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SPE-GCS ANNUAL GOLF TOURNAMENT
P. 33
W ith 2016 now well under way, I would like to take stock of a few of our major initiatives for the year.

The first initiative relates to the SPE-GCS Scholarship Fund that will eventually pay out enough of an annuity to cover the SPE Gulf Coast Section scholarship donations that are made each year. Our objective is to decouple our ability to provide scholarships to deserving students from the cyclic profitability of the Section.

The fund was launched in November with an objective to raise $6 million over six years. Since then, we have raised $71,800 from seed money from the Section, individual donations, and pledges.

You will, by now, have received my mail asking for your contribution to help ensure that we continue to develop engineers to secure our energy future. I look forward to your generosity and foresight.

The Scholarship Committee recently conducted a survey of past recipients of the SPE-GCS scholarship. The stories of a representative sample of the winners over six decades are posted on the scholarship page at spegcs.org. I urge you to read these testimonials, as they are proof that the scholarship program is a remarkable success story for our Section. I also ask prospective students to note that applications for the SPE-GCS Scholarship are due February 12.

We are making excellent headway with our Members in Transition initiative launched at the end of last year. Our first MiT Seminar will be February 5 at SPE Headquarters in Houston from 8:00 AM to 1:00 PM with an agenda that includes:

- How to Start Your Own Business
- The Large Company Hiring Process
- Networking Effectively to Build Beneficial Relationships
- Discussion of Resources for SPE Members

Our MiT initiative aims to encourage both those of you who harbor an entrepreneurial spirit and those who have a technical idea that might be worth pursuing on a commercial basis.

To this end, you will have seen a call go out last month for the submission of technology ideas to the SPE-GCS Ideas Launch Pad (ILP). We are looking for a two-page technical abstract laying out the idea, the market need, and feasibility of development. A SPE-GCS ILP committee will meet every month to review the ideas submitted, one of which will be selected for further support.

We are partnering with the Houston Technology Center (houstontech.org), one of Forbes’ “10 Technology Incubators Changing the World” and “12 Business Incubators Changing the World.” The HTC is the largest technology business incubator and accelerator in Texas, advancing the commercialization of emerging technology companies in the greater Houston area. The idea selected by the SPE-GCS ILP committee will be submitted to the HTC for further consideration.

The Section will cover the application fee to the HTC and will support the presentation that will be made to the HTC Energy Advisors Council. Should the company behind the idea be selected for membership in the HTC, the Section will subsidize the first year’s membership fee. Members receive seed money of $25,000, funded by the McNair Group, as well as ongoing support from the HTC during the incubation period as further funds are sought for development and launch of the company.

On a parting note, I am pleased to advise that we have been streamlining our social media presence and have selected LinkedIn (linkedin.com/company/spe-gulf-coast-section) as a focal point. We will use this venue to convey details about upcoming events as well as information important to our membership — so, stay tuned.

All the best!

DR. IVOR ELLUL
2015 - 2016 SPE-GCS Chair

GCS ENERGY TICKER

Please visit spegcs.org for more information!
February

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BOARD OF DIRECTORS MEETING

THURSDAY, FEBRUARY 18 / 7:30 TO 10:30 AM

Location: SPE HOUSTON OFFICE
10777 Westheimer Rd, Ste 1075, Houston, TX 77042

Event Contact SHARON HARRIS
713-457-6821 / 713-779-4216 FAX / sharris@spe.org
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SPE-GCS
MEMBERSHIP REPORT EXTRA
December 2016

TOTAL SPE-GCS MEMBERSHIPS

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<th>PROF NEW</th>
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STUDENT MEMBERSHIPS

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<td>1062</td>
<td>2613</td>
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*This chart does not reflect lapsed student memberships

DON’T MISS OUT
RENEW YOUR DUES TODAY!

VOLUNTEER SPOTLIGHT

DAN MOORE

This month, SPE Gulf Coast is excited to feature Dan Moore as the Volunteer of the Month. Dan’s involvement with SPE goes back over 40 years. In 1973, Charlie Jacobs with Welex in Corpus Christi, an oilfield legend and a man he greatly respected, gave Dan an SPE application and encouraged him to get involved. Charlie was a mentor for Dan in his early career and a great proponent for SPE. Over the years, Dan has attended SPE meetings and social events. He has also served on the Drilling Study Group Committee since 1996, spending most of that time serving as the Arrangements Chair. He has enjoyed the clay shoots and golf tournaments as well.

Dan has been a Technical Sales Engineer for Electric Line Services for most of his career. He graduated from Texas A&M with a bachelor’s degree in electrical engineering and is professionally registered in Texas.

Dan believes SPE is an excellent forum for information exchange and social interaction within the oil and gas industry, both of which are essential elements for the success of companies and individuals. As a volunteer, his comfort zone is working behind the scenes, performing important tasks out of the spotlight. Serving as the Arrangements Chair has fit him well. Dan’s father told him when he was young, "If a man can’t buy your labor and sell it at a profit, he doesn’t need you.” In his life, he has taken that advice to heart and truly believes this: In your career, in your volunteering, whatever you do, be useful.

Thank you, Dan!

February, 2016
A big issue in Congress this term is the passage of the Harris bill, which, if defeated, would give the Federal Power Commission authority to regulate production of natural gas. As is often the case, it pits the consuming states against the producing states. Leading the charge in support of the bill is Senate Majority Leader Lyndon B. Johnson.

The “Golden Foot” of core analysis will be celebrated soon, as Core Lab will process its millionth foot of core, thus representing a momentous endorsement of core analysis as a basic science in the optimum development of reserves. (Interestingly, in 2016, Core Lab celebrates its 80th year of analyzing cores.)

