scholarship recipients and has already graduated from the first class to go through the RigOne program. Susan sent this letter to Mark Rubin, Executive Director of SPE International, thanking SPE for our donation.

"I wanted to say thank you to you and SPE. SPE contributed \$100,000 to the HCC RigOne program. My 21-year-old son, Denis, is one of the eight members of the first Roustabout I/ II class that started January 5. He received a \$1,000 scholarship toward the cost of the class, which was a big help to us, as my husband was laid off in November 2013. Denis graduates on Saturday and there will be a ceremony. He wasn't interested in college and wants to go offshore. When applying for jobs, he has been competing with older candidates who have transferrable skills. I hope this certification will give him a little bit of an edge. Below is a photo from the first day of class; he is second from the left and is the youngest in the class. Again thanks to SPE. ... He has really liked the class." - Susan Ganz, Schlumberger

Susan is now working with our YPs to reserve a Schlumberger auditorium for the Emerging Engineers Conference in June. What goes around, comes around, so cast your bread upon the waters!



Love, Jeanne

4.2015

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Then & Now
Buddy Woodroof

Student Chapter Section
TAMU-SPE

SPE-GCS Directory

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BOARD OF DIRECTORS MEETING

THURSDAY APRIL 16TH / 7:30 AM TO 10:30 AM

Location SPE HOUSTON OFFICE

10777 Westheimer Rd., Suite 1075, Houston, TX 77042

Event Contact SHARON HARRIS

713-457-6821 / 713-779-4216 FAX / sharris@spe.org



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SPE-GCS MEMBERSHIP REPORT February 2015

2.2015 TOTAL: 13,078 YP: 2,680 **1.2015** TOTAL: **11,572**

TOTAL: **11,572** YP: **2,203**

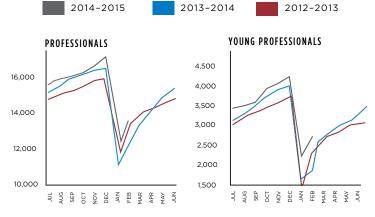
1.2015 2.2015 **SPE-GCS MEMBERS** TOTAL ΥP TOTAL ΥP New Members 277 134 123 55 Transfered to Section 1 45 18 Unpaid 4.818 1.605 5.835 1.875 STUDENT MEMBERS PAID UNPAID PAID UNPAID Texas A&M 1.063 275 884 361 Rice 62 19 55 20 HCC 24 32 20 25 UH 371 145 290 173 **Total** 1,547 466 1.286 591

5.284

12.858

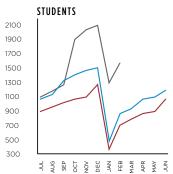
6.426

66.7%



73.5%

14.625



Total Paid/Unpaid

% Paid





VOLUNTEER

SPOTLIGHT

MOHAMMAD TABATABAEI



ohammad Tabatabaei is a reservoir engineer at Marathon Oil Corporation in Houston where he works in the Kurdistan Development Team. Prior to that, he was a reservoir engineer at Marathon Subsurface Technology Group.

He received his Bachelor's degree in Petroleum Engineering and mechanical engineering, both from Sharif University of Technology in Tehran. Then he earned his Master's degree in Petroleum Engineering from University of Louisiana at Lafayette and his PhD in Petroleum Engineering from Texas A&M University. He has authored several technical articles, including more than 15 SPE conference and peer-reviewed papers. His areas of expertise include reservoir characterization, reservoir and well performance analysis, and production optimization.

Mohammad has served SPE on multiple levels. He served as an officer of the Sharif University of Technology and University of Louisiana at Lafayette SPE student chapters. He also has served as a technical editor since 2011, where he received the SPE Outstanding Technical Editor Award in 2012 and 2013. He also has been serving on the SPE-ATCE Production Monitoring and Control subcommittee since 2013. Mohammad has been an active member of the Reservoir Study group of the SPE Gulf Coast Section since 2012 and currently serves as the Program Chair of the group.





COLUMN BY BUDDY WOODROOF

APRII

1955

A new oil deposition theory is afoot, namely that oil was actually deposited due to condensation of upward rising gaseous material originating in very hot zones below the earth's outer crust and condensing in cooler upper strata of the outer crust. (So those fossils had nothing to do with it!)

Interest in uranium mining starts to take a back seat to oil exploration, as experts claim that a single oil well will gross as much income in 2 years as an average uranium mine will in a lifetime.

Dowell field tests a new experimental fracturing method they call "Stratablast," which involves placing explosive pellets in hydraulic fractures rather than sand, and then detonating the pellets. Field tests are being conducted in Kansas, North Texas and Oklahoma.

A drilling company announces plans to sue the Atomic Energy Commission for damage incurred by one of its wells in Escalante, Utah following an atomic bomb test in Nevada.

U.S. active rig count - 2,626

APRII

1980

Petro-Canada reports plans to buy my favorite refinery, namely the bankrupt refinery complex in Come-By-Chance, Newfoundland. (Why don't we build one in Cut and Shoot, Texas just to stay up with the Canadians!)

While Exxon foresees cars getting an average of 36.5 mpg by the year 2000, the U.S. government predicts an average of 85 mpg by 1995. (The government might want to consider farming out their forecasting to oil industry experts.)

As they did in prior decades with regard to oil pipelines, the railroads are fighting giving the right of eminent domain to coal slurry pipelines across railroad rights-ofways.

As has been the case in recent years, in 1980, petroleum engineering graduates commanded the highest average starting salaries of any of the engineering disciplines, followed in order by chemical engineering and then civil engineering graduates.

U.S. active rig count - 2,659

APRIL

2005

ChevronTexaco's Petronius platform is back online after being shut down due to severe damage from Hurricane Ivan in September of last year. Initially, it is producing approximately 75% of its 42,000 BOPD and 65 MMcfd prehurricane output.

Excelerate Energy commissions its Gulf Gateway Energy Bridge deepwater LNG port and begins commercial operations at the world's first offshore LNG receiving port 116 miles off the coast of Louisiana.

The American Gas Association reports that U.S. natural gas reserves for year-end 2004 exceeded 190 tcf for the first time since 1986.

A record 23,000 gas wells were completed in the U.S. in 2004, and of the resulting 2004 gas production, 48% came from the 30 top holders of gas reserves and the rest from thousands of independent producers.

Light sweet crude oil - \$51.48/bbl; Natural gas - \$7.09/MMbtu; U.S. active rig count - 1,348

THE REST OF THE YARN

This month we continue our look back at the life and times of industrialist and philanthropist Andrew Carnegie.

arnegie had a radical attitude toward philanthropy, which he described in 1889. Rich people, he said, should give away most of their money during their lifetimes in ways beneficial to society. The man who dies rich, he wrote, "dies disgraced."

