



CONNECT

SPE GULF COAST SECTION NEWSLETTER

HAS UNCONVENTIONAL BECOME CONVENTIONAL?

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DISPLACEMENT EFFICIENCY IN CEMENT JOB DEMYSTIFIED

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HOW TO PREDICT RESERVOIR PERFORMANCE WITH SUBSURFACE UNCERTAINTY AT MULTIPLE SCALES

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CHAIR'S CORNER



JEANNE PERDUE 2014 - 2015 SPE-GCS Chair

etworking becomes increasingly important when oil sells for as low as \$46 per barrel. By attending local SPE events like the Digital Energy Conference (March 3-5) and the ESP Workshop (April 22-24) in The Woodlands, as well as Gulf Coast Section study group luncheons, you will learn how to survive – even thrive! – in a low oil price situation. These SPE meetings are where best practices are shared, where good ideas happen, where you learn what works and what doesn't.

Surely you have heard that "two heads are better than one." Well, how much better is a group of 25 heads? Of 250 heads? This industry has experienced several of these downturns during my career, and each time, the phoenix has risen from the ashes stronger and wiser than before, with new technologies and techniques that take oil drilling and production to a whole new level. How did this happen? By collaborating and sharing more than ever.

In this country we cannot team up to control prices like a cartel. But we can come together to solve technical problems, to share new ways to use old tools, to show demos of new technology. Why sit at your desk and worry and fret, when you can go to an SPE meeting and learn how to make things better at your job? Your boss will be so impressed that maybe you will keep your job.

If you do lose your job due to layoffs, SPE is your safety net. You can attend one SPE study group meeting per month at the Student/Unemployed rate of only \$10 so you can stay abreast of new technology in between jobs. And when things start to pick up again, your SPE friends will be the first to tell you of any job openings.

So "pick a chin, and keep it up!" as my double-chinned friend Virginia Brooks likes to say. This, too, shall pass. The world will continue to need even more fuel, lubricants, plastics, fertilizers, wax, polyester, etc., as the global population continues to grow, and solar and wind energy cannot supply the molecular building blocks. Therefore, growing demand will swallow this oil glut soon enough, and when the next boom comes, let's all promise — once again — not to go overboard with irrational exuberance.

STUDENT CHAPTERS

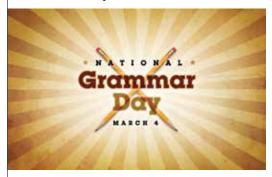
One of our goals this year is to strengthen our relationships with the four Student Chapters in our area: University of Houston, Rice University, Texas A&M, and Houston Community College. I have received requests recently to write the required letter of section support for three more SPE Student Chapters: Lamar University, Prairie View A&M, and Lone Star College.

But before the Gulf Coast Section commits to supporting them financially, we want to make sure we have enough support from our members to ensure their continued success. I figure the alumni from these colleges would be the best source of support, as they know the campus and the tenured professors, and can be excellent role models.

Here are some things our members can do to support our Student Chapters:

- Sponsor and attend Student Chapter events on campus
- Deliver technical presentations at Student Chapter meetings
- · Hold Study Group meetings at the university
- Serve as SPE student paper contest judges
- Let graduate students deliver presentations at Study Group meetings
- Provide live webinars or recordings of Study Group meetings online for students
- Contact new graduates and encourage them to join SPE as YPs
- Have YPs deliver presentations about their career experiences at universities
- Participate in internship and recruiting fairs on campus
- Help students with their homework over Skype or offer career advice via social media
- · Arrange/sponsor a field trip for students
- Serve as guest lecturers to supplement curricula/faculty

If you are a Lamar, Prairie View, or Lone Star College graduate, please let me know, as we will need liaisons and mentors for these new SPE Student Chapters. Without such support, I cannot write a letter to SPE Headquarters guaranteeing adequate support to make these new Student Chapters successful.



I will be celebrating National Grammar Day on March 4. Why did they choose that date? Because it is the only day of the year that forms a complete sentence: March forth!

Love, Hame

3.2015

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BOARD OF DIRECTORS MEETING

THURSDAY MARCH 19TH / 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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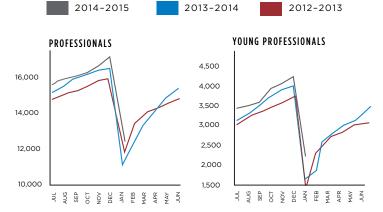
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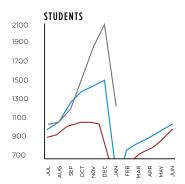
SPE-GCS MEMBERSHIP REPORT January 2015

1.2015 TOTAL: 11,572 YP: 2,203 12.2014 TOTAL: 16,787 YP: 4,070

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1.2019		12.2014		
TOTAL	ΥP	TOTAL	ΥP	
123	55	128	67	
45	18	2	1	
5,835	1,875	2,678	1,047	
PAID	UNPAID	PAID	UNPAID	
884	361	1,363	149	
55	20	82	22	
25	24	69	20	
290	173	520	155	
1,286	591	2,086	349	
12,858	6,426	18,873	3,027	
6	6.7%	86.2%		
	TOTAL 123 45 5,835 PAID 884 55 25 290 1,286 12,858	TOTAL YP 123 55 45 18 5,835 1,875 PAID UNPAID 884 361 55 20 25 24 290 173 1,286 591	TOTAL YP TOTAL 123 55 128 45 18 2 5,835 1,875 2,678 PAID UNPAID PAID 884 361 1,363 55 20 82 25 24 69 290 173 520 1,286 591 2,086 12,858 6,426 18,873	









VOLUNTEER

SPOTLIGHT

RAFAEL G. BARROETA

afael G. Barroeta is the current Chair of the SPE-GCS
Reservoir Study Group, and he has been very active in
the group since 2011, serving as Program Coordinator,
Special Activities Chair, and Annual Reservoir Forum
Co-Chair, among other roles. He played a major role in
helping the Reservoir Study Group win the 2014 section award for Study
Group of the Year.

Rafael is a Senior Reservoir Engineer in the Worldwide Subsurface Engineering support team at Occidental Oil and Gas. Previously, he worked as Principal Consultant at SPT Group (now Schlumberger) for 5 years doing consulting services on reservoir simulation, uncertainty assessment, history matching, and reservoir optimization. Before that, he worked at PDVSA Intevep in Venezuela for 5 years, collaborating on reservoir engineering projects involving chemical EOR and conformance studies in oilfield operations. He holds a B.S. degree in Polymer Science and an M.E. degree in Reservoir Engineering from Universidad Simon Bolivar in Venezuela, and an M.S. degree in Petroleum Engineering from University of Tulsa.

Rafael has also been involved in many volunteer activities with the SPE International, including Session Chair for the SPE History Matching ATW in Cartagena in 2011, Peer Reviewer for *SPE Journal* in 2013, and a permanent collaborator on the "SPE Opinion Panel Survey" committee.



COLUMN BY BUDDY WOODROOF

MARCH

1955

Never discard your cores, as a couple of Bakersfield oil men will attest. On a trip to Argentina, they presented a piece of core from what at that time was the world's deepest well to First Lady Eva Peron (Remember..."Don't Cry for Me Argentina"?), in exchange for which they received an autographed photo.

