Changing the Rules in Physics-of-Flow:

Can Chemical Advances Drive Significant Recovery of In-Place Oil From Liquid-Rich Shales & Tight Oil Reservoirs?

GENERAL MTG P.11

LINER DRILLING TECHNOLOGY AS A TOOL TO MITIGATE DEPLETION DRILLING P.17

RENEW YOUR SPE MEMBERSHIP P.9
Happy New Year! If you are like most people, you may have experienced a sudden burst of motivation and self-examination that comes in early January. Sadly, many of our New Year’s resolutions and goals are notoriously short-lived, if not completely forgotten by February. First, choose the right resolution for you for the right reasons. For many resolutions, failure may occur because the resolutions are not made with serious intent and deliberation. Give thought to what you really want and why you want it. Then decide how difficult or challenging to make your resolution. Optimal performance comes from resolutions that are difficult, but not so difficult that we do not believe they can be accomplished. Be specific about your resolutions and goals. Formally commit to your resolutions and write them down on paper.

Second, create a plan for how you intend to accomplish your resolutions. The key to constructing a good plan is to identify the exact steps that you will take toward accomplishing your resolution and assigning due dates to those steps. Once the obstacles have been identified, it is fairly easy to generate a comprehensive to-do list for accomplishing each resolution.

Third, stay on track to accomplish your goal. With a good plan in hand, making significant progress toward your goal requires discipline.

Fourth, remain flexible and keep on going. A recent realization among goal-setting experts is the need to continually modify our approach—sometimes even changing or abandoning a goal altogether. Many times, circumstances beyond our control pop up at the most unexpected and inconvenient times. So long as we build flexibility into our expectations, we can simply adjust things as we go. Set aside time to reevaluate your goals and plans on a monthly or quarterly basis. We can verify accomplishments and progress, and if needed, adjust plans and continue onward to achieve our goals for 2013.

The SPE Gulf Coast Section Nominating Committee led by Hiep Vu (Past Chair) is collecting nominations for international and regional SPE awards. Any member can nominate a deserving candidate either through the Nominating Committee or directly to SPE. Details on the regional and international awards can be found on the SPE website (www.spe.org). I look forward to many SPE Gulf Coast Section members being nominated for well-deserved recognition.

The 2013 Houston Area Engineer of the Year will be honored during the 2013 Engineers Week Celebration February 17-23, 2013. The Houston Engineers Week Committee needs additional volunteers to help plan and run this event. Please contact Andrea Ranft, Committee Chair, at AndreaRanft@TSCEngineering.com to volunteer.

All SPE Gulf Coast Section members should have received their renewal forms for their 2013 SPE membership. If you have not renewed your 2013 SPE membership, do it online at (www.spe.org) or by mail today.

We would like to know how we can serve your interests with programs and activities organized by the SPE Gulf Coast Section study groups and committees. We encourage you to become active in a study group or committee. Please send me your comments and suggestions at sbaumgartner@marathonoil.com.
STUDY GROUPS

GENERAL MEETING
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THURS
January 10

SPE-GCS BOARD OF DIRECTORS MEETING

LOCATION
SPE Houston Office
10777 Westheimer Rd.
Suite 1075
Houston, TX 77042

EVENT CONTACT
Sharon Harris
713-457-6821 EXT. 821
713-779-4216 FAX
sharris@spe.org

7:30 AM TO 10:30 AM
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January 1963

In light of the on-going slant-hole scandal, Texas Governor Price Daniel proposes to the state legislature that an additional 33 field inspectors be funded for the Railroad Commission, which compares with the three inspectors the agency had when the slant-hole scandal broke last spring.

Deep testing in the Appalachian Basin is expected this year, especially by Humble in West Virginia.

A report on petroleum engineering in 29 colleges and universities reveals that student enrollment has declined from 4,803 students in 1957 to 1,320 in 1962.

Shell Oil reports plans to tap Canadian Athabasca tar sands to the tune of 500 wells drilled yearly for their program of in-situ thermal recovery.