Andrew Carnegie was not the first great philanthropist of history, but he was a pioneer in committing himself to giving away virtually all of his money while he was alive. He was also a trendsetter in the way he approached the task, seeking to carefully sift

through requests and identify the worthiest recipients. One of his first projects was to supply America and Scotland with libraries that could be used by anyone free of charge. He spent more than \$50 million on this effort, building 1,946 library buildings in the U.S. (some of which have since been closed). He also donated generously to many colleges, universities, museums, and research groups. He poured money and time into organizations seeking world peace. In his later years, peace became his grand passion.

Next month, Andrew's passion for peace follows him to his grave.

THENE NOW A PRIL QUIZ

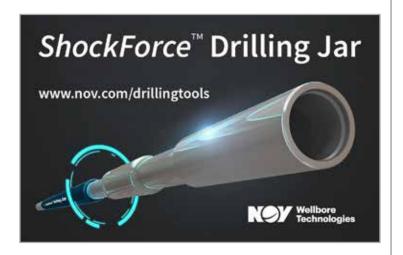
It took 41 years for the U.S. to produce its first billion barrels of oil (1859-1900). How many years did it take the U.S. to produce its second billion barrels: a) 23 years, b) 16 years, c) 9 years, or d) 6 years?

ANSWER TO MARCH'S QUIZ

The winning solution of March's contest to see who could come up with the most creative solution to the "dive-bombing sea gull" problem faced by Sun Oil's South Jersey shore bulk storage station was the installation of tents over the tops of the steel storage tanks.

No winner in February

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.





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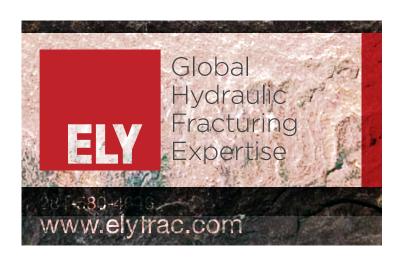
RESEARCH & DEVELOPMENT

Building NASA Collaborations with Outside Groups

Mark's presentation will begin with an overview of the Rice Space Institute, and the Institute's efforts to increase interaction between Rice and NASA JSC. He will give a couple of examples of those efforts and talk about a couple of the outreach efforts to foster greater enthusiasm and awareness for the space economy. Next, he will provide an overview of NASA's ECLSS development efforts, framing NASA's effort to provide an Earthlike ecology "in a box". Then he will discuss two major systems — water and waste management — and will close by briefly describing the "Engineers Without Borders" effort.

MARK JERNIGAN

Mark Jernigan has worked at NASA for over 35 years, developing and delivering hardware and software projects and advanced capabilities for human spaceflight. He is currently Executive Director of the Rice Space Institute and Associate Director in JSC's Human Health and Performance Directorate. At JSC, he leads the effort to assure the next generation of exploration systems have the necessary capabilities to sustain the crew for the mission, meet the human performance constraints, and take advantage of their performance capabilities to maximize both mission safety and success. At Rice, he is responsible for improving the engagement between Rice and JSC. Prior to this position at JSC, he was Program Manager for the Advanced Human Support Technology program, responsible for a portfolio of projects, grants, and cooperative agreements to improve the state-of-the-art life support, environmental monitoring, habitability and human factors for space systems. He has a BS in Aero Engineering from Texas A&M and an MS in Systems Design and Management from MIT.





EVENT INFO

Thursday

4.2.15

11:30 AM TO 1:00 PM

SPEAKER

Mark Jernigan
Executive Director of the Rice
Space Institute; and Associate
Director in JSC's Human Health
and Performance Directorate
Rice University / NASA

LOCATION

Norris Westchase Center 9990 Richmond Ave., Suite 102 Houston, Texas 77042

EVENT CONTACT

Skip Davis 281-359-8556 skdavis@ technologyintermediaries.com

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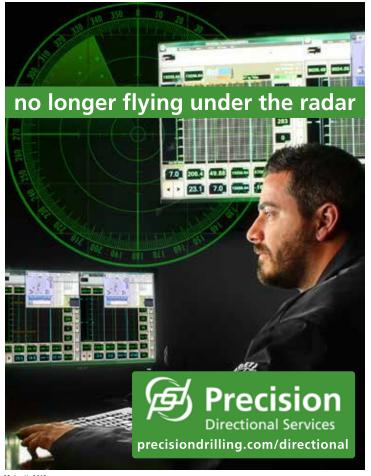
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DRILLING

Exploiting Unconventional Resources through Horizontal Drilling - Challenges and Opportunities

Horizontal drilling technologies have been heralded by many as the greatest advances since the conception of the rotary drilling bit. Horizontal drilling now accounts for a significant percent of active onshore wells in the U.S., especially for exploiting shale gas resource and seems to be increasing every year. Horizontal drilling allows for an increase in the recoverable petroleum in a given formation, and even increases the production in fields previously thought of as marginal or mature. Horizontal drilling also allows for more economical drilling, and less impact on environmentally sensitive areas. However, there are many technical challenges in successfully drilling and completing a long horizontal well. The presentation will outline some of the main differences between drilling a vertical and horizontal well and prescribe remedies to overcome these challenges to successfully exploit unconventional/shale gas resources to meet future global energy needs.

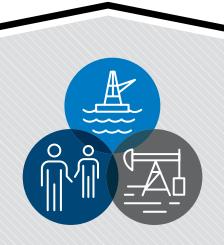
FERSHEED MODY



Fersheed Mody is a seasoned professional with thirty years of diversified research, applied technology and project management experience in the areas of drilling and production with technology organizations of an independent oil company (Apache Corporation), a major international oil company (Shell International E & P) and a major integrated service company (Halliburton). He has published

over 60 technical papers and holds 28 patents. He has been invited as a guest speaker at various SPE Forums: Rock Mechanics, Borehole Stability, Advances in Drilling Fluids, Pore Pressure Estimation, Petroleum Well Construction, Cementing in Harsh Environments, Under Balanced Drilling and Designer Fluids. He received his Ph.D. in Mechanical Engineering from the University of Oklahoma in 1985.





EVENT INFO

Wednesday

4.8.15

11:30 AM TO 1:00 PM

SPEAKER

Fersheed Mody Manager, Global R&D Apache Corporation

LOCATION

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

EVENT CONTACT

Mojtaba P. Shahri 713-849-1818 mojtaba.pordelshahri@ weatherford.com

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GENERAL MEETING

U.S. Oil, Gas & NGL Fundamentals - From Excess to Exports

As U.S. production of oil, gas, and NGLs continues to seemingly outpace domestic demand growth, analyst Greg Haas will present key perspectives from Stratas Advisors on the upstream supply outlook, midstream constraints, and downstream consumption within the U.S., as well as an evaluation of the export market potential and balances for U.S. hydrocarbons.

GREG HAAS

On behalf of the clients of Stratas Advisors, a Hart Energy Company, Mr. Greg Haas leverages more than 25 years of integrated energy experience and has extensive knowledge of the operating and financial fundamentals of the North American energy industry.

He initiated and continues his role as primary author of the Refining Unconventional Oil study and its successor, the North American Unconventional Oil service, and contributes to the global Heavy Crude Oil Outlook study, while directing ongoing research for the North American Shale Quarterly service.