This is a rerun from several years ago, but I love the story about the pesky seagulls that made a nuisance of themselves at Sun Oil Co.'s South Jersey shore bulk storage station. It seems that these "dumb birds" had figured out a way to break open the clam and oyster shells that they dug up from the mud flats at low tide, namely by dive-bombing Sun's steel storage tanks and dropping the crustacea from sufficient altitude such that they break open upon contact with the top of the storage tanks. A disgruntled warehouseman had to climb up on top of the large storage tanks (small storage tanks were apparently not targeted) every couple of days and sweep off the broken shells because the weight of the accumulated shells might squash the tanks.

Put on your thinking caps and check out this month's History Quiz, as it relates to this vignette.

East Texas crude oil - \$2.90/bbl; U.S. active rig count - 2,574

MARCH

1980

Dubai goes virtually "all-in" with ARCO, by signing a 35-year 1,180 sq. mile concession onshore. Ironically, now 35 years later, ARCO and the concession have both gone away.

The Soviets lament that they have apparently reached a production output peak (11.86 MMbd), which they may never surpass without a new giant field discovery.

Diamond Shamrock and Houston Oil & Minerals take leases on 214,000 acres in the Nehalem basin of northwestern Oregon (year-round ski season at Mt. Hood is great, but not a prolific oil-producing area).

Sound familiar...The Soviets begin making moves toward replacing Afghani President Karmal with a military chief, while the Afghanis and their Islamic neighbors raise \$7 million in aid for the Afghani Muslim Freedom Fighters in their ongoing conflict with the Soviets.

U.S. active rig count - 2,624

MARCH

2005

Indonesia's falling crude oil production has caused it to become a virtual net importer of oil, and thus the government is seriously considering withdrawing from its OPEC membership.

Officials investigate a fire and explosion at BP PLC's 446,500 b/d Texas City refinery in which 14 contractors were killed and 100 were injured.

Meanwhile 100 miles southwest of Houston on the Matagorda Ship Channel, a subsidiary of Gulf Coast LNG Partners LP petitions the U.S. Federal Energy Regulatory Commission for authorization to build and operate an LNG receiving terminal at that point.

Bartering is alive and well in the oilpatch...Japan's Mitsubishi Corp. closes a deal with Pertamina to import 20,000 b/d of Indonesian crude oil as a partial repayment for a \$310 million loan from Mitsubishi and partners to support Indonesian natural gas development projects.

Light sweet crude oil - \$54.24/bbl; Natural gas - \$6.80/MMbtu; U.S. active rig count - 1,282

THE REST OF THE YARN

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

arnegie didn't feel comfortable getting married while his formidable mother Margaret was alive. She died in November 1886, and five months later, when he was 51, Carnegie wed Louise Whitfield, age 30. The couple had one daughter, Margaret, nicknamed Baba.

An affectionate husband and father, Carnegie loved retreating with his family to Skibo, his estate in the Scottish Highlands, one of the most beautiful pieces of real estate on the face of the earth.

Here he rode horses, golfed, swam, entertained, and read voraciously. He had a knack for balancing relaxation with hard work, and this may account for his robust health through the years.

In 1901, when he was 65, he was still as bubbly as ever, excited about the infinite future of steel, especially his steel. But once again his divided mind asserted itself—he hankered to become a full-time doer of good deeds. As it happened, the financier J.P. Morgan was interested in acquiring Carnegie Steel. Morgan asked Carnegie how much the firm

would cost. Carnegie told him \$480 million, which, in 1901 was serious money. Morgan accepted his price. Carnegie's personal share was in excess of \$200 million. He was now the richest man in the world in terms of liquid assets, and he began bestowing vast sums upon good causes.

Next month, Andrew's approach to philanthropy is revealed.

THENE NOW MARCH QUIZ

Refer back to the conflict between man and seagull in the March 1955 segment. This month's quiz is actually a contest to see who can come up with the most creative solution to the "dive-bombing seagull" problem faced by Sun Oil. What might they have done circa 1955 to discourage those pesky birds from this practice?

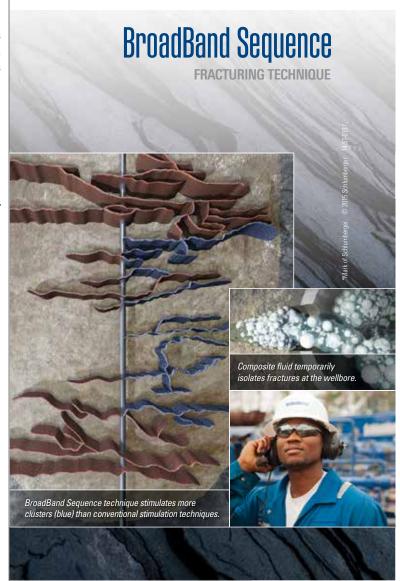
ANSWER TO FEBRUARY'S QUIZ

Of the four combined groups of companies: a) Kerr
McGee, Occidental, and Phillips; b) Tenneco,
Atlantic Richfield, and Getty; c) Standard Oil of
Indiana, American Petrofina, and Murphy; and d)
Sun, Continental, and Tenneco, only group a) Kerr
McGee, Occidental, and Phillips failed to earn a
combined \$1 million in net profit
in calendar year 1974.

CONGRATULATIONS TO JANUARY'S WINNER

No winner in January

If you would like to participate in this month's quiz, e-mail your answer to contest@spe.org by noon, March 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

Big Data and the Process of Everything

As companies have embraced the digital oilfield and implemented more and more sensors, we are now awash in data. Having more data does not mean we are necessarily improving business outcomes. Increasingly connected devices ("Things") are becoming the main source of the information glut. This Internet of Things (IoT) will soon be generating millions of sensor readings and events every day. The main challenge is to quickly mine knowledge from data and operationalize this knowledge in an end-to-end digitized business processes. The knowledge mined and operationalized from IoT/Big Data will be one of the more compelling digital transformation enablers.

Dr. Setrag Khoshafian will provide a compelling viewpoint on why massive systems of connected devices and groundbreaking analytics mean nothing if there is no way to orchestrate both the physical assets and people within the business. The Process of Everything (PoE) will provide the context to coordinate the data and events to execute business rules, automate decisions, drive processes, and learn and adapt to guide human actions, resulting in maximized production, lower maintenance costs, and increased profitability.

DR. SETRAG KHOSHAFIAN

Dr. Setrag Khoshafian is one of the industry's pioneers and recognized experts in Digital Enterprises, especially intelligent business process management (iBPM). He has been a senior executive in the software industry for the past 25 years, where he has invented, architected, and steered the production of several enterprise software products and solutions. Currently, he is Pega's Chief Evangelist involved in numerous technology, thought leadership, marketing, alliance, and customer initiatives. The majority of his time is spent with Fortune 500 companies, specifically on their transformational journeys leveraging digital technologies (especially process digitization). His interests and expertise spans all aspects of innovation in Digital Enterprises. This includes Internet of Things/Internet of Everything (he pioneered the vision and use cases of the Process of Everything), intelligent BPM; Predictive & Adaptive Analytics; Social, Mobile & Cloud; and Real-Time Lean Six Sigma.

Previously he was the Senior VP of Technology at Savvion where he invented and led the development of the world's first web-centric BPM platform. He was a senior architect at Ashton-Tate, where he invented Intelligent SQL, and previously an OODBMS researcher at MCC, where he invented several object database technologies. Dr. Khoshafian is a frequent speaker and presenter at international workshops and conferences. He is the lead author of more than 10 books and more than 50 publications in various industry and academic journals. His recent books include Intelligent BPM: The Next Wave. Dr. Khoshafian holds a PhD in Computer Science from the University of Wisconsin-Madison. He also holds an MSc in Mathematics.