U.S. active rig count – 1,378

January 1988

Japan’s Natural Resources and Energy Agency reports that nuclear energy will remain the cheapest source of electric power in Japan, followed by coal, oil, LNG, and hydroelectric. Mexico also reports plans to boost nuclear energy to back out oil in electricity generation.

The first lawsuits, totaling $250 million, are filed against Ashland Oil in the wake of its surface oil tank rupture that spilled more than one million gallons of fuel into the Monongahela River in Pittsburgh.

Norsk Hydro AS plans to drill the world’s first horizontal well with a floating rig west of the main Oseberg field structure in the Norwegian North Sea.

WTI crude oil - $17.61/bbl; U.S. active rig count – 1,102

January 2003

With 90% of PDVSA employees on a strike aimed at ousting President Hugo Chavez, Venezuela’s oil exports drop from 3 million b/d to less than 250,000 b/d. As a result of the market instability, oil prices spike as high as $33.65/bbl, considered to be an unsustainable price.

Also, as a result of the reduction in Venezuelan oil exports, Venezuelan-backed Citgo, the fifth largest refiner in the U.S., requests a crude oil loan from the U.S. Strategic Petroleum Reserve, which is turned down by the DOE.

The Republic of Georgia signs an agreement with the Northrop Grumman Corp. to develop an aerial surveillance system to monitor the Baku-Georgia-Turkey oil export pipeline. The U.S. also allocates $11 million to Georgia for the training and development of a 400-member special antiterrorist military unit to protect the pipeline.

Light sweet crude oil - $33.65/bbl; Natural gas - $5.13/MMBtu; U.S. active rig count – 851

January History Quiz

What Middle East oil field was drilled on an oil seep that was mentioned in Biblical times?

January 1910 The University of Pittsburgh offered three courses in oil and gas law and in the process the first course material dealing directly with the oil and gas industry.

January 2013

This month we look at the life of a ruthless and charitable oil magnate that historian Ron Chernow once described as being “as good and as bad a man as ever lived”. John D. Rockefeller.

John Davidson Rockefeller was born on July 8, 1839 in a modest house in Richford, New York. John’s father, “Big Bill,” was a traveling peddler and a full-time rogue, selling snake-oil remedies. Big Bill’s greatest love in life was money. He loved fondling it, spending it and the power it gave him. He passed on to John a passion for profit and a risk-taking spirit.

Young John also took after his mother, Eliza, whom he adored. Unlike Bill, Eliza was conscientious, well organized, and a devout Baptist. John thus inherited a complex set of traits: on the one hand, money-lust and boldness, on the other, powerful discipline and strong religious faith. Throughout his life he struggled to reconcile and unite these forces. He wondered how he could accumulate money yet preserve his piety. Upon hearing a local minister who preached, “Get money, get it honestly, and give it wisely,” those words became the motivation for his life.

He took his first job at age 16 as a clerk in Cleveland. As he sat at his desk poring over his ledger books, he could glance out his office window and see barges on the waterfront loaded with merchandise. This, he felt, was it...capitalism! In 1858, at age 18, he helped launch Clark and Rockefeller, a trading firm specializing in fish and grain. The company thrived, due largely to Rockefeller’s immense capacity for hard work, his serious and focused attitude, and his natural talent for leadership and organization – attributes that served him well throughout his career.