Prior to joining Stratas Advisors, Greg held operating and fundamental research roles at Exxon Corp., Electric Power Research Institute (EPRI), at pipeline and power consultancies, and most recently in energy equity research at brokerage firms, including Raymond James Financial and Sanders Morris Harris Group where he covered equities and fundamentals of refining, pipelines, integrated oil, oilfield services and electric power companies and technologies. Hass holds an MBA from Rice University, a Masters in Mechanical Engineering and Bachelor degrees from University of Illinois.





EVENT INFO

Thursday

4.9.15

11:30 AM TO 1:00 PM

SPEAKER

Greg Haas Director of Research Integrated Oil & Gas Stratas Advisors

LOCATION

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

EVENT CONTACT

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

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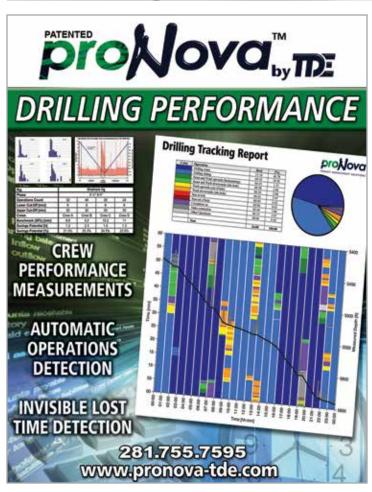


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PETRO-TECH

2015 Salary Survey Highlights

Each year the Petro-Tech Study Group facilitates a salary survey for Techs in the GCS area. Results are then compiled into a report and presented to our members, as well as industry leaders and organizations upon request. We include current year statistics, year-over-year comparisons and benchmarks of other comparable industry survey results.

Petro-Tech salary surveys are in very high demand by employers and department managers as well as the Study Group members. The survey is sent out to all Petro-Tech contacts subscribed to our mailing list, and can be taken by any Tech in the Houston metro area.

Please look for the survey in your email inbox and complete at your earliest convenience! Anyone holding a Technician/Technologist role in O&G is encouraged to participate.

JESSICA MORGAN



Jessica is the current Chair of the Petro-Tech Study Group, having been with the board since 2011. She has facilitated our salary survey for us for the last four years. Jessica has thirteen years of experience in the industry moving from admin to tech to technologist in quick succession. She has extensive experience in data analysis, reserves reporting, database administration, corporate compliance and

reporting, and software development/troubleshooting.

Jessica has been a member of SPE for seven years and has been employed at Black Stone Minerals as a Senior Engineering Technologist for the last five years. She's a single mom of two teenagers and avid genealogist.

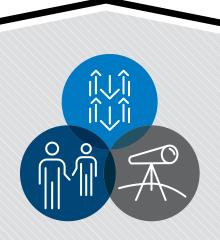
2014 PROFESSIONAL ENGINEERING EXAM RESULTS FOR PETROLEUM ENGINEERING

First Timers 71% Second+Timers 3% National Average Pass Rate 57%

PE Exam Application Deadline Date: July 1, 2015 Next Petroleum PE Exam Date: October 30, 2015

> 2015 HOUSTON COURSES AUGUST 24 – 28 // OCTOBER 5 – 9

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EVENT INFO

Thursday

4.14.15

11:30 AM TO 1:00 PM

SPEAKER

Jessica Morgan Senior Engineering Technologist Black Stone Minerals

LOCATION

Sheraton Brookhollow 3000 North Loop W Houston, TX 77092

EVENT CONTACT

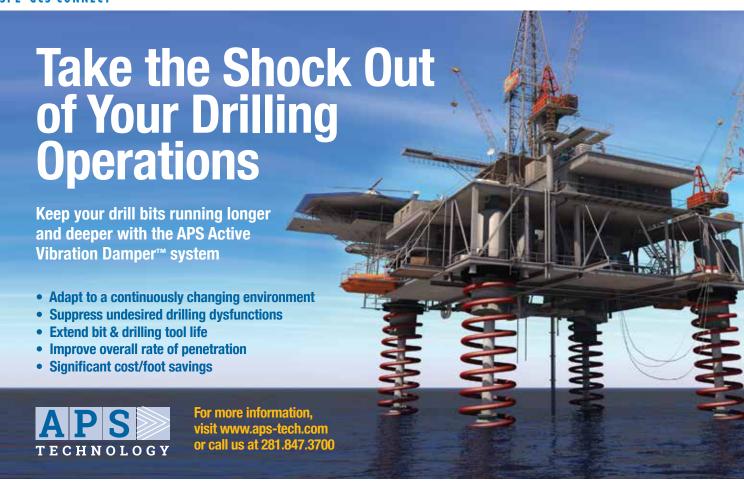
Jessica Morgan 713-929-1633 jmorgan@ blackstoneminerals.com

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NORTHSIDE

Considerations in Using the Limited Entry Technique in Massive Hydraulic Fracturing Treatments

Limited entry is the process of limiting the number or reducing the entry-hole diameter of perforations in such a way that significant perforation friction pressure is achieved during the treatment. Perforation friction establishes a backpressure in the wellbore that tends to allocate flow among the multiple perforation intervals/clusters, thus improving control of the hydraulic fracturing process. In horizontal wells, limited entry is often used in conjunction with the Plug-and-Perf process and is one of the most economical processes available to stimulate wells completed in unconventional reservoirs. To implement effective limited entry treatments, it is important to understand the mechanisms impacting pressure drop across perforations and use that knowledge to take appropriate precautions when designing and implementing the treatment. This includes identifying or predicting variations in mechanical rock properties such as stress within the reservoir. This presentation introduces critical considerations in executing limited entry treatments and develops key concepts through the use of case studies.

DAVE CRAMER

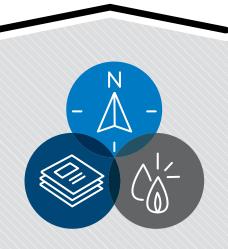


Dave Cramer is a Senior Engineering Fellow with ConocoPhillips on the ConocoPhillips Global Completions Engineering staff in Houston, TX. He has 37 years of experience in designing, executing and evaluating well stimulation treatments. Dave has authored 45 papers and is coinventor of 2 U.S. patents. Industry recognitions include the Henry Mattson Technical Achievement Award by the Denver SPE chapter

in 1993 and the SPE International Completions Optimization and Technologies Award in 2011. He was an SPE Distinguished Lecturer from 2003-2004 and the SPE Region Director for the U.S. and Canada Rocky Mountain region from 2004-2007. Dave is a Registered Professional Engineer in Colorado.