What ever became of the promising wildcat territory known as the Palo Duro Basin? Located between the Anadarko Basin and the Permian Basin, it held much promise in the early days of seismograph prospecting. With much more advanced prospecting techniques along with the advent of hydraulic fracturing, maybe we should take another look!

C.A.T.C. Offshore Group reports plans to drill a wildcat in Grand Isle Block 45 in the Gulf of Mexico at a mind-boggling water depth of 112 ft.

East Texas crude oil - $2.90/bbl; US active rig count – 2,395

---

American and Soviet negotiators are in Washington working on the details of a five-year agreement for the US purchase of up to 10 million metric tons (74 million bbl) a year of Russian crude oil and refined products. This grain-for-oil agreement was negotiated over a bed of quicksand!

The use of a “frac van” with digital readouts and strip chart data recording gains traction in conjunction with hydraulic fracturing.

Since Americans have not given into the small economy car movement and continue to prefer the full-size family car, automobile executives report that future fuel savings will only be achieved by reducing the weight of the full-size cars, and thus petrochemical output projections call for more automotive plastics production.

A floating petrochemical plant is one step nearer, as Offshore Petroleum & Management Systems issues a letter of intent to Pullman Kellogg for a study of the economic and technical feasibility of its offshore ammonia-urea platform-rig concept for 250-ft water depths.

US active rig count – 1,653

Light sweet crude oil - $17.70/bbl; Natural gas - $2.43/MMbtu; US active rig count – 695

---

This month TR bolts the Republican Party to form the National Progressive Party with the stated intention of dissolving the unholy alliance between corrupt business and corrupt politics.

Roosevelt’s Progressive Party’s platform was so far ahead of its time on many points (Social Security and the minimum wage, for example) that it would take a generation and another Roosevelt, TR’s fifth cousin Franklin, to bring them into being. In hopes of protecting the investing public from swindlers, the Progressives called for federal regulation of stock offerings and fuller disclosure of corporate financial transactions, ideas that found their way into the creation of the Securities and Exchange Commission in 1934.

During his presidency, a time when corporations were growing ever...
larger. Roosevelt operated on the principle that the federal government was the only institution strong enough to combat their Darwinian tendency to crush competitors and maximize profits by keeping wages low and prices high. Now, in 1912, he is even more adamant about this.

The presidential campaign of 1912 pitted TR and his Progressive Party against the Republican candidate William Howard Taft and the Democratic candidate Woodrow Wilson. While Taft vacationed and Wilson gave as few speeches as possible, Roosevelt campaigned relentlessly.

TR campaigned for a commission to regulate corporations. Its members – accomplished, public-spirited leaders of business – would study a company’s affairs, require change when there were signs of monopoly, and stamp a company “approved” when all was in order. Once approved, the company could operate without fear of prosecution under the country’s confusing antitrust law. To Wilson, the corporation commission was a dangerous merger of business and government, sure to enable Big Business to regulate the regulators. Even Taft roused himself to condemn it as “the most monstrous monopoly of power in the history of the world.”

Next month, a shot rings out on the campaign trail, but TR is not deterred.

---

**THEN & NOW**

**FEBRUARY QUIZ**

In what state did the anticlinal theory of oil prospecting experience its first practical application?

**ANSWER TO JANUARY’S QUIZ**

After Spain conquered Peru in the mid-19th century, their prime interest in the oil seeps on the westernmost point of the continent was to boil down the crude oil to make pitch, which they used to caulk their ships.

**CONGRATULATIONS TO DECEMBER’S WINNER**

Guadalupe Villanueva, University of Houston Student

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

Strategy at Saudi Aramco

Saudi Aramco has made a strategic decision to substantially expand its R&D capabilities. Nine new Saudi Aramco research centers were established around the world – including three in the United States. This presentation will talk about Saudi Aramco R&D strategy and the motivation of the R&D global presence, and will focus on the R&D activities of the centers in the US.

ASHRAF AL-TAHINI

Ashraf Al-Tahini is the R&D Director at Aramco Services Company. Al-Tahini manages three research centers conducting upstream and downstream research in Houston, Boston and Detroit.

Prior to his current role, Al-Tahini was the assistant to the Vice President of Petroleum Engineering and Development at Saudi Aramco. Al-Tahini holds a PhD and an MS in petroleum engineering from the University of Oklahoma, and a BS in chemical engineering from King Fahd University of Petroleum and Minerals in Dhahran, Saudi Arabia.

Al-Tahini has received several awards, including the Rock Mechanics Award for the University of Oklahoma Mewbourne School of Petroleum and Geological Engineering (MPGE) for the years 2003 and 2006, and the 2010 SPE Young Member Outstanding Service Award. Al-Tahini was the 2011 chairperson of SPE Saudi Arabia Section and the chairperson of the 2009 Saudi Arabia SPE Section Annual Technical Symposium and Exhibition. Al-Tahini has more than 17 technical publications and three US patents.

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Ken A. Golden is a Commercial Advisor for ExxonMobil Exploration Company, with focus on portfolio analysis and optimization. His 31 years of work experience include: Senior Energy Advisor for Exxon Mobil Corporation; Strategic Advisor for Upstream Strategic Planning; Unconventional Development Advisor for XTO; and a variety of technical and supervisory roles, including assignments in Norway and the UK, deepwater project development for Angola and worldwide exploration, and extensive experience in economics, engineering and business.

He received his BS degree in petroleum engineering from Texas A&M University, and an MBA from University of Texas of the Permian Basin. Golden is a registered Professional Engineer in Texas, and has been a member of the Society of Petroleum Engineers for over 33 years.

