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Greetings

It is my pleasure to present the 2013-2014 Petroleum Engineering Department Annual Report. It has been a year of transition and growth for the department.

The department welcomed several new faculty members. Those hired as tenured or tenure-track faculty include Jihoon Kim as assistant professor (from Lawrence Berkeley National Laboratory), Sam Noynaert as assistant professor (Texas A&M) and Teri Reed as associate professor (from Purdue University). Non-tenure track faculty hired to help teach include Heitor Lima as professor of engineering practice (from Petrobras), and Terri Smith as lecturer (of Tech Editor, Inc.).

One of the most significant measures of faculty quality are the International awards received by the faculty. In the past 12 years, our faculty have received a total of 30 Society of Petroleum Engineers (SPE) major international awards. This is a noteworthy record of recognition of our faculty. In 2013 Tom Blasingame received the DeGolyer Distinguished Service Award (the fourth member of our faculty to win this award), Hisham Nasr-El-Din received the Distinguished Achievement Award for Petroleum Engineering Faculty, Fred Dupriest received the Drilling Engineering Award (the first of our faculty to receive this award), John Killough received the Reservoir Description and Dynamics Award (our third winner in a row), and Maria Barrufet and Mike King were named Distinguished Members.

Another measure of faculty quality is the output of scholarly research, and in this area our faculty also excel compared to their peers. Our faculty brought in $12.5 million in external research funding in 2013-2014, one of the highest per faculty in the college. Another measure of scholarly production is publication in refereed journals. During the past five years, in SPE journals alone, our faculty published 126 articles, more than any other petroleum engineering department. On a per faculty basis, our faculty’s publication output was also the highest. In light of the large enrollments of both undergraduate and graduate students, for the faculty to maintain the highest level of research is a notable achievement.

No academic program can be outstanding without outstanding students, and we are fortunate to have the best students the program has ever had. The 2013 freshman class had an average SAT score of 1,273, substantially higher than the university average, and over 90 percent of the class were automatically admitted to Texas A&M, which means they were either in the top 10 percent of their high school class, or were in the top 25 percent of their class and had an SAT score greater than 1,300. Admission to our department is extremely competitive. At the graduate level in 2013, of the 84 new Master’s and Ph.D. students, 35 were U.S. citizens, with students coming to us from such notable universities as Penn State, Princeton, Georgia Tech, Brigham Young, Johns Hopkins, Carnegie Mellon, University of Southern California, and University of Texas at Austin. As oil and gas activity continues to spread to the Northeast, top engineering students at schools that do not offer petroleum engineering are learning about our industry, and are coming to graduate school in our department to become re-branded as
The proof of the effectiveness of an engineering department is the accomplishments of its graduates, and to me, this is the measure that shows the Texas A&M petroleum engineering program stands out as the best. The success of our graduates continues to astound me as I meet more and more of them. Here are a few examples. Each year, the Center for New Ventures and Entrepreneurship designates the Aggie 100, which recognizes the 100 fastest growing Aggie-owned or Aggie-led businesses in the world. In 2013, 16 of the Aggie 100 were owned by our department’s graduates.

This department has attained its current preeminence in large part due to the generous support of our alumni. Led by our Industry Board, a group of more than 50 of our most successful graduates, alumni have given generously to the department to fund scholarships, support student activities, endow faculty positions, and purchase equipment. The department received total gifts in 2013-2014 of over $4.8 million. The total endowment for the department reached $48.3 million in hand. The incredible generosity of our alumni is what sets this department apart from all other petroleum engineering departments.
Undergraduate Program

**Ranking**

*U.S. News & World Report has ranked Texas A&M’s petroleum engineering department as the top undergraduate program among departments with a Ph.D. program (last ranked 2002).*

**Goals**

The primary goals of the program are to produce 200 highly qualified U.S. and international students each year, to place these students in entry-level industry positions or graduate programs, and to maintain our top ranking among petroleum engineering programs.

**Curriculum**

Our curriculum gives every student a solid foundation in petroleum engineering fundamentals, but we also insist on experience in the industry. As a result, our graduates will enter the industry ready to be productive contributors, but also will understand the need to continue to learn and improve their skills throughout their careers.

**Four-year Degree Program**

The four-year curriculum in petroleum engineering includes training in basic engineering sciences to prepare our graduates for the application of engineering principles to the petroleum industry. Courses in geology also give an understanding of the geological structures and conditions favorable for petroleum deposits. Other courses are also added in petroleum engineering which illustrate the application of the engineering principles to the type of problems and solution methods used in the petroleum industry.

**Undergraduate Enrollment 2013–2014**

Petroleum engineering – 812
Engineering – 9,253
Texas A&M – 42,029

**Student Quality 2013–2014**

Petroleum engineering average SAT score – 1,273
Texas A&M average SAT Score – 1,220

**Diversity**

17% Female
25% Minority

**Scholarships**

$831,745 total
540 department scholarships
16% female
23% minorities

**Bachelor Degrees Awarded**

December 2013 – 8
May 2014 – 159
August 2014 – 5
Cumulative since 1930 – 4,991
Graduate Program

Ranking
Texas A&M University has been awarding master’s and doctoral degrees in petroleum engineering for more than 60 years. The graduate program of the Harold Vance Department of Petroleum Engineering is currently ranked second in the nation, tied with Stanford University, according to U.S. News & World Report’s America’s Best Graduate Schools (last ranked 2009). We have the largest number of Ph.D. students and the largest number of Master’s students of any petroleum engineering program in the nation. We also have the leading distance-learning program in petroleum engineering with about 150 Master’s of Engineering students enrolled.

Research
Both the Master’s and Ph.D. programs offer opportunities to conduct original research, working closely with one or more members of the petroleum engineering department’s nationally recognized faculty. The Master’s of Engineering program allows accepted applicants to work on their degree from anywhere in the world through distance learning.

Graduate Enrollment – 2013-14
Petroleum engineering – 378
Engineering – 3,075
Texas A&M – 9,893

Student Quality – 2013-14
Petroleum engineering average GRE score – 1,297

Diversity
22% female graduate students
Student population from more than 44 countries

Student Funding
$208,474 in fellowships
69 fellowships awarded
28 graduate assistant teaching positions
122 graduate assistant research positions

Degrees Awarded
Dec 2013–May 2014
Ph.D. – 17
Masters – 52
Masters of Engineering – 28

Cumulative since 1950
Ph.D. – 329
Masters – 1,352
Departmental Research Budget

Research expenditures

Division of overall budget for 2013-14 ($21.6 million)

Source of research contract awards for 2013-14
Acid Stimulation Research Program

Research continued in the Acid Stimulation Research Program (ASRP), led by four faculty and conducted by a team of graduate and undergraduate student researchers. The program includes extensive experimental studies of various aspects of acidizing processes and theoretical studies that are developing improved models of acid stimulation and its effects. Research in the program includes analyses of field treatment data provided by program sponsors and experiments using core samples supplied by sponsors. The current ASRP Phase I will be completed in December 2015.

The principal investigators leading this program are Dan Hill, Hisham Nasr-El-Din, and Ding Zhu. Another faculty collaborator is Zoya Heidari. The individual projects included in ASRP are:

» Effect of Core Geometry and Treating Conditions on Wormhole Breakthrough Pore Volume in Carbonate Stimulation
» The Role of Permeability in Carbonate Matrix Acidizing
» Integrated Optimization of Carbonate Matrix Acidizing Design
» The Effect of CO₂ Solubility Limitations on Spent Acid Recovery
» Effect of Acid Additives on Carbonate Acidizing
» Influence of Seawater, Produced Waters and Other Saline Waters on Acid Reaction with Carbonate Rocks
» Impact of Hydrolysis on the Performance of VES-Based Acids
» Formation Damage Due to Iron Precipitation
» A Quantitative Application of Well Logs to Detect Zones for Acid Stimulation and to Improve Prediction of Acid Stimulation in Carbonate Formations

The current industry sponsors are: Baker Hughes, BG Group, Chevron, ConocoPhillips, Halliburton, Maersk, Pemex, Petrobras, Qatar Petroleum, Saudi Aramco, Schlumberger, and Total.
Crisman Institute

The Crisman Institute for Petroleum Research is a unique program for academia. Founded years ago with a private endowment to support research in the department, the Crisman Institute has grown to a current permanent endowment of more than $5 million, the income of which is supplemented by annual contributions from 20 sponsoring companies to yield an annual funding level of about $2 million. Industry and governmental representatives help identify problems of major significance and support projects of particular interest to them through membership in the institute. Researchers in the Crisman Institute work closely with industry to identify and solve significant hydrocarbon recovery research problems through the four research centers in the institute: the Halliburton Center for Unconventional Resources, the Chevron Center for Well Construction and Production, the Schlumberger Center for Reservoir Description and Dynamics, and the Center for Energy, Environment and Transportation Innovation.

The focus of each center is to develop technology and processes to reduce uncertainties and costs in the finding and development of petroleum resources. This is done through the construction of databases of known resources to provide analogs to new resource opportunities and by developing technologies that either diminish the costs involved in existing technology applications or that amplify the reserves per completion as a result of better technology. We address both costs and the ultimate recovery per completion where applicable in our research efforts in the institute.

The institute also strives to produce significant advances in upstream petroleum engineering technology through the combined efforts of faculty, post-doctoral researchers, and highly qualified graduate students, in close cooperation with industry. The Crisman Institute’s current major research involves improving fluid recovery and permeability to gas in shale reservoirs, developing a fracture model to predict fracture growth and fluid distribution, and developing well logging methods in organic-rich source rocks.

Since 2005, the Crisman Institute has funded a total of 240 projects of which 200 are complete. During 2013-2014 there were 24 active projects with an average of 35 Crisman-supported graduate students per semester.

Much of the research conducted through the Crisman Institute has resulted in the development of software and databases that are used by industry. An additional benefit member companies have experienced is the opportunity to become familiar with our students and their research, which has often led companies to hire them post-graduation.
Foundation CMG Chair Research

The Foundation CMG Chair in Robust Reduced Complexity Modeling (R2CM) in Reservoir Engineering, directed by Drs. Eduardo Gildin and Mike King, has been in place for almost a year. The objective of the R2CM Research Chair is to develop, test, and apply new methods of model validation (or invalidation) together with integrated dynamic reservoir monitoring and control, amenable for fast simulation, parameter estimation, uncertainty quantification, and production optimization in a variety of challenging problems. The FCMG promotes and financially supports research and development and students through research grants at universities and industry research centers. The mandate is to investigate leading edge research and innovation in oil and gas reservoir modelling.

The main goals of the A&M’s Foundation CMG Chair in Robust Reduced Complexity Modeling are to (1) examine a broad range of reservoir modeling techniques and their appropriate validation for consistent assessments of model simplifications and data assimilation for fast and accurate robust performance predictions; (2) tackle the “reduced complexity modeling” paradigm for reservoir management and optimization applications as a basis for decision support under uncertainty; and (3) formulate a structured model hierarchy that encompasses adequate comprehensive computer models for each tier, with an underlying error analysis, that can be used as a tool for assessing complex reservoir models used in the optimization under the uncertainty paradigm.

The program currently involves more than 20 researchers among graduate students (Master’s and Ph.D.) and post-docs from the petroleum engineering and mathematics department working in a variety of projects ranging from multiscale model reduction to streamline simulation for conventional and unconventional reservoirs. The seed funds provided from FCMG has allowed the hire of four students fully supported by the FCMG Chair. Among
all of the projects, we can cite: (1) the investigation of meshless model reduction techniques, such as the Capacitance Resistivity Modeling (CRM) with emphasis on control system techniques in unconventional reservoirs; (2) robust multiscale model reduction using POD-DEIM and multiscale FEM methods; (3) The value of information in intelligent wells; (4) robust upscaling for unconventional reservoirs; (5) streamline simulation and fast marching methods for conventional and unconventional reservoirs; (6) formulation of a structured model hierarchy that encompasses adequate comprehensive computer models for each tier, with an underlying error analysis, that can be used as a tool for assessing the complex reservoir model used in the optimization under the uncertainty paradigm.