DIRECTIONAL AND HORIZONTAL DRILLING SPECIALISTS





EVENT INFO

Tuesday

4.14.15

11:30 AM TO 1:00 PM

SPEAKER

Dave Cramer Senior Engineering Fellow ConocoPhillips

LOCATION

Greenspoint Club 16925 Northchase Dr. Houston, Texas 77060

EVENT CONTACT

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

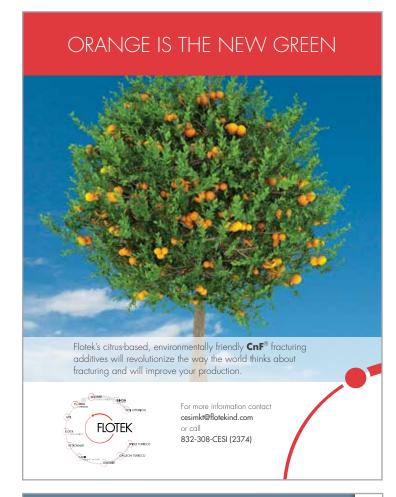
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WESTSIDE

Horizontal Well Performance Metrics

Completion and operational issues arise during the management of horizontal wells in naturally fractured reservoir systems. Similar problems have been observed in vertical wells. These observations, which will be discussed, are based on a significant population of wells, which have been evaluated for their completion effectiveness and persistence, reservoir quality, and other performance metrics. There are several common practices that may have unanticipated, often undesirable consequences, unless specific attention is given to mitigating those situations. This discussion documents the probability that the preventative measures can be beneficial. The primary takeaway is that modest changes in completion and operating practices can have significant long-term benefits.

JIM CRAFTON

Jim Crafton, president of Performance Sciences, Inc., graduated from the University of Missouri Rolla in 1965 and received an Honorary Degree of Professional Petroleum Engineer. He also has a Master's Degree from the University of Oklahoma and a Ph.D. from the University of Tulsa. He has developed production data analysis software, pipeline and reservoir management tools, managed E&P activities in the Rocky Mountain and Mid-Continent regions, and taught well stimulation, well testing and integrated exploration classes. The Reciprocal Productivity Index® technique that he developed is a practical method for evaluating shale, oil, gas and coalbed methane wells. Jim is an SPE Distinguished Lecturer for the 2014-15 season and was previously in 2003-04. He is Chair Emeritus of the Distinguished Lecturer Committee, received the Rocky Mountain Region Distinguished Contribution to Production Engineering Award, the Henry B. Matson Technical Achievement Award, and is a Distinguished Member of the Society of Petroleum Engineers.

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EVENT INFO

Wednesday

4.15.15

11:30 AM TO 1:00 PM

SPEAKER

Jim Crafton
President
Performance Sciences, Inc.

LOCATION

Norris Westchase Center 9990 Richmond Ave., Suite 102 Houston, Texas 77042

EVENT CONTACT

Sandeep Pedam 713-591-5738 sandeep.pedam@ conocophillips.com

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\$40

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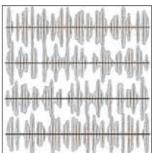
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PROJECTS, FACILITIES & CONSTRUCTION

An Agenda for the Lull: Coping Successfully in These Volatile Times

It wasn't but a few months ago that we discussed the dire situation the oil and gas industry finds itself in. The E&P industry was eroding value—on average 35 percent on a price normalized basis, due to poor capital discipline, almost non-existent portfolio management, and poor practices. We exhorted the industry and the business leadership to urgently focus on controlling the rising project costs or the industry would find itself in a serious crisis. However, high oil prices cushioned the effect of poor practices and muffled the hearing of the industry!

What a difference a few months make! The crisis is here and the new normal—low oil prices—is probably here to stay. Oil and gas operators—large and small, EPC players, vendors, and service providers—are all trying to navigate their way through this mess and are finding it difficult. This is not surprising. Since the industry didn't need to focus on cost for the better part of 15 years, we really don't know how to do it.

This talk will draw upon the vast Independent Project Analysis, Inc. (IPA) database of capital projects and lessons learned to present an agenda for the lull. Specifically, we will discuss the things businesses should be doing right now that will make their companies emerge stronger from this crisis. We will also discuss the easy and tempting short-term tactics that will actually end up weakening firms.

NEERAJ NANDURDIKAR

Neeraj is Director of the Exploration and Production (E&P) practice at Independent Project Analysis, Inc. He provides strategic direction and oversees the global practice, including customer relations, intellectual property development, research, and project consulting services. Neeraj has spent the past 15 years in an advisory role working with the EVPs, VPs, heads of projects, and functional leaders of more than 30 different O&G operators and service providers around the world helping them design, build, and optimize their organizations and project delivery systems to adapt to the everchanging project environment.

He has authored several papers published in Society of Petroleum Engineers (SPE), delivered keynote addresses, and served as a committee member for several SPE workshops and conferences. He currently serves as an Associate Editor for SPE's Economics & Management journal.

Neeraj holds an M.S. in Petroleum Engineering from The University of Tulsa and an MBA from the Wharton Business School of the University of Pennsylvania.



EVENT INFO

Tuesday

4.21.15

11:30 AM TO 1:00 PM

SPEAKER

Neeraj Nandurdikar Director of the Exploration and Production Independent Project Analysis, Inc

LOCATION

Wood Group Mustang, Inc Stallion Building S1C- Event Room 17325 Park Row Houston, TX 77084

EVENT CONTACT

Bryan Marlborough 281-647-8385 bryan.marlborough@ woodgroup.com

MEMBERS

\$35

NON-MEMBERS

\$40

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- If you want to significantly increase your hydrocarbon recovery, who do you call? **Binder: Binder polymers and flow-back chemistry pull more oil from the formation.**
- If you want a green drilling system that is easy to run, great ROP and good hole stability, who do you call? **Binder:** The Binder Maxim System will do all of that at a fraction of the cost.
- When your drillstring is packed off or your coil is stuck, who should you use? **Binder: Binder has freed 47 drillstrings and coiled tubing strings in the past 18 months.**

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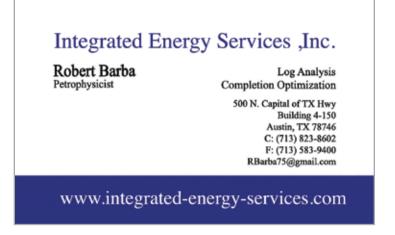
9391 Grogans Mill Road, Suite A-1 The Woodlands, TX 77380



(281) 419-9047 office (281) 362-5612 fax









COMPLETIONS & PRODUCTION

Advances in Production and Completion Optimization—Quantifying Drainage Volume and Understanding Refracs Using Microseismic

In this lower price environment, many operators are looking to technology to help minimize costs and improve production. In this presentation, Sudhendu Kashikar will cover how microseismic technology is being reinvented to provide invaluable information to both completions and reservoir engineers.

Because microseismic technology uses actual recorded data away from the wellbore, it is one of the few technologies that can provide insight into some of the unanswered questions operators have. This presentation will discuss the technology of monitoring and optimizing refracs, including early findings from this work – such as the identifying effectiveness of diverters, impact of treatment pressure on re-frac, and how to identify and delineate newly created fractures from pre-existing depleted fractures. The presentation will also introduce a method for better understanding production through use of microseismic constrained reservoir simulation.