EVENT INFO

Thursday

3.05.15

11:30 AM TO 1:00 PM

SPEAKER

Dr. Setrag Khoshafian Chief Evangelist Pegasystems

LOCATION

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

EVENT CONTACT

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

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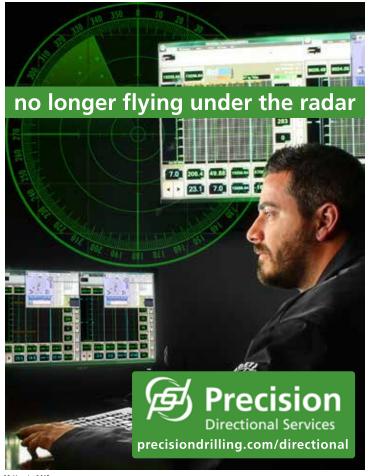
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HSSE-SR

2015 HSE Student **Invitational**

The HSSE-SR Study Group is hosting a Student Invitational to highlight current Health, Safety and Environment issues in the oil and gas industry. Approximately 120 Advanced Placement science students from Fort Bend ISD and Katy ISD will have an opportunity to ask questions and interact with professionals one-on-one to learn more about the presentation topics. SPE Members are encouraged to attend this meeting to engage with the students.

AGENDA

9:30 – 9:40 am Introduction and Welcome - Trey Shaffer, SPE HSSE-SR Technical Director 9:40 - 9:55 am About SPE – Jeanne Perdue, SPE-GCS Chairperson Safety - Charlie Williams, Center for Offshore Safety 9:55 - 10:30 am

10:30 - 10:45 am Break

Health – Malick Diara, Exxon Mobil 10:45 – 11:15 am

Break/Lunch 11:15 – 11:45 am

11:45 – 12:15 pm Environment – George E. King, Apache

Question and Answer Session 12:15 - 1:00 pm Closing Remarks - Trey Shaffer 1:00 - 1:15 pm

C.R. (CHARLIE) WILLIAMS

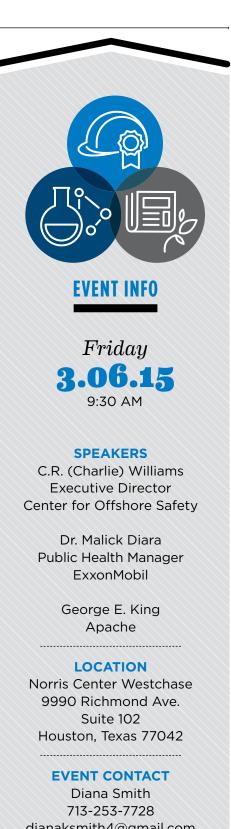
C.R. (Charlie) Williams II was named Executive Director for the Center for Offshore Safety (COS) in March 2012. Charlie retired from Shell as Chief Scientist of Well Engineering and Production Technology after a 40-year career. He is a mechanical engineering graduate of the University of Tennessee and Professional Engineer and recipient of the 2012 OTC Special Citation for his work on COS.

DR. MALICK DIARA

Dr. Malick Diara joined ExxonMobil in 2009 with more than 20 years of experience in international health. He is the Public Health Manager of the ExxonMobil Corporate Department of Medicine and Occupational Health. His key responsibilities are focused on infectious disease prevention and control in company workplaces. He is a physician with a Medical Doctorate from Dakar School of Medicine in Senegal (1987), a Master's in Business Administration from the Paris School of Business - Institut Superieur de Gestion (1991), and a Master's in Public Health from Tulane University, Louisiana (1997).

GEORGE E. KING

George King is a registered professional engineer in Texas and Oklahoma with 43 years of experience since joining Amoco Research Center in 1971. George's technical work has provided advances in shale developments, environmental risk reduction in well construction and fracturing, sand control reliability and underbalanced perforating. George has a BS in Chemistry from Oklahoma State, a BS in Chemical Engineering and an MS in Petroleum Engineering from the University of Tulsa. He also taught Fracturing and Completions courses at the University of Tulsa for 11 years as an adjunct professor.



dianaksmith4@gmail.com

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NORTHSIDE

Displacement Efficiency in Cement Job Demystified

Successful cement jobs require that the drilling fluid is fully displaced by the cement slurry. Good mud removal ensures good bonding of the cement to the casing and the formation. Failure to remove all the mud from the annular spaces leads to mud channels, which will weaken the cement bonding and cement-seal integrity.

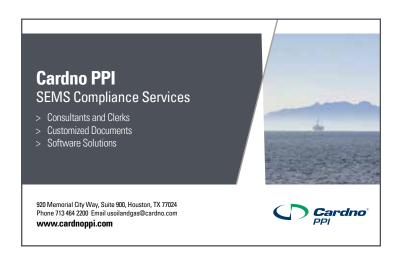
Conventional hydraulics calculation is necessary, but not enough to cover the displacement efficiency with computational fluid dynamics (CFD). This presentation shows the R&D on the assessment of the risk of mud channeling as a function of fluid properties, flow rate, wellbore geometry, and well path. The goal is to address the risks and optimize the displacement efficiency in order to deliver a cement sheath to be able to retain annular-seal integrity.

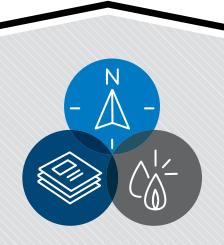
GEFEI LIU



Gefei Liu, President of Pegasus Vertex, Inc., received his BS degree from the University of Science and Technology of China and an MS degree from the University of Texas at Austin. He has over 20 years of experience in engineering and software development for the drilling industry, and has published many technical papers and one book on drilling hydraulics. He is also actively involved in SPE lunch and learn

programs and has given presentations for SPE-GCS, SPE Evangeline, and Canadian Association of Drilling Engineers (CADE).





EVENT INFO

Tuesday

3.10.15

11:30 AM TO 1:00 PM

SPEAKER

Gefei Liu President Pegasus Vertex, Inc.

LOCATION

Greenspoint Club 16925 Northchase Dr. Houston, Texas 77060

EVENT CONTACT

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

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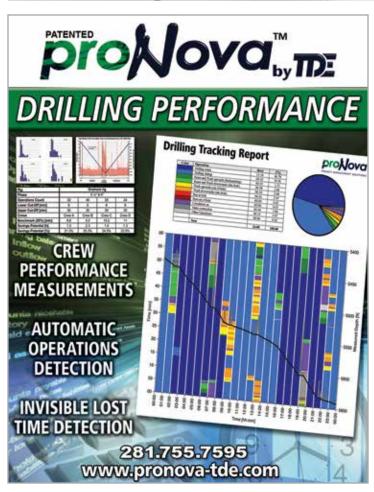


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DRILLING

Building Drilling Efficiencies to Avoid Hazards Through Real-Time Analytics

Many conversations around unconventionals center on the need for drilling cheaper, deeper and being ever mindful of the well economics; this is a good basis of thinking as long as wellbore quality and process safety are not sacrificed.