Every year, Gildin and King participate in the FCMG Research Chair Summit which takes place in Calgary. The Texas A&M Chair was kicked off at the Summit 2013. The Summit involved all the Chairs worldwide and the foundation’s member companies. There were two days of intensive exchanges of ideas and planning for the future. In 2014 we took one graduate student to the Summit who presented to an audience of industry and university partners.

Global Petroleum Research Institute

Texas A&M’s Global Petroleum Research Institute (GPRI) is a cooperative effort among international operating companies to conduct critical research in the development of petroleum technology. GPRI is a unique research center within the Dwight Look College of Engineering, one of only two institutes that provide members (1) project confidentiality, (2) protection from antitrust for collaborative projects, and (3) assignment of intellectual property (IP) to members of their joint industry projects. IP issues are addressed in an umbrella “Cooperative Agreement” that eliminates much time in establishing contracts and getting projects established. Current membership includes: BP, Chevron, ConocoPhillips, ExxonMobil, Shell, and Total. GPRI is currently managing the Marine Vibrator Joint Industry project, a collaborative effort to develop alternatives to air guns for seismic exploration.

A quarter scale model of a new design for a seismic device designed to send low frequency acoustic signals for seismic measurements of oil and gas bearing formations beneath marine environments

Texas A&M Environmentally Friendly Drilling Program (EFD)

The EFD Technology Integration Program (TIP) is an integrated approach for applying new technologies in unconventional gas production. The TIP addresses
both exploration and production. Environmental impacts include: land, air, surface and ground water, emissions and societal. Technologies shall come from several sources: (a) service providers that are developing technologies (b) other Research Partnership to Secure Energy for America (RPSEA) and National Energy Technology Lab funded projects, and (c) the EFD program. The TIP works with other University and corporate programs to identify new and successfully applied technologies and identify technologies that have been developed for other industries. The GPRI team focuses on water treatment technology and conducts field trials in representative unconventional gas plays so that results could be evaluated efficiently as to benefit both the industry, the organizations with the technology, and the public sector.

Advanced Analytical Technology

The GPRI team is collaborating with GSI Environmental Inc. to conduct a comprehensive-program that identifies practical and cost-effective analytic technologies to assess environmental risks associated with shale gas development and extraction. Primary funding assistance for the program is from RPSEA while additional support and sponsorship is being sought from industry partners. A&M participating members include GPRI, the Institute for Renewable Natural Resources (IRNR), and EFD.

The goals of the project are to a) identify technologies, b) field test advanced monitoring and measurement techniques, and 3) integrate the technologies into one cost-effective program for the oil and gas industry. Three types of investigation are being addressed:

» Measurement of potential emissions of volatile air contaminants from produced water impoundments using new analytical instruments at on-site well locations;

» Use of new analytic techniques to measure the potential impacts of methane and other gases on groundwater resources, due to formation fractures or casing leaks; and

» Use of on-site, real-time analysis of produced water and frac flow back brine to allow faster and more accurate characterization of oil and gas waters associated with unconventional gas development.

One of the most vexing problems facing those who process produced water is the timely analysis of the composition of the brine, both the input feed and the output processed water planned for recycling and re-use in the field. The project aims to identify accurate and cost effective analytical technology that can provide real time results for operators.
Heavy Oil, Oil Shales, Oil Sands, and Carbonate Analysis and Recovery Methods

The Texas A&M University, Harold Vance Department of Petroleum Engineering, Heavy Oil, Oil shales, Oil sands, and Carbonate Analysis and Recovery Methods (HOCAM) is a research group focused on education and research for the recovery of unconventional oil resources with very low API gravity. The main objective of HOCAM is to find environmentally friendly and economic production solutions for challenging reservoirs including heavy oil, oil shale, oil sand, and carbonate host-rock environments.

Our ultimate goal is to educate and train engineers on finding practical solutions for the recovery of these unconventional oil resources using thermal enhanced oil recovery (thermal-EOR) methods.

We bring new insights to the thermal-EOR methods with the application of unconventional technologies such as smart well technologies and seismic monitoring to track thermal fronts. This is expected to reduce environmental footprints and minimize the production cost per barrel of oil. Our solution strategies are empowered with the interdisciplinary vision of the research team.

As the success of any thermal-EOR method highly depends on the chemical, thermal, and other physical properties of the reservoir rock and fluids, we propose to extend one-dimensional experimental studies for dynamically tracking the thermal front behavior to the more natural three-dimensional environment. Furthermore, our ability to continuously measure the chemical and physical changes in oil, water, gas, and rock allows us to understand the degree of upgrading in oil. We are also developing solutions to manage water and gas produced in the process. All this is complemented with our development of simulation plug-ins compatible with existing commercial reservoir simulators that will allow overcoming uncertainties regarding oil-field properties or the thermal recovery process itself.
Killough Simulation Projects

In this research group, Dr. John Killough and his students investigate different aspects of reservoir simulation in various scales, from advanced high-performance computing methods in gigantic reservoirs, to challenging microscale storage and flow mechanisms in ultra-low permeability shale and fractured carbonate reservoirs.

Beyond Dual-Porosity Modeling for the Simulation of Fluid Flow in Unconventional Reservoirs

In fractured shale reservoirs, hydraulic and natural fractures serve as highways for hydrocarbon flow globally while most fluid is stored in an extremely tight organic-rich matrix. In the fine scale, the stagnant matrix domain can be further subdivided into inorganic and organic porosities with significantly different attributes. Since there exist massive micro- and nano-pore systems in shale matrices, the actual flow mechanisms in shale reservoirs are considerably more complex than can be simulated by conventional Darcy flow. Those complexities make conventional dual porosity/permeability models intractable to directly simulate fractured shale reservoirs. The necessity of capturing the connectivity hierarchy and distinctive fluid storage/transport characteristics has motivated us to simulate unconventional reservoirs in a novel approach. In this micro-scale model, inorganic and organic portions of shale matrix are treated as sub-blocks. In particular, several porosity systems in the model may be tied to each other through arbitrary transmissibilities.

Simulation of Fluid Flow in Fractured Carbonate Reservoirs

Significant hydrocarbon resources exist in fractured reservoirs, such as shale gas, CBM, and vuggy carbonate reservoirs. Generally these reservoirs behave in a different manner from conventional homogeneous reservoirs: the matrix mainly provides the fluid storage with little flow capacity and the fracture acts as a highway for global fluid flow with good fluid conductivity but little porosity. Therefore, to simulate the fluid flow in such reservoirs presents a challenging and interesting problem that has been the subject of much research. In spite of the advances accomplished so far, there still remains a significant obstacle to the accurate simulation of fractured carbonate reservoirs at the reservoir and field levels. A unified theory is required to allow this transition which forms the basis of this research. This is achieved by developing different techniques for the simulation of fractured carbonate reservoirs which far-exceed current capabilities and to apply these techniques to the relevant reservoirs all over the world. The results of micro-models will be extended to field-scale
models through a unifying technique which allows the rigorous upscaling of the micro-model results.

Use of Topological Data Analysis in Reservoir Engineering

Data analysis is one of the most important topics in any industry. In petroleum engineering, the complexity of reservoir data presents a challenge for engineers to study and make decisions. A new approach to analyze complex data is called topological data analysis which aims to extract meaningful information from such data. It relies on the concept that complex data has shapes and these shapes can be translated to information. The objective of this research is to use topological data analysis in studying a variety of complex data in reservoir engineering. From seismic to real-time production data, complex data in quantity, quality, heterogeneity and non-linearity is investigated and results are found and shown.

Model Calibration and Efficient Reservoir Imaging

The Model Calibration and Efficient Reservoir Imaging (MCERI) industrial research consortium at Texas A&M University has been at the forefront of reservoir modeling, history matching, and streamline simulation technologies for well over the last decade. Much of the mathematical foundations behind modern streamline simulation have been developed in the research consortium, which is co-directed by Dr. Akhil Datta-Gupta and Dr. Michael J. King. Datta-Gupta and King co-authored the SPE textbook, *Streamline Simulation: Theory and Practice*. The research consortium continues to be one of the most active centers for the development of streamline technology and its applications to reservoir management and optimization, multi-scale data integration and history matching, upscaling/upgridding, and more recently, performance analysis and optimization of unconventional wells.

Reconciling high resolution geologic models to dynamic data such as transient pressure, tracer and multiphase production history or time-lapse seismic data is by far the most time-consuming aspect of the workflow for both geoscientists and engineers. The situation is further complicated by the rapid progress in well-construction technology and the advent of smart
wells and permanent down-hole sensors. The amount of data collected is increasingly becoming overwhelming and there is an immediate need to improve our capabilities to utilize the data in a timely and efficient manner. Furthermore, as the use of time-lapse seismic becomes more common in the industry, there is also an increasing demand for quantitative and efficient use of these data for reservoir characterization in addition to reservoir monitoring. A focus of the MCERI research consortium has been the development of novel techniques and efficient workflows for reconciling high resolution geologic models to pressures, rates, fluid production and time lapse seismic response. This includes geologically consistent regionalization and re-parameterization, identification of spatial distribution of reservoir properties, and uncertainty quantification.

How coarse is coarse and how fine is fine? This is an often asked question in reservoir simulation and modeling. We have developed novel adaptive upgridding algorithms to address this question through the design of simulation grids that optimally preserve the reservoir heterogeneity and geologic features. These techniques have been extensively applied to simulation layer design for both conventional and unconventional reservoirs.

A more recent focus of the MCERI consortium has been the development of efficient and rigorous approaches for performance analysis and optimization of unconventional wells. We have introduced novel fast marching methods for visualization of well drainage volumes in the presence of hydraulic and natural fractures. The fast marching methods can be orders of magnitude faster than conventional reservoir simulators and allow for efficient computation of pressure and rate transient response, matrix-fracture parameter estimation and optimization of well completion strategy.

Reparameterization (Image Compression) of Geologic Models via Basis Function Construction

Diffuse Source Pressure Transient Upscaling utilizes drainage volume concepts to obtain local upscaling calculations. A sequence of drainage volumes at increasing times are shown for a single coarse cell of a tight gas full field reservoir model.
A major emphasis of the MCERI research consortium has been field application and validation of the novel technologies in close collaboration with the industrial partners. The current joint industry project members are:

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<th>Aramco</th>
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Some recent MCERI publications are listed below.


Multi-Scale Formation Evaluation of Unconventional and Carbonate Reservoirs

The Multi-Scale Formation Evaluation of Unconventional and Carbonate Reservoirs joint industry research program (JIP) was established in September 2012 in the Harold Vance Department of Petroleum Engineering at Texas A&M University. This multidisciplinary research program, directed by Dr. Zoya Heidari and advised by Dr. A. Daniel Hill and Dr. Stephen Holditch, focuses on developing models based on integrated interpretation of multi-scale formation data including core measurements, well logs, borehole measurements, and seismic data. Such models provide reliable petrophysical evaluation and characterization of challenging reservoirs. Although we apply our developed methods to a variety of conventional and unconventional reservoirs, our main focus is the formation evaluation of organic shale and carbonates. Our approach includes both numerical simulations and laboratory experiments.

The long-term goals of the Texas A&M Formation Evaluation Research Group include:

» To develop methods, algorithms, and work flows in a format that can be directly and easily used in the petroleum industry to solve challenging problems in formation evaluation and reservoir characterization for unconventional and carbonate reservoirs;

» To develop innovative laboratory methods to characterize organic-shale and carbonate cores using nuclear magnetic resonance, electrical resistivity, dielectric, and other measurements; and

» To train professional petrophysicists and petroleum engineers for the future of the petroleum industry and potential scientists for academia.

The outcomes of this research program are delivered to members in the form of analytical models, algorithms, or computational methods. Members of this research program have access to all the outcomes of the projects at any time. We listen to the needs of our member companies and design the outcomes of our research for seamless usability in industry.