Forecasting long-term energy trends begins with a simple fact: People need energy. Over the next few decades, population and income growth – and an unprecedented expansion of the global middle class – are expected to create new demands for energy. As people’s needs and modern technologies continue to evolve, so too will the energy landscape.

The scale and nature of this challenge is readily apparent in ExxonMobil’s Outlook for Energy: A View to 2040, a long-term global forecast of energy demand and supply trends. For example, as global economic output more than doubles by 2040, energy demand will increase about 35 percent, even with significant efficiency gains. Energy demand in the developing (non-OECD) nations will drive nearly all of the global energy demand increase.

Ongoing progress poses the dual challenge of meeting the world’s energy needs to advance living standards while managing the environmental effects of energy use. While there is no single or simple solution to this challenge, practical options to meet people’s needs for reliable, affordable energy continue to expand.

Understanding the factors that drive the world’s energy needs – and likely choices to meet those needs – is the mission of The Outlook. By sharing The Outlook, ExxonMobil hopes to broaden the understanding among individuals, businesses and governments. Energy matters to everyone, and we all play a role in shaping its future and helping advance prosperity.

Kenneth A. Golden

The Outlook for Energy: A View to 2040

November 2.9.16

12:00 PM
Stan Bond is Vice President, Developments, for Hess Corporation, a global independent energy company engaged in the exploration and production of crude oil and natural gas. In this role, Bond draws on his 30+ years of experience in the oil and gas industry to lead field developments at Hess’ assets, primarily focused in deep water.

Prior to joining Hess in February 2011, Bond served as BP’s Project General Manager, Floating Systems Program, for the company’s deepwater developments organization. While at BP, he was accountable for the engineering and execution of the Macondo capping systems. Bond has held a variety of positions at Arco Oil & Gas Company and Vastar Resources. He began his career with Gulf Oil Exploration.

Born in Pakistan, Bond holds a bachelor’s degree in petroleum engineering from Mississippi State University and is a registered Professional Engineer in the state of Texas.

Stan Bond shares his perspective on leadership based on his 30+ years in the oil and gas industry, including learning from adversity. He will draw on examples including Macondo and Thunder Horse. “Without adversity and learning, we would not be here today,” Bond contended in a keynote speech at the Subsea Tieback Forum in 2012. “We need to change our culture and not just learn from our mistakes but systematically learn how to avoid them.”

That takes a particular style of leadership — which is all the more important today. Confronted with the steep and sustained low-oil price environment, the industry requires a robust cultural transformation to navigate the current challenges, underscored by issues such as safety, reliability, and escalating cost. Bond argues that a new brand of leadership is essential to proactively innovate, collaborate, standardize and lead. Hess calls this management system and approach to leadership Lean, and is leveraging it to create a high-performance culture to meet the challenges of today and tomorrow.
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tetratec.com
The development of technology within the petroleum industry has encountered few time periods more rich than the last 15 years, as geology, geophysics and petro-physics have merged with engineering to solve the mysteries of production from unconventional resources. This talk will introduce some of these development drivers and then focus on the latest developments of fracturing and resource evaluation.

GEORGE E. KING

George E. King has over 43 years oilfield experience since starting with Amoco Production Research in 1971. His technical background includes basic research on energized fracturing, production and fracturing chemicals; acidizing; asphaltenes; perforating cleanup; well integrity; and completions in both conventional and unconventional resources. Currently, King is the Distinguished Engineering Advisor for Apache, a position he has held since 2009.

King’s technical accomplishments include 71 technical papers and a book on completions and workovers. He was Distinguished Lecturer on foam fracturing for the Society of Petroleum Engineers (SPE) during 1985-86, and a completions course lecturer on horizontal wells for the SPE Short Course series in 1999. Industry positions held include Technical Chairman of the 1992 SPE Annual Fall Meeting, past API subcommittee chair on perforating, 11 years as adjunct professor at the University of Tulsa, and numerous SPE committees on forums, paper selection committees, and applied technology workshops.
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ENGINEERING INNOVATION WORLDWIDE

PETROPHYSICS THAT PAYS OFF
Highlights from the 2015 SPE Workshop on Downhole Tools in HPHT Applications

In October 2015, SPE conducted its second Advanced Technology Workshop on downhole tools and HPHT applications. The theme was “Challenges, Opportunities, and Value in HPHT Applications.” Despite industry conditions in late 2015, attendance was strong and presentation quality was impressive. Attendee participation and feedback reflect a significant ongoing interest in advancing HPHT products, processes and technologies. This presentation will summarize the workshop content, conclusions, and some of the more significant themes that emerged from it.

DOUG LEHR

Doug Lehr is Director of Technology, Wellbore Intervention, at Baker Hughes in Houston. Lehr has 36 years of experience in the development of downhole tools for oil and gas well production and servicing applications. He has held management positions in technology and quality assurance and has worked both internationally and domestically.

Lehr has authored papers on cementing, multi-zone stimulation, and high pressure/high temperature (HPHT) tools, and has spoken extensively on HPHT topics. He has chaired and co-chaired SPE Advanced Technology Workshops on downhole tools and HPHT applications. Lehr holds numerous US and international patents and was an SPE Distinguished Lecturer in 2012-13. He holds a BS degree in mechanical engineering from the University of Texas and an MBA in finance and marketing from the University of Houston.

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Lehr has authored papers on cementing, multi-zone stimulation, and high pressure/high temperature (HPHT) tools, and has spoken extensively on HPHT topics. He has chaired and co-chaired SPE Advanced Technology Workshops on downhole tools and HPHT applications. Lehr holds numerous US and international patents and was an SPE Distinguished Lecturer in 2012-13. He holds a BS degree in mechanical engineering from the University of Texas and an MBA in finance and marketing from the University of Houston.

