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TENNIS
TOURNAMENT
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Advanced Technical Ceramics for the Oil & Gas Industry
GENERAL MTG P.13
September marks the beginning of a new school year, and students from kindergartens, elementary schools, middle schools, high schools, colleges and universities are learning the traditional curriculum. When and how are our students introduced to the basic concepts of the petroleum industry? The Gulf Coast Section Community Services and Education Committees support numerous programs and activities to educate students and teachers. The programs and activities require volunteers from our section membership to engage in presenting the concepts of the petroleum industry. Please join us and volunteer your time and talent to help increase the student, teacher and community knowledge level of our industry and encourage career opportunities in the petroleum industry.

The SPE Annual Technical Conference and Exhibition (ATCE) will be held in early October, and the Gulf Coast Section membership will receive several awards. The Gulf Coast Section Young Professionals (YP) Committee will receive the Outstanding Section YP Committee Award for Overall Excellence. James Pappas (RPSEA), Jeannie Perdue (Occidental Petroleum), and Syed Ali (Schlumberger) will receive the SPE Distinguished Service Award.

We would like to know how we can serve your interests with Gulf Coast Section programs. We encourage you to become active in a study group or committee. Based on my experience, the investment of time and talent will be repaid with dividends.

Do you like the new format of the Gulf Coast Section newsletter? Do you like the new format of the Gulf Coast Section website? Please email me your comments and suggestions at sbaumgartner@marathonoil.com. Thank you.
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THE NEW SPE-GCS.ORG
Valerie Martone
2012-2013 Communications Director

29TH ANNUAL SPE-GCS TENNIS TOURNAMENT
Benefiting the SPE-GCS Scholarship Fund

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UNCONVENTIONAL WISDOM
ATCE 2012
SPE Annual Technical Conference & Exhibition

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OPEN OFFICER POSITIONS
Since its first conference 88 years ago, the Society of Petroleum Engineers’ Annual Technical Conference and Exhibition (ATCE) has attracted more than half a million of the E&P industry’s greatest minds from more than 50 countries around the world. Technical sessions, presented with an exhibition, focus on all phases of oil and gas exploration and production, and special events allow E&P professionals to network with colleagues from around the world and celebrate key successes in the industry.

**TOP REASONS TO ATTEND ATCE 2012**

ATCE 2012 is one of the best ways that you can gain technical knowledge and make valuable contacts while saving on consulting and research costs. Here are the top 5 reasons you should attend:

• 400+ peer-selected technical papers covering current applications and future technologies
• Expanded technical content and events for projects, facilities, and construction professionals
• 400+ exhibiting companies—the largest in ATCE’s history—showcasing the latest technologies, new product launches, and valuable industry services
• Numerous networking events & student and young professional activities
• Pre- and post-show training courses. ATCE also offers the opportunity for SPE volunteers to share best practices for their committees and sections

**HOW TO JUSTIFY YOUR ATTENDANCE**

• Offer to prepare and deliver a short presentation to your colleagues to share what you’ve learned so that others on your team will gain the benefits of your attendance
• Explain what you plan to get out of attending and how that will benefit your company
• Be ready with a plan that shows who will cover for you while you are attending the conference
• Offer to share a room to reduce hotel expenses and/or utilize our complimentary hotel shuttle service to avoid renting a car
• Share presenter handouts and exhibiting companies’ materials with your colleagues. SPE On Demand offers you unlimited access to many of the presentations and audio from the ATCE technical sessions
• Receive continuing education credits for attending
• SPE members can take advantage of discounted registration

For more information, visit: [http://www.spe.org/atce/2012/](http://www.spe.org/atce/2012/)
September 1962
Horizontal wells in the 1960’s? Well, sort of. Would you believe slant-hole drilling for the purpose of stealing oil from adjacent leases? New regulations from the Texas Railroad Commission are designed to bring an end to this piracy. One of the hot topics at the annual meeting of the American Institute of Chemical Engineers (AIChE) involves the prospects for processing and handling liquefied methane (LNG). Experts report that 300 trillion c.a. ft. of natural gas, now lying useless in free-world fields outside North America, could enter the energy pool if processing and handling hurdles can be cleared. Cities Service Oil pioneers a TV-radio first—a simulcast in English and Spanish over Miami stations. Justice Department is reportedly accelerating its anti-trust case, charging Phillips Petroleum with trying to buy control of Union Oil back in 1959-60. U.S. active rig count – 1,697.

September 1987
Newfoundland Energy Ltd., a U.S. company incorporated in Bermuda and operating in Canada, reactivates its mothballed oil refinery in Come-By-Chance, Newfoundland (Gotta love that name.). Sweden will employ six of its military bases to assist in constructing strategic underground crude oil storage units for Saudi Arabia. The Soviets report their first subsea completion, a Caspian Sea exploratory well in about 426 ft. of water 75 miles northeast of Baku. The well is remotely operated from a nearby fixed platform. Saudi Arabia hints it may start flooding the market with crude oil again if OPEC members don’t restore discipline on overproduction (What else is new?). WTI crude oil - $19.56/bbl; U.S. active rig count – 1,099.

September 2002
Researchers at Texas A&M announce a patented process for converting stranded and associated natural gas into hydrocarbon liquids. Kerr-McGee issues construction contract for the world’s first cell spar production platform. This third-generation of spar technology was developed for economic production in smaller deepwater fields. CERA Chairman and noted author Daniel Yergin urges the U.S. to focus internationally more on Eurasia, West Africa, and Latin America to diversify its oil supply sources and bolster energy security in the face of increasing imports and rising Middle East tensions. Saudi Arabia reiterates its commitment to unilaterally make up any shortfall in global oil supply in the event of a U.S.-led attack on Iraq (How thoughtful!). Light sweet crude oil - $29.58/bbl; Natural gas - $3.36/MMBtu; U.S. active rig count – 863.