Each May, we host an annual consortium meeting to report the accomplished research activities and progress of our projects to our industry members. Our JIP members receive an annual report booklet, printed copies of presentation slides, and an electronic copy of both during the annual meetings or by mail by the end of May. The second research meeting was held on May 14, 2014.
We started this research program with eight projects in line with our long-term goals. This number has since increased to 23. The Texas A&M Formation Evaluation Research Group consists of Ph.D. and Master’s students of petroleum engineering at Texas A&M. We also engage undergraduate students in collaborative work with graduate students primarily in experimental projects. We have now reached 19 researchers, including three advising faculty, eight doctoral students, six master’s students, and two undergraduate students. Our student researchers develop new ideas and tangible methods and models for unsolved problems in formation evaluation, while making themselves ready for solving challenging problems in their future careers in the petroleum industry. Our first master’s student graduated in December 2013, and is now employed in industry.

The Group collaborates with faculty within the petroleum engineering department, with faculty from other departments within Texas A&M, and with scientists and engineers from other research institutes and universities with specialties in well logging, pore-scale measurements and numerical simulations, seismic interpretation and inversion, and reservoir simulation.

The current sponsors of the program include: Aramco Services Company, BP, BHP Billiton, Chevron, ConocoPhillips, and Devon Energy. Additional support is provided by the American Chemical Society, the Crisman Institute, and the Society of Petroleum Engineers.

Although we have some predefined objectives and projects, we are always flexible to define our short-term objectives according to the research needs of our JIP members. Our research priorities correspond with the suggestions we receive from our members. In addition to the projects we share with all our members, we define separate confidential projects and agreements based on specific needs of companies. One of our research collaborators in this category is Saint-Gobain Proppants in the field of completion petrophysics.
RPSEA Grants

Advanced Hydraulic Fracturing Technology

Professors Ding Zhu and Dan Hill are the principal investigators of a project involving Advanced Hydraulic Fracturing Technology for Unconventional Tight Gas Reservoirs, granted to the Department of Petroleum Engineering at Texas A&M University in 2012 by the Research Partnership to Secure Energy for America (RPSEA).

This project focuses on how the conductivity of the sedimentary rock behaves differently for different shale formations. Tight gas/oil refers to the fact that hydrocarbon located within these ultra-low permeability reservoirs is not easily extracted. The targeted formations within the scope of this research are Barnett shale, Fayetteville shale, Eagle Ford shale and Marcellus shale.

The study began with collecting rock samples from each formation and then progressed to running fracture conductivity tests and measuring rock mechanics properties. This led to developing an understanding of, and creating simple methods to, predict fracture conductivity behavior based on the rock mechanical and mineralogical properties as well as the fracturing design. Over the last two years, this research has attracted many talented students from different backgrounds to the petroleum engineering department, especially U.S. students from other disciplines. These students bring fresh ideas and strong research backgrounds with them, which greatly enhance the progress of the research project.

Over the last two years, the project funding has supported eight graduate students who came from the United States, China, Columbia and Bulgaria. These students work on the research as a team but individual-
ly target a specific aspect of it for their thesis or dissertation. In return, the project provided them a graduate degree along with hydraulic fracture knowledge, honed researching abilities, and strong teamwork skills.

The students are: Mark McGinley, bachelor’s degree in mechanical engineering, Penn State University; Kathryn Briggs, bachelor’s degree in mechanical engineering, Boston University; James Guzek, bachelor’s degree in environmental engineering, Cornell University; Junjing Zhang, master’s degree and bachelor’s degree in petroleum engineering, China Petroleum University; Timothy Jansen, bachelor’s degree in nuclear engineering, Texas A&M University; Paola Perez, bachelor’s degree in industrial engineering, Columbia; and Dante Guerra, master’s and bachelor’s degree in civil engineering, Ohio State University.

Numerical and Laboratory Investigations for Maximization of Production from Tight/Shale Oil Reservoirs

Dr. George Moridis, visiting professor, is one of the principal investigators in a joint project recently awarded $1.94 million by RPSEA. This project is a joint research venture between the Lawrence Berkeley National Laboratory (LBNL) and Texas A&M University, with Dr. Tom Blasingame being the lead Texas A&M principal investigator. The research proposal, “Numerical and Laboratory Investigations for Maximization of Production from Tight/Shale Oil Reservoirs: from Fundamental Studies to Technology Development and Evaluation,” was submitted in response to RPSEA’s request for proposals and has been selected for the funding award.

The joint project will employ the use of sub-microscopic and microscopic studies, coupled with molecular dynamics simulations and laboratory core-scale studies, to evaluate current and novel technologies of shale oil production, while developing the new pressure-volume-temperature fluid relationships that apply in the ultra-small pores of such media for inclusion into state-of-the-art simulators. It will cover the entire range of scales, from nanoscopic (nanometer scale) to reservoir scale (100’s of meters scale) flow. Tight and shale oil reservoirs fall under RPSEA’s unconventional resources program, which is an effort by RPSEA to increase the supply of domestic natural gas and other petroleum resources through reducing the cost and increasing the efficiency of exploration.
In Memoriam

Dr. Robert (Bob) Allen Wattenbarger, professor, passed away May 9, 2014, with loved ones by his side after a serious short illness.

Bob was born on July 13, 1935 in Tulsa, Oklahoma. He graduated from Tulsa Central High School in 1953, and earned a bachelor’s degree in petroleum engineering from the University of Tulsa in 1958. After graduating, he married fellow Tulsan and the love of his life, Julie Chick.

In 1959, the two moved to Colombia, South America. While there, Bob worked for Mobil Oil and the couple had their first son, Mike. In 1961, they returned to Tulsa, where Bob worked for the Oil Recovery Corporation and Sinclair Oil, and they had their second son, Chick. The couple then moved to California, where Bob earned his Ph.D. from Stanford University and began his work in petroleum reservoir modeling. In 1967, the family moved to Dallas, where Bob joined Mobil Research, developed industry’s first practical composition-al reservoir simulator, and the couple had their third son, Phil. In 1969, they moved to Denver, where Bob became Vice President of Scientific Software Corporation and helped drive the company’s leadership in reservoir simulation technology for the next decade. In 1979, the family moved to Houston, and Bob started his own engineering consulting firm. In 1983, he joined the faculty of Texas A&M as a professor in petroleum engineering, where he had the honor of teaching Aggies for over 30 years.

Bob was a naturally gifted engineer and mathematician. He loved to solve challenging problems, teach, and work with students. In addition to his pioneering work in reservoir simulation, he conducted research in a variety of areas, including natural gas engineering and well test analysis. He authored over 140 publications, numerous book chapters, and co-authored a book on Gas Reservoir Engineering. He was a member of the Society of Petroleum Engineers (SPE) for 53 years, was inducted into the SPE Legion of Honor in 2000, and received the SPE Reservoir Description and Dynamics Award in 2012. He was awarded the John E. & Deborah F. Bethancourt Professorship in 2013.

He always enjoyed the chance to spend time with family and friends. He loved to play tennis, golf, fish, and sail. In the early 1960s, he and Julie placed fourth in the Flying Junior national sailing championship. In addition to sailing his Flying Dutchman, Bob enjoyed numerous adventures with family and friends boating in the Virgin Islands and Bahamas. Bob also had a love for music that began at an early age. In college, he sang in a fraternity quartet and was a member of the University of Tulsa Choir. He was a member of the Brazos Valley Chorale and the FPC Chancel choir. Bob was past president of the Society for the Preservation of Barbershop Quartets and sang bass for the popular quartet, Sounds OK. They performed the National Anthem prior to the opening of a Texas A&M vs. Kentucky baseball game in April 2014.

Bob was a kind-natured man, a warm friend, and a loving husband and father. He will be dearly missed.
Biographies and Accolades

I. Yucel Akkutlu, associate professor, is the graduate advisor for the department. He is the current holder of the George & Joan Voneiff Career Development Professorship. Akkutlu’s research interests include phase behavior of multi-component fluids in nanoporous materials, shale gas and oil resource assessment and characterization, and CO2-enhanced shale gas and oil recovery. He is the principal contact for the Gas Hydrates Laboratory. He serves as the principal investigator for a project sponsored by Flotek Industries to research the impact of complex nanofluids on production in the emerging shale oil plays.

In April 2013, Akkutlu was inducted into the A Peer Apart program, which recognizes those dedicated individuals who have been involved in the peer review of 100 or more technical papers. Soon after, he was named the new executive editor for the SPE Journal. The Board of Regents granted him tenure on arrival in January, 2013. He was selected as the chair of the Natural Sciences and Engineering Research Council of Canada (NSERC) Materials and Chemical Engineering Committee. He received the AIME Rossiter W. Raymond Memorial Award at the Society of Petroleum Engineers Annual banquet. This award from the American Institute of Mining, Metallurgical, and Petroleum Engineers (AIME) recognizes the authors of the best paper in an AIME constituent society journal having the lead author under the age of 35. Akkutlu was also selected to be a 2014-15 SPE Distinguished Lecturer. Only 32 SPE members (or 0.04 percent) have been chosen as distinguished lecturers for the 2014-15 rotation, touring the world with a special topic to further education in petroleum research among the SPE membership. His lecture topic will be, “Atomistic Modeling and Molecular Simulation of Fluids in Nanoporous Materials with Applications in Unconventional Resources.”

Walter Ayers, visiting professor, is researching availability and suitability of brackish and saline water for fracture stimulation of the Eagle Ford Shale, South Texas. Other research interests include: conventional clastic and carbonate oil and gas reservoirs; unconventional reservoirs, including shale gas and oil, coalbed methane, tight sands gas, and heavy oil; unconventional gas resource assessments; CO2 sequestration in geologic media; clastic and coal depositional systems, and related hydrology; and industry short courses in petroleum geology and unconventional gas and oil reservoirs.

Maria A. Barrufet, professor, is the director of distance learning for the department. She is also the Baker Hughes Endowed Chair. Her research interests include evaluation of different methods to desalinate oilfield brines; unit operation aspects of evaporators, membranes, osmotic separation, heat transfer, energy and mass balance computations; enhanced oil recovery using thermodynamics and transport phenomena; multiphase flow; and rock and fluid properties. Barrufet is the principal contact for the BP Laboratory for Field Studies and the Ramey Thermal Recovery Studies and Chemical Analysis Laboratory. She is the co-principal contact for the Multiphase Flow Loop Tower Lab, which incorporates the entire height of the Richardson building.

Barrufet was named an SPE Distinguished Member in 2013. This award recognizes SPE members who
have attained eminence in the petroleum or academic community, or who have made significant service contributions to SPE. She was also selected as one of three professors to receive the Charles Crawford Distinguished Service Award.

**Thomas A. Blasingame**, professor, is the current holder of the Robert L. Whiting Professorship. He is involved in research on unconventional reservoirs, production data analysis, pressure transient data analysis, petroleum reservoir engineering, and technical mathematics.

Blasingame received the SPE DeGolyer Distinguished Service Medal in 2013. This achievement recognizes his service to the profession of engineering and geology. He is also a member of the U.S. Department of Energy Methane Hydrates Advisory Committee, the advisory committee for the U.S. Secretary of Energy, through 2015.

**David Burnett** is the director of technology for the Global Petroleum Research Institute (GPRI). In 2014, he was named an SPE Distinguished Member, an award given in recognition of his achievements for the industry. His research interests include well-completion technology, drill-in fluids for well completions, formation damage phenomena in well completions, horizontal well stimulations, and profile control technology. Burnett, also a TEES associate research scientist, is deeply concerned with the wastewater created during the drilling process and has been instrumental in the development of membrane technology to treat it. GPRI held spring and fall two-day short courses on Water/Wastewater at Texas A&M University to demonstrate water field trials and testing.

**Akhil Datta-Gupta**, Regents Professor, is the holder of the L.F. Peterson ’36 Chair. He has research interests in rapid flow simulation techniques, reservoir optimization, large-scale parameter estimation via inverse methods, and uncertainty quantification and assessments. He is involved in the joint industry project Model Calibration and Efficient Reservoir Imaging (MCERI), which develops theoretically sound but practical approaches to data assimilation and model calibration (history matching) during reservoir modeling and forecasting.