With the completion cost of an unconventional well representing over 60% of the total well cost, it is very important to deliver to the completion and production teams a quality wellbore. It all begins with good drilling practices and "listening to the well." By keeping our finger on the pulse of the well during drilling operations, many events that eventually lead to a poor quality hole or stuck pipe, sidetracks and well control incidents can be seen coming. The "health of the well" is clearly reflected in the analytics derived from basic real-time data at the rig site combined with cutting analysis, LWD data and other analysis, forming the basis of good well listening. However, these skills are not that common and when they are, the rush to drill the well quickly, sometimes takes priority over paying attention to basic good drilling practices.

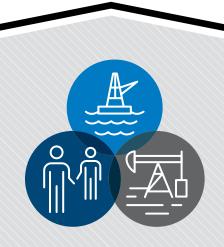
When well economics are very tight, a solution can be the provision of Real-Time Analytical Analysis through the use of an existing drilling team. When equipped with a quality analysis tool, these highly skilled teams can also provide Drilling Hazard Avoidance (DHA) advice to the well's decision makers both on location and through the client's Real-Time Operation Centers (RTOC). With this insight, these teams have the opportunity to come up with recommendations to completely avoid these hazards, delivering a quality wellbore quickly and safely while avoiding well control incidents and drilling hazards.

PAT YORK



Pat York has been in the oil and gas industry for 42 years. He is currently the Global Director with Well Engineering & Project Management for Weatherford. He has been involved in Drilling Hazard Management since 2005 and Solid Expandable Technology since its global implementation in 1998. Since 2004, he has collaborated with clients on complex drilling and completion projects.

He has served in several management, business development and operational roles as well as executive management in the solid expandable and drilling hazard mitigation arena. He received his Bachelor's Degree in Electronic Engineering Technology at Northwestern State University in 1972 and pursued his MBA degree there in Economics and management before launching his career in the oil industry.



EVENT INFO

Wednesday

3.11.15

11:30 AM TO 1:00 PM

SPEAKER

Patrick L. York
Global Director - Well Engineering
& Project Management
Weatherford

LOCATION

Greenspoint Club 16925 Northchase Dr. Houston, Texas 77060

EVENT CONTACT

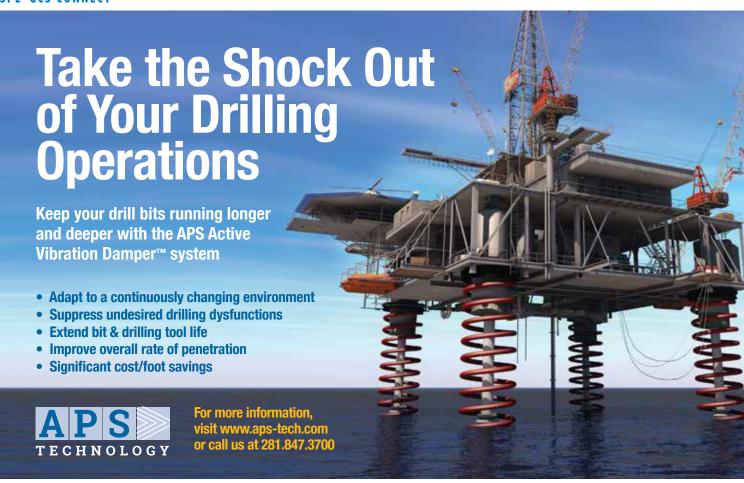
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GENERAL MEETING

Has Unconventional Become Conventional?

This presentation will explore what historically has been meant by unconventional resources and unconventional recovery techniques. The role that unconventional resources are likely to play in the future will then be presented in order to answer the question: Has Unconventional become Conventional?

DR. CHRISTINE EHLIG-ECONOMIDES



Christine Ehlig-Economides is Professor of Petroleum Engineering at the University of Houston. She holds the William C. Miller Chair honoring Charles V. Fitzpatrick. She was previously Professor at Texas A&M University for 10 years and before that worked 20 years for Schlumberger. While at A&M, she managed research in production and reservoir engineering in conventional and shale reservoirs and helped

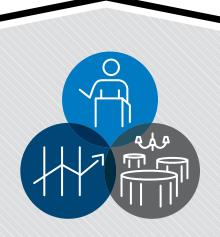
the petroleum engineering department to grow and evolve to a broader energy scope. Dr. Ehlig-Economides is a world-renowned expert in reservoir engineering, pressure transient analysis, integrated reservoir characterization, complex well design and production enhancement.

Dr. Ehlig-Economides was elected to the National Academy of Engineering in 2003, was a member of the National Academy of Science Committee on America's Energy Future, and is currently a member of the NRC Board on Energy and Environmental Systems (BEES). She is one of the 16 Quantum Reservoir Impact (QRI) Scholars and has recently been named a Chief Scientist for the Sinopec Research Institute on Petroleum Engineering as one of the Thousand Talents in China. Dr. Ehlig-Economides earned her PhD in Petroleum Engineering from Stanford University, an M.S. in chemical engineering from the University of Kansas and a B.A. in Math-Science from Rice University.

Register at: http://www.spegcs.org/events/2831/







EVENT INFO

Thursday

3.12.15

11:30 AM TO 1:00 PM

SPEAKER

Dr. Christine Ehlig-Economides
Professor, William C. Miller
Endowed Chair
University of Houston

LOCATION

Petroleum Club of Houston 1201 Louisiana Street Houston, TX 77002

EVENT CONTACT

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

MEMBERS

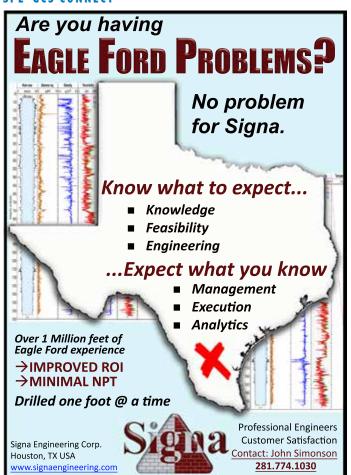
\$35

NON-MEMBERS

\$40

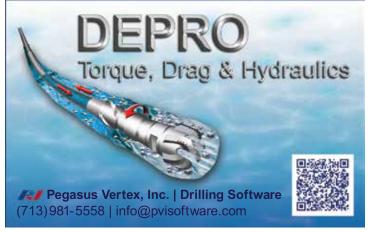
STUDENTS

\$10









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COMPLETIONS & PRODUCTION

How to Predict Reservoir Performance with Subsurface Uncertainty at Multiple Scales

Subsurface uncertainty is one of the main challenges in using reservoir models to predict field performance for development and depletion planning purposes. The importance of reliable characterization of subsurface uncertainty and its impact on reservoir performance predictions is increasingly recognized as essential to robust decision making in the upstream industry, which is especially true for large projects in complex geologic settings. However, despite recent advances in reservoir modeling and simulation, reliable quantification of the impact of subsurface uncertainty remains difficult in practice. Many factors lead to this state of affairs; technically, a fundamental difficulty is that reservoir heterogeneity at multiple scales may have strong effects on fluid flows.

This lecture presents an analysis of the challenge and possible resolutions. Indeed, relying on computing power alone may not address the challenge. Instead, we must look at reservoir modeling and performance prediction holistically, from modeling objectives to appropriate techniques of incorporating reservoir heterogeneity into the models. We present a goal-driven and data-driven approach for reservoir modeling with the theoretical reasoning and numerical evidence behind them, including real field examples. The one idea that participants of this lecture should take away is that appropriate parameterization of multi-scale reservoir heterogeneity that is tailored to the business questions at hand and available data are essential for addressing the challenge of subsurface uncertainty.