Next month, an event occurs that would dramatically impact the future of JDR.
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SPE-GCS MEMBERSHIP REPORT

November 2012

NOVEMBER

Total: 15,292
YP: 3,198

OCTOBER

Total: 15,072
YP: 3,096

<table>
<thead>
<tr>
<th>SPE-GCS Members</th>
<th>Total</th>
<th>YP</th>
<th>Total</th>
<th>YP</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Members</td>
<td>160</td>
<td>75</td>
<td>215</td>
<td>88</td>
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<tr>
<td>Transferred to Section</td>
<td>222</td>
<td>N/A</td>
<td>183</td>
<td>N/A</td>
</tr>
<tr>
<td>Transferred out of Section</td>
<td>120</td>
<td>N/A</td>
<td>104</td>
<td>N/A</td>
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<tr>
<td>Unpaid</td>
<td>1,669</td>
<td>625</td>
<td>1,723</td>
<td>643</td>
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<tr>
<td>Renewed for 2013</td>
<td>6,528</td>
<td>1,449</td>
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Student Members

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<th>Unpaid</th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Texas A&amp;M</td>
<td>791</td>
<td>136</td>
<td>UH/Rice</td>
<td>267</td>
<td>58</td>
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<tr>
<td>HCC</td>
<td>44</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1,102</td>
<td>209</td>
<td></td>
<td>1,100</td>
<td>210</td>
</tr>
</tbody>
</table>

Total Paid/Unpaid 16,394* 1,878 16,172 1,933
% Paid 89.7% 89.3%

* Another new Section Record!

This month, the Gulf Coast Section recognizes Mike Jackson for his efforts on the Membership Committee. When he volunteered to help out with membership, he was put to work right away. He was given a list of SPE members who still had not renewed their dues for 2013 as of mid-November, and he started contacting them to help prevent the precipitous January Plunge that our Section has experienced in the past (see charts on this page). He also asked them what they liked best about being an SPE Member.

Here’s what they said:

• “Though my technical specialties and interests have changed over the years, I find that the broad scope of technologies shared through SPE have kept me connected and enlightened throughout the journey.”

• “Being in the SPE for over 30 years makes me feel connected to our industry.”

• “I enjoy participating in the technical conferences and having access to the wide range of SPE papers that describe the leading edge of innovation and best practices within our industry.”

• “The technical resource library of SPE papers is an invaluable asset for practicing engineers to access in problem solving.”

• “The professional and personal networking opportunities that SPE provides are very useful throughout one’s career.”

• “The SPE meetings and forums are one of the best venues for keeping current on industry practices.”

Mike has worked at Champion Technologies since 1981. He received his BSc. in Chemistry (McMaster University, Ontario, Canada) in 1981. He has worked and lived in Calgary, Edmonton, Houston, Venezuela, Ecuador and Brazil, and is currently in Houston. He has participated in SPE for several years, and, for the past two years, he has been volunteering in SPE’s e-Mentoring Program.
Please join us for our annual User Group Meeting (UGM) in Houston on Tuesday, February 12, 2013 at the Norris Conference Center.

The 2013 UGM will combine a broad range of topics including Flow Assurance, Well Dynamics, Drilling and Completions.

There is no fee to attend the meeting. Lunch and refreshments will be provided.

Registration is now open, please visit our website www.sptgroup.com.

February 12, 2013 8:30am-4pm
Norris Conference Center
803 Town & Country Lane
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• Send a company bulk payment for your employees. Payments must be made before December 30th and your company will need to register. This option helps to alleviate costly bank fees, currency conversions, and processing of employee expense reports.
• Mail checks, UNESCO coupons or joint dues to:
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  P.O. Box 833836
  Richardson, TX 75083-3836 USA

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Under certain circumstances, SPE offers a dues waiver for renewing members up to two consecutive years for those facing
• disability or unemployment
• active military duty
• compulsory post-graduation military or social service

To qualify for a dues waiver, you must:
• submit a dues waiver request annually by mail
• provide a written request for unemployment or disability or proof of active military duty or compulsory service.