The Rest of the Yarn
In 1937, one of the world’s largest investors in the oil industry died. From the 1890’s, he was involved in the financing of three eastern pipeline companies. He was one of the organizers of the Gulf Companies in the Spindletop days, and at his death, his family retained the controlling interest in Gulf Oil Corp.

He founded Alcoa and U.S. Steel, and by the early 1920’s, he was one of the richest men in the U.S. During that decade (prior to tax shelters), he paid the third highest income taxes in the U.S., trailing John D. Rockefeller and Henry Ford. Because of his financial acumen (and connections), he headed up the U.S. Treasury under three Presidents. The Episcopalian and staunch Republican was constantly frustrated with the way the U.S. government failed to maintain its fiscal budget, insisting that tax rates were too high and that people would try and avoid paying them. His fortune and art collection were the basis for the National Gallery of Art. He helped found one of the top-ranked universities in the northeast and it’s estimated that he contributed $43 million to his alma mater, the University of Pittsburgh.

He became unpopular with the onset of the Great Depression, by insisting to President Hoover that he “liquidate labor, stocks, farmers, and real estate.” When cabinet-level impeachment hearings were held, he resigned to become U.S. Ambassador to Great Britain. He died four years later. He was Andrew William Mellon. And now you know…The Rest of the Yarn.
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**SPE-GCS MEMBERSHIP REPORT**  
**July 2012**

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**VOLUNTEER SPOTLIGHT**

**Jeanne Perdue**  
To Receive Distinguished Service Award at ATCE

After receiving the Young Member Outstanding Service Award 20 years ago, then the Gulf Coast Section Service Award and Regional Service Award, our current Membership Chair Jeanne Perdue will be receiving the highest service award SPE has: the Distinguished Service Award. The presentation will be made at the Annual Technical Conference & Exhibition in San Antonio at the Awards Banquet the evening of Tuesday, October 9, 2012. Winners of this award also become SPE Distinguished Members.

Jeanne has volunteered her services to SPE from both international and sectional service levels. On an international level, she has been instrumental in the development of several initiatives that helped lead the way to SPE’s current eLibrary and web-based services. She helped develop the SPE Magic Suitcase program and was also an SPE Distinguished Lecturer. For our very own Gulf Coast Section, she has held a variety of positions since 1989 and currently resides over our section as the Membership Chair.

“Jeanne has played a key role in developing SPE’s publications and online offerings,” says former Gulf Coast Section Chair Jane Moring. “She is an avid supporter of the educational initiatives to improve the image of the oil industry.”

After working as an Editor at Hart’s E&P magazine and a chemist and librarian at the Texaco Research lab, Jeanne now serves as a Technical Writer at Occidental Petroleum. She earned a BS in Chemistry from SUNY at Albany (go Great Danes!) and attended courses in MS Petroleum Engineering at University of Houston. She was also elected twice to the Alief ISD school board and served as president of the Alief ISD Education Foundation for 10 years.

---

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We are pleased to announce the 29TH Annual Society of Petroleum Engineers Gulf Coast Section Tennis Tournament, which will be held on October 5 & 6, 2012 at The Houston Racquet Club located at 10709 Memorial Drive in Houston, Texas.

Tournament activities will begin on Friday evening with registration starting at 4:00 PM. Social Mixed Doubles and some flights of Tournament Doubles will start at 6:00 PM along with hors d’oeuvres or light dinner. On Saturday, registration will begin at 8:30 AM with play beginning at 9:00 AM. Time permitting, a FUN Scrambles Tournament will be arranged in the afternoon. Saturday evening will consist of a wonderful dinner, door prizes, and award ceremony.

Entry fees (per person) are $125.00 which covers Tournament Double and Social Mixed doubles, or $50.00 for those only playing Social Mixed Doubles. The charge for non-playing spouses or guests will be $25.00. Please be ready for playing lots of tennis, meeting old friends and making new ones, receiving an official tournament t-shirt and more nice gifts (contributed by our sponsors), drawing of valuable door prizes, winning awards, and enjoying all meals (Friday dinner through Saturday dinner) and beverages.

Participation is limited and entries will be accepted on a first-come, first-served basis. The deadline for tournament entry is Monday, October 1st, 2012. The entry and sponsorship forms are included in the attachments on page 9. Please consider sponsoring this year’s event either by donations, door prizes, or ditty bag items. We appreciate your support, and if you need more information please call.

On behalf of the entire 2012 SPE-GCS Tennis Committee, we look forward to seeing everyone for two fun-filled days of tennis!

**QUESTIONS**
Jim Sheridan
281-432-9209
Jim.Sheridan@bakerhughes.com

Suzanne del Rosario Davis
713-839-2135
dsdelrosariodavis@lgc.com

**EVENT CONTACT**
Joanne Hresko
74 Hessenford Street
Sugar Land, TX 77479
joannahresko@comcast.net

**LOCATION**
The Houston Racquet Club
10709 Memorial Drive
Houston, TX 77024
713-464-4811

**EVENT INFORMATION**
Mixed Doubles - Friday, October 5th - 6:00 PM
Tournament Doubles - Saturday, October 6th - 9:00 AM

The tournament doubles event is open to men and women and is a combined bracket. Partners may be of the same gender or mixed.

The committee will assist players who do not have a partner for any event.

**FLIGHTING**
Championship – Advanced Players
A – Regular & Advanced Players
B – Intermediate Players
C – Non-regular players & beginners

The SPE-GCS Tennis Committee reserves the right to allocate players to a different flight if necessary.

**WHAT TO EXPECT**
Lots of tennis, meeting old friends and making new ones. Door prizes, T-shirts, awards, meals and beverages.