Datta-Gupta was named one of the 2014 Texas A&M University Association of Former Students Distinguished Achievement Award recipients for Research, an award given only to those professionals who exhibit the highest standards of excellence at Texas A&M. He was recently awarded a three-year grant to support the project, “Time-Lapse Seismic Monitoring and Performance Assessment of CO2 Sequestration in Hydrocarbon Reservoirs,” with funding provided by the Chemical Sciences, Geosciences and Biosciences Division, Office of Basic Energy Sciences, and Office of Science, U.S. Department of Energy (DOE).

**Fred Dupriest**, professor of engineering practice, has research interests in drilling performance workflows, drilling mechanics theory and practices, lost circulation theory and practices, stuck pipe avoidance, borehole quality management practices, and advanced well control practices. He received the 2013 SPE Drilling Engineer-
ing Award at the 2013 IADC/SPE Drilling Conference held in Amsterdam. This is an annual award recognizing an individual for contributions that have had an impact on the drilling industry and is the highest recognition for a drilling engineer in the industry.

**Eduardo Gildin**, assistant professor, is the current CJ Craft Jr. Faculty Fellow. He has research interests in reservoir modeling and optimization for the oil and gas industry using concepts from mathematical modeling using discretization of pde’s (finite difference, finite element methods, and finite volumes), systems and control theory, and model reduction of large scale dynamical systems. In particular, he is interested in closed-loop reservoir management. Gildin is the co-director for The Foundation CMG Chair in Robust Reduced Complexity Modeling (R2CM) in Reservoir Engineering.

**A. Rashid Hasan**, professor, was named the Larry A. Cress ’76 Faculty Fellow. He holds a Ph.D. in chemical engineering and has 30 years of teaching, consulting, and research experience in many areas, including wellbore heat transfers, transient transport processes, and wellbore and reservoir fluid flow. He plans to develop heat transfer models for subsea completion in deep water settings and modeling wellbore transient heat transfer to convert wellhead pressure during water injection in unconventional formations. He and Peter Valkó are currently working on modifications to the Multiphase Flow Loop Tower Lab housed within the Richardson building to further research and observe hold-up both in the section above and below the entry point of a gas-liquid mixture.

Hasan is one of the co-principal investigators who received a five-year, $5 million grant from the Bureau of Safety and Environmental Enforcement (BSEE) to manage the Ocean Energy Safety Institute. The five-year agreement will provide a forum for dialogue, shared learning and cooperative research among academia, government, industry and other non-government organizations in offshore-related technologies and activities that help ensure environmentally safe and responsible offshore operations. As a Texas A&M Engineering Experiment Station (TEES) researcher, Hasan will be partnering efforts with Texas A&M University, The University of Texas at Austin and the University of Houston to manage the institute.

**Berna Hascakir**, assistant professor, is interested in heavy oil and oil shale recovery by thermal enhanced oil recovery methods, challenging reservoirs (such as tight heavy oil reservoirs, carbonates, reservoirs with a strong aquifer, and oil shales), thermal front tracking, and the environmental impact of thermal recovery.


**Zoya Heidari**, assistant professor, is a Chevron Corporation Faculty Fellow. Her research interests include petrophysics, borehole geophysics, well logging, inverse problems, unconventional reservoirs, and rock physics.
Heidari was named one of the award recipients for the 2014 TEES Select Young Faculty Fellow. The award recognizes outstanding young faculty members who have demonstrated their talents for research. She is the principal contact for the Unconventional Rock Physics Laboratory and the co-principal contact for the Rock Mechanics Laboratory.

A. Daniel Hill, professor, is the department head and the current holder of the Noble Endowed Chair. He is a recognized expert in the areas of production engineering, specializing in carbonate acidizing, sandstone acidizing, acid fracture conductivity, and well completion performance. He is the co-principal contact for the Acid Fracture Research Laboratory, the Acid Stimulation Laboratory, the Hydraulic Fracture Conductivity Laboratory, the Matrix Acidizing Laboratory, the Rock Mechanics Laboratory, and the Wellbore Acoustic Lab.

Hill received the 2013 SPE Gulf Coast Regional Distinguished Achievement Award for Petroleum Engineering Faculty in recognition of his outstanding contributions to SPE and his dedicated service to the Gulf Coast Region.

John Jochen, senior lecturer, joined our faculty in January 2012. He is a petroleum engineer with more than 30 years of oil and gas experience, and instructs courses dealing with the application of petroleum engineering tools, methods, and techniques to solve real problems that petroleum engineers encounter while producing individual wells.

John Killough, professor, is the current Michael & Heidi Gatens Development Professor and an adjunct professor at Skolkovo Institute of Technology in Moscow. His interests include reservoir simulation and high performance computing, coupled surface and subsurface reservoir models, upscaling and multiscale reservoir simulation, contaminant transport in aquifers, and hysteresis and relative permeability. His student research group investigates different aspects of reservoir simulation in various scales, from advanced high performance computing methods in gigantic reservoirs, to challenging micro scale storage and flow mechanisms in ultra-low permeability shale and fractured carbonate reservoirs.

Killough was the recipient of the 2013 SPE Reservoir Description and Dynamics Award in recognition of his outstanding achievements in and contributions to the advancement of petroleum engineering in the area of reservoir description and dynamics. He was also awarded a grant from the Qatar National Research Fund as part of their National Priorities Research Program for his proposal “Beyond Dual-Porosity Modeling for the Simulation of Fluid Flow in Fractured Carbonate Reservoirs.” The award is for three years for a total of more than $1 million. Professor Michael Fraim at Texas A&M Qatar is the co-investigator on this research.

Jihoon Kim joined the faculty as an assistant professor in August 2014. Originally from South Korea, Kim received his Ph.D. in petroleum engineering from Stanford University prior to becoming a postdoctoral
fellow at the Lawrence Berkeley National Laboratory in California. He was a geological research scientist with the Lawrence Berkeley National Laboratory prior to joining Texas A&M University. His bachelor’s and master’s degrees are in civil, urban, and geosystem engineering from Seoul National University. His areas of research interest include coupled flow and geomechanics in hydrate, shale and tight gas, and geothermal reservoirs; hydraulic fracturing, hydro-shearing, and coupled geomechanic-geophysical modeling; reservoir simulation and computational geomechanics; and nuclear waste disposal and geological CO2 sequestration. He is an awarded reviewer, but in addition to reviewing, writing, and research, Kim is also adept at software development, especially with regards to geomechanics simulator coding and its coupling to reservoir simulators. In 2012, Kim was the recipient of the Director’s Award for Exceptional Achievement at Lawrence Berkeley Lab.

Michael King, professor, is an assistant department head (administration) and the current holder of the LeSuer Chair in Reservoir Management. His research interests include 3D reservoir modeling and characterization, upscaling of geologic models for flow simulation, and streamline-based simulation and flow analysis. He is involved (along with Dr. Datta-Gupta) in the joint industry project MCERI, which aims for a systematic, practical and efficient approach to data assimilation, continuous model calibration, and updating using dynamic data. King was named an SPE Distinguished Member in 2013. This award recognizes SPE members who have attained eminence in the petroleum or academic community, or who have made significant service contributions to SPE.

Robert H. Lane, professor, is interested in research concerning the management of excess water production during recovery of oil and gas; improved reservoir sweep of improved oil recovery (IOR) and enhanced oil recovery (EOR) drive fluid; improved well completions for optimum well and reservoir connectivity in IOR and EOR projects; the development of nanosensors for improved reservoir description and fluid sweep; the study of nanosensor interactions with reservoir rocks and fluids; the management and fate of CO2 during oil and gas production operations and CO2 sequestration; and reservoir and production chemistry.

He is the principal contact for the Rock-Fluids and IOR Lab and the Tommie E. Lohman Fluid Measurement Laboratory.

Jenn-Tai Liang, professor, joined the department in August 2014. Before joining Texas A&M University, Liang was a professor of petroleum engineering and director of Tertiary Oil Recovery Program at The University of Kansas. Prior to that, he served as a program manager in upstream oil and gas research at the US DOE Idaho National Laboratory. His main research focus is on developing promising uses of nanotechnology for oilfield applications in both conventional and unconventional reservoirs. Based on drug-delivery technologies from the pharmaceutical industry, his research group successfully developed
a chemical delivery system that uses nanoparticles to entrap and protect the chemicals from the hostile underground environments. The current oilfield applications include delayed gelation for water shutoff and in-depth conformance control, delayed release of scale inhibitors to extend the treatment life time, wax and asphaltene inhibition for flow assurance, microbial enhanced hydrocarbon recovery, and fracture fluid cleanup. He was recently selected as an SPE Distinguished Lecturer for the 2015-2016 lecturer season.

Heitor Lima, professor of engineering practice, joined our faculty in August of 2014. Lima received his Ph.D. in petroleum engineering from Texas A&M University, his master’s degree in petroleum engineering from the State University of Campinas, Brazil, and his bachelor’s degree in civil engineering from the University of Sao Paulo, Brazil. His research interests include deepwater drilling, deepwater well design, and advanced well control, and he instructs introduction to drilling systems and drilling engineering courses.

Bryan Maggard, senior lecturer, received his bachelor’s, master’s, and Ph.D. in petroleum engineering from Texas A&M University. He is involved in continuing research efforts of the Reservoir Modeling Consortium. His research interests include thermal recovery, applied reservoir simulation, and numerical methods and application of computing. Maggard served as undergraduate advisor in 2013-2014.

William D. McCain, visiting professor, was recently awarded the ConocoPhillips Non-Tenured Track Excellence in Teaching Faculty Award in 2014. He received his Ph.D. and master’s degree from the Georgia Institute of Technology and has written two editions of the textbook, *The Properties of Petroleum Fluids*, and authored and co-authored more than 45 professional articles. His research interests include reservoir engineering and management; reservoir fluid properties; reservoir rock properties; reservoir simulation, especially design of water flooding and miscible displacement; and production of volatile oils and gas condensates.

Priscilla G. McLeroy, professor of engineering practice, has research interests in portfolio management, integrated reservoir management, applied decisioning, technology commercialization, and asset optimization. She joined our faculty in the spring semester of 2012 and has more than 25 years of operating experience with global energy companies.

Duane A. McVay, professor, is assistant department head for academics. His research interests include reservoir simulation, uncertainty quantification, integrated reservoir characterization and management, project evaluation, and unconventional resources. He is the appointed associate director of the Berg-Hughes Center for Petroleum and Sedimentary Systems.
George Moridis, visiting professor, is a senior scientist in the Earth Sciences Division of the Lawrence Berkeley National Laboratory (LBNL), where he is the head of the Hydrocarbon Resource Program, is in charge of the LBNL research programs on unconventional resources (hydrates, tight/shale gas and oil), and leads the development of the new generation of LBNL simulation codes of coupled flow, thermal, geomechanical and geophysical processes. Moridis is a visiting professor in the Guangzhou Center for Gas Hydrate Research of the Chinese Academy of Sciences; he is also an adjunct professor in the Chemical Engineering Dept. at the Colorado School of Mines, and in the petroleum and natural gas engineering department of the Middle East Technical University, Ankara, Turkey. He holds a master’s degree and a Ph.D. from Texas A&M University and bachelor’s and master’s degrees in chemical engineering from the National Technical University of Athens, Greece. Moridis is the author or coauthor of over 75 papers in peer-reviewed journals, 3 book chapters, 3 patents, and more than 200 LBNL reports, paper presentations and book articles. He is on the editorial board of three scientific journals, an associate editor of four scientific journals, and a reviewer for 26 scientific publications.

Hadi Nasrabadi, assistant professor, is the Douglas Von Gonten Faculty Fellow, an endowed position given in recognition and support of his accomplishments. Nasrabadi has taught such courses as reservoir simulation, basic reservoir engineering, and reservoir petrophysics. His research interests include compositional modeling of multiphase and multicomponent fluid flow in porous media, CO2 enhanced oil recovery and sequestration, phase behavior of reservoir fluids, modeling asphaltene precipitation in porous media, and shale gas and oil recovery.