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Innovative Concepts and Drilling Practices Improve Hole Opening Performances in Harsh Drilling Environments

Hole opening (dual diameter drilling) continues to receive industry attention due to its numerous advantages. However, this application presents some challenges, with direct implications on drilling efficiency and operational costs that worsen in harsh environments.

This presentation will offer new discussions on hole opening efficiency, with specific emphasis on harsh environments. Factors and conditions that influence hole opening success will be identified. Solutions that challenge some of the currently held positions on BHA design, bit/reamer matching, rock failure mechanisms, drilling parameter responses and trends will be discussed. Current industry positions on reamer failure causes and interpretations, which continue to dictate their development, will also be challenged and revised.

Discussions will lead to new product concepts, BHA principles, drilling parameter relationships, and field execution practices. Global performance results, focusing on harsh environment hole opening applications, will also be presented.

GRAHAM MENSA-WILMOT

Graham Mensa-Wilmot is a Senior Advisor, Drilling Engineer in Chevron’s Energy Technology Company. He is the MAXDRILL (Performance Drilling) project leader. He has more than 28 years of experience in drilling applications research, downhole tool development, drilling vibrations identification and remediation, drilling mechanics, drilling system design and analysis, and drilling performance improvement. He has authored 42 technical papers and also holds 35 patents on the same disciplines.

Mensa-Wilmot is a recognized industry leader on performance drilling. He serves on the SPE/IADC Drilling Conference Program Committee and the SPE Drilling and Completions technical review committee. He previously served for six years on the JPT Editorial Committee as technical editor for the Bits/BHAs and Performance Drilling. Mensa-Wilmot holds an MS degree in drilling engineering from Romania’s University of Petroleum and Gas in Ploiesti.
Fast Marching Method: A New Paradigm for Modeling Unconventional Reservoirs

This talk will discuss a novel approach for rapid field-scale performance assessment of shale gas and oil reservoirs. The proposed approach is based on a high frequency asymptotic solution of the diffusivity equation in heterogeneous reservoirs and serves as a bridge between simplified analytical tools and complex numerical simulation. The high frequency solution leads to the Eikonal equation, which is solved for a “diffusive time of flight (DTOF)” using the Fast Marching Method. The DTOF generalizes the concept of depth of investigation to heterogeneous and fractured reservoirs and provides an efficient semi-analytic method to calculate drainage volume, pressure depletion, and well performance in unconventional reservoirs.

More importantly, in a manner analogous to streamline simulation, the “diffusive time of flight” can also be used as a spatial coordinate to reduce the 3-D diffusivity equation into a 1-D equation, which can be solved numerically, accounting for the relevant physics related to shale gas and oil reservoirs. The speed and versatility of our proposed method makes it ideally suited for high-resolution reservoir characterization through integration of static and dynamic data.

The major advantages of the proposed approach are its simplicity, intuitive appeal, and computational efficiency. We demonstrate the power and utility of our method using field examples.

AKHIL DATTA-GUPTA

Akhil Datta-Gupta is a Regents Professor and holder of L.F. Peterson '36 Endowed Chair in Petroleum Engineering at Texas A&M University. With a PhD in petroleum engineering from the University of Texas at Austin, Datta-Gupta is well known for his contributions to the theory and practice of streamline simulation in petroleum reservoir characterization, management, and calibration of high-resolution geologic models. Datta-Gupta received two of the top three technical awards given by the Society of Petroleum Engineers (Carl Award, 2009; Uren Award, 2003) for his contributions related to reservoir characterization and 3-D streamline simulation. Datta-Gupta was elected to the US National Academy of Engineering in 2012.
Digital Facilities Engineering – No Document Left Behind

The modern oil patch has become digital as well as physical. The deployment of a wide array of sensors, smart machines, and process control systems has created a digital version of the physical oil and gas producing platform. The current challenge — and opportunity — is what to do with all the data.

The facilities engineering, design and construction world is no different than operations and production engineering, bringing thousands, if not tens of thousands, of documents, drawings and models to the information intensity of this digital mirror world. Information from this digital ecosystem is essential to designing the right platform, constructing the facility according to specifications and regulations, and turning over to operations a plant ready to meet production and safety expectations. With current pressure on the cost of constructing a major capital project, the effective use of data could be a significant opportunity for more reliable and efficient operations.

The challenge of managing this collection of digital information begins with collection, curation and management of change. The formal turnover to operations phase may be the end of the construction team’s responsibility, but the full lifecycle of digital asset information is the more appropriate scope for an information management solution. Leaving no relevant information (or documents) behind will help to create holistic asset management solutions for these major investment projects.

JIM CROMPTON

Jim Crompton retired from Chevron in 2013 after almost 37 years with the company and moved from Houston to Colorado Springs, CO. Once there, he established Reflections Data Consulting, LLC to continue his work in data management and analytics for the exploration and production industry.

A Distinguished Lecturer for the Society of Petroleum Engineers in 2010-2011, Crompton spoke on the topic of “Putting the Focus on Data,” and he is a frequent speaker at SPE conferences on digital/intelligent energy and the data foundation.

In 2013, he co-authored with Dr. Dutch Holland a book titled The Future Belongs to the Digital Engineer focusing on emerging digital technology in oil and gas operations. In 1999, he was elected chair of the general committee of the Petroleum Industry Data Exchange (PIDX), the API electronic commerce subcommittee.

Crompton graduated from the Colorado School of Mines with a BS in geophysical engineering in 1974 and an MS in geophysics in 1976. In 1996, he earned an MBA from Our Lady of the Lake University in San Antonio, TX.
Mark Houser began serving as the Chief Executive Operator of University Lands in March 2015. University Lands represents one of the largest acreage positions held by an entity in the state of Texas. Revenues from the oil and gas leases on these lands provide funding for the University of Texas and Texas A&M systems.