Friday – light dinner
Saturday – breakfast, lunch and snacks
Hit & Grab – Saturday after lunch
Award presentations, door prizes & heavy appetizers at 4PM

**RULES OF ENTRY**
The event is open to members, non-members, guests, and friends of SPE. The only restriction is that tennis professionals are not allowed.

**REGISTRATION**
Friday, October 5th 4 - 6 PM
Saturday, October 6th 8:30 – 9:00 AM

**IMPORTANT NOTICE**
All paid participants must wear their “Name Tags” during this event to have access to the food and drinks.

**ENTRY FEE INFORMATION**
$125.00 - Fee covers Tournament and Mixed Doubles for an individual player.

$50.00 for those only playing Mixed Doubles.

$25.00 – Spouse/Guest (Not Playing)

Fees are due with entry form.
Make checks payable to: SPE-GCS Tennis.
Entry Form  Entry Deadline – Friday, October 1, 2012

SPE-GCS EVENTS  29TH ANNUAL TENNIS TOURNAMENT

Name

Gender            Company

Address

City             State              Zip

Phone             Email

PLAYERS  1 ENTRY FORM PER PLAYER

Tournament Doubles  $125 per person
Mixed Doubles Only  $50 per person
Spouse/Guest/Speaker  $25 per person

Your Rank: Championship  ○ A  ○ B  ○ C
Your T-Shirt Size:  ○ M  ○ L  ○ XL  ○ XXL

SATURDAY TOURNAMENT DOUBLES
Are you playing tournament doubles?  ○ Yes  ○ No

Partner’s name:
(Partner must send in own entry form)

Partner’s Rank: Championship  ○ A  ○ B  ○ C
Do you need a partner?  ○ Yes  ○ No

FRIDAY MIXED DOUBLES
Are you playing in mixed doubles?  ○ Yes  ○ No
(Additional $50 if mixed doubles partner is not playing in tournament doubles)

Partner’s name:
(Partner must send in own entry form)

Partner’s Rank: Championship  ○ A  ○ B  ○ C

SPONSORS

Sponsors are a welcome and essential part of making this event a success. In recognition of their support, sponsors will be identified with special signage and privileges. 100% of the net proceeds raised by the tournament will be applied toward scholarships for the Society of Petroleum Engineers Gulf Coast Section College Scholarship Fund. All sponsors will have their company name on the tournament sponsor board and recognized in the tournament program according to sponsorship level.

SPONSORSHIP LEVELS

○ Platinum Sponsor  $5,000
(Entitled to register 8 tournament players)

○ Gold Sponsor  $2,500
(Entitled to register 4 tournament players)

○ Silver Sponsor  $1,500
(Entitled to register 3 tournament players)

○ Bronze Sponsor  $1,000
(Entitled to register 2 tournament players)

○ Court Sponsor  $500
(Entitled to register 1 tournament player)

METHOD OF PAYMENT

Payment:  ○ Check  ○ Visa  ○ MC  ○ AMEX  ○ DISC

Card Number
Expiration Date
(If paying with credit card you mail email entry to SPE-GCS Tennis c/o joannehresko@comcast.net)

Name as it appears on card

Name of sponsoring company  (If being sponsored)

Amount Enclosed  (Make checks payable to SPE-GCS Tennis)

Mail entry form with payment to:
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Valerie Martone
2012-2013 Communications Director

We are excited to introduce our enhanced website, www.spegcs.org. Same old address, but with a fresh new feel. Our sleek site is faster, more user friendly, easier to maintain, and more efficient and engaging. We went “live” during our kick off meeting, and we’ll continue to make improvements in the coming months regarding user permissions and the information transfer process.

For our members, event creation and registration is much easier for you to use because, after all, this is your tool! Searching/posting for jobs, discovering how to get involved, and learning what your study group or committee is planning is all right there, at your fingertips.

The simple, organized format makes it easy to navigate to what you are interested in, whether it’s trucking down a presentation you heard or learning how to advertise your company.

Sign up for the e-newsletter, become a member, or connect with other members on our social media sites like Linked In. Make this your “go to place” to connect with what is happening SPE GCS.

We’d like to thank all who were involved for making these much-needed improvements a reality. Now what are you waiting for? Check it out and mark it as a favorite!

Open Officer Positions

Are you looking to get more involved in SPE-GCS but not quite ready to make a full commitment to becoming an officer? Why not consider volunteering your time for one of the opportunities with a study group or committee? To find out more about these opportunities, please visit our website.

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Lectures 1–2 Introduction

- 5 September  From Exploration to Drilling
- 19 September  MODUs, MOPUs, Offshore Platforms, FPSOs, Pipelines, and Construction Equipment

Lectures 3–6 Oil and Water Handling

- 3 October  Facilities Orientation
- 17 October  Oilfield Process Selection and Separation
- 31 October  Treating Oil
- 14 November  Treating Produced Water

Lectures 7–9 Gas Handling

- 9 January  Hydrates
- 23 January  Gas Dehydration, Treating & Processing
- 6 February  Pumps and Compressors

Lectures 10–12 Piping and Safety

- 20 February  Design for Piping and Relief Systems
- 6 March  Design for Safety
- 20 March  Lessons from Piper Alpha and Other Disasters

Learn more and register at www.spe.org/go/intro_facilities.
Advanced Technical Ceramics for the Oil & Gas Industry

By highlighting technical ceramic materials and components on the base of silicon carbide and silicon nitride and showing properties compared with other materials, this presentation will inspire you to think about more applications in the oil and gas production technology. Case studies are presented where ceramics make the difference in performance, lifetime and lifecycle costs. The “appropriate material in the appropriate application” will lead to satisfying economical and technical solutions.

Hardness, toughness, wear resistance, corrosion resistance, costs and weight – the spectrum of modern material properties is nearly unlimited. A design engineer can select the best suited material for demanding applications.