SUDHENDU "KASH" KASHIKAR



Sudhendu "Kash" Kashikar has over 20 years of experience in the oil and gas industry. He specializes in commercializing multidisciplined technical solutions – bridging the gap between drilling, completions and seismic. Kash began his career with Schlumberger as a field engineer and worked numerous international assignments in operations, sales, marketing and new technology development. Prior

to joining MicroSeismic, Kash spent time developing and commercializing Fiber Optic Distributed Sensing technology and was the Global Head of Oil and Gas for Fibercore.

Kash has a Bachelor of Science in Petroleum Engineering from the University of Poona and a Master of Science in Petroleum Engineering from the University of Oklahoma. He has authored numerous technical papers and patents.



EVENT INFO

Wednesday

4.22.15

11:30 AM TO 1:00 PM

SPEAKER

Sudhendu "Kash" Kashikar VP, Business Development, Completions Evaluation MicroSeismic

LOCATION

The Greenspoint Club 16925 Northchase Dr. Houston, Texas 77060

EVENT CONTACT

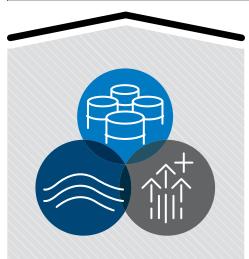
Jonathan Godwin 713-259-9726 jongodwin@hotmail.com

MEMBERS

\$40

NON-MEMBERS

\$45



EVENT INFO

Thursday

4.23.15

11:30 AM TO 1:00 PM

SPEAKER

Shah Kabir Global Reservoir Engineering Advisor Hess Corporation

LOCATION

Sullivan's Steakhouse 4608 Westheimer Rd Houston, TX 77027

EVENT CONTACT

Juan C. Picott jpicott@maxoilsolutions.com

MEMBERS \$35

NON-MEMBERS \$40

RESERVOIR

Challenges in Unconventional Reservoir Forecasting

Many decline-curve analysis methods have emerged for forecasting the future performance of unconventional reservoirs. However, severe noise in field data, coupled with the low-frequency rate in monitoring/reporting and the unknown behavior of many completion and reservoir parameters with time, collectively present serious challenges in obtaining correct model parameters in many settings.

To address the complexity of this multitude of issues, performance forecasting is approached in two steps. First, we attempt to circumvent the data noise and frequency issues with a global cumulative production profile for a group of wells exhibiting similar performance characters, leading to the estimation of global model parameters. Second, we compare error trends amongst all methods for a basis of selecting well groups.

A simple rule-of-thumb is developed to get an estimate of the allowable time for extrapolating performance prediction within certain error bound. This and other studies have shown that at least six months' production data are required for valid extrapolation. Beyond the modern empirical decline-curve methods, this talk also explores the use of tools that have roots in analytical methods.

SHAH KABIR



Shah Kabir is a global reservoir engineering advisor at Hess Corporation in Houston. His experience spans more than 30 years in the areas of transient-pressure testing, fluid- and heat-flow modeling in wellbores, and reservoir engineering. Besides coauthoring more than 125 papers, Kabir coauthored the 2002 SPE textbook Fluid Flow and Heat Transfer in Wellbores and contributed to the 2009

SPE monograph Transient Well Testing. He has served on various SPE committees, including the editorial review committees for SPEPF, SPEREE, and SPEJ. He has chaired several ATW and Forum series meetings. He was an SPE Distinguished Lecturer during 2006-2007 and became an SPE Distinguished Member in 2007. Kabir received the 2010 SPE Reservoir Description and Dynamics award. He currently serves as an associate editor for the SPEREE journal.

BUSINESS DEVELOPMENT

Mexico The Evolving Doors to Entry

Join us at the Four Seasons Hotel for an informative panel discussion of the ongoing evolution of E&P's entry into Mexico.

Over the past decade, Mexico's oil production has declined by over one million barrels of oil production per day. President Enrique Pena Nieto's efforts have led to the constitutional amendments and legislative acts necessary to facilitate the use of private/public capital to develop Mexico's immense hydrocarbon potential. With low development costs, expansive infrastructure, and a modern marine construction sector, Mexico has a lot to offer. In addition, Pemex is seeking to farm out several important hydrocarbon discoveries on the Mexican Shelf to help recoup lost oil production. The Comisión Nacional de Hidrocarburos (CNH) plans to hold several licensing rounds that will likely cover onshore and offshore acreage, including unconventional, conventional, heavy oil, shelf and deep water opportunities. All these efforts are paving the way for more foreign capital, safety, and technological investments into one of the globe's fastest growing economies.

Our panel of experts will discuss what opportunities and challenges exist for expansion in a market that has been closed for 70+ years. This market promises to be attractive to both the IOC's and independents, and both public and private capital.

We welcome you to join us for this informative panel discussion to be sponsored by Simmons & Co. Intl., as well as the fellowship and networking of the popular Social Hour at 5:00 pm.

SCIENCE ENGINEERING FAIR OF HOUSTON 2015 SPE SPECIAL AWARD WINNERS



1ST PLACE

The Numerical Simulation of an In-Situ Subsea Separator, Part II

2ND PLACE

Particle Enhancements for a Greener, Stronger Cement

3RD PLACE

Soaking It Up Plant Style

Left to right: SPE-GCS judge Mabel Vocal, 2nd place winner Michael Bohnet of the Academy of Science and Technology, 1st place winner Jerath Karan and 3rd place winner Kevin Westerfield, both of Friendswood High School, and SPE-GCS judge Nii Ahele Nunoo.



EVENT INFO

Wednesday

4.29.15

5:00 PM TO 7:00 PM

SPEAKER

TBD

Please check online for updates!

LOCATION

Four Seasons Houston 1300 Lamar Between Caroline & Austin Houston, TX

EVENT CONTACT

Matt Borman 281-345-8019 mbormann@wwtco.com

MEMBERS

\$40/\$50 Walk-In

NON-MEMBERS

\$45/\$50 Walk-In



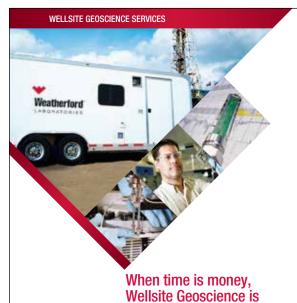
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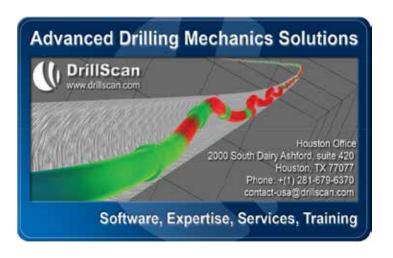
HSSE-SR

Making Safety Personal in the Oil & Gas Industry

The achievement of safety excellence across the oil and gas industry requires multiple strategies if we are to eliminate death from our efforts to explore for and produce hydrocarbons as a vital energy resource. One of those strategies is making safety personal for every man, woman and child in our workplace family. This presentation will describe and illustrate first hand several ways of making safety personal in the oil and gas industry.