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SESSIONS IN 2012

ADVANCED SEISMIC STRATIGRAPHY: A SEQUENCE-WAVELET ANALYSIS EXPLORATION-EXPLORTATION WORKSHOP – ADS / 29 October – 2 November

APPLIED RESERVOIR ENGINEERING – RE / 26 November – 7 December

BASIC RESERVOIR ENGINEERING – BR 5-9 November

DEVELOPMENT GEOLOGY – DG 26-30 November

DECLINE CURVE ANALYSIS AND DIAGNOSTIC METHODS FOR PERFORMANCE FORECASTING – DCA / 17-18 December

FOUNDATIONS OF PETROPHYSICS – FPP 12-16 November

PRODUCTION GEOLGY FOR OTHER DISCIPLINES – PGD / 3-7 December

RESERVOIR MANAGEMENT – RM 10-14 December

STUCK PIPE PREVENTION-TRAIN WRECK AVOIDANCE™ – SPP 10-12 December

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Changing the Rules in Physics-of-Flow: Can Chemical Advances Drive Significant Recovery of In-Place Oil From Liquid-Rich Shales & Tight Oil Reservoirs?

Has the brute force of fracturing taken recovery of tight oil as far as it can go? Is a new approach using production enhancing chemicals and processes ready to take the next step? Mr. King will present some new and unusual ideas proposed as the next step in the evolution of tight oil production.

George E. King

George E. King is a Registered Professional Engineer with over 40 years of oilfield experience. His technical background includes basic research on energized fracturing, production and fracturing chemicals, acidizing, asphaltenes, perforating cleanup, well integrity and completions, complex formations (North Sea chalk, San Juan coal, Alaskan and Canadian heavy/viscous oil, US tight gas, GoM Deep Water, and Niobrara shale), unconventional resources, (Barnett Shale, Horn River Shale, Eagle Ford Shale, Fayetteville Shale, Gothic Shale), sand control, low pressure gas well operations and applications work on coiled tubing, cutoff, formation damage and well repair operations.

His technical accomplishments include 60 technical papers as well as a book on completions and workovers. He was selected as a Distinguished Lecturer on foam fracturing for the Society of Petroleum Engineers (SPE) during 1985-86 and was a Completions Course Lecturer on horizontal wells for the SPE Short Course series in 1999. His industry positions include Technical Chairman of the 1992 SPE Annual Fall Meeting, past API subcommittee chair on perforating, 11 years as an adjunct professor at the University of Tulsa (teaching senior level and graduate credit well completions and fracturing courses at night) and numerous SPE committees on forums, paper selection committees and Applied Technology workshops. His awards include the Amoco Vice President’s Award for Technology from Amoco in 1997, API service award in 1994 and the 2004 SPE Production Operations Award. He was selected as the 2012 Engineer of the Year from Greater Houston Region’s Texas Society of Professional Engineers.

Mr. King has a BS in Chemistry from Oklahoma State in 1972, a BS in Chemical Engineering from the University of Tulsa in 1976, and an MS in Petroleum Engineering from the University of Tulsa in 1982. He maintains a web site with free downloads of petroleum engineering educational materials at www.GEKEngineering.com.
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Monitoring Well Integrity For the Life of the Well: A Program to Determine What is Possible, Practical, and Environmentally Sound

Well integrity management has again become a topic of conversation as the oil and gas industry seeks to reassure the public that well construction and operation practices prevent risks of environmental pollution. One approach has been to consider a third-party investigation and evaluation for both current and developing monitoring methods. The program, being advanced, uses a nationally recognized research facility to evaluate early warning methods for failure prediction, including those that have been advanced by US national laboratories and non-oil & gas industries. This presentation begins with where state-of-the-art monitoring is now, and where it is headed.

George E. King

George E. King is a registered professional engineer with over 40 years of experience since joining Amoco Research Center in 1971. His technical work has provided advances in foam fracturing, production from unstable chalk, underbalanced perforating, sand control reliability, gas shale completions and fracturing. Currently, he is working with new technologies for Apache Corporation. He holds degrees in Chemistry from Oklahoma State University, as well as Chemical Engineering and Petroleum Engineering from the University of Tulsa where he also taught completions and workovers for 11 years at night as an adjunct professor. He has written 65 technical papers and was awarded the 2004 SPE Production Operations Award and the 2012 Engineer of the Year award from the Houston Region of the Texas Society of Professional Engineers. He is Apache’s Distinguished Engineering Advisor.
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Featured course:
Economics of Unconventional Gas
February 4–7, 2013
Houston, Texas