XIAO-HUI WU



Xiao-Hui Wu joined ExxonMobil Upstream Research Company in 1997. His research experience covers geologic modeling, unstructured gridding, upscaling, reduced order modeling, and uncertainty quantification. He is a Senior Earth Modeling Advisor in the Computational Science Function. Xiao-Hui received his Ph.D. in Mechanical Engineering from the University of Tennessee and worked

as a postdoc in Applied Mathematics at Caltech before joining ExxonMobil. He is a member of SPE and SIAM, a technical editor/reviewer for the SPE Journal, Journal of Computational Physics, and Multiscale Modeling and Simulation. He served on program committees of several conferences, including the Reservoir Simulation Symposium.

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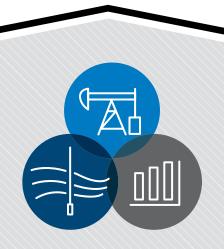
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johnshaughnessy@sbcglobal.net



EVENT INFO

Wednesday **3.18.15**

11:30 AM TO 1:00 PM

SPEAKER

Xiao-Hui Wu Senior Earth Modeling Advisor ExxonMobil Upstream Research Company

LOCATION

Greenspoint Club 16925 Northchase Drive Houston, TX 77060

EVENT CONTACT

Jonathan Godwin (281) 921-6526 jgodwin@carboceramics.com

MEMBERS

\$35 / \$40 Walk-In

NON-MEMBERS

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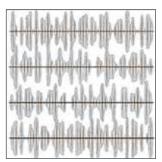
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PETROLEUM ENGINEERING

Seeking Faculty Applications

The Petroleum Engineering Program in the Chemical and Biomolecular Engineering Department at the University of Houston invites applications for two tenured/tenure-track faculty positions. We are seeking faculty candidates with superior skills for effective teaching and pioneering research. The successful candidates will lead an externally funded research program, mentor graduate and undergraduate research, teach petroleum engineering courses, and serve UH, the Houston community, and the petroleum engineering profession.

Application is open for candidates with any petroleum engineering research interest. Special needs of the program include: drilling and well completions; production engineering; and applications of novel technologies in petroleum recovery and production operations, especially in deep water or for ultra-low permeability reservoirs.

Appointment to our faculty requires a Ph.D. in Engineering, Physical Sciences or a related field. Candidates at the Professor level must have demonstrated records of scholarship.

You will need to provide your Curriculum Vitae, a detailed description of research interests (not to exceed 10 pages), a teaching philosophy statement (2 pages), and the names and email addresses of three references whom we may contact.

Applications should be submitted online via the following links:
1. Assistant/Associate/Full Professor: apply at http://jobs.uh.edu/postings/23170
2. Assistant Professor: apply at http://jobs.uh.edu/postings/23160

Please direct inquiries for additional information to Thomas K. Holley, Ph.D., Director of the Petroleum Engineering Program, at tkholley@.uh.edu

The University of Houston is an Equal Opportunity/Affirmative Action employer. Minorities, women, veterans, and persons with disabilities are encouraged to apply.

WESTSIDE

Effect of Dynamic Active Fracture Interaction on Completion and Fracturing Practices

Multiple hydraulic fractures created using limited entry techniques interact with each other and cause accelerated growth of some individual fractures at the expense of the slowdown of others. The created fractures are not parallel with each other and some of them may intersect and coalesce with adjacent fractures. The net effect is a complex and non-uniform production pattern. This presentation will discuss the cause and effect of these phenomena and methods by which they may be altered.

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 entirely dedicated to the technology of hydraulic fracturing. At the present time, his main focus is on research, consulting, and teaching short courses related to horizontal well fracturing.

SPE-GCS WESTSIDE STUDY GROUP

Quarterly Attendance Award

In September 2014, SPE-GCS Westside Study Group established an incentive program to improve and encourage participation in its monthly luncheons. Westside Quarterly Attendance Award's goal is to recognize individuals for their commitment and support to SPE. Each quarter, three different levels of awards, Platinum, Gold and Silver, are given to attendees who have attended the most events. This is a spin-off of the Young Professionals' Executive Club, which awards YPs for participating and volunteering in YP events. Maybe other study groups can copy this incentive program for their events so that SPE members will continue to attend even with oil at \$46/bbl.

The Westside Study Group announced the Q4 2014 Quarterly Attendance Award winners at their January 2015 luncheon:



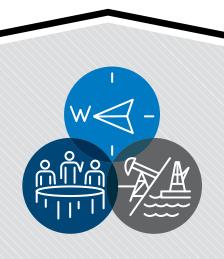
PLATINUM AWARD \$100 Gift Card Tim Pawlik CMGL



GOLD AWARD \$50 Gift Card Robert Eggert Robert W. Eggert, Jr. LLC



SILVER AWARD \$25 Gift Card David Koseluk Halliburton



EVENT INFO

Wednesday **3.18.15**

11:30 AM TO 1:00 PM

SPEAKER

Ali Daneshy President Daneshy Consultants International

LOCATION

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

EVENT CONTACT

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

> MEMBERS \$40

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RESERVOIR

Correct Forecasts Often Aren't; Reservoir Study 2.0 = ?

After comparing forecasts of production, reserves, cost, schedule and value creation with the actuals realized, IPA (Independent Project Analysis) concluded that the state of the field development forecasting business is the equivalent of a yellow or red card in soccer. Something has to be done to make the forecasts more realistic and less biased towards the optimistic. At the same time, the E&P business is facing a VUCA future (volatile, uncertain, complex and ambiguous) and it is very important to account for the key uncertainties and risks in individual field developments and in the aggregate portfolio of company assets – as individual field and composite ambitions are arrived at and communicated. Add to this the need for E&P to adapt and to turn itself into a better-performing E&P 2.0 via imagination, innovation (of technology, big data, the internet of everything, AI, business model, collaboration 2.0) and "creative destruction" to combat low oil and gas prices, the high break-evens and the too low return on investment in the view of investors. All these aspects will be addressed and a key recommendation is that 2015 must be the year of cross-discipline thinking!

HELGE HOVE HALDORSEN



Helge Hove Haldorsen currently holds the positions of VP Strategy & Portfolio and Mexico Country Manager for Statoil Development and Production North America in Houston. Helge has an MSc in Petroleum Engineering from The Norwegian Institute of Technology in Trondheim and a PhD in Reservoir Engineering from the University of Texas at Austin. Helge was a Second Lieutenant in The Royal Norwegian Navy

and held various positions within reservoir engineering at Esso Exploration Norway in Stavanger; Sohio Petroleum Company in San Francisco and Anchorage; and The British Petroleum Company in London. Helge joined Hydro in 1987 and held a number of key management positions with the company: Chief Reservoir Engineer, VP Exploration & Research and President E&P International. After the acquisition of the Houston-based independent Spinnaker by Hydro in 2005, Helge served as the President until the merger with Statoil in October 2007. Helge has served on the Society of Petroleum Engineer's (SPE) Board of Directors for 3 years and he has been an SPE Distinguished Lecturer and an SPE Distinguished Author. He has written many technical papers and articles and has been a Professor of Industrial Mathematics at the University of Oslo as well as a lecturer at Stanford University.