Today, the most used materials are: steels, nickel and cobalt based alloys, non-ferrous metals, cemented carbides and all kinds of plastics. Nevertheless, there are challenges where these materials reach their limits. Technical ceramics are an ideal supplement when special properties are required.

Ceramic materials are well known to be hard and corrosion resistant, but also brittle. If the design of ceramic parts takes account of the special properties, usage of ceramic components in the oil and gas production technology will be economic and successful. Sandscreens made of PetroCeram®- silicon carbide outmatch metal filter systems when attack by erosion and corrosion is severe. Due to the stability of the material, the characteristics of the filter remain constant for an extremely long period. The special design of the ceramic filter elements prevents plugging. A sophisticated hybrid design of ceramic and metal overcomes the limited tensile strength of the ceramic material.

Another example for the high abrasion resistance of silicon carbide is the application in axial tilt bearings which operate at very high load in muddy and abrasive environments. PetroCeram® stacked bearings are armor-plated with ceramics pads making the bearing immune against wear and extending lifetime.

Dietrich Lange

Dietrich Lange is a mechanical engineer from the University of Karlsruhe. He received his Ph.D. from the nuclear research center in Karlsruhe for a thesis investigating the wear behavior of boron carbide-based materials.

In 1986, he joined ESK Ceramics GmbH & Co KG in Kempten, Bavaria, Germany. He worked in Research & Development where he built up a line for the production of high performance silicon nitride balls for antifriction bearings. He also headed the department of quality assurance. He managed several projects in the department of business development. He is an expert for non-oxide ceramic materials.

Since 2012 he has been a member of the PetroCeram® team as a product manager.
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- Frac Water Management
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The Promising Outlook for the Utica Shale

Join the Business Development Study Group at the Four Seasons Hotel for our first meeting of the new season. EnerVest’s Phil DeLozier will share his insight on the bright future for eastern Ohio’s Utica Shale as continued industry success and a receptive regulatory environment combine to create the potential for a second Eagleford. The popular format of a Business & Social Networking hour, with complimentary hors d’oeuvres and a cash bar, followed by an hour-long program, will begin at 5:00 PM in the Mezzanine.

Development of the Utica Shale, along with its side-car companion, the Point Pleasant, is transforming the oil and gas business of eastern Ohio. A crowded field of new entries and their support brokers vie for new and HBP leasehold from the Appalachians to Lake Erie. Early movers have been proceeding to test their newly acquired assets, defining the boundaries of production type (dry gas, condensate, oil), optimizing drilling and completion methodologies, and working with governmental entities to amend 40 acre rules for 10,000 foot lateral technologies. Meanwhile, established producers contemplate their options to sell out, promote, or self-develop their steady HBP holdings. While both the number of horizontal wells and the length of their production history are small, encouraging early results along with industry’s desire for high value liquids production has led to look alike comparisons to the Eagleford – where a high level of continuous development is expected for many years. What is the current level of activity and success? What are some important technical questions to be resolved? What is the outlook for future transactions? More large acreage deals? Or is industry focused on filling out drillable units? What are the important governmental and regulatory issues left to address? Will pipeline and transportation infrastructure keep pace? How will a trained local workforce keep pace with demand?

Back by popular demand, a business and social networking hour, with complimentary hors d’oeuvres and a cash bar, will begin in the Mezzanine at 5PM, followed by an hour-long program.

Phil DeLozier

Phil DeLozier is Sr. Vice President Business Development at EnerVest, Ltd. Before joining EnerVest in 2006, he served as VP – Business Development of EOG Resources, Inc. Prior to his employment with EOG Resources Phil was Manager – Business Development of Tenneco Ventures Corp., Vice President – Land & Acquisitions of McCormick Resources, Inc., and held various leadership positions at Tenneco Oil E&P Co. from 1979 to 1996. He is the Houston Regional Director and a member of the Board of Directors of the Independent Petroleum Association of America. In June 2005, he received the IPAA Leadership Award for his industry contributions.

In addition, Phil serves on the board of directors of the World Affairs Council of Houston, where he was Chairman in 2007, and the Palmer Drug Abuse Program. He also is an active member of the International Association of Petroleum Negotiators, TIPRO and the Texas Alliance of Energy Producers. Phil earned a Bachelors of Arts degree from Oklahoma State University.
The Starting Point

As engineers, we all know that stress and strain calculations must be based on a difference between initial and final condition pressures, temperatures, axial and torsion conditions. Most engineering focuses heavily on determining the final condition and assumes that we know the initial condition completely. This is not true for oil and gas wellbore design. We often make inappropriate guesses at the undisturbed earth temperature profile (UDT) from only two points (or even sometimes less!) and then assume that the UDT is the initial condition temperature. This is a dangerous and false assumption, as disasters have occurred as a result of ignoring the initial condition. Parts of the wellbore can be either over-designed (costly) or under-designed (dangerous). This talk is focused on the reasons and methods for determining accurate initial conditions and their usefulness.

Olli Coker

Mr. Coker earned a BS Chemistry from the University of Arkansas in 1974. His oilfield career began in 1980 with Phillips Petroleum as a drilling engineer in the Texas Panhandle and Permian Basin, while he also taught at Odessa College, School of Drilling Technology. After working out of Norway and the UK, he was assigned to Houston with the Conoco Wells Technology division specializing in Drilling and Computers, while returning to school and earning an MS Petroleum Engineering from Texas A&M in 2002. Within ConocoPhillips was the Global Well Technology Group, where he worked on drilling, well design, computers, managed pressure drilling, and wellbore positioning. In 2009, he retired from ConocoPhillips and went to Altus Well Experts as a consultant working in thermal analysis and stress analysis for wellbore casing and tubing design.