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Production Chemistry

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ECONOMICS OF UNCONVENTIONAL GAS

February 4–7, 2013
Houston, Texas

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Production Chemistry

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ECONOMICS OF UNCONVENTIONAL GAS

February 4–7, 2013
Houston, Texas

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NOVOS: A Case Study On New Drilling Systems

NOV’s new drilling control system, NOVOS – a case study on a new approach to 3rd party integration and capabilities with drilling controls - a different approach using control systems found today. Jens will speak about “Well planning tools, becoming online decision tools - powered by the interoperability capabilities of a platform”. The case study will show integration technologies and what changes this brings to the human in the loop.

Jens Ingvald Ornaes

Jens is part of NOV’s team bringing new technology to the market and is part of the team building NOV’s new drilling control system.
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■ save 1 billion pounds of proppant
■ prevent more than 400 screenouts
■ eliminate over 55,000 road journeys.

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Schlumberger
Liner Drilling Technology as a Tool to Mitigate Depletion and Lost Circulation: Field Experiences in the Gulf of Mexico

It is increasingly difficult to find hydrocarbon reserves located in benign environments, which has resulted in the oil and gas industry moving to locations where significant drilling challenges are encountered. These challenges often lead to costly non-productive time with increased operational risk. In order to reach their objectives, operators have to make decisions “outside the box” to mitigate these challenges. Liner drilling technology has been introduced as a well construction technique in recent years proven to significantly reduce non-productive time with associated reduction of operational risks. As seen in the case histories presented, liner drilling in lieu of conventional drilling methods was identified as the only practical way, short of abandoning the well, for the operator to accomplish their objectives.

This presentation will portray five case histories in both shelf and deep water GOM where liner drilling technology was applied to mitigate lost circulation, wellbore stability issues and other drilling hazards. Also included is a discussion of the liner tool and casing bit systems implemented with brief well histories depicting the drilling hazard mitigated with the eventual outcome. Highlighted will be the operational parameters, liner drilling results with the associated value to the operator.

Steve Rosenberg

Steve Rosenberg is the Global Drilling Reliability Manager for Weatherford’s Well Engineering and Project Management Team with over 25 years of experience in the oil and gas industry. He has previously held drilling engineering positions with Diamond Offshore and Conoco. Mr. Rosenberg is regarded as a subject matter expert in casing and liner drilling applications having written or coauthored 13 technical papers on these subjects.
Global Unconventional Resources: Strategies for Dynamic Markets

Robert Clarke will present Wood Mackenzie’s view on unconventional resources around the world, including the strategies companies will employ to develop these plays. He will outline the most important pros and cons for each investment theme from a commercial vantage point. For many operators and investors, the portfolio benefits and price risks in domestic tight oil plays compete head-to-head with the low entry costs and massive resource potential of international unconventional gas assets. In Wood Mackenzie’s view, large portfolio players (majors and large independents) will continue to increase their investments in international gas plays. Additionally, supply players (NOCs and utilities seeking access to volumes) will invite experienced unconventional operators to participate in their domestic gas opportunities.

Robert Clarke

Robert G. Clarke has been with Wood Mackenzie since 2005, originally as a member of the company’s US Lower 48 Upstream Research team. He has covered both the Rocky Mountains and Gulf Coast regions and led Wood Mackenzie’s onshore Gulf Coast service from 2007 to 2009. Robert currently manages Wood Mackenzie’s Global Unconventional Play Service.

Robert’s analytical specializations include geologic play description, decline curve analysis, production forecasting and economic modeling. He has widespread experience analyzing unconventional assets and has worked on numerous upstream consulting projects, ranging from asset opportunity screenings for E&Ps to due diligence work for private equity M&A. Robert also regularly contributes to written media and industry conferences.