EVENT INFO

Thursday

03.19.15

11:30 AM TO 1:00 PM

SPEAKER

Helge Hove Haldorsen SPE President and VP Strategy & Portfolio Statoil

LOCATION

Petroleum Club of Houston 1201 Louisiana Street Houston, TX 77002

EVENT CONTACT

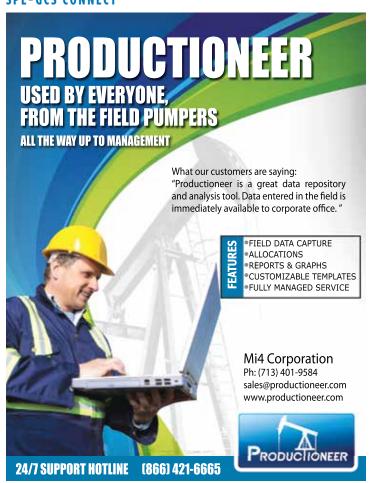
Juan Carlos Picott jpicott@maxoilsolutions.com

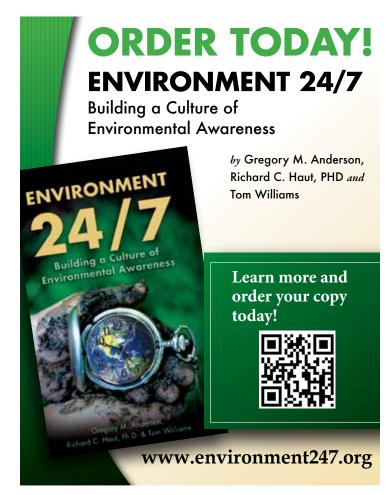
MEMBERS

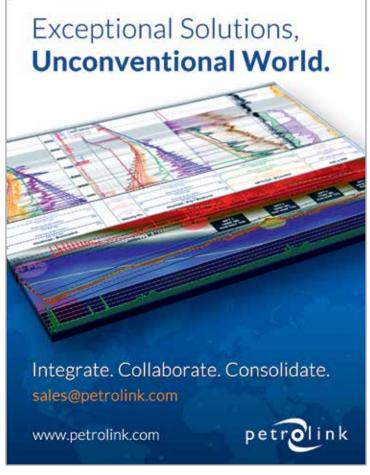
\$35

NON-MEMBERS

\$40











WATER & WASTE MANAGEMENT

Using Pre-Drill Groundwater Monitoring as a Stakeholder Outreach Tool

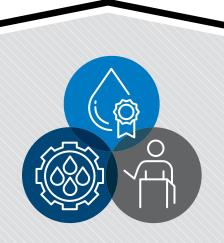
Successful unconventional shale exploration and production is dependent on hydraulic fracturing. However, concerns over environmental issues related to exploitation in densely populated areas are increasing. Having a strategy in place to document baseline environmental and particularly groundwater conditions prior to exploration can help manage risk with stakeholders. This presentation will present experience gained in the United States shale exploration regions related to baseline groundwater sampling.

RYAN LEATHERBURY



Ryan Leatherbury is a Client Service Manager for Weston Solutions, Inc. Ryan is Weston's Oil and Gas practice leader in Central Texas and manages Weston's Eagle Ford Shale Service Center in San Antonio, Texas. Ryan has a BS in Civil Engineering from Rice University and has more than 20 years of environmental investigation, remediation, and compliance experience. Ryan's specialty is environmental information

management, particularly for environmental investigation and enterprise compliance.



EVENT INFO

Tuesday

3.24.15

11:30 AM TO 1:00 PM

SPEAKER

Ryan Leatherbury Client Service Manager Weston Solutions

LOCATION

Aramco Room
Petroleum Club of Houston
1201 Louisiana Street
Houston, TX 77002

EVENT CONTACT

Reshmy Mohanan 713-344-4094 rmohanan@brt-chem.com

MEMBERS

\$40

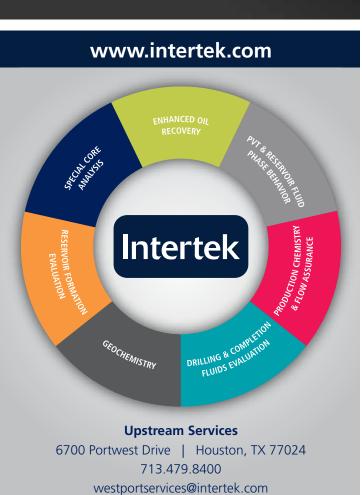
NON-MEMBERS

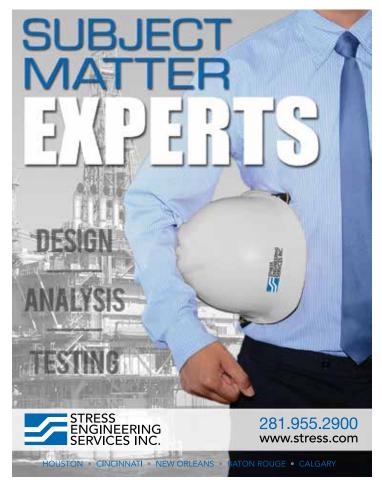
\$50

STUDENT/UNEMPLOYED

\$10













BUSINESS DEVELOPMENT

Future and Present E&P MLP Strategies

Please join us for a discussion of the present and future strategies of upstream Master Limited Partnerships (MLPs).

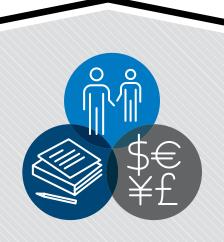
The SPE BD Study Group is putting together a panel of industry representatives to discuss how the rapidly changing price environment of both gas and liquid production has spurred quick jettisoning of \$4 / \$100 strategies, sending upstream MLPs into intense corrective/creative mode.

Discussions will center around the A&D market specific to MLP appropriate assets, hedging strategies and emerging MLP trends.

TOPICS INCLUDE THE FOLLOWING:

- Increasingly accurate production forecasts that are now, more than ever, key to syncing asset valuations with the MLP yield/distribution model.
- · Appropriate hedging strategies.
- What happens when some of the drilling results are less than predicted (i.e., MLPs taking on too much drilling risk)?
- · How is the MLP approach to asset development changing?
- How will the new price environment affect hedging access and duration?
- Will the lower commodity environment spark MLP consolidations, or disaggregation into smaller MLPs?

We will follow the popular format of a business & social networking hour, with complimentary hors d'oeuvres and a cash bar followed by an hour an a half long program, including a Q&A session. It will begin at 5 pm in the Mezzanine of the Four Seasons Hotel in Downtown Houston.



EVENT INFO

Wednesday

3.25.15

5:00 PM TO 7:00 PM

SPEAKER

Please check online for updates!

LOCATION

Four Seasons Hotel 1300 Lamar Houston, TX 77010

EVENT CONTACT

Matt Bormann 281-345-8019 mbormann@wwtco.co

MEMBERS

\$40 / \$50 WALK-INS

NON-MEMBERS

\$45 / \$50 WALK-INS







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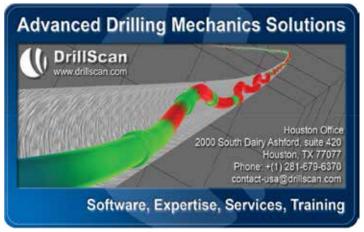
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Dealing with Volatility

Recent market "shifts" remind us that energy is a volatile industry that requires massive capital investment and long operational horizons. The ability to predict the future is tentative at best. How, then, do companies adjust their portfolios to adapt to fundamental change?