Hisham A. Nasr-El-Din is a professor and holder of the John Edgar Holt Endowed Chair in Petroleum Engineering. Previously, he worked for 15 years as principal professional and team leader of the Stimulation Research and Technology Team at Saudi Aramco, and four years as a staff research engineer with the Petroleum Recovery Institute in Calgary. He also worked as a research associate with the University of Saskatchewan, the University of Ottawa, and the University of Alberta, all in Canada. His research interests include well stimulation, formation damage, enhanced oil recovery, conformance control, interfacial properties, adsorption, rheology, cementing, drilling fluids, two-phase flow, and non-damaging fluid technologies. Nasr-El-Din has several patents and has published and presented more than 560 technical papers. He holds bachelor’s and master’s degrees from Cairo University, Egypt and a Ph.D. from the University of Saskatchewan, Canada, all in chemical engineering. He is a review chairperson for SPE Journal, and is a technical editor for SPE Production & Operations and SPE Drilling & Completions. He has been invited to give keynote presentations at various SPE and NACE conferences. He received the SPE Regional Technical Discipline Award for Production and Operations in 2006, was named a Distinguished SPE Member in 2007, and received SPE awards for Outstanding Associate Editor (SPEJ) and
Outstanding Technical Editor (SPEPO) in 2008. He has received the SPE Production and Operations Award and Outstanding Associate Editor Award (SPEJ) in 2009. He received the SPE “A Peer Apart” status in 2011 for reviewing more than 100 papers and was named the 2013 recipient of the Distinguished Achievement Award for Petroleum Engineering Faculty.

**Sam Noynaert** received his doctorate in the fall of 2013 and was hired as an assistant professor with our department beginning Sept. 1, 2013. He formerly served as a lecturer during his studies. His research interests include coiled tubing drilling, horizontal and deviated drilling, and drilling in shales.

**Teri Reed**, associate professor, is the assistant vice chancellor for engineering academic affairs. She recently served as a member of a delegation from Texas A&M University that travelled to Greece to sign research agreements with several institutions of higher education and two federal research agencies. These agreements will facilitate industry-sponsored projects between Greece and the Texas A&M Engineering Experiment Station (TEES). In addition, she spent two weeks in Uganda this summer working as a co-principal investigator on a US Agency for International Development (USAID) grant working to establish a petroleum engineering program in the country with an emphasis on the environmental management needed in the Albertine Rift area where oil and gas have been discovered.

**David Schechter**, associate professor, is the current holder of the Aghorn Energy Career Development Professorship. His research interests include the Spraberry trend area, geological and petrophysical analysis, wettability determination and imbibition experiments, numerical modeling, reservoir simulation, and CO2 flooding and gas injection. He is the principal contact for the CO2 EOR Laboratory, the Naturally Fractured Reservoir Lab, and the recently opened Chevron Petrophysical Imaging Laboratory.

**Jerome. J. Schubert** is an associate professor and has a bachelor’s and master’s degree, and a Ph.D. all in petroleum engineering from Texas A&M University. He has over 35 years of experience in the petroleum industry as a drilling engineer. He specializes in well control methods and training, deep water drilling, dual gradient drilling, underbalanced drilling, managed pressure drilling, Extreme High Temperature/High Pressure Rheology, Cementing, XHPHT Gas Kicks, and well abandonment. His teaching duties include Drilling Engineering, Advanced Drilling Engineering at the undergraduate level. His graduate courses include Underbalanced and Managed Pressure Drilling, Drilling Engineering, Offshore Drilling, and Advanced Well Control. His research interests include Deepwater Drilling, Well Control, Dual Gradient Drilling, Underbalanced Drilling5, Managed Pressure Drilling, Risk assessment of Drilling systems, XHPHT mud rheology and cementing, and well abandonment. His research has resulted in three patents in dual gradient drilling, over 75 conference and journal publications, and two textbooks.
Schubert is a registered professional engineer and has received several awards including holder of the W.F. and Marilyn Albers Faculty Fellowship, 2013 TIPRO Texas Top Producers award as one of the top fifteen Best Engineers in the State of Texas, and SPE Distinguished Member.

Cathy Sliva, senior lecturer, joined our faculty in January 2013 to team-teach PETE 403. She works in industry and has more than 30 years of industrial experience.

Glenn Sliva, senior lecturer, joined our faculty in January 2013 to team-teach PETE 403. He has over 30 years of industrial experience and continues to work in industry.

Terri Smith, lecturer, has a master’s degree in English from California State University and a bachelor’s degree in English from Texas A&M University. She is interested in technical writing and editing and teaches our petroleum engineering students these skills.

Peter Valkó, professor, is the current holder of the Robert Whiting Chair in Petroleum Engineering. His research interests include performance of stimulated wells, design and analysis of hydraulic fracturing treatments, and numerical inversion of the Laplace transform. He is the co-principal contact for the Multiphase Flow Loop Tower Lab, which incorporates the entire height of the Richardson building, and is working with Dr. Rashid Hasan on modifications to it.

George Voneiff is a professor of engineering practice. His research interests involve unconventional gas, petroleum economics, and statistical analysis of petroleum reserves. He is one of the newest inductees into the department’s Academy of Distinguished Graduates.

Ding Zhu was promoted to professor on Sept. 1, 2013, and is the current holder of the L.F. Peterson ’36 Professorship. She has conducted and supervised research projects in production optimization, well stimulation, horizontal well application and intelligent completions. She has been a principle investigator for several RPSEA funded projects in unconventional resource fracture conductivity study and using downhole sensing technology to diagnose flow and fracture performance, and she is a co-principle investigator for ASRP (Acid Stimulation research Program) and Acid Fracturing JIP. She received an SPE Distinguished Achievement Award for Petroleum Engineering Faculty in 2010, and SPE Distinguished Lecture for 2011-2012. She is the co-principal contact for the Acid Fracture Research Laboratory, the Acid Stimulation Laboratory, the Hydraulic Fracture Conductivity Laboratory, the Matrix Acidizing Laboratory, the Rock Mechanics Laboratory, and the Wellbore Acoustic Lab.
Joevan Beladi  
Technical Assistant II

Kathy Beladi  
Senior Administrative Coordinator

Beladi was elected an executive officer to the University Staff Council. She serves the council as secretary until August 2015. The council serves as an official body to represent staff concerns to the university administration and makes recommendations on various issues relating to both classified and non-classified staff. It reports directly to the president of the university.

Phaedra Hopcus  
Senior Program Specialist I

Hopcus was selected as one of only seven staff members in the College of Engineering to receive the 2014 Engineering Staff Excellence Award. Her achievement is based upon her outstanding service contribution to the department, her willingness to go the extra mile, and for standing out as an excellent achiever. She was also elected to the Engineering Staff Advisory Council (ESAC). ESAC seeks to engage and empower engineering staff members, enhance their work environment, and build a sense of community within the college. She is the committee chair for development of the Annual Engineering Staff Workshop.

Don Conlee  
Senior Research Technician

Jason Demshar  
Senior IT Manager

Mary Lu Epps  
Senior Information Specialist II

Laura Hall  
Program Coordinator

Gail Krueger  
Senior Administrative Coordinator

Krueger was promoted to Senior Administrative Coordinator in September 2013. She has been with the department over 25 years and has served the undergraduate program with distinction, having won the 2012-13 President’s Meritorious Service Award.

Nancy Luedke  
Communications Coordinator

John Maldonado, Sr.  
Facilities Manager
Tim Meekma
Business Coordinator III
Meekma was promoted to Business Coordinator III in September 2013. He has been with the department eight years.

Barbi Miller
Lead Office Assistant

Carol Mumford
Senior Academic Advisor
Mumford was promoted to Senior Academic Advisor in 2014. She has been with the department for five years and has been an integral part of our undergraduate program the past several years.

Frank Platt
TEES Research Engineer

Betty Robbins
Administrative Coordinator

Eleanor Schuler
Senior Administrative Coordinator

Rudy Schultz, Jr.
Business Administrator II

Ted Seidel
Manager Distance Learning
Seidel was appointed to the new position of manager of distance learning in 2014 and has been instrumental in the continued advancement of the technology the department uses to offer classes by distance learning. He was elected to ESAC and serves the council as the vice-chairman.

Carl Vavra
TEES Assistant Research Scientist

Stuart White
Information Technology Professional I

Jessica Wilson
Program Assistant

John Winkler
Business Coordinator III
Winkler was promoted to Business Coordinator III in September 2013. He has been with the department for eight years.
Aggie 100 Winners in Oil- and Gas-related Businesses

Each year, the Aggie 100 identifies, recognizes, and celebrates the 100 fastest growing Aggie-owned or Aggie-led businesses in the world. The Aggie 100 not only celebrates their success, it also provides a forum to pass on lessons to the next generation of Aggie entrepreneurs.

Sixteen petroleum engineering individuals or companies made the list in 2013:

2. Team Trident – Houston, Texas
   Rod Long ’82, President, Owner, Founder
   Rick Restivo ’91, Vice President, Owner, Founder

4. Navidad Resources, LLC. – Tyler, Texas
   Harold E. McGowen III ’82, President and CEO, Founder

8. Tolteq – Cedar Park, Texas
   Paul Deere ’92, President, Owner

23. 3-C Valve & Equipment, LP – Corpus Christi, Texas
   Layne J. Smith ’81, President, Owner, Founder

27. LCM Industries, Inc. – Odessa, Texas
   Tommy Crume ’96, President, Owner, Founder

41. Texas Pride Fuels, Ltd. – Springtown, Texas
   Dan Haile ’96, Executive Vice-President, Founder

45. Wildhorse Resources, LLC. – Houston, Texas
   Jay Graham ’92, President, Founder
   Anthony Bahr ’91, CEO, Founder

49. LINN Energy, LLC. – Houston, Texas
   Mark E. Ellis ’79, Chairman, President and CEO

57. AXYS Industrial Solutions, Inc. – Houston, Texas
   Brian Lamb ’91, President and CEO, Owner, Founder
   Chris May ’91, COO and Partner

60. Energy XXI – Houston, Texas
   John D. Schiller, Jr. ’81, Chairman, CEO, Founder

67. Monico Monitoring, Inc. – Spring, Texas
   Doyle Taylor ’82, President and CEO, Owner
   Karen Taylor ’84, Vice President, Owner

72. CIMA Energy, LTD. – Houston, Texas
   Thomas K. Edwards ’88, President, Owner, Founder
   Michael D. Rupe ’93, CFO, Owner, Founder

76. Laredo Energy – Houston, Texas
   Glenn D. Hart ’78, CEO, Founder
   Jerry Holditch ’79, Executive Vice President, Owner, Founder
   Scott Stevenson ’84, Vice President, Owner, Founder

77. Houston Offshore Engineering – Houston, Texas
   Philip Poll ’88, Manager of Projects, Owner, Founder
   Ngok Lai ’72, Manager of Operations, Owner, Founder
   Jun Zou ’97, Manager of Naval Architecture, Owner, Founder

84. Tex-Star Water Services, LLC. – Irving, Texas
   Grant Swartzwelder ’85, President, Owner, Founder

90. EV Energy Partners LP. – Houston, Texas
   Mark Houser ’83, President and CEO, Founder
Industry Board

The Petroleum Engineering Industry Board promotes the continuous improvement of the Harold Vance Department of Petroleum Engineering at Texas A&M University. Members serve on committees focusing on the undergraduate program, the graduate and research programs, outreach programs, former student programs, and development. Its members are nominated from a variety of sources and selected by the department head to serve three-year terms. The Industry Board holds formal meetings twice a year.