Oil was discovered on the PUF lands in 1923, and royalties from oil and gas production have been a primary revenue driver at University Lands since. The shale revolution and increase in horizontal drilling of the 2000s further increased the contributions of oil and gas development, enabling University Lands’ revenue to top $1.1 billion in fiscal year 2014.

On February 24, Mark Houser, CEO of University Lands, will share the story of the PUF lands and outline his charge as its new leader. Houser will discuss what he and his team are doing to develop more efficient ways to maximize the value of this unique acreage holding in the resource-rich, multi-zoned Permian Basin.

Please join us for this informative discussion. The popular format of a business and social networking hour followed by an hour-long program including a Q&A session will begin at 5:00 PM in the Mezzanine.

**MARK HOUSER**

Mark Houser began serving as the Chief Executive Operator of University Lands in March 2015. University Lands represents one of the largest acreage positions held by an entity in the state of Texas. Revenues from the oil and gas leases on these lands provide funding for the University of Texas and Texas A&M University systems.

Prior to working at University Lands, Houser was the Executive Vice President and Chief Operating Officer of EnerVest, Ltd., an acquisition-focused, upstream oil and gas company that operates in 16 states. He was also the President and Chief Executive Officer of EV Energy Partners (EVEP), an upstream master limited partnership of which EnerVest is the general partner. Houser was with EnerVest for nearly 16 years and still serves on the Board of Directors of EVEP.

Houser holds a petroleum engineering degree from Texas A&M University and an MBA from Southern Methodist University. He serves on several boards, including Chapelwood United Methodist Church, the Houston Methodist Hospital System, the Houston Methodist Research Institute, and the Texas A&M Department of Petroleum Engineering Advisory Board.

Houser, a native of Dallas, and his wife, Lou, have four daughters. They enjoy hunting and fishing at their ranch.
WATER AND WASTE MANAGEMENT

Taking Stock of Water Management in 2016: Activity Levels, Volumetrics, Treatment Technologies, and Focus Areas for Lower Cost Water Management

This presentation will be an overview of the complexity of low-cost treatment of oil and gas water and the technical challenges involved. It will focus on a volumetric and spending review of current water management practices in oil and gas, and where those systems are strained, including sourcing, transportation, storage, treatment and disposal. The presentation will take a case study approach to assessing common treatment methods along with what works cost effectively. It will include a discussion of downturn impacts on water management programs – and changes we should anticipate between 2014 and 2015-2016.

LAURA CAPPER

CAP Resources is a Houston-based oil and gas technology consultancy that specializes in market assessment, strategy development for emerging market opportunities, technology commercialization, operations planning, due diligence / transaction support services, and aggressive growth strategies.

As president, Laura Capper brings 25 years of experience for public and private companies including integrated oil and gas companies, oilfield service companies, technology transfer offices, and private equity and venture capital firms. CAP Resources has serviced over 600 clients and contributed to the development of over $3 billion in value associated with new venture launches and mergers, acquisitions, and investment activity.

A primary focus of the firm has been matters related to unconventional exploration and production trends and practices, water management and treatment technologies, mobile field data collection and guidance systems, and environmental and waste-handling practices in the oilfield, among other areas of the firm’s specialties. Over this period, CAP Resources has authored a series of in-depth reports tracking the state of water management and investment opportunities in US and world unconventional shale plays.

SUPPORT THE SPE-GCS SCHOLARSHIP FUND
New opportunities are available this year to support SPE Gulf Coast Section.
Corporate sponsorships and individual donations benefit the SPE-GCS Scholarship program, which has awarded more than $3 million in scholarships since 1963 to local engineering students.

For Corporate Registration & Information:
specgs.org/sponsorship-opportunity/
For Individual Scholarship Donation Information:
specgs.org/specgs-scholarship-fund/
Members in Transition Initiative (MiT)

The SPE Members in Transition Seminar Series covers topics of interest to SPE members who are between jobs during the current industry downturn or who are looking for new career opportunities. The agenda for the first seminar in the series will include “How to Start Your Own Business,” “The Large Company Hiring Process,” “Networking Effectively to Build Beneficial Relationships,” and a discussion of resources for SPE members.

**PROGRAM 1: HOW TO START YOUR OWN BUSINESS**
Striking out on your own can be appealing. It's exciting and can be rewarding. This presentation will discuss things you should consider before doing so. Is entrepreneurship right for you? What questions should you ask yourself first? What are the first steps? What resources are available to help you get started?

**DR. J. ROGER HITE**
Dr. J. Roger Hite has over 40 years’ experience in petroleum engineering in a variety of areas — reservoir engineering, enhanced oil recovery, information technology, and profitability analysis — working with every discipline in the petroleum industry, from geophysics to civil engineering, both onshore and offshore. Hite is the SPE Gulf Coast North America Regional Director and is an SPE Distinguished Member.

**PROGRAM 2: THE LARGE COMPANY HIRING PROCESS**
Large companies often use similar practices in their talent acquisition process. Much of this is also relevant to small companies, but their processes will likely have more variation and not be as formalized. HR process perspectives and candidate perspectives will be compared.

**GREG FIELDS**
Greg Fields has experience in HR leadership at the local, regional and global levels, and he provides holistic solutions for the challenges facing today’s leadership. By fitting the pieces together of strategy, structure, process and people, Fields provides principle-centered strategic and tactical leadership with an engineering-based, results-driven orientation to provide solutions that deliver business value.