Event Info

SPEAKER
Olli Coker
Altus Well Experts, Inc.

LOCATION
Greenspoint Club
16925 Northchase Drive
Houston, TX 77060

MEMBERS
$35 before 9/24/12, $40 after

NON-MEMBERS
$35 before 9/24/12, $40 after

EVENT CONTACT
Jonathan Godwin
281-921-6526
Jonathan.Godwin@carboceramics.com
The Work of IPIECA

IPIECA, formed in 1974 following the launch of the United Nations Environment Program (UNEP), is the global oil and gas industry association for environmental and social issues. It is the only global association involving both the upstream and downstream oil and gas industry on these issues. Its membership covers over half the world’s oil production and it is the industry’s principal channel of communication within the UN.

Brian’s discussion will provide an overview of IPIECA and the priority topics being addressed by the organization and its members. He will also provide an overview of IPIECA’s efforts in the area of freshwater management for the oil and gas industry. IPIECA has recently launched a local water tool to support the identification of localized freshwater risks associated with oil and gas operations.

Brian Sullivan

Mr. Sullivan joined IPIECA as the Executive Secretary in 2011 following a 23-year career with BP. He graduated in Metallurgy and Materials Science from Imperial College, London, UK and was recruited into BP’s Refining and Marketing international graduate program in 1986. Over the course of 23 years, his career included assignments in London, Copenhagen, Budapest, Athens and Johannesburg, and business experience in over 60 countries. During his time with BP, he had a varied career of technical, commercial, financial and leadership roles across the downstream value chain, including crude and products trading, marine fuels, lubricants and alternative energy.
An Unbiased View of the Potential for North American Gas Exports

Before 2008, North America was on a natural gas treadmill. Available supply was being rationed, and industrial consumers were leaving our shores for jurisdictions with more economic feedstock. Now, the worm has turned. LNG regas terminals built to handle expected high levels of imported natural gas have become white elephants as shale gas production has grown to over 25 Bcf/d.

The unconventional resource base is impressive; what are the prospects for export of North American gas on a large scale? Richard Tucker will examine drivers for North American LNG liquefaction and export, including resource availability, expected supply costs and arbitrage opportunities.

Richard M. Tucker

Mr. Tucker is responsible for marketing Ziff Energy Group’s E&P Services to upstream oil & gas producers in the U.S. He has 35 years of experience, and has been with Ziff Energy Group for the last 15 years providing consulting services to the energy industry, both upstream and downstream.

Mr. Tucker graduated Summa Cum Laude with Departmental Honors in Economics from Western Maryland College (now McDaniel College), and attended graduate studies in Economics at the University of Chicago and Virginia Polytechnic Institute. He is a Charter Member of the National Energy Services Association (NESA) and a member of International Association of Energy Economists (IAEE).

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Increasing the Velocity of Decision Making for Rapid Response to Volatile System Conditions in the Oilfield

For more than a century, oilfield data and chemical application information has been measured and recorded manually, demanding large amounts of time and resources, and increasing the potential for human error. Today, the development of enhanced data communication systems makes it possible for operators to obtain field data faster, more efficiently and more precisely, improving the speed of the decision-making process during field condition changes and challenges.

In this presentation, Clariant Oil Services explains how, through an innovative, fully integrated chemical delivery data management system, service companies can assist oil and gas operators in obtaining more frequent and accurate information about their chemical usage, product spend (delivery) and tank levels, allowing for increased operating efficiency, enhanced customer service and improved budgeting procedures. Likewise, we will discuss how use of an Information Management platform enables operators to quickly track KPI’s, production data, and spot outliers important to their specific operations. Business users can trend data, while focusing on quick time-to-value.

John Gatlin

John Gatlin joined Clariant Oil Services in 2012 as Western Region Project Manager. Based in Bakersfield, California, John is responsible for Project Management responsibilities in Central and Southern California, focusing on improvements in technology, automation and telemetry. He brings to Clariant extensive experience in Project Management, Operations Management, Purchasing and Financial Analysis.

Prior to joining Clariant Oil Services, John served as Project Manager and Purchasing Manager for McJunkin Corporation within their Southern California Division. Before that, he was Operations Manager for Chambers Operating, a production company based in West Texas. John has held a number of other management positions throughout his career, including Sales Manager, Account Manager and Financial Analyst. He holds a Bachelor of Science degree in Marketing and Management from Louisiana Tech University.
Continuing Assurance Advances for Deepwater BOP Testing and Other Pressure Testing Applications

Many assurance advancements to deepwater BOP leak detection testing were introduced through an industry-sponsored development project. Through the experiences and end-user suggestions gathered over the past 2 1/2 years, the application has evolved and advanced beyond the original vision, into new areas of assurance and functionality.

Rigs now utilize a customized smart schematic of the BOP and manifold within the application. This provides the subsea engineer with the ability to optimally design each of the required tests by simply clicking to close and open; manifold valves, BOP rams, annulars, etc. As a proper test is lined up, the test path is highlighted and documented for each test. The valve coverage feature verifies that all valves are properly planned for testing.

During actual testing, the BOP-Manifold schematic will be updated at the end of each test, showing the valve coverage progress real-time. Final reports are now enhanced, with the schematic representation showing all valve states for each test, with the test path highlighted. Included in the report is the valve coverage report, showing detailed verification of complete testing.

The development has expanded beyond BOP testing, to all pressure testing requirements. Also presented will be real-time monitoring capabilities and other enhancements being planned and developed.

C. Mark Franklin, P.E.

C. Mark Franklin P.E., is the founder and President of IPT Global, LLC, an emerging technology and assurance company.

Prior to IPT Global, during his over 25-year career, he held a diverse range of engineering and leadership positions with both independent and major operators. He has worked in drilling, completions and production operations. His background spans all facets of planning and well operations, in the Gulf of Mexico, Rockies, and numerous international locations.