Current members:

Kathy Beladi (Secretary) – Harold Vance Department of Petroleum Engineering
Greg Bird ’82 (Co-Chair) – Jetta Operating Co., Inc.
Elizabeth J. Cantrell ’96 – Kerns Petroleum Inc.
Clay Carrell ’88 – EP Energy
Jeff Coburn ’82 – Direct Sales, Halliburton
Robert Coffman ’81 – ConocoPhillips
Andrew Coleman ’94 – Raymond James & Assoc.
J. Ross Craft ’80 – Approach Resources Inc.
William Deupree ’83 – Escondido Resources II, LLC
Derek Dictson ’00 – Engineering Development Office
David Dunlap ’83 – Superior Energy Services
David Dunton ’85 – Alpine Gas Company
Jeff Elkin ’80 – Empasa Energy
Mark Ellis ’79 – Linn Energy LLC.
Tim Friesenhahn ’86 – XTO Energy Inc.
Erin Gage – Engineering Development Office
Terry Gerhart ’84 – Noble Energy
Bill Gillespie ’80 – Marathon Oil Corp.
Frosty Gilliam, Jr. ’80 – Aghorn Energy, Inc.
Dan Hill ’74 (Ex-Officio Member) – Harold Vance Department of Petroleum Engineering
John H Hollowell ’79 – Shell Energy Resources Co.
Jeff Honeck ’82 – Estancia Oil & Gas LLC
Steve Horn ’79 – CRS Proppants, LLC
Mark Houser ’83 (Co-Chair) – EnerVest, Ltd.
Ramona Hovey ’89 – DrillingInfo, Inc.
Peter D. Huddleston ’80 – Huddleston & Co., Inc.
A. Carl Isaac ’87 – Crimson Exploration Inc.
Janeen Judah ’81 – Chevron Africa and Latin America E&P
Karl Kurz ’83 – Independent Investor
Ted Lafferty ’92 – Schlumberger
Trent Latshaw ’75 – Latshaw Drilling & Exploration Co.
Jeff Lehrmann ’86 – Chevron Canada Resources
Richard Lonquist ’87 – Lonquist & Co.
Donald Lovingfoss ’87 – Lovingfoss Energy
Jeffrey W. Miller ’85 – Vortus Investments
Stephen Miller ’79 – Crescent Consulting, LLC.
Rick Moncrief ’81 – Caiman Energy, LLC
Richard Morrison ’80 – BP America
Gene Narahara ’81 – Chevron Energy Technology
Karen Olson ’87 – Southwestern Energy
Douglas B. Otten ’65 – Nexen Petroleum USA Inc.
Jennifer Palko ’95 – Athlon Energy
Terry Rathert ’75 – Newfield Exploration Company
Lance Robertson – Marathon Oil Corp
Mark Rubin ’81 – Society of Petroleum Engineers
John D. Schiller, Jr. ’81 – Energy XXI
Ken Sheffield ’82 – Pioneer Natural Resources
Catherine Sliva ’80 (Vice Chair) – BlueRock Energy Capital
Pat Smith ’81 – Headington Energy Partners, LLC
Mike W. Taylor ’74 – Lone Star Land & Energy II, LLC
George Voneiff ’83 – Unconventional Gas Resources
Joe Wright ’82 – COG Operating LLC
Clifford Zwahlen ’87 – Concho Resources
Endowments

There were 90 new gifts made or pledged in 2013-2014, totalling more than $4.8 million. Our thanks go out to all the generous donors who make our program the best-supported petroleum engineering department in the country.

Brenda Bridges and Dr. Bill McCain Scholarship

Rhonda and Frosty Gilliam, Jr. ’80 have established the Brenda Bridges and Dr. Bill McCain Scholarship in Petroleum Engineering. This gift was given to honor McCain for excellence as both a teacher and mentor in the Harold Vance Department of Petroleum Engineering, and to recognize his wife, Brenda, for her support of her husband. Distributions from this endowment will be used to provide scholarships to students pursuing a degree in petroleum engineering.

The Gilliams have been active supporters of the Dwight Look College of Engineering and Texas A&M University for more than 25 years, including contributions to various athletics projects and the Association of Former Students. They have also endowed a professorship and two other scholarships in petroleum engineering.

Margaret and Ed Cadena ’42 Family Scholarship

Siblings Kim and Ed Cadena recently endowed a $25,000 scholarship in honor of their parents Margaret and Ed Cadena. The Margaret and Ed Cadena ’42 Family Scholarship will be awarded to undergraduate students pursuing a degree in the Harold Vance Department of Petroleum Engineering.

Libby and Terry R. Gerhart ’84 Scholarship

Libby and Terry Gerhart have contributed $60,000 to establish a scholarship focusing on undergraduate students pursuing a degree in the Harold Vance Department of Petroleum Engineering.

The Libby and Terry R. Gerhart ’84 Scholarship was established to provide one or more scholarships to full time, in-state students who are also members of the student chapter of the Society of Petroleum Engineers. This endowment is part of the department’s Nelson Scholars Program and will be awarded in accordance with Texas A&M University’s scholarship criteria.

Loren Helmreich Memorial Scholarship

This scholarship was created in memory of Loren Helmreich by Andrew S. Helmreich ’05 and his family, and friends of the family.

Steven A. Holditch ’69 Department Head Chair in Petroleum Engineering

This chair was created in honor of former petroleum engineering department head Stephen A. Holditch, in order to recruit and retain future department heads and provide funding for key faculty. Donors from 2013-14 include:

- Circle-S Oil & Gas Company, L.P.
- Mr. Anthony C. Isaac ’87
- Mr. Glenn D. Hart ’78
- Mr. J. Ross Craft ’80
- Mr. Kim L. Eubanks ’79
- Mr. Richard D. Moncrief ’81
- Mr. Richard R. Lonquist ’87
- Mr. Ted H. Smith, Jr. ’75
- Mr. William E. Deupree ’83
- Schlumberger
- Summit Petroleum LLC
**Ted H. Smith, Jr. ’75 and Max R. Vordenbaum ’73**

**DVG Developmental Professorship**

Ted H. Smith, Jr. ’75 and Max R. Vordenbaum ’73 have established a DVG Developmental Professorship in petroleum engineering. Smith and Vordenbaum, who work for Stephens Engineering, are registered professional engineers who graduated from Texas A&M with degrees in petroleum engineering.

**The Texas Oilman Scholarship in memory of Raymond Stallcup**

The Jetta Operating Company, Inc. created this scholarship in memory of Raymond Stallcup, one of its longtime and loyal contractors.

**William “Doug” Von Gonten ’56 Excellence Fund for Faculty Enrichment**

Catherine and Kenneth Sheffield, Jr. ’82 were the first donors to the new William “Doug” Von Gonten ’56 Excellence Fund for Faculty Enrichment. It is a pooled fund, with the funding available to be used at the discretion of the department head to reward and recruit talented faculty members who embody the same passion for and commitment to petroleum engineering education for which Dr. Von Gonten was well-known.

**Kelly L. ’87 and William D. ’87 Von Gonten, Jr. DVG Chair**

Kelly L. ’87 and William D. “Bill” ’87 Von Gonten Jr. have made the inaugural gift to the newly launched initiative, the Dr. William D. “DVG” Von Gonten ’56 Excellence in Faculty Initiative in Petroleum Engineering. Their $2 million contribution will create the Kelly L. ’87 and William D. ’87 Von Gonten, Jr. DVG Chair and will be used to support the teaching, research, service and professional development activities of the holder. The chair will be awarded to a distinguished faculty member within the petroleum engineering department.

Bill, a 1988 graduate of the department, is the son of Dr. Von Gonten; he and his wife, Kelly ’87, are active supporters of the Harold Vance Department of Petroleum Engineering. The couple has made substantial contributions to the department, including the Kelly and Bill Von Gonten Jr. ’87 Scholarship in Petroleum Engineering – a full-ride scholarship for petroleum engineering undergraduates.

**Alex Wisniewski ’10 and Michael Nance ’08 Endowed Scholarship**

Alexandra Wisniewski Nance ’10 and Michael Nance ’08 of Houston, Texas, have joined together to create the Alex Wisniewski ’10 and Michael Nance ’08 Endowed Scholarship.

The endowment, created through the Texas A&M Foundation, will be used to provide one or more scholarships to full-time students in good standing pursuing an undergraduate degree in the Harold Vance Department of Petroleum Engineering or from any department within the Mays Business School. The award will alternate each year between a petroleum engineering student and a business school student.

Michael received his bachelor’s degree in petroleum engineering in 2008 and is employed by Anadarko Petroleum Corporation. Alexandra is a 2010 recipient of a bachelor’s in business administration.

Contributions to the endowment were made in part by friends and family of the Nances, in addition to matching funds from Anadarko.
The Chevron Corporation and the Harold Vance Department of Petroleum Engineering held a ribbon cutting ceremony on April 22, 2014 for the Chevron Petrophysical Imaging Laboratory at Texas A&M University. Vice Chancellor and Dean of Engineering Dr. M. Katherine Banks, Department Head Dan Hill, and Associate Professor and Lab Director David Schechter, as well as representatives from Chevron, including Shariq Yosufzai (Vice President, Global Offices of Diversity and Ombuds Executive Sponsor for the TAMU Partnership), Glenn Weckerlin (Manager, University Associations), Bill Hunter (Portfolio Manager for University Affairs), and Nicole Boswell (Diversity and Veterans Recruiting Specialist) attended the ceremony.

The new laboratory features a state of the art Toshiba Aquilion RXL CT Scanner with 3D advanced visualization software. The scanner is a high-precision instrument that can measure the porosity, fluid density and changes in saturation in core samples and enhanced oil recovery flood experiments such as water, gas or CO2 flooding. It can also be used to visualize natural fractures in core samples and wormhole propagation in cores exposed to acid treatments.

Von Gonten heads his own reservoir engineering consulting company, W.D. Von Gonten & Co. Lee Raymond is the former longtime Chairman & CEO of ExxonMobil, and his son John Raymond is Managing Partner and CEO of The Energy & Minerals Group.

Through a Texas A&M Engineering Experiment Station research cooperation agreement, faculty and students helped in designing and creating the lab. In return, faculty and students have access to the lab for research projects. Named the W. D. Von Gonten Laboratory (WDVGLab), the new facility is equipped with more than $10 million of equipment that will be able to evaluate properties of oil- and gas-containing shales and other unconventional reservoir rock. The lab will also be a resource for industry clients by performing sophisticated tests on rock samples from wells around the world.
Pioneer Natural Resources Company Resource Room

Pioneer Natural Resources Company recently contributed $600,000 to the Texas A&M Foundation to benefit the Dwight Look College of Engineering’s petroleum and mechanical engineering departments at Texas A&M University.

A portion of the funding will support a multipurpose resource and meeting space within the Harold Vance Department of Petroleum Engineering. Construction on the Pioneer Natural Resources Company Resource Room was completed in early spring of this year and is continuously utilized by faculty, staff and students.

The remainder of the gift will be designated to the Pioneer Natural Resources Company Scholarship in Mechanical Engineering. This scholarship fund will provide financial aid to undergraduate students as well as fund graduate student fellowships and faculty fellows.

“Aggie engineers have contributed significantly to the success of our company and we recognize the value of the Texas A&M educational experience. We are pleased to support the great work of the petroleum and mechanical engineering departments through endowments and building space improvements to enhance the quality of education,” said Ken Sheffield ’82, senior vice president of operations and engineering of the company and current member of the Petroleum Engineering Industry Board in the Harold Vance Department of Petroleum Engineering.

In addition to the financial support Pioneer has given to the Look College, the company has also established employee scholarship funds for “Pioneer Aggies” to give back to the engineering program. Employees wishing to contribute through this program will have their gift matched dollar for dollar by the company.

Oxy USA Benches

Oxy USA, Inc. made a donation to the Harold Vance Department of Petroleum Engineering to replace seating in the Richardson Building. The department commissioned 11 new custom-made wood benches for the lobby area as well as for the fourth and fifth floors. These lovely benches furnish comfortable seating for the thousands of students who attend classes in the Richardson Building each week.
Awards

Academy of Distinguished Graduates

Four alumni were inducted into the Academy of Distinguished Graduates of the Harold Vance Department of Petroleum Engineering during the annual Industry Board Dinner held on Sept. 19, 2013.