**PROGRAM 3: NETWORKING EFFECTIVELY 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.

**SUSAN HOWES**
Susan Howes is a recognized industry leader in petro-technical talent attraction, development and retention, and an invited speaker and published author on a variety of technical and business topics. She is a reservoir engineer, experienced project manager, process facilitator, campus recruiter, community of practice leader, and external corporate representative. Howes is the SPE Soft Skills Committee Chair and is an SPE Distinguished Member.
SPE-GCS Night at the Movies: *

**Switch** – Discover the Future of Energy

Presented by HSSE-SR and Young Professionals

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Please join SPE-GCS HSSE-SR and Young Professionals groups for an evening of networking and learning.

- 5:00 PM Social Hour
- 6:00 PM Feature Film
- 7:30 PM Panel Discussion

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**2016 Young Engineer of the Year**

Society of Petroleum Engineers - Gulf Coast Section

Chiedoze Ekweribe

“Dozie” Ekweribe is a Project Manager, Well Reliability and Optimization at Chevron Energy Technology Company. He has served as project manager for a liquid loading study for the giant Tengiz oilfield in Kazakhstan and shale well performance study for Alberta, Canada, and he leads Chevron’s Global Production Engineering Community of Practice. He also worked as a production engineer supporting Chevron’s Angola LNG project, and as a reservoir engineer for the Mad Dog field in the Gulf of Mexico. He is an expert in well performance and production optimization modeling using both steady-state and transient flow simulators.

Dozie has BS and MS degrees in chemical engineering from Gubkin Russian State University of Oil and Gas in Moscow, and a second MS in petroleum engineering from the University of Oklahoma. He serves as Chair of the SPE Gulf Coast Section’s Young Professionals Board and as a technical editor for the SPE Production and Operations Journal. He was also active in the SPE Delta Section, American Association of Blacks in Energy (AABE) and National Society of Black Engineers (NSBE).

Please join us in congratulating Dozie for being chosen as the SPE-GCS Young Engineer of the Year for 2016!
Accelerated Learning Tutorial: Fundamentals of Reservoir Simulation

This seminar will give a fast-paced overview of reservoir simulation. Attendees will come away with an understanding of basics such as why and how a model is built, the sources of data, how wells are modeled, and facets of a reservoir simulation study. The various phases (from model building through prediction) and types (single-well, sector, full-field) of models will be discussed. Time permitting, there may be some hands-on use of a simulator.

Outline: Introduction, elements of a reservoir simulation, types of reservoir simulators, coordinate geometries and model types, reservoir simulator features, well modeling overview, building the model, defining initial conditions, history matching, prediction.

Attendees will be awarded with a certificate for eight Professional Development Hours (PDH).

**Dr. J. Robert Gochnour**

J. Robert Gochnour recently retired after 40 years in technology, mostly associated with reservoir simulation technology. Gochnour was the manager of Advanced Reservoir Simulation Development and Deployment for BP Subsurface Technology in Houston. He earned his bachelor’s, master’s and doctorate degrees in petroleum and natural gas engineering from Pennsylvania State University. Gochnour has been a member of SPE since 1973 and has taught some 200 industry short courses as well as graduate petroleum engineering courses at the University of Pittsburgh, West Virginia University, and the University of Houston.

**Dr. Sheldon Gorell**

Dr. Sheldon Gorell is a senior simulation technologist with almost 30 years of experience in the oil and gas industry. His areas of expertise include geologic and reservoir modeling, characterization, simulation, uncertainty analysis, and optimization. He is experienced in management, consulting, research, development of software algorithms and interfaces, training, testing, and product commercialization. Gorell holds the position of Vice President of Technology with RPS Knowledge Reservoir. He holds MS and PhD degrees in chemical engineering from Stanford University.

**MEMBERS/NON-MEMBERS** $350

**NOTE**

A limited number of subsidized passes for this one-day tutorial will be available for students/retired professionals and professionals with no corporate support. Please e-mail Sunil Lakshminarayanan (sunil_lakshminarayanan@oxy.com) for more details.

**EVENT INFO**

**THURSDAY**

2.18.16

8:30 AM TO 4:30 PM

**SPEAKER**

Dr. J. Robert Gochnour

Retired

Dr. Sheldon Gorell

VP of Technology

RPS Knowledge Reservoir

**EVENT LOCATION**

SPE Houston Training Center

10777 Westheimer Rd, Ste 1075

Houston TX 77042
Girls Exploring Math and Science (GEMS)

SPE Gulf Coast Section will exhibit at the Girls Exploring Math and Science (GEMS) event at the Houston Museum of Natural Science on February 20, and we need representatives to volunteer. Please visit the Community Service page atspcs.org for information on pre-registering.

During the GEMS event, the museum will be filled with booths hosted by non-profits and professional organizations showcasing careers in math, science, technology and engineering. Volunteer professionals will be assigned to booths where they will interact with event participants and answer questions about careers in science, technology, engineering and math. They will also be asked to help pack up once the event concludes. Come share your career or your passion with the science and math enthusiasts of tomorrow!

FOR MORE INFORMATION

EVENT INFO
SATURDAY
2.20.16
7:30 AM TO 1:30 PM

TIMELINE
7:30 AM – 8:00 AM set-up
9:00 AM – 1:00 PM event
1:00 PM – 1:30 PM pack-up

EVENT LOCATION
Houston Museum of Natural Science
5555 Hermann Park Dr
Houston, TX 77030

EVENT CONTACT
Amy Chaisson
713-639-4746

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Volunteering at The Beacon

Please join SPE-GCS Young Professionals in their support of The Beacon, a nonprofit organization helping the poor and homeless populations of the Houston area.

Since opening in 2007, The Beacon has grown from serving 80 clients per day to serving 600-800 clients daily in four core programs: The Beacon Day Center, Cathedral Clinic at The Beacon, Brigid’s Hope at The Beacon, and Cathedral Justice Project at The Beacon. These four programs come together under one roof to provide meals, showers, laundry service, case management, medical and psychiatric care, pro bono legal services, and pastoral care.