WARREN HUBLER

Warren is a graduate of the US Naval Academy in Annapolis, Maryland where he earned a BS degree in Marine Engineering. After seven years of naval service, he joined Helmerich & Payne International Drilling Co. He began as a roughneck in land drilling operations. In 1991, Warren served as an administrative Manager in Gabon, West Africa. In 1992, Warren assumed duties as H&P's corporate Safety Manager. In 1995, he earned formal recognition as a Certified Safety Professional. In 2000, Warren became Vice President of Health, Safety and Environment (HSE) for H&P. In 2010, Warren's job duties at H&P were expanded to include professional development.





EVENT INFO

Thursday

4.30.15

11:30 AM TO 1:00 PM

SPEAKER

Warren Hubler, CSP
VP Health, Safety and
Environment
Helmerich & Payne International
Drilling Co

LOCATION

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

EVENT CONTACT

Trey Shafer 832-209-8790 trey.shaffer@erm.com

MEMBERS

\$40

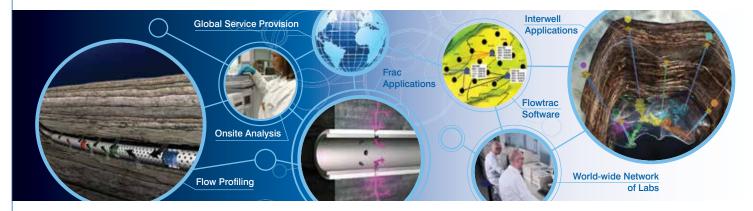
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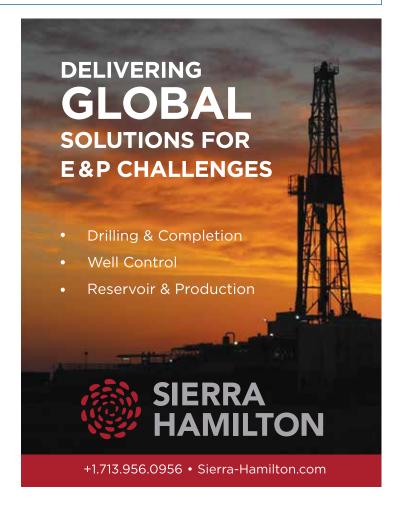
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Horizontal Drilling Workshop

The one-day Horizontal Drilling and its Challenges workshop covers most of the basic/advanced engineering and concepts. This course provides a systematic, phased approach of the use of fundamental engineering principles, tubular mechanics and challenges associated in drilling these wells. The target audience should be interested to learn/refresh engineering principles so that they can be more equipped to consult as well as solve complex problems effectively and confidently. Upon completion of this course, attendees will have deeper knowledge of the basic principles used in day-to-day exercise and will be able to use the knowledge gained in an improved way. This course will have practical hands-on class exercises to solve complex problems in practical terms through DSWE software accessed through the cloud.

7:30 AM Registration

8:00 AM Horizontal Drilling Workshop: Dr.Robello Samuel

- General Introduction
- Types of Horizontal Wells
- Wellpath Planning
- Surveying and Calculation of Horizontal Wellpath
- · Multilateral Wells
- · New Generation Horizontal Wells
- Downhole Tools and Measurements
- Challenges and Mitigation
- Casing Wear
- Horizontal Completions
- Software on Design, Torque and Drag estimation, Hole cleaning and Pressure management

4:00 PM Adjourn

ROBELLO SAMUEL



Dr. Samuel Robello is a Technology Fellow with Halliburton. He is currently a research and engineering lead for well engineering applications and responsible for research and scientific activities for new drilling technologies. He has more than 25 years of multi-disciplinary experience in domestic and international oil/gas drilling and completion operations, management, consulting, software development and teaching. He is also an

adjunct Professor at the University of Houston and Texas Tech University, Lubbock for the past 10 years. He has published more than 120 technical papers, reports, and books. He is presently serving in several Editorial Review Committees. Samuel's unique blend of skills as a field engineer, researcher and teacher helped him to author six drilling books and a forthcoming book "Drilling Engineering Optimization". He started his career working on rigs as a drilling engineer. He has also worked at Oil and Natural Gas Corporation from 1983 to 1992 as a field drilling engineer. Dr. Robello, a SPE Distinguished Lecturer, holds B.S. and M.S. (mechanical engineering) degrees from University of Madurai and College of Engineering, Guindy, Anna University (Chennai), M.S. and Ph.D. (petroleum engineering) degrees from Tulsa University. He is also the author of seven best-selling drilling engineering books.

EVENT INFO

FRIDAY

4.3.15

7:30 AM TO 4:00 PM

SPEAKER

Samuel Robello Technology Fellow Halliburton

LOCATION

SPE GCS Section Office 10777 Westheimer Road, Suite 1075 Houston, Texas 77042

EVENT CONTACT

Nii Ahele Nunoo 507-304 5416 nii.nunoo@nov.com

COST

\$150

INTENDED

For field & office engineers, geoscientists and geologists

FORMAT

Lecture/Lab/Presentation

воок

Horizontal Drilling Engineering by Samuel Robello SigmaQuadrant.com







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Oil Patch Orientation

This seminar is the most popular SPE program. The course is designed as a non-technical audio-visual guided tour through the oil patch, illustrating the basic equipment and techniques used in the discovery, development and production of petroleum.

- Introduction/Outline of the Day
- The Economics & Future of the Petroleum Industry
- Theory of the Origins of Hydrocarbons
- Reservoir Parameters (eg: Porosity/Permeability)
- · Geology of Petroleum & Geophysics
- · Drilling Basics
- Well Logging
- Well Completions
- Reservoir Drive Mechanisms
- Production Equipment (sub-surface & surface)
- Midstream & Downstream Topics

JOHN FARINA provides petroleum engineering consulting and technical training services to the international and domestic petroleum industry.

RON HINN works as an upstream technical consultant, specializing in the areas of knowledge management, competency development and technical training.

SUSAN HOWES is Horizons Manager in the Organizational Capability group at Chevron.

KEN ARNOLD is an independent consultant with over 40 years of experience in projects, facilities and construction related to upstream oil and gas developments.

MARTY STETZER leads a consulting practice that specializes in training design and delivery, operations improvement and large-scale system implementations.

EVENT INFO

WFDNFSDAY

5.12.15

8:30 AM- 5:30 PM

LOCATION

Hilton Houston North 12400 Greenspoint Dr Houston, TX 77060

REGISTRATION

www.spegcs.org/events/2853/

CONTACT

Regina.Eco@questar.com

COST

\$350.00

SPEAKERS

John Farina Ron Hinn Susan Howes Ken Arnold Marty Stetzer

Committee: Technology Transfer

Deep Dives 2015

The "Deep Space, Deep Ocean" 2015 forum is designed for professionals in the energy and aerospace industries. This includes business leaders, engineers, scientists, R & D professionals, IT and cybersecurity managers, reliability and asset managers, entrepreneurs, and others who lead technology innovation within these two industries.