Prior to joining Wood Mackenzie, he worked as a field geologist for HMI, a private engineering and consulting firm in Houston. Robert graduated Cum Laude from Texas A&M University in 2001 with a BA in Geology and received an MBA in 2005 from the Eller College of Management at the University of Arizona.
Wave Glider – Introduction to a New Autonomous Remotely Piloted Ocean Data Collection Platform

Sudhir Pai graduated from University of Bombay with a Bachelors Degree in Electrical Engineering. After two short stints with Dodsal and Honeywell, he joined Schlumberger as a Field Engineer with their international staff and has been with the organization for 30 years. He has worked in the Middle East and India for 17 years in six different countries. He managed Operations of Schlumberger Oilfield Services for Mumbai from 1997-2001. As part of the management of business and technology, he was based at the company headquarters in Houston, Texas for six years. From 2003-2005, he was Vice President and General Manager for the Completions business worldwide. From 2005-2011, he split his time between Personnel/Human Resources in Dubai and Corporate Planning/Supply Chain in London Gatwick.

Since January 2012, Sudhir has been Vice President of worldwide Operations for Liquid Robotics Oil and Gas, a Joint Venture with Schlumberger.

Sudhir Pai
Attend an SPE training course held at the Houston training center or in conjunction with an SPE event.

Below are just a few of the courses we offer. Be sure to visit our website for the complete schedule.

Courses available at the SPE Houston Training Center

- 29–30 January: Shale Selection, Completions, Fracturing, and Production
  - Instructor: George E. King

- 5–6 February: Monte Carlo Simulation for the Oil and Gas Industry
  - Instructor: Susan Peterson

- 7–8 March: Chemical Enhanced Recovery
  - Instructor: Mojdeh Delshad

- 19 March: Optimizing Gas Fields Using Integrated Asset Modeling
  - Instructor: Michael H. Stein, S.M. Avasti, Luiz C. Amado

- 20–21 March: Oil and Gas Economics and Uncertainty
  - Instructor: Rodney Schulz

Courses available at SPE events in Texas

- 3 February: Hydraulic Fracturing—A Concise Overview
  - Instructor: Carl Montgomery

- 4 February: Introduction to Commissioning and Initial Startup
  - Instructor: Grant Gibson, Howard Duhon

- 7–8 February: Hydraulic Fracturing—Design and Treatment
  - Instructor: Michael B. Smith

- 17 February: History Matching and Conditioning Reservoir Models to Dynamic Data
  - Instructor: Akhil Datta-Gupta

- 17 February: Fundamentals of Reservoir Simulation
  - Instructor: J. Robert Gochnour

- 21–22 February: Reservoir Simulation for Practical Decision Making
  - Instructor: Dean C. Rietz, Miles R. Palke

Register today at www.spe.org/go/trainingcourses.
Where is the industry in terms of ESP and PCP technology and reliability? How can these advancements and learnings be applied in the Permian Basin? This presentation will provide answers to these questions, plus provide information on work in progress around the globe that may also be applicable to understanding and improving ESP and PCP performance in this region.

Shauna Noonan

Shauna Noonan, SPE, is a Wells Technology Supervisor in the Completions and Production Technology Group for ConocoPhillips in Houston. She has worked on artificial lift projects and technology development worldwide at ConocoPhillips and was previously with Chevron for over 19 years. She has chaired many industry artificial lift forums and authored/co-authored numerous papers on the subject of artificial lift. She was the chair of the ISO standard committee for PCPs and is the current chair of the ISO standard for ESPs. She holds a position on SPE International Board of Directors as the 2013-2015 Technical Director for Production and Operations and serves on the JPT Editorial committee. She also received the 2012 SPE-GCS Regional Production and Operations Award. Shauna began her career working for Chevron Canada Resources and holds a B.Sc. in Petroleum Engineering from the University of Alberta.
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Risk Tolerance and Risk Neutrality

Many exploration and production companies impose a risk threshold on major capital projects (one common such hurdle is a maximum acceptable probability of negative NPV). Projects which fail to meet the threshold are not usually rejected outright; rather, the project team is instructed to gather more information and perform more analyses to reduce the range of economic uncertainty associated with the project. Projects are routinely delayed while unnecessary appraisal wells are drilled and analyses are conducted, thus eroding millions of dollars from the NPV of these projects. The primary arena in which risk tolerance is applied is the development stage of a project.