More than 85% of the services of The Beacon are operated by volunteers. On February 21, it will be the SPE-GCS Young Professionals who answer the call to service. Please come and bring friends or family.

Please have a good breakfast before arriving in order to remain energized throughout the event, which goes beyond the typical lunch time and may involve some physical activity. You may also bring gently used or new items to donate.

Second Annual SPE-GCS Oilfield Games Scholarship Fundraiser

Help us make this second annual SPE-GCS scholarship fundraiser bigger and better by supporting the Oilfield Games as a participant or sponsor.

Oilfield Games is a half-day, interactive oilfield simulation where asset teams of up to four people will compete to maximize the recovery and profitability of a mature field while applying the principles of responsible corporate citizenship.

Participants: Individuals and teams can sign up online for $65 per member or $75 per non-member.

Sponsors: The success of the Oilfield Games hinges on the support of our sponsors. Sponsorship includes recognition in the SPE-GCS Connect Newsletter and event program, and on event signage. Sponsors are also entitled to register participants according to their sponsorship level:

• $7,500 Diamond Sponsor: 8 participants
• $5,000 Platinum Sponsor: 6 participants
• $3,500 Gold Sponsor: 4 participants
• $2,000 (2): 2 participants
• $1,000 (1): 1 participant

All of the net proceeds raised by the Oilfield Games will benefit the Society of Petroleum Engineers Gulf Coast Section Scholarship Fund.
Meet SPE-GCS Scholarship Winner,
Bryan Beresik

The Scholarship Committee recently conducted a survey of the past recipients of the SPE-GCS scholarship. If you’re considering donating to the SPE-GCS scholarship fund, writing a recommendation for a high school student for the SPE-GCS scholarship application by the February 12 deadline, or hiring an SPE-GCS scholarship winner in a summer 2016 pre-college internship, you’ll be glad to know that the program has enjoyed considerable success over the past six decades. Here’s Bryan Beresik’s story:

The SPE-GCS scholarship I received was the “foot in the door” that launched my career.

I definitely didn’t appreciate it at the time, but I look back fondly on all the early mornings and late nights struggling through homework assignments or projects with my classmates in the library and Petroleum Engineering building at Texas A&M University. Those experiences shaped me into a better engineer and better leader. After graduating in 2009, I began my career at Chevron in Houston as a production engineer. Since then, I have held positions of increasing responsibility in production operations and asset development. I currently work as project manager for Chevron’s Wolfcamp program in the Permian Basin.

The SPE-GCS scholarship I received was the “foot in the door” that launched my career. I received the scholarship with an internship after my senior year in high school, giving me a strong start at A&M, and leading to a second internship following my freshman year. Everything took off from there. I remember my dad telling me after the scholarship awards banquet, “You have the world in your hands; make the most of it!” Truer words were never spoken. My advice to students is that these scholarships afford tremendous opportunities that extend far beyond the financial value of the scholarship. Realize this and make the most of it.

Bryan Beresik is currently a Wolfcamp Project Manager for Chevron. He attended high school locally at Langham High School, graduating in 2004. He then went on to graduate with a degree in petroleum engineering from Texas A&M University. You can contact Bryan at bryanberesik@chevron.com

2016–2017 SPE-GCS Scholarships

SPE-GCS scholarships are available to students who maintain a GPA of 3.0 or higher and are majoring in petroleum engineering, geology, or a related discipline. Students not majoring in petroleum engineering or geology, but who complete an internship with a company in the oil and gas industry are also eligible.

The requirements for new applicants:
• Currently reside in Houston or 29-county Gulf Coast area (see link below for eligible counties)
• Enroll in an engineering or science program at a university in the fall
• Currently be a high school senior
• Submit a minimum SAT score of 1650 and/or ACT score
• Be a US citizen
• Completely fill out the scholarship form and turn in by deadline: 2.12.16
• Submit high school transcripts
• Submit activities, awards and honors
• Provide professional reference letters
• Demonstrate financial need (if applicable, not required)
• Submit a short essay (approx. 500 words)

For more information, application & instructions: specgs.org/committees/scholarship-internship/

NOTE: Each 2016-17 first-time scholarship recipient may be eligible for a summer internship with an oil and gas company on availability. Renewable yearly scholarship ($2,000/semester, $4,000/academic year) up to 4 years
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Starlite1@sbcglobal.net

2015 PROFESSIONAL ENGINEERING EXAM RESULTS FOR PETROLEUM ENGINEERING

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

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

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REACHING FUTURE STUDENTS

*Texas A&M University SPE Student Chapter is continuing its public outreach campaign with special emphasis on educating the public on the important role of the petroleum industry in global development. We would like to thank all the volunteers from our chapter for their selfless service and hard work.*

![Image](image1.png)

FRESHMAN SEMINARS

TAMU-SPE Recruitment Committee has hosted a series of seminars as a part of the Dwight Look College of Engineering, introducing freshmen engineering students to petroleum engineering. These seminars covered drilling and completion, petroleum project evaluation, economics, and reserve calculations.

![Image](image2.png)

COLLEGE STATION HIGH SCHOOL VISIT

The TAMU-SPE Outreach Committee spent October 29 with College Station High School students from six different classes discussing the impact of the oil and gas industry in today’s society. Discussions varied from the technology development and the environment protection by the industry, to student life at Texas A&M University and expectations of joining the industry. A special thanks to College Station High School for the invitation to visit for the day and to return next year.