Three general sessions will feature keynote speakers from top O&G, petrochemical, IT and engineering companies, and NASA and other aerospace organizations who will address technological challenges and opportunities for collaboration. Five technical tracks include: Risk Management and Reliability, Robotics and Automation, Advanced Technologies and Materials, Cybersecurity and Big Data Analytics, and Synergy between Industries.

REGISTRATION

www.deepdives2015.com

EVENT INFO

TUFS - WFD

4.7.15 - 4.8.15

8:00 AM- 5:00 PM

LOCATION

The Woodlands Marriott Hotel & Convention Center

CONTACT

713-787-6407 info@deepdives2015.com

MEMBERS

\$300 for both days

OilSim Competition Fundraiser

This brand new fundraiser is being launched to bring in the additional scholarship money over and above our traditional golf, tennis, and sporting clays tournaments. Not only is this a fun social activity with other SPE members, but it is also an educational experience similar to a capstone project, which makes it a good training investment for employees who need the Big Picture of how our industry works using a simulated field development project.

Participants will be grouped in teams of 4 by the committee. After registration and introductions, each team will act as a virtual petroleum company in the business simulation "OilSim" to explore and develop an offshore oil and gas prospect. An experienced OilSim instructor will guide the participants through the process while encouraging friendly competition amongst the teams.

On behalf of the entire 2014-2015 SPE-GCS OilSim Competition Fundraiser Committee, we look forward to seeing everyone for a fun-filled day of competition!

EVENT SCHEDULE

Registration 7:30 - 8:00 AM
Intro & Instructions 8:00 AM - 10:30 AM
Challenge #1 10:30 AM - 12:00 PM
Lunch 12:00 PM - 1:00 PM
Challenges #2 & #3 1:00 PM - 4:00 PM
Happy Hour 4:00 PM - 6:00 PM

LOCATION

The Frontline Group of Texas, LLC 15021 Katy Freeway, Suite 575 Houston, TX 77094 281-453-6000

PLAYERS & INTERESTED SPONSORS, PLEASE CONTACT

Lindsey Ferrell 512-913-7112 Iferrell@frontline-group.com

Kristin Obenhaus 281-456-6037 Kobenhaus@frontline-group.com

DIAMOND SPONSORS







OilSim

Friday April 10th

8:00 AM TO 5:00 PM

SPONSORSHIP OPPORTUNITIES

Proceeds from the sponsorships of this tournament benefit the SPE-GCS Scholarship Fund, which has awarded more than \$3 million in scholarships since 1963 to local engineering students.

DIAMOND LEVEL SPONSOR \$3500

Company name on the competition sponsor board Recognition in the competition program Entitled to register/sponsor 4 competitors (from your organization or from a pool of interested students)

PLATINUM LEVEL SPONSOR \$2500

Company name on the competition sponsor board Recognition in the competition program Entitled to register/sponsor 3 competitors (from your organization or from a pool of interested students)

GOLD LEVEL SPONSOR \$1500

Company name on the competition sponsor board Recognition in the competition program Entitled to register/sponsor 2 competitors (from your organization or from a pool of interested students)

SILVER LEVEL SPONSOR \$750

Company name on the competition sponsor board Recognition in the competition program Entitled to register/sponsor 1 competitor (from your organization or from a pool of interested students)

BRONZE SPONSOR \$500

Company name on the competition sponsor board Recognition in the competition program

In-kind donations for ditty bags and door prizes are also accepted.

Today's Petroleum Engineering Professional Registration Process

Today's Professional Registration process involves eight distinct steps for the Petroleum Engineer. The first step is obtaining a college degree. The second step is applying to take the Fundamental Exam (FE), usually in the last year in college. The third step is taking and passing the Fundamental Exam. The fourth step is obtaining a minimum of four years of industry experience. The fifth step is applying with a state board to take the Professional Exam (PE) in Petroleum Engineering. The sixth step is getting approval from a state board to take the PE Exam.

The seventh step is taking and passing the common national Petroleum Engineer Exam. The eighth and final step is obtaining a state board recognized Professional Engineering stamp.

The Petroleum Engineering PE Exam first arrived in 1973 and has seen many changes over the years. It was an objective style exam for over twenty years. Now it is a full multiple choice exam. The overall pass rates have averaged 70% over the past fifteen years. The PE Registration requirements have also improved and stiffened over the past two decades. The post-Macondo effect was seen, for the first time, on this past year's Petroleum PE Exam.

GARY BING WINES

Gary Bing Wines graduated from the University of Oklahoma in 1962 with a B.S. Degree in Petroleum Engineering. He worked for Cities Service Oil Company in Odessa, Texas, and Great Bend, Kansas. He moved to Oklahoma City and worked for Tenneco and Lear Petroleum before getting into the consulting business in 1976 at Winrock Engineering, Inc. He was a member of the SPE Engineering Registration Committee from 1973 to 1989 (16 years) and was chairman for two terms in 1975 and 1976. He prepared and scored Petroleum Professional Exams for SPE and NCEES in the mid-1970's and helped to prepare and score exams through 1986. He was the primary author of the first edition of the SPE book, A Guide to Professional Registration for Petroleum Engineers in 1979 and helped re-edit it through its fifth edition in 1985. He helped set up and co-instructed the first Professional Registration Review Course for Petroleum Engineers in 1979 for SPE and continued to co-instruct the course through 1988 for SPE. Since 1989, he has continued to instruct similar P.E. review courses throughout the U.S. He has authored several papers on Professional Registration. He is currently a licensed Professional Engineer in Oklahoma. He became a SPE Distinguished Member in 1987, received a SPE Regional Service Award in 1989, and became a fifty-year SPE member in 2015.

EVENT INFO

WFDNFSDAY

4.22.15

11:00 AM TO 1:00 PM

SPEAKERGary Bing Wines

LOCATION TBA

EVENT CONTACT

Brittany Niles 281-782-8194 niles@shell.com

MEMBERS \$20 / Walk-ins \$30

NON-MEMBERS \$25 / Walk-ins \$30

STUDENTS \$10



Volunteering at the Beacon

Please join SPE-GCS Young Professionals in their support of The Beacon, a nonprofit organization helping the poor and homeless populations of the Houston area. The Beacon programs provide meals, showers, laundry service, case management, medical and psychiatric care, pro bono legal services and pastoral care. More than 85% of the services of The Beacon are operated by volunteers. Please come and bring friends or family.

For questions or inquiries, please contact Catalina at Catalina.Leal@bakerhughes.com, Prashant at Prashant.Sainani@cop.com, Leonard at Leonard.Johnson@swiftenergy.com, and Akhan at AMukhanov@slb.com.

Interested in becoming part of the YP Board?

Our board applications are online at http://www.spegcs.org/committees/young-professionals/

Contact Pavitra Sainani pavitra.a.sainani@exxonmobil.com with any questions.