He is a registered Professional Engineer, with a BS in Petroleum Engineering from the University of Louisiana at Lafayette.
Life Cycle Analysis of Water Use for Unconventional Shale Oil & Gas Extraction

Presented will be a comprehensive case study using a general material balance and decline curve analysis to analyze water use requirements for both the drilling and fracturing of vertical and horizontal wells. The findings of this study reveal very interesting results of oil and gas extraction techniques compared to other energy sources. Benchmarks of efficiencies are established, as well.

Kenneth Carlson, Ph.D.

Ken Carlson is an Associate Professor in Civil and Environmental Engineering at Colorado State University with over 20 years of experience in water treatment, wastewater handling and environmental engineering. Dr. Carlson is the Co-director of the Colorado Energy Water Consortium, a public-private partnership that is addressing water issues associated with oil and gas exploration and production in Colorado and the Rocky Mountain region. Through the consortium, Dr. Carlson is working with industry, the Colorado Oil and Gas Association and the National Renewable Energy Lab on water quantity characterization and frac flowback/produced water quality assessment. Current work includes studies related to fuel source water intensity, treatment of frac fluid flowback and produced water and optimization of water handling and management. Dr. Carlson has been instrumental in organizing the Colorado State University Natural Gas Symposium in 2011 and 2012 and the Fundamentals of the Natural Gas Industry class in 2012. Dr. Carlson has a BS in chemical engineering from the University of Wisconsin, MS in Civil Engineering from Colorado State University and a Ph.D. in Environmental Engineering from the University of Colorado – Boulder. Before coming to Colorado State University, Dr. Carlson worked for over 10 years in private industry including multiple positions in the environmental consulting field.
Shale Reservoir Analysis: Methods and Case Studies

Wells in shale reservoirs are drilled and completed as multiple fractured horizontal wells, due to very low permeability. The analytical models of the wells were developed 15 years ago for oil wells in a more permeable environment. The flow regimes, including early time and compound linear flow, had been discussed in detail and it’s been observed that a unit slope line will develop when more than 20 fractures are created.

We begin our presentation by reviewing flow regimes of multiple fractured horizontal well models, and then discuss simplified SRV bounded and tri-linear models. We’ll discuss the characteristic behavior of a horizontal well model that drains a reservoir through multiple fractures, highlight significant features, and place the approximate models that are commonly used to analyze responses in the context of rigorous predictions. We’ll present the scaling method to ensure that volumes drained by approximate models are correct.

Part two of the presentation will focus on the liquid-flow analog to evaluate gas wells producing in shales. Some suggest the liquid-flow analog presented by Al-Hussainy et al. (1966) may not be adequate to evaluate the performance of gas wells in shale reservoirs. A solution in terms of the similarity transformation is presented to examine the pressure distribution in a linear reservoir filled with a real gas. The solution is intended to evaluate the early-time performance of gas wells producing through an infinite-conductivity fracture or through a horizontal well consisting of multiple, infinite-conductivity fractures. The solution is suited to evaluate the suggestion that the liquid-flow analog may not be appropriate to evaluate long linear-flow trends that are usually evident in shale wells and reexamined by considering 2D numerical solutions at a fractured well. We’ll present a method to adjust calculations to obtain estimates with reliable accuracy.

Finally, we’ll present practical issues on production analysis as well as a workflow toward reliable analysis and use an example from Haynesville to demonstrate the workflow.

Chih Chen

Chih Chen, North and South America Manager for Kappa, has over 30 years experience in well testing and model development. Prior to joining Kappa 18 years ago, he worked for Flopetrol Schlumberger and Halliburton. He has served in several SPE meeting and editorial review committees and has published several papers. He has an M.S. in Petroleum Engineering from the University of Tulsa, Oklahoma and a B.S. in Petroleum Engineering from the National Cheng-Kung University, Taiwan, as well as 25+ years experience in pressure transient analysis, reservoir simulation, production analysis, secondary/tertiary recovery, gas lift design, reservoir and production engineering.

Event Info

SPEAKER
Chih Chen
North & South America Manager
Kappa

LOCATION
Greenspoint Club
16925 Northchase Dr.
Houston, TX 77060
281-875-0191

CONTACT
Matthew Strom
281-618-7848
matthew_strom@sw.com

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How Diagnostic Fracture Injection Testing (DFIT) is Impacting our Understanding of Ultra-Tight Unconventional Reservoirs

To achieve optimal production from tight or unconventional reservoirs, it is important to determine the permeability, pore pressure and state of stress of rock strata, including the caprock and underlying intervals. Doing so will lead to properly designed hydraulic fracturing treatments, realistic predictions of well performance, and a basis for normalizing reservoir contribution when evaluating completion and stimulation effectiveness.

A time-honored way to derive the necessary reservoir information is to conduct in-situ pressure transient tests. Since it is difficult to inject fluid into or withdraw fluid from the pore network of ultra-tight rock, hydraulic fracture propagation can be used to provide the injection event. A hydraulic fracture bypasses wellbore damage and near-wellbore stress concentrations and connects wellbore to a significant portion of the reservoir layer thickness. Evaluating the pressure falloff response of small-scale hydraulic fractures enables reservoir transmissibility (kh/u) to be evaluated by a variation of the impulse testing method. As well, the minimum principal stress is derived by identifying fracture closure.