HIGH SCHOOL RECRUITING

On November 18, members of the TAMU-SPE Recruitment Committee participated in an engineering fair at Memorial High School in Houston. In the two-hour event, high school students listened to a keynote presentation about the oil and gas industry and then had the opportunity to interact with petroleum departments from across the country. Thank you to SPE-GCS for organizing such a successful event.

A SPECIAL INVITATION: DVG MEMORIAL GOLF TOURNAMENT

TAMU-SPE would like to invite industry professionals to participate in the annual Douglas Von Gonten Memorial Golf Tournament. The tournament will be held April 4 at the Traditions Club in Bryan. The tournament is a four-man scramble in which two industry players and two students are paired. The proceeds of this tournament help support the DVG Memorial Scholarship Fund, which provides annual scholarship support to petroleum engineering students. Sponsorship packages are available starting at $500. For details, please contact Mason Whittington at masonwhittington12@gmail.com.

![Image](image3.png)

Student Chapter Directory

**HOUSTON COMMUNITY COLLEGE**
Raymond McCoy
rqm3rd@yahoo.com

**RICE**
Yichen Liu
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The SPE-GCS Membership Committee, led by Chair David McCalvin and Special Events Chair Faye York, hosted a networking and membership recruiting social at the Hughes Hangar on November 12. The social also highlighted Alzheimer’s Awareness Month with a presentation by Kathryn Berkson of the Alzheimer’s Association Houston & Southeast Texas Chapter about care and help available for Alzheimer’s patients and their caregivers. A door prize raffle was held, with several happy recipients. A good time was had by all!

The SPE-GCS Tennis Committee triumphs again! The 32nd Annual Society of Petroleum Engineers Gulf Coast Section Tennis Tournament was held November 5-6 at the Houston Racquet Club. The tennis was fantastic, the weather cooperated, the fellowship was fun, and we had an outstanding tournament that profited the SPE-GCS scholarship fund. The Tennis Committee leaders are (left to right): Jim Sheridan, Suzanne del Rosario-Davis, Masha Phillips, James Jackson (Chair), Erin Chang, and Gurjeet Jauhar.
On December 13, a group of 19 SPE volunteers helped serve lunch to approximately 300 people at The Beacon, a nonprofit organization helping the poor and homeless populations of the Houston area.

Our support focused on different kitchen tasks, including attending the front line, preparing food, attending drink stations, doing dishes, cleaning tables, and facilitating the process at the registration and serving lines. It was a perfect opportunity to get to know more people from our industry as well as to share the holiday spirit with colleagues and the people who need it the most. It was a wonderful experience, and volunteers expressed interest in continuing to volunteer at our events.

We have scheduled our next volunteer event at The Beacon for February 21. If you would like to join, please visit this link to learn more and RSVP: spegcs.org/events/3120/.

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**SPE-GCS DISCOUNTS**

**Houston Museum of Natural Science**

SPE-GCS members can receive 30-60% percent off the regular price on all museum tickets. These discounts include HMNS exhibit halls, the Wortham Giant Screen Theatre, Burke Baker Planetarium, the Cockrell Butterfly Center, and museum special events.

Here’s how to get your discount:
2. Enter this password (all lowercase): rock
3. Print your coupon. Only one coupon is needed per group.
4. Redeem your coupon for tickets during your visit or call 713-639-4629 for ticket info and scheduling.
On November 10, SPE-GCS YP members Danny Marquez and Leonard Johnson delivered an Energy4Me lecture at Houston Heights High School. After the presentation, students posed a range of questions on education, job roles, energy types, and much more.

The Energy4Me program educates students and the general public about energy in all of its incarnations. The program began in Houston a few years back and has evolved to include presentations, activities, videos and projects. Today, SPE collaborates with schools around Houston to catalyze the growth and reach of the program in order to impart knowledge and information about the complex workings of the energy industry.

To expand the program, we need volunteers like you! Throughout the coming months, a few sessions will be held at different schools lasting approximately one hour each. During this hour, volunteers will go into a classroom and deliver a presentation, lead an activity, or facilitate a project from the Energy4Me curriculum. The curriculum is comprehensive and has many activities to offer students in K-12 classrooms. The materials are available to anyone; all you need is the willingness to teach and transfer knowledge to the leaders of tomorrow.

For more information on the program, please visit www.energy4me.org or contact SPE-GCS YP Community Outreach Coordinator Danny Marquez (dannymarquez0@gmail.com) to find out how you can help.
43rd Annual SPE Gulf Coast Section Golf Tournament

*Monday 04.11.16*

Now in its 43rd year, the annual golf tournament is one of the SPE Gulf Coast Section’s most important fundraisers. Come out to the beautiful courses of Kingwood and Deerwood Country Clubs and enjoy a great day of golf in support of scholarships for young engineers embarking on the adventure of an oilfield career. You will also love the wonderful food provided out on the course by our fabulous oilfield cook teams!

In addition to prizes for the winners, we have flight vouchers to raffle off, and all players will receive exciting door prizes courtesy of our generous sponsors. So bring your customers out for the day and treat them to a fun experience they won’t forget!

Your support goes directly to funding valuable scholarships for many Gulf Coast Section students embarking on careers in petroleum engineering or related fields. We know how tough these times are, but we all know that we still need to attract new talent to this great industry. Every penny made by the golf tournament is invested in the drive to educate more young engineers.

Thank you for your support!

**SPONSORSHIP & REGISTRATION**
specs.org/events/3126/

**WHERE**
Kingwood Country Club
1700 Lake Kingwood
Kingwood, Texas 77339

Deerwood Country Club
1717 Forest Garden Drive
Kingwood, Texas 77345

**COST**
Varies (see website for more info)

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SCALEGUARD proppant-delivered scale inhibition

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

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

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

carboceramics.com/scaleguard  Production. Enhanced.

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