EVENT INFO

SUNDAY

4.12.15

10:45 AM - 2:00 PM

THE BEACON

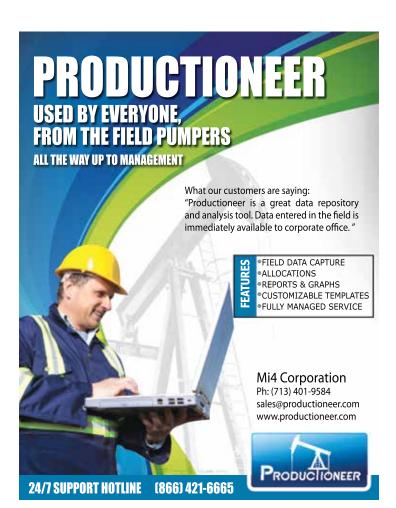
John S. Dunn Outreach Center 1212 Prairie Street Houston, Texas 77002

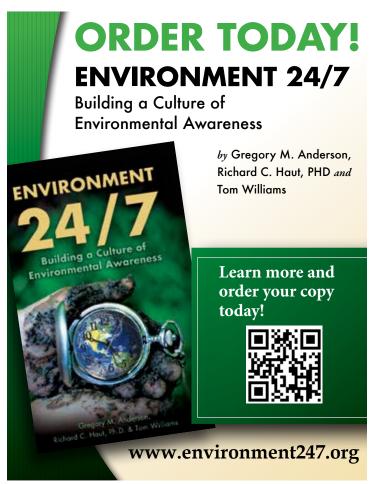
MORE INFO

www.beaconhomeless.org

NOTE

Please have a good breakfast before coming to the event. If you like, please bring gently used or new items to donate.





43rd Annual SPE Gulf Coast Section Golf Tournament

Monday

4.13.15

7:15 AM TO 8:30 PM

LOCATION

Kingwood Country Club 1700 Lake Kingwood Kingwood, Texas 77339

EVENT CONTACTS

Cameron Conway cconway@kb-industries.com

Robin Smith Robin77095@att.net

Marc Davis mdavis@championspipe.com

Come and join us at the biggest and best tournament in Houston! Great golf, great prizes, great food!

The Houston golf community's biggest charity golf tournament takes place again at the Clubs of Kingwood. And 2015 promises to be our best ever, as we celebrate the 42nd playing of the annual event. Sponsorship gives you the chance to play any of the four beautiful and challenging courses at Kingwood Country Club or at the nearby Deerwood Country Club - one of Texas's best.

SCHOLARSHIPS FOR GULF COAST ENGINEERS

Most important of all, your support goes directly to funding valuable scholarships for many Gulf Coast students embarking on a career in Petroleum Engineering or related fields. We know how desperately the industry needs to attract new talent. Every penny made by the golf tournament is invested in the drive to educate more young engineers.

Committee: Auxiliary

EVENT INFO

FRIDAY

4.10.15

LOCATION

McCormick & Schmick's 1151 Uptown Park Blvd. Houston, TX 713-840-7900

PRICE

Under \$35

PROGRAM

Tentative - Speaker from Bayou Bend

DEADLINE

Tuesday, April 7

CONTACT

Evelyn Earlougher 281-419-1328 eearlougher@comcast.net Nancy Hill 281-435-1619

Nancyhill2444@sbcglobal.net

BOOK CLUB

WFDNFSDAY

4.22.15

TITLE

Old Filth by Jane Gardam

DISCUSSION LEADER

Lorie Coffelt

HOSTESS

Karen Mermis

CONTACT

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SPE-GCS

2015 SPE-GCS AWARDS BANQUET

THURSDAY, MAY 21 5:00 - 10:00 PM

Join the Gulf Coast Section as we celebrate another year of student success, emerging professionals, established industry leaders and long-time supporters.

Every year the Society of Petroleum Engineers Gulf Coast Section (SPE-GCS) holds a banquet to honor SPE Scholarship recipients, Young Professionals, the Legion of Honor, and the recipients of the SPE section awards.

The SPE-GCS gives over \$350,000 annually in scholarships. The annual SPE-GCS Awards Banquet recognizes the high school seniors and college students who have received an SPE-GCS scholarship for the 2015 academic year. The scholarship recipients and their parents are invited to attend. This is a great opportunity to welcome outstanding students into the petroleum industry and to make a positive impression on members of the community. In addition, this event also recognizes our Legion of Honor award recipients as well as our SPE Sectional and Regional award winners. Members of the Legion of Honor have served SPE for fifty years and will be honored for their long-standing commitment to our professional society.

This year we are especially honored to present keynote speaker Karen Olson from Southwestern Energy.

Additionally, we look forward to the return of our emcee Mark Vandermeer, the voice of the Houston Texans.

The Gulf Coast Section of SPE has more members than any other SPE section in the world. This night is your chance to show your support to those of us who are entering the industry, those of us who are leading the industry and those of us who have spent their lives in the industry.



SPE-GCS

STUDENT CHAPTER PAGE

TAMU-SPE

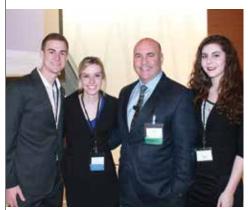
4th Annual Student Summit Continues to Provide Development Opportunities for Petroleum Engineering Students

This February, the SPE Student Chapters at Texas A&M University and University of Oklahoma co-hosted the fourth annual Student Summit for Petroleum Engineering students in Oklahoma City. The three-day event included two keynote addresses, 18 technical lectures, a panel session, an exhibition session, 8 site visits to area companies and the University of Oklahoma's Rock Mechanics Laboratory, as well as after-hours networking events. By providing professional development and technical learning opportunities, the event enabled greater interaction among students and industry leaders while strengthening SPE Student Chapters from six different countries and three continents.

The theme for the 2015 Summit was "From Wellhead to the World: Petroleum's Global Impact". A total of 24 experts from industry and academia addressed the notion that while petroleum is a local commodity, innovations and resources created by exploration and production have a global impact. This year's keynote speakers, Allen Sinor, Baker Hughes Vice President of Global Accounts, and Tony Vaughn, Devon Energy Vice President of Exploration and Production, discussed their views and opinions on current and future development of the petroleum industry with the 250 students in attendance. Other speakers attending included 2015 SPE International President Helge Haldorsen, Statoil Vice President of Land Veronica Roa, and Baker Hughes Global Director of Petrophysics Matt Bratovich.

The 2015 Student Summit has received excellent feedback from both participants and speakers. Billy Eerdmans, from the University of North Dakota, said "Personally, this was one of the best conferences I have ever been to, and the same sentiment is felt by my friends." Applications to host the 2016 Student Summit will be made available in late March.









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CALENDAR

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY Research & Development	FRIDAY Continuing Education	SATURDAY 4
		Technology Transfer	Drilling Technology Transfer	General Meeting	Auxiliary OilSim	
5	6	7	8	9	10	11
Young Professionals	Golf Tournament	Northside	Westside	Board of Directors Meeting		
		Petro-Tech				
12	13	14	15	16	17	18
		PF&C	Completions & Production	Reservoir		
		Permian Basin	Water & Waste Management			
19	20	21	Young Professionals 22	23	24	25
			Business Development	HSSE		
26	27	28	29	30		