Gregory A. Bird ’82, is president and owner of Jetta Operating Company, Inc. headquartered in Fort Worth, Texas. Bird founded the company in 1991. After graduating from Texas A&M University, Bird worked in areas of reservoir engineering, reservoir management and economic analysis. He is a registered professional engineer in the state of Texas and a member of the Fort Worth Chapter of the Society of Petroleum Engineers (SPE). He also serves as a board member of several organizations including the Texas A&M University Petroleum Engineering Industry Board, TCU Energy Institute, Longhorn Council - Boy Scouts of America Foundation and the Botanical Research Institute of Texas. He is also a member of the Dallas Petroleum Club, Fort Worth Air Power Council and several professional organizations including the Texas Oil & Gas Association and the Fort Worth Wildcatters. Additionally, he is involved in other community and philanthropic efforts through the Gregory A. and Laura E. Bird Foundation.

J. Michael Gatens ’80, has 31 years of oil and gas experience, primarily in unconventional gas, and currently serves as CEO of Unconventional Gas Resources Canada Operating, Inc. He also co-founded and is on the Board of Directors of the American sister company, Unconventional Resources, LLC. Prior to founding these current companies, Gatens co-founded MGV Energy Inc. in 1997, a Canadian E&P company. MGV developed the first commercial coalbed methane (CBM) production in Canada in the Horseshoe Canyon coals. Prior to founding MGV, Gatens led numerous unconventional gas research projects for the Gas Research Institute and authored or co-authored numerous technical articles. Gatens was also the founding Chairman of the Canadian Society for Unconventional Gas and is an Honorary Member, receiving the Sproule Achievement Award for Unconventional Gas in 2006. Gatens is a registered professional engineer in Texas and Alberta. He has been active in SPE since 1977, and was named a Distinguished Member in 2000. Gatens is currently on the board of the Petroleum Technology Alliance of Canada, and has been active in several joint industry/government/stakeholder initiatives, receiving the Alberta Centennial Medal in 2005.

George W. Voneiff ’83, has 28 years of oil and gas experience, primarily in unconventional gas, and currently serves as CEO of Unconventional Resources, LLC, a US E&P company. He also co-founded and is on the Board of Directors of a Canadian sister company, Unconventional Gas Resources, LP. Prior to founding these current companies, Voneiff co-founded MGV Energy Inc. in 1997 with Mike Gatens. Prior to founding MGV, Voneiff was an engineer/manager specializing in the analysis and development of tight gas, CBM and shale reservoirs. Voneiff teaches graduate-level classes on Petroleum Economics and Reserves at Texas A&M University, is a member of the Texas A&M Department of Petroleum Engineering Industry Board and is a member of the Texas A&M Energy Engineering Institute External Advisory Board. In 2005, Voneiff
received the Sproule Lifetime Achievement Award from the Canadian Society for Unconventional Gas.

William D. Von Gonten, Jr., ’87, founded W. D. Von Gonten & Co. in 1995, having worked 10 years internationally for a major oil and gas consulting firm. He is a third generation petroleum engineer in a distinguished engineering family. Von Gonten is a registered petroleum engineer, a member of SPE and the Society of Petrophysicists and Well Log Analysts, and the Houston Producers’ Forum. He has been awarded U.S. Patent No. 4,944,349 for his invention of a downhole production tool used in paraffin problem oil wells. He has given numerous talks and seminars on petroleum cash flow systems and the outlook on domestic and international exploration and production. The Von Gonten family’s interest in undergraduate education related to the oil and gas industry dates back decades. Von Gonten and his wife, Kelly, most recently endowed a full-ride scholarship for Texas A&M University students in petroleum engineering.

Dwight Look College of Engineering Outstanding Alumni Honor

George K. Hickox Jr. ’81, received the Dwight Look College of Engineering Outstanding Alumni Honor Award on April 3, 2014, for his “distinguished career and leadership within the oil and gas industry; for his continued support of Texas A&M University through his service to the Harold Vance Department of Petroleum Engineering, the Dwight Look College of Engineering and Texas A&M Foundation; for his commitment to education through numerous contributions to Texas A&M University.”

The Outstanding Alumni Honor Award was established in 1981 to recognize engineering graduates of Texas A&M University who have brought honor to their profession by outstanding leadership in engineering activities, by enhancing the professional development of engineers, or by their creativity or ingenuity in the field of engineering.

Committed to higher education, Hickox currently serves on the Texas A&M Foundation Board of Trustees. The Texas A&M Foundation is an independent nonprofit organization that raises money to support academics and student leadership programs at the university. Hickox established the endowed George K. Hickox Jr. Professorship in Petroleum Engineering through the Texas A&M Foundation a few years ago. He was inducted into the Harold Vance Department of Petroleum Engineering’s Academy of Distinguished Graduates in September 2011.

After receiving bachelor’s degrees with honors in geology and petroleum engineering from Texas A&M University, Hickox earned a master’s degree in business administration from the University of Houston. Since 1991 he has been a general partner of Philadelphia-based Heller Hickox & Co., a partnership that invests in and sponsors oil- and gas-related transactions such as restructurings, recapitalizations and acquisitions of producing properties, pipelines, gathering systems and oil field service companies. He presently serves as a director and officer of several private oil and gas and oilfield service companies.
Students who received academic financial support through the department during academic year 2013-2014:

**Mark W. Albers Scholarship**
- Jonathan Soto Ortega
- Matthew Wiese
- John Wleczyk

**Benny Altman Memorial Scholarship**
- Dylan Bucanek
- William Chapman
- Glenn Hudson
- Kevin Stoller
- Benny Altman Memorial Scholarship
- Dylan Bucanek
- William Chapman
- Glenn Hudson
- Kevin Stoller

**James W. “Bill” Amyx Memorial Scholarship**
- Jason Rausco

**Anadarko Petroleum Corporation**
- Austen Anderson
- Annie Besson
- Stephen Cantu
- Brian Chin
- Shawn Dillon
- Jacob Farmen
- Mitchell Greene
- Sarah Gresh
- Dylan Guthrie
- Yuze Jing
- Lindsay Kalberer
- Andrew Kazlow
- Charles Leach
- Connor McKown
- Ashley Mills
- William Reese
- Jacob Smith
- Meagan Soto
- John Paul Thibodeaux
- Dylan Waak
- Daniel Walter
- William Warner

**API Houston Chapter Scholarship**
- John Blanchard
- Austin Draughon
- Michael Festervand
- Shawn Guice
- Austin Hahn
- Joshua Hanchera
- Blake Hermes
- Annie Hilford
- Blake Hubbard
- Aimee Jenks
- Ryan Jicha
- Kathleen Johnstone
- Justin Lundquist
- Thomas Maranuk
- Ruben Martinez
- John Martz
- Michael McAdams
- Jonathon McDonnell
- Steven McRaith
- Aaron Miller
- Tyler Moehlman
- Armando Moreno
- Lindsay Rhodes
- Byron Sherman
- Alfred Stone
- James Thompson
- Aaron Townsend
- Dennis Widman
- Andrew Wlazlo

**Battlecat Oil & Gas Scholarship**
- Matthew Tomberlin

**Mr. John E. ’74 and Deborah F. ’76 Bethancourt Scholarship**
- Lyndsey Duvall

**Gregory A. Bird ’82 Scholarship**
- Charles Benson

**Travis L. Booher ’62 Scholarship**
- Edgar Aguilar
- James Bevan
- Charles Cook
- Luke Roberts

**BP-Amoco Foundation Grant**
- William Baycroft
- William Deupree
- Ibsen Esqueda Flores
- Melissa Garrett
- Anne Mims
- Hamza Paracha

**E.C. “Ned” Broun ’45 Endowed Scholarship**
- Keenan Abraham
- Dylan White

**J.L. Burkhart ’57, B.J. Reid ’79, BRG Petroleum Inc. Scholarship**
- Matthew Johnson
- Colton Reese
- Calvin Caraway

**Laurelei and J.C. Burton ’60 Scholarship**
- Forrest Field
- Phillip Flores
Margot & Al Byington ’58 Scholarship
Marcela Martinez
Omer Yasin

Margo & Powell Campbell ’66 Scholarship
Sebastian Chavez
Abdelrahman Issa
Jeffrey McGowen
Reid Scofield

Chesapeake Energy Corporation
Austin Cantwell
Benjamin Faith
Matthew Grubb
Corey Jones
Joseph Larakers
Kristin O’Brien
Meghan Whipple
Matthew Williamson

Chevron Corporation Scholarship I
Kyle Zimmermann

Chevron Corporation Scholarship II
Carter Henderson

Chevron Corporation Grant
Christopher Amoruso
Fitrisia Anandita
Evan Bao
Jeremiah Benner
Carson Brickey
Sean Buechele
Eric Burg
Austin Chaney
Daniel Coats
Richard Cochrane

Mario Coll
Mahd Dada
Clayton Davila
Allen Duong
Raymond Earwood
Nathan Fernandez
Cody Kainer
Patrick Laflin
Andrew Malone
Joshua Mathews
Michele Mistretta
Dylan Morales
Kody Murphy
Amanda Nelson
Jerald Potter
Joshua Rosenstein
Clayton Scott
Jose Segovia
David Sonka
Ryan Stage
Natasha Stolte
Luke Strother
Hunter Swerdloff
Landen Tinar
Jonathan Truong
Kirk Wallace
Samuel Wilson
Cori Ziemianski

Concho Resources Scholarship
Lauren B’Oris
Cameron McCartney
Mattheuw Rodriguez
Mark Rudolph
Luke Sisti
Zachary Taylor
Lucian Williams

Dru R ’80 and M. Scott Cone ’82 Scholarship
Leigha Alexander

JoAnn & Michael Cone ’60 Scholarship
Mitchell Cirioli
Stavros Demarchos
Alejandro Fano
Dylan Janek
Christopher Nace
Raymond Noah
Jordyn Slocum
Michael Stolte
Luke Velten
Antonio Wilkinson

ConocoPhillips Scholarship
Douglas Chipponeri
Neshme Colmenero
Shawn Ferrell
Sarah Gubbels
Daniel Herrera
Alana Low
Darius Pitre
Bailey Stang

Christy D. and Mark A. Conrad ’90 Scholarship
Dane Hooker

Dr. Paul B. Crawford Memorial Scholarship
James Brasseaux
Matthew Corsi
CRS Proppants/Stephen R. Horn ’79
Grant
Arsalan Abbasi
Angela Boyd
Charles Carson
Johann Cherian
Bohyung Choi
Phillip Clemmons
Calen Collins
Garrett Cross
Juan Diez
Virginia Giroir
Jacob Gritte
Kenneth Guion
John Habenicht
Jarred Helms
Jacob Huck
Kyle Hyche
Christopher Joiner
Pierre Kana Nguene
Hannah Korenek
Joann Mazoch
Ross Neskora
Rafael Paz
Scott Polley
Travis Runge
Ryan Skeffington
Cameron Slone
Preston Tidwell
Anne Weaver
Ryan Whitmire
Zhibin Ye

Patricia & Jerry B. Davis ’52 Scholarship
Shane Farren
Gojko Matovic

Ernest F. Dean ’54 Scholarship
Philip Richard
Matthew Cannon
Ethan Siegel

Deupree Foundation Scholarship
Daniel Hilton

Richard C. “Dick” Durbin ’56 Scholarship
Bradley Burt
Kenneth Furches
Trevor Long
Boone Niederhofer

Valarie and Jeff Elkin Scholarship
Joshua Gervais

Joy and Ralph Ellis Scholarship
Melissa LeRoy

J. Ralph Ellis, Jr. ’52 Scholarship
Claire Mullen

Mark and Julia Ellis Scholarship
Steven Fly

Energy Cup Scholarship
Ryan Barber
Zachary Barham
Jason Beach
Andrea Carter
Ivan Chamata
Sara Edwards
Cullen Guglielmo
Jonathan Holstein

Heidi Karp
Mark Melton
Eric Rabushka
Ryan Reyna
Paul Shaunessy
David Smith
Grant Stein
Joseph Summers
Joseph Wachsman
Allison Weimer
Andrew West
Danica Westgard
Rachel Wilkins
Michelle Yang
Tianhang Zhou