Companies are comfortable with the notion of failed exploration wells but not failed developments. Stringent probability-of-success hurdles often result.

Unless the failure of a single project could put a firm into financial distress, companies should be risk neutral when making decisions at the project level – i.e., they should make decisions based on the mean values of the economic metrics of interest (NPV, P/I, etc.) with no further consideration taken of the probability of success. Value-of-information (VOI) analyses should be used to determine when additional information or analysis adds value to a project and when it does not.

The key concept is this: Risk tolerance should be applied at the portfolio level, not the project level. The question to ask is not, “Am I comfortable with the risk associated with this project?”; rather, it is, “Am I comfortable with the risk associated with my portfolio of assets when this project is included?”

Patrick Leach

Patrick Leach has 30 years of experience in the energy industry, primarily in upstream oil & gas. He is the CEO of Decision Strategies, Inc., a leading management consulting firm in the industry. Mr. Leach has also been an independent consultant and worked for Texaco as a geophysicist, partner & government coordinator and portfolio manager. He has lived and worked all over the world. Mr. Leach is the author of “Why Can’t You Just Give Me the Number? - An executive’s guide to using probabilistic thinking to manage risk and to make better decisions.”

Mr. Leach has a B.Sc. from the University of Rochester and an MBA from the University of Houston. He is a Charter Fellow in the Society of Decision Professionals and holds membership in the American Association of Petroleum Geologists, the Society of Petroleum Engineers, the Decision Analysis Affinity Group and INFORMS.
Shale Resource Assessment & Development - Full Life Cycle Integrated Approach

A full lifecycle integrated approach for shale resource plays is an essential process to establish value creation and to ensure reserves and production growth. With this process, key issues and uncertainties in shale resource development are resolved as plays evolve from concept screening, to exploration and resource assessment and then to full development. The integrated approach relies upon key elements, which include 1). Field Demonstrations, and 2). Mechanistic Studies.

The design, planning and implementation of systematic and “scalable” field demonstrations are essential elements required to address strategic, development and operational issues. Mechanistic studies are utilized to understand the key production drivers. Shale gas productivity is typically much lower than conventional reservoir systems and often lower than tight gas reservoirs. The flow behavior in these systems must be understood and quantified in order to effectively characterize and predict well and reservoir performance behavior. The primary take-away from this presentation is that new processes and advances in field demonstrations and mechanistic models are key factors required for appraisal and development of global shale resources.

P.K. Pande

P. K. Pande serves as Director, Reservoir Technology with Anadarko Petroleum Corporation. His responsibilities include managing an integrated team of subsurface professionals including geologists, geophysicists and reservoir engineers in application of subsurface technologies and best practices for unconventional and deepwater resources.

Pande has also served as Subsurface Manager for Ourhoud Field, Algeria, the country’s second largest oil field. He has contributed to the development and reservoir management of numerous world-class reservoirs, including Alaska’s Prudhoe Bay, North America’s largest oil field and Endicott, the first arctic offshore oilfield. He was actively involved in the design, planning and implementation of the Prudhoe Bay Miscible Gas Project, the largest enhanced oil recovery project in the world. He served as Project Manager for U.S. Department of Energy’s flagship project on improved recovery and reservoir characterization methods for shallow-shelf carbonate reservoirs in the Permian Basin.
Eagle Ford Completions: What Leads to BIG SUCCESS?