BILL ARNOLD



Bill Arnold is Professor in the Practice of Energy Management at the Jones Graduate School of Business at Rice University in Houston, Texas. Bill joined Rice in June 2009 and taught courses on the Geopolitics of Energy and Managing Energy Transitions. He actively engages with professionals in academia and industry from around the world. Previously, as Royal Dutch Shell's Washington Director of International Government Relations and

Senior Counsel for the Middle East, Latin America, and North Africa, he engaged at the highest levels of government in the US and abroad to provide geopolitical insights, develop business strategies, build scenarios, and advance multi-billion dollar projects. He had been with Shell since 1993.

Bill held a White House appointment as Senior Vice President of the Export Import Bank of the United States from 1983 to 1988, when he received the Distinguished Service Award. He was Eximbank's liaison officer to the Berne Union, the World Bank and the International Monetary Fund. He developed special export credit packages for Brazil and Mexico during the first Latin American debt crisis.

His international banking experience includes: Executive Vice President/International Banking Division of First City National Bank-Houston (now JPMorganChase); General Manager, COMIND International Banking Corporation (now Banco do Brasil); and Vice President/Manager of the Latin America Division of Texas Commerce Bancshares (now JPMorganChase).

Bill holds a Bachelor of Arts degree in economics from Cornell University, a Master of Arts in Latin American Studies, and a Master of Business Administration/International Finance from the University of Texas at Austin. In his early 20s he was Field Director of Amigos de las Americas, a private international development organization with more than 250 volunteers in Honduras and Guatemala. He served in the US Army and was awarded the Army Commendation Medal.

EVENT INFO

TUESDAY

3.17.15

11:00 AM

SPEAKER

Bill Arnold

Professor in the Practice of Energy Mgmt. Rice University – Jones Graduate School of Business

LOCATION

The 43rd Restaurant & Lounge 1415 Louisiana Street Houston, TX 77002

EVENT CONTACT

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

MEMBERS

\$20

NON-MEMBERS

\$30

Committee: Auxiliary

EVENT INFO

FRIDAY

3.13.15

LOCATION

TBD

EVENT CONTACT

Nancy Hill 281-809-5515 Nancyhill2444@sbcglobal.net

Evelyn Earlougher 281-419-1328 eearlougher@comcast.net

NOTE

The SPE-GCS auxiliary will not have a formal luncheon and program in March. We will meet at a local restaurant for conversation and friendship, with separate checks. The location has not yet been determined. Contact one of our event contacts for exact details.

Technical Writing Workshop

All technical professionals want to tell their technical story of the work they have done. We can effectively communicate the results of our work in two ways: writing reports, file notes, or conference papers and making oral presentations at meetings and internal conferences.

Writing reports is by far the most important tool we have to record our work and to show our colleagues and management our technical capability. Usually, written reports are followed by presenting a summary of the key messages. Presentations of final reports and/or work are made for two reasons: 1) for informational purposes or 2) for making decisions. Presenting the results of reports in a brief, clear and logical fashion will enable the audience, which is typically management, to make decisions.

The purpose of this workshop is to present tips on writing good presentation papers and making effective presentations for both SPE and your work. The workshop is designed to be interactive.

BYRON HAYNES, JR.

Byron Haynes, Jr., has over 30 years of industry experience in studies and operations on primary depletion, waterflood, and miscible gas flood projects in Alaska, Gulf of Mexico, Colombia, North Sea, Kuwait, Qatar, Oman, and in state government oil and gas regulation. He is currently the Reservoir Engineering Learning Advisor in the Subsurface Global Learning and Development Group in Shell. His responsibilities include teaching, budgeting, coordinating, and developing reservoir engineering training for Shell worldwide.

Byron has been a Technical Editor for the *SPE Reservoir Engineering and Evaluation* magazine since 2005 and has won awards as outstanding Technical Editor for the magazine in 2007, 2013, and 2014. He has taught technical editor workshops for SPE at the Fall Annual Technical Conferences from 2008 – 2011. Byron has served on various SPE committees, including the US Registration Committee and the Ethics and Professionalism Committee. He has authored or co-authored 15 SPE papers.

Byron is a graduate of the University of Texas at Austin with a BS and MS in Petroleum Engineering. He is a registered professional engineer in Texas and Alaska and is a member of the SPE, AAPG and the West Texas Geological Society.

EVENT INFO

THURSDAY

4.9.15

5:00 PM TO 8:00 PM

SPEAKER

Byron Haynes Jr Reservoir Engineering Learning Advisor Shell Global Solutions US, Inc.

LOCATION

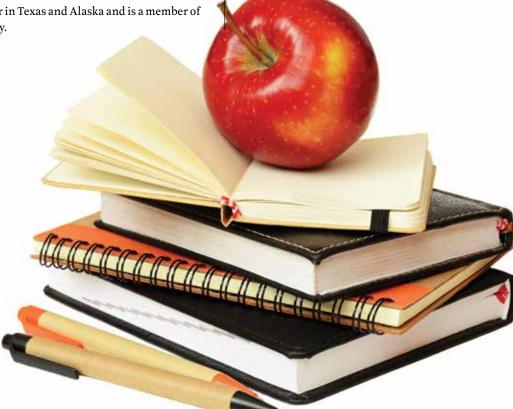
Hilton Houston 9999 Westheimer Road Houston, TX

EVENT CONTACT

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

MEMBERS \$45

NON-MEMBERS \$50



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 to build collaborative relationships in order to 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) will enable us to gain personal and professional skills needed to face the challenges ahead. Its importance becomes evident as we recognize the value of the networking, advice and support a mentor can give us when developing a quality and healthy relationship. Building fluency in the use of Networking and Mentoring supports the Soft Skills of Networking, Diversity, Mentoring and Teamwork. This 3-hour workshop was developed in collaboration between the SPE Talent Council and the SPE Soft Skills Committee.

SUSAN HOWES

Susan Howes is Organizational Capability Consultant in the Reservoir Management department at Chevron, with prior assignments as Reservoir Management Consultant in the Reservoir Management Framework group and as Manager of the Horizons Program. Susan Howes is formerly Learning and Organizational Development Manager at Anadarko.

Susan Howes is a petroleum engineering graduate of the University of Texas and is a Past President of the Chevron Women's Network. She currently serves as Chair of the SPE Soft Skills Committee, was the 2010 Chair of the SPE Talent Council, and is an SPE Distinguished Member.

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 is a petroleum engineering graduate of the University of Texas (PhD) and holds a Masters in Mining and Petroleum Engineering from Delft University of Technology in The Netherlands. Rijken currently serves on the SPE Talent Council Committee and the ATCE SPE reservoir engineering committee. She has previously served on the ATCE well completions committee and served on the ATCE SPE well stimulation committee prior to becoming the committee chair.

EVENT INFO

THURSDAY

3.26.15

5:00 PM TO 8:00 PM

SPEAKERS

Susan Howes Peggy Rijken

LOCATION

Hilton Houston 9999 Westheimer Road Houston, TX 77027

EVENT CONTACT

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

MEMBERS \$45

NON-MEMBERS \$50



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 funfilled 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 (TopGolf)

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

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.

REGISTRATION DEADLINE

March 31, 2015

43rd Annual SPE Gulf Coast Section Golf Tournament

Monday

04.13

7:15 AM TO 8:30 PM

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.