Consequently, diagnostic fracture injection testing (DFIT) has been used extensively in unconventional reservoir plays to gain insight into stress and transmissibility - yet with mixed results. The presenter will briefly outline the basic theory and implementation process of DFIT and then discuss practical considerations that strongly influence the value we derive from these tests. Examples will be used from DFIT projects in Eagle Ford, Bakken and Poland. Items to be covered may include:

• issues with horizontal wells
• advantages of vertical wells
• pay height uncertainty
• interaction with natural fracture systems
• complex fracture geometry
• leak-off mechanisms
• job sizing
• shut-in time requirements
• repeat testing
• downhole shut-in methods

Dave Cramer

Dave Cramer is an Engineering Fellow in the ConocoPhillips Global Completions Engineering group in Houston, TX. He has over 34 years of experience in designing, implementing and evaluating well stimulation treatments. Dave has authored 40 technical papers and is a co-inventor of 2 U.S. patents. His industry recognitions include the Henry Mattson Technical Achievement Award by the Denver SPE chapter in 1993 and the SPE International Completions Optimization and Technology Award in 2011. He was an SPE Distinguished Lecturer from 2003-2004 and the SPE Region Director for the U.S. and Canada Rocky Mountain region from 2004-2007. Dave is a registered Professional Engineer in the state of Colorado.
The Tech to Paycheck Equation - Petroleum Technician Responsibilities & Potential

We’ll be presenting the 2012 Petro Tech Salary Survey, taken last month, and Techs from the Houston area will speak regarding their specific role (Drilling, Production, Reservoir, Geo, Land, Regulatory, etc.).

Jessica McCormick is a Senior Engineering Tech who works with a team of four engineers and two techs to maintain data on over 50,000 wells across 30+ acquisition databases, multiple plays, and partners. Jessica has been in the Oil & Gas Industry for ten years, and served eight of those with a mid-sized E&P Operator. She has worked with the largest private fee and royalty owners in the US for the past two years. She has worked across a wide range of responsibilities and departments, including production, reserves, corporate, federal, and SEC reporting, AFE’s, drilling & completion, corporate budgeting, mapping, acquisition and divestiture reviews, and software development, and is an expert PHD user. She was a Beta tester for PHDRMS prior to its roll out to the general population, and also proficient in over two-dozen industry specific software sets.

Kiki Lickett is a Regulatory Analyst with nine years of experience in the Regulatory field, mostly in Texas, Oklahoma and New Mexico. She served in various capacities for several companies in the Houston area, from the beginning to the end of a well and has experience with commission permitting & completion processing. She has a strong ability to interact & communicate with County, State and Federal regulatory agencies and to interact, communicate and support various departments (including Engineering, Land, Geology and EH&S). She is proficient in evaluation and interpretation of permits and plats as well as interpretation and application of County, State and Federal Regulations.

Jackie Nelms is a Geo Tech with over 17 years Oil and Gas experience working for companies such as Shell, Burlington Resources, ExxonMobil and, currently, Southwestern Energy Company. She’s had various roles within the organizations, including Operations Tech, Engineering Tech, Reservoir Tech, but her most enjoyable and rewarding is that of a Geoscience Analyst. In her current role, she is able to utilize a multitude of G&G related applications and work with many disciplines to achieve team goals. She builds projects in specific geologic applications such as SMT and Petra and loads well locations, digital and raster logs, formation tops, production, etc., to assist geos in their interpretation efforts. She also assists the Land division with lease efforts by maintaining acreage position utilizing GIS.
Challenges of Heavy Oil Processing

There are a number of flow assurance and processing challenges associated with the production of heavy oil that are addressed in the early stages of development, including: sizing of separators, internal design of the vessels, the process vessel configuration and the optimum means of handling solids and water. A critical aspect of the design is the accuracy and the reliability of the fluid characterization data. Numerous operators can attest to the difficulties in processing heavy oil and many make attempts to minimize the impact of these issues in the design stage. However, there are critical factors associated with produced fluid characterization data that are often either overlooked or misinterpreted. It is the importance of this data reliability and accurate interpretation that is the subject of this presentation.

Dr. Walled Georgie

Dr. Georgie has 30+ years experience in the Oil and Gas industry, mainly in processing and separation offshore and onshore. His primary area of expertise is centered around operation trouble-shooting, de-bottlenecking, oil water separation and slugging problems, process verification, and all other fluid and gas handling issues, including fluid, production chemistry, flow assurance and integrity management. Dr. Georgie worked mainly with the service sector in the USA, UK and ME from 1979 until 1987. He then followed a career with Statoil in Norway from 1987 until 1999, mainly in daily operation and project operation support and plants troubleshooting of oil and gas facilities. Dr. Georgie then started Maxoil Solutions and has been working as a consultant since March 1999, in the areas of separation troubleshooting, operation assurance, produced water management, gas handling problems, flow assurance, system integrity and production chemistry.

Dr. Georgie has a B.S. in Chemistry, M.S. in Polymer Technology, M.S. Safety Engineering, and Ph.D in Chemical Technology. He is a member of SPE and has served on numerous committees as a technical advisor.

An Operator’s Perspective on the Bakken Shale

This presentation will focus on Marathon’s approach to determine optimum development for the Bakken Shale in North Dakota. Located in the Williston Basin in North Dakota, Montana and in the Canadian provinces of Saskatchewan and Manitoba, the Bakken Shale formation is mainly an oil play with potential that rivals the largest finds in the U.S. The presentation will address Marathon’s Bakken results, trends in completion practices, data acquisition methods and well interference issues. We’ll discuss key data and analysis used to construct reservoir models and provide insight towards Bakken recovery potential.

Russ Buettner

Russ Buettner is the Subsurface Asset Manager for Marathon’s Bakken Assets. Russ has 28 years of oilfield experience involving Reservoir Management & Characterization as well as production engineering and business development. Russ has a B.S. degree in Petroleum Engineering from Louisiana State University, an MBA from University of Houston and he has co-authored multiple technical papers.
Frac 101

This presentation will update the SPE 152596 presentation on fracturing risk and benefits with new data and advances in fracturing technology. Risk elements of over 20 potential fracturing outcomes will be discussed with occurrence, impact projections, regional variances and methods of reducing risk and increasing benefits.