This presentation will summarize Hess’s Eagle Ford completion approach and lessons learned while appraising this unconventional oil play. Topics to be covered include: geo-steering, rock mechanics effects on hydraulic fracture design, production cement bond optimization, cemented sleeve trials, and a comparison of well performance using different fracturing methods.

Mark Reid

Mark is currently the Completion Engineering Team Lead for the Eagle Ford Asset at Hess Corp. in Houston. He was formerly Vice President Engineering / Completions for Denali and Vice President Offshore GOM Exploitation for Coastal/El Paso. He has 27 years of industry experience for the three organizations. He holds a BS degree in Petroleum Engineering from The Colorado School of Mines and an MBA in finance from the University of Colorado at Denver.
In unconventional plays, you’re challenged by how to make more oil or gas while reducing costs and meeting environmental parameters. Halliburton has the solution: distributed temperature sensing—used in conjunction with microseismic fracture mapping—that gives operators the ability to make adjustments during a treatment to help assure every planned zone is treated.

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The Society of Petroleum Engineers Gulf Coast Section will present a continuing education seminar which will discuss ethics. This one hour seminar will qualify attendees for their annual ethics training requirement by the Texas Board of Professional Engineers.

C.W. Clark

As Director of the Compliance & Enforcement Division of the Texas Board of Professional Engineers, Mr. Clark manages the day-to-day operations of the division to include policy advisory opinions, compliance reviews of continuing education audits, seal imprint approvals, investigations of enforcement cases against violators, and providing outreach programs to educate the public and licensed engineers on engineering matters pertaining to the Board and the Engineering Practice Act.

Before joining the State of Texas, Mr. Clark worked in private industry as an Electrical Engineer with Motorola, Inc. in Austin for 21 years, and prior to that, eight years with Texas Instruments in Dallas. Mr. Clark is a BSEE graduate of Southern Methodist University and a member of the Institute of Electrical and Electronics Engineers (IEEE). C.W. and his wife, Jan, have two children and live in the Austin area. C.W. and Jan have also been active with foster parenting and over the past 34 years have had the great pleasure of fostering 251 infants and children.
2013-2014 SPE-GCS Scholarship

Renewable yearly scholarship ($1,500/semester, $3,000/academic year) up to 4 years:
• Eligibility for renewal is dependent upon maintaining a GPA of at least 3.0, majoring in engineering, and pursuing a career in the Oil & Gas industry

The requirements for first time applicants:
• Currently reside in Houston OR 29-county Gulf Coast area
• Enroll in an engineering or science program at a university in the Fall
• Currently be a high school senior
• Minimum SAT score of 1650
• Short essay (approx. 500 words)
• High school academic record
• Activities, awards and honors
• SAT and/or ACT score
• Professional Reference letters
• Financial need (if applicable, not required)
• Be a U. S. citizen

The process:
• Scholarship committee reviews each application
• Selected applicants are interviewed in the second round (April 2013)
• After the interviews, the scholarship committee meets and collectively decides the 2013-14 scholarship recipients (May 2013)

NOTE: Each 2013-14 first-time scholarship recipient may be eligible for a summer internship with an oil & gas company on availability

Event Info
TO APPLY
Log on to the SPE Gulf Coast Section homepage and select the Scholarship/Internship committee page. A link to instructions and the online application are located in the center.

QUESTIONS
gcs-scholarship@spemail.org

INSTRUCTIONS & APPLICATION
http://spegcs.org/scholarship-app/instructions/

DEADLINE
Complete scholarship form by 2/13/2013

HOUSTON SPE AUXILIARY
JANUARY ACTIVITIES

The Houston SPE Auxiliary will not meet in January 2013. Please watch for news of our February meeting at which we will honor all of our past Presidents.

DATE
January 23, 2013

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The Glass Castle
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  12 months = $1,000
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SILVER,
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(EEC, RNC) & GOLD (RNC)
- Donation Amount $3,000, $1,000 & Less than $1,000
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- Managers and Supervisors
- Executives
- Educators and Students
- Consultants

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