LOCATION

Kingwood Country Club 1700 Lake Kingwood Kingwood, Texas 77339

EVENT CONTACTS

Cameron Conway cconway@kb-machine.com

Robin Smith Robin.Smith@halliburton.com

Marc Davis

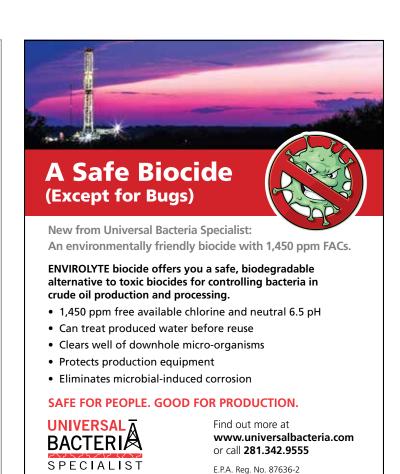
mdavis@championspipe.com

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.









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1ST ANNUAL SPE

Casino Night Scholarship Fundraiser

SCHEDULE

5:30 - 07:30 pm Buffet Dinner and Cash Bar

7:30 - 10:30 pm Gaming and Entertainment

10:30 - 11:00 pm Awards, Grand Prizes, and Closing

SPECIAL GUEST

Former Houston Oiler as Emcee!

MORE INFO

Door prizes awarded during the evening. There will be a friendly, competitive Texas Hold 'Em Poker Game downstairs on a first-come, first-serve basis. Trophies will be awarded to the top three winners.

ONLINE TICKET PRICES

Early-Bird Individual: \$50.00 by 3/6 Early-Bird Couple: \$75.00 by 3/6 Regular Individual: \$75.00 after 3/6 Regular Couple: \$100 after 3/6

WALK-IN PRICES

Individual: \$100 / Couple: \$120

\$500 SPONSORS





The Gulf Coast Section encourages its members to be involved with student chapters and other sections to help grow the overall SPE family. John Jackson (J.J.), the SPE Gulf Coast Section Newsletter Chair and Young Professional (YP) Sponsorship Chair, has been

working with various SPE sections throughout the United States to educate members on

the importance of proppants and the benefits of being involved in SPE. Over the past few months, with the help of his company (Unimin Energy Solutions), John has traveled to Texas A&M University, Louisiana State University (LSU), Texas Tech University, and the Four

Corners Section (San Juan College). For more information on how you can help spread the

word about membership, contact Membership Chair Xuan VandeBerg,

DIAMOND SPONSOR



EVENT INFO

SATURDAY

3.28.15

5:30 PM TO 11:00 PM

LOCATION

HESS Club 5430 Westheimer Road Houston, Texas 77056

EVENT CONTACT

Julia Clarke

713-369-5413 jpclarke@fugro.com

ONLINE REGISTRATION

http://www.spegcs.org/events/2786/

SPE GCS CONNECT

EVENT

RECAP







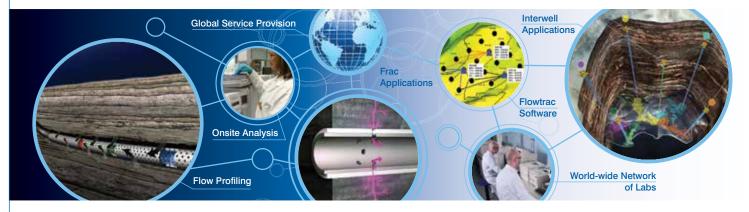






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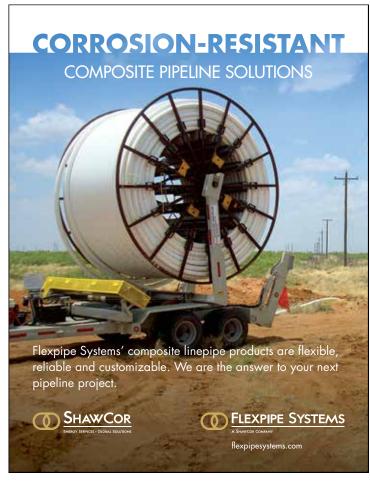
Reservoir Characterisation Using Tracer Technology

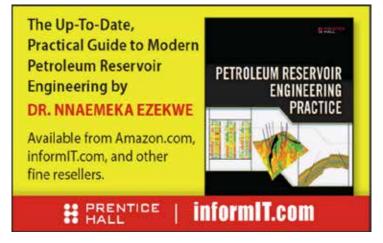
- Expertise in waterflood, injection gas, CO₂ and EOR chemical tracer applications
- Long term wellbore fluid inflow characterisation using no wires, fibres or well intervention
- Unconventional stage production measurement using Tracerco patented technology
- Global network of laboratories and operational capabilities providing local service provision to key oil and gas regions

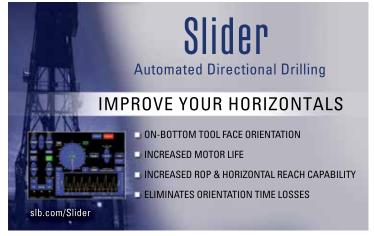
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STUDENT CHAPTER PAGE

TAMU-SPE

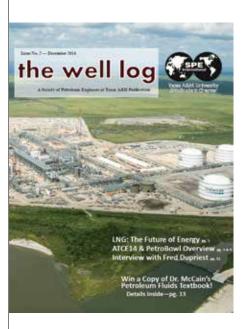
The Well Log

The Well Log (TWL) is a student-run SPE journal within the Petroleum Engineering department at Texas A&M University. The first issue premiered in September 2014, and the response from students, faculty, and those in the industry has been great. It features a compilation of review articles, original research, interviews with distinguished professors, and other unique content pieces.

The purpose of TWL is to give students an opportunity to work with a technical journal related to the oil and gas industry and to develop their writing and professional skills. Since the journal is entirely student-run, a team of undergraduate and graduate students do all the readings, selection, editing, designing, and finally the publishing and promoting.

An online format was chosen because it is not only more financially sustainable, but also allows greater reader accessibility to TWL. Furthermore, this format allows authors to be more involved in their own promotion, as much of the publicity is done via Facebook, personal blogs, emails, etc. We are growing as we progress and discover our needs, and we encourage anyone interested in collaboration to send us their articles to be considered for publishing in upcoming issues. We would also like to invite all GCS Connect readers to check out our journal at www.TheWellLog.com.

Tanner Wachsman Editor-in-Chief & Founder twachsman@tamu.edu



DVG MEMORIAL GOLF TOURNAMENT



UPDATE

In last month's column, we stated that we celebrated our 25th Anniversary. This was an unfortunate mistake in the SPE International records. TAMU-SPE has been a student chapter for a much longer time. We apologize for any confusion, and are thankful for the support of our former students.

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YOUR GUIDE TO YOUR ORGANIZATION LEADERS

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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

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is all smiles these days. That's because he and his team recently designed a new state-of-the-art mudlogging cabin. The spacious interior makes room for more laboratory services at the wellsite. Now exploration companies have access to more data in real time, so they can make better decisions faster. It's one more way Weatherford Mudlogging is committed to Excellence from the Ground Up.



CALENDAR

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY Research & Development	FRIDAY HSSE Student Invitational	SATURDAY
1	2	3	4	5	6	7
		Northside	Drilling	General Meeting	Auxiliary	
8	9	10	11	12	13	14
		Young Professionals	Completions & Production Westside	Reservoir Board of Directors Meeting		
15	16	17	18	19	20	21
		Continuing Education Water & Waste	Business Development	Continuing Education		Casino Night
22	23	Management 24	25	26	27	28