George King

George King is a Registered Professional Engineer with 41 years of oil industry experience since joining Amoco Research in 1971. He has published 65 technical papers on completions, stimulation and production engineering. He holds degrees in chemistry, chemical engineering and petroleum engineering. George works with new technology and well problems in his role as Apache’s Distinguished Engineering Advisor.

Event Info

SPEAKER
George King
Distinguished Engineering Advisor, Apache

NEW LOCATION
Norris Center
9990 Richmond Avenue South
Bldg. Suite 102
Houston, TX 77042

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Please join SPE-GCS Young Professionals in their support of The Beacon, a nonprofit organization helping the poor and homeless populations of the Houston area. Serving between 500-700 people PER DAY, The Beacon provides meals, showers, and laundry services to those in need as well as providing case services that help the homeless move off the streets and be self-sufficient.

Volunteers operate more than 85% of the services of The Beacon. On September 15th, it’ll be Houston area young professionals that answer the call to service. Please come and bring friends or family. For questions or inquiries, please contact Sudiptya Banerjee at sudiptya.banerjee@bakerhughes.com.

**LOCATION**
The Beacon  
John S. Dunn Outreach Center  
1212 Prairie Street  
Houston, TX 77002  
713-590-3303

**CONTACT**
Sudiptya Banerjee  
281-460-1973  
sudiptya.banerjee@gmail.com

**Thursday, September 20**

**Young Professionals Houston Dynamo Networking Event**

**Soccer Game**

**Details**
Come join the SPE-YP for a Dynamo game at BBVA Compass Stadium!
To register visit: www.spegcs.org/en/cev/2380

**Event Contact**
Rachel Phillips  
512-944-6005  
racheldphillips@gmail.com

**Congratulations SPE-GCS YP**

On behalf of the Gulf Coast Section, I would like to thank our very own Young Professionals committee on their outstanding commitment to deliver the SPE-GCS mission to our membership. Our YP Committee has continued to distinguish themselves on a global scale, and as such, they have been selected to receive the 2012 SPE Outstanding Section YP Committee Award for Overall Excellence. This award will be presented at the ATCE in San Antonio this fall. Please join me in congratulating our YP Committee on their well-deserved recognition!

– Hiep Vu, Past Chair

**Wednesday, September 12**

**Young Professionals Tailgate Happy Hour**

The SPE-GCS YP Organization is comprised of Houston area young professionals from all areas of the energy industry. The monthly happy hours are a great opportunity to network and get involved.

**Location**
Houston Texans Grille  
City Centre  
I-10/Beltway 8

**Register**
www.spegcs.org/en/cev/2378

**Contact**
Rachel Phillips  
512-944-6005  
racheldphillips@gmail.com
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LOCATION
Space Center Houston

DETAILS
Volunteer will participate in directly presenting, interacting and educating the community in this all day STEM program. This engineering event will be targeted towards middle & high school students, teacher and parents.

CONTACT
Xuan Harris
xuan.harris@gmail.com

October 20 & 27
8:00 AM TO 6:00 PM

REBUILDING TOGETHER HOUSTON

DETAILS
Many people in our community are not able to leave their homes without assistance. Rebuilding Together Houston identifies individuals who live in homes that need assistance and helps design ramps to be installed by volunteers. SPE-GCS works closely with Rebuilding Together Houston to provide the skilled labor required in order to bring these designs into reality for a worthy homeowner. We are in need of an eager crew of 5 to 10 individuals with some carpentry skills and tools. In addition, helpers/learners are also welcome. Project timing is flexible and the task size can be adjusted to fit the crew’s skill level. Join us for a rewarding experience of building-in-place design and complete a ramp in one day. This can open up the world of one of our neighbors! Come join us! For details, please visit: http://www.rebuildingtogetherhouston.org/about_us/programs_overview.htm

Project Managers looking to earn credits towards their PMP certification are invited to volunteer for this program.

SPE Booth with interactive engineering activities: Magic Suitcase, Porosity Demonstration, etc. For additional details, please visit www.energydayfestival.org

SECRETARY

PROJECT MANAGERS

VOLUNTEER FOR THE HIGH SCHOOL GUEST LECTURE PROGRAM

Make math and science more meaningful inside the classroom by sharing your experience and opportunities in the energy industry. Westside, Milby, and the Young Women’s College Preparatory are looking for guest speakers to discuss career choices, what you do on a daily basis, and your experience with a topic taught in class.

Volunteers will visit a class this fall between September and November but sign up begins today. For more information please contact Ochiagha Victor Ananaba (OAnanaba@slb.com).
Hunting’s reputation for excellence in well construction technology is just part of the picture. From tubular goods and connection technologies to mud motors, everything we manufacture is made better by the most respected engineers in the business, and our 24/7 support, repair and testing across North America, Europe, Asia and the Middle East. Optimize your drilling investment with Hunting.

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The Gulf Coast Section holds its annual high school recruiting fairs throughout the Greater Houston Area to encourage talented young students to consider a future in the oil & gas industry. Each recruiting fair is 2-3 hours long and held at a different high school each night. At these fairs, we provide information to high school students and parents about petroleum engineering degrees, careers and SPE scholarships and internships.

We are looking for a team to lead and help organize this program. If you are interested in volunteering contact Xuan Harris.

---

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In new or mature wells, proppant flowback doesn’t have to be a problem.

Preventing proppant production in any well can be costly and pose significant disposal challenges. At the first sign of proppant production, PropStop® ABC service—featuring a water-based formulation—can make application more efficient, improve safety and help stop proppant production for the life of the well.

What’s your production enhancement challenge? For solutions, go to halliburton.com/PropStop
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September 2012

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