Raymond H. Eubank ’48 Family Scholarship
Daniel Ochsner

Kelli Marie Flanagan ’06 Memorial Scholarship
Connor Wilcox

Fort Worth Wildcatters Association Scholarship
Clayton Crews
Michael Scanlin

Joe B. Foster ’56 Scholarship
Ryan Hernandez

Henry A. Gilbert Memorial Scholarship
Bryce Anderson
Chad Bourne
David Cantu
Shannon Cook
Dimitri Crislinelis
Ignacio De Barros Barreto Scavone
Joseph Decker
Ahamed Elsokary
Corey McKinsey
Grant Melson
Gregory Obi
Jesus Olivares
Jacob Rietveld
Shirley Zhang

Rhonda & Frosty Gilliam, Jr. ’80 Scholarship
Kevin Pollak
Fredrik Vaage

Jack and Nell Glynn Scholarship
Ana Perez

The Grey Wolf Drilling Company Scholarship
Riyan Ariwibowo
Clayton Cox
John Freeman
Evan Roback
Niraj Shah
Adam Zhu

Mary Lou & Jimmie D. Harrington ’47 Scholarship
Wahl Harvey
Eli Lauffenburger

Hess Foundation Academic Scholarship
Kenneth Ashworth
Ryan Cyr
Christopher Duin
Ashley Findley
Michael Germain
Austin Grant
Shelby Hillman
Matthew Holland
Matthew Kozlowski
Stephen Loughren
Austin Mallet
Daniel Meyer
Caitlin Papso
Preston Pope
Kevin Presley
Matthew Sasso
Ryan Schenkewitz
Jacob Smith
Ritthy Son
Richard Thayer
Kyle Townsend
Bryce Whitmire

Henry & Jean Holland ’45 Scholarship
Benjamin Hoffman

Mark and Lou Houser Scholarship
Andrew Bakke

B.P. Huddleston Scholarship
Kevin Ma

B.P. and F.M. Huddleston ’56 Scholarship
Hanyu Li

Kenneth R. Huddleston I Endowed Scholarship
Ryan Barbe
Marcus Elliott
Austin Pettyjohn
Luke Westmoreland
Caleb Winkowski

K.R. Huddleston II Honors Scholarship
Robert Carruthers

Tuan Thanh Phi
Chad Schrumpf
Benjamin Spinks
Andrew Weldon

Peter D. Huddleston ’80 & Kathy B. Huddleston ’81 Scholarship
Garrett Granier
Gabriel Siegel

A.C. Isaac ’87 Scholarship
Omar Ghannoun
Nathan Yeary

William Earnest Jochee Scholarship
Kexin Cui
Brady McClain

Nan and Joe Johnson ’51 Scholarship
Ryan Rice

Richard L. “Dick” Jones, Jr. ’55 Scholarship
Nektarios Christoforakis
Danna Knight

Wallace O. Keller Memorial Scholarship
Kyle Chandler
Neil Longenbaugh

Kyle Kepple ’92 Scholarship
Andrew Abbott
Michael McGowen

Dottie and Henry (Buddy) G. Kleemeier ’66 Scholarship
Stephen George

Joyce Whiting Kraemer Scholarship
Courtney Brown
David Gregory
Hunter Lahasky
Nicholas McKillip
Claudia Picou
Stephen Rankin
M. Scott Kraemer ’43 Scholarship
Andy Contreras
Andres Garza
Philip Mundt
Alison Ondrusek
Sterling S. Lacy Jr. ’46 Scholarship
Joseph Cox
Justin Eastwood
Tim and Amy Leach Scholarship
Travis Yuille
Dr. W. John Lee Scholarship
Jonathan Hsia
Rachel Olson
Fred M. Lege III Scholarship
Charles Aitken
Elizabeth Ballard
Peter Gainey
Colin Nester
Jack E. & Carolyn H. Little ’60 Scholarship
Jeffrey Lo
Paula & Bill Lonquist ’48 Scholarship
Kristina Klock
Thien Nguyen
Ada and Don Lovingfoss ’87 Scholarship
Jeffrey Leblanc
Gary J. Mabie ’65 Scholarship in Petroleum Engineering
Ahmed Abassi
Marathon Oil Company
Clay Bludau
Timothy Dash
Andrew Decheck
Cory Gilbert
Sammazo Plamin
Brooks Taylor
James Tollette
Jason Zhao
Joseph A. Marek ’57 Scholarship
James Yancy
Matlin Corporation/Permian Basin Aggies Scholarship
Jonathan Foster
William Tindol
Brenda Bridges and Dr. Bill McCain Scholarship
Thomas Read
Merit Energy Company Scholarship
Bohao Cheng
John Drozd
Susan W. & Jeffrey W. Miller ’85 Scholarship
William Moomaw
The Nancarrow Family Scholarship
Michael Staff
Randolph Newcomer, Sr. ’57 Scholarship
Allison Buettner
John Christman
Joshua Lachner
Newfield Exploration Company Scholarship
Jesse Burttschell
Lucas Bazemore
Newfield Exploration Company Grant
Conner Mowery
Pablo Prudencio
George A. Odum ’67 Endowed Scholarship
Matthew Fauel
B. D. O’Neal ’53 Scholarship
Belle Ibanez
Ann G. and Charles K. Orr ’57 Scholarship
Eliza Bornman
Glenda & Doug ’65 Otten Scholarship
John Burman
Luke Lau
James Terry
Dr. Philip Oxley Scholarship
Zachary Bateman
Petroleum Engineering Faculty Scholarship
Weihao Ding
Petroleum Engineering Industry Board Scholarship
Abdalla Ali
Laura Pelaez Soni
2011 Petroleum Engineering Industry Board Scholarship
Earl Hoover
Pioneer Natural Resources Company Grant
Ryan Adami
Amulya Agarwal
Stephen Barletta
Scott Brown
Robert Carlton
Chafic Charafeddine
Andre Denis
Nathan Eldridge
Alaina Eoff
Karlis Ercums
Christopher Eustice
Matthew Fitzgerald
Nicholas Gillispie
Xinyi Gou
Michael Grant
Thomas Greene
Madison Hayes
Derek Hess
David Hess
Gregory Hoffman
Mustafa Hussein
Gun Hee Jo
Christopher Johnson
Meghan Johnson
Robert Jordan
Ricardo Juarez
Kelly Keller
Alex Lambros
Bradley McMickle
Hector Menchaca
Yash Mistry
Kelsey Mitsdarffer
Matthew Morte
Kevin Nguyen
John Odlozil
George Parker
Zachary Pfuger
Mary Claire Pollard
Jordan Prentice
Dawson Protz
David Ragland
Gaurav Rai
Tyler Rheinlander
Clint Rothe
Kurtis Sanstrom
Matthew Sibley
Parker Simmons
Natalie Statton
Adiv Sulaiman
Ashlee Sweep
Omar Enriquez Tenorio
Nicholas Timmermann
Jose Torres
Natasha Annunziata Trilli
Peter Van Houten
Brent Vering
Brooke Wilkins
Courtney Wilcox
Corey Wittig
Carter Yancey
Ramon Yu
Shangjie Yue

**Mr. Edward O. Price, Jr. ’50 Scholarship**
Garrett Reddin

**Randall & Dewey Scholarship**
Lane Borden
Ayten Rady

**Terry W. Rathert ’75 Scholarship**
Adam Lapucha

**Captain Phil R. Rickey Memorial Scholarship**
Zachary Matous
Jacob Rojas

**Charles A. Rohan Memorial Scholarship**
Abdelrahman Kotb
Robert Leidy
Michael Stewart

**Marita and Earl E. Rossman, Jr. ’54 Endowed Scholarship**
Andre Gava Domingos
Peter Prutzman

**Kristi & John Schiller ’81 Scholarship**
Connor Knight

**Mary Sue and Col. Albert D. Schutz ’40 Scholarship**
Brady Lain

**Cathy and Glenn Sliva Scholarship**
Corryn Mills
James Skinner

**SM Energy Scholarship**
Blake Ardrey

**Ted H. Smith Jr. Scholarship**
Omar Garza Aguilar
Beshoy Mikhaeil
Andreas Prakoso
SPE Dallas Section Scholarship
  Macey Bryan

Mr. & Mrs. Horace G. Spiller, Sr. Endowed Scholarship
  Matthew Adesuyi
  Raquel Belnap
  Gaines Myer
  Kyle Schoener
  Matthew Vaughan
  Kathryn Wagner

Statoil
  Kyle Bulpitt
  Hassan Daramsis
  Shelby Fancher
  Madeleine Kilgore
  Nicolas Osa
  Katrina Schilling
  Jennifer Wisler
  Jacob Young

Diana S. Stepan '94 Scholarship
  Katherine Nunley

Cheryl & Michael W. Taylor '74 Scholarship
  Mark Williamson

Harold J. Vance Scholarship for Excellence
  Pervez Agwan
  Shahin Amin
  Connor Barnett
  Samuel Castello
  Luis Contreras
  Colin Dickerson
  Connor Feist
  Chase Graves
  Jireh Groenow
  Slone Harrison
  Callum Hevle
  Hammad Irshad
  Jordan Jacobs
  Mir Arsalan Jalali
  Stephen Janacek
  James Johnston
  Sameer Karim
  Jackson Klein
  Tyler Lawrence
  Austin Lester
  Fengyi Li
  Xiaofeng Li
  Kyle Hieu Luong
  Matthew Mayzer
  Jacob Misemer
  Kang Han Park
  Diego Perez-Garcia
  Akash Punnoose
  Cristian Quinteros
  Nicholas Roller
  Jacob Sloan
  Nehemiah Solis
  James Sparks
  Paulo Staniszewski
  Patrick Tafallo
  Gregory Taylor
  Tan Tran
  Natalie Villalpando
  Daniel Weimer
  Corey Wood

Harold J. Vance I Endowed - SPEE Scholarship
  Jacob Baynham
  Craig Collins
  Phong Tran

June and Laman Vance Memorial Scholarship
  Bradley Burnside

Dr. Doug Von Gonten Scholarship
  Turner Armstrong
  Benjamin Bates
  Jackson Beard
  Matthew Beck
  Jonathan Berner
  Eric Bosley
  Robert Champion
  Adrian Cortez
  Erik Dengler
  Lucas Du Chemin
  Ahmed El-Toukhy
  Alexander Frame
  Eric Gunderson
  Hayden Hatley
  Michael Hawkes
  Austin Henderson
  Matthew Hoelscher
  Zebadiah Hornbuckle
  John Jacobs
  Joshua Kingma
  Kevin Lafferty
  Paul LaMarca
  Teresa Lamey
  Vikas Mohan
Ryan Ozie
Travis Preston
Duo Qiu
Daniel Rubio
Henry Serry
Nathan Thames
Austin Tung
Courtney Walker
Mason Whittington
Brooke Wollam
Preston Young

Kelly & Bill Von Gonten ’87 Scholarship
Cole Barron

Steve Wade ’72 Memorial Scholarship
Michelle Noto

Fred G. Walsh ’74 Scholarship
Garrett Wilson

Joseph H. Wellborn, Sr. ’41 Endowed Scholarship
Carlos Menendez

Whiting-Pinson Scholarship
John Blissard
Brandon Gowisnock
Madison Hollaway
Nicholas Lappin
Brendan Love
Brian Richards

Robert L. Whiting Memorial Scholarship
Ehab Abed

James H. Wilkes Scholarship
James Hervey

Roger J. Wolfe Scholarship
Xuyang Guo

ALRDC Fellowship
Muhammad Ali

Baker-Hughes Fellowship
Paola Pereza Pena

John C. Calhoun, Jr. Fellowship I
Shola Babalola
Arthur Chan
Gautier Dreyfus
Sunhua Gao

ALRDC Fellowship
Muhammad Ali

Baker-Hughes Fellowship
Paola Pereza Pena

John C. Calhoun, Jr. Fellowship I
Shola Babalola
Arthur Chan
Gautier Dreyfus
Sunhua Gao

Jason Hadley
Vanessa Mpon Ndonhong
Xichen Wang
Yingyu Wang

John C. Calhoun, Jr. Fellowship II
Matthieu De Cointet

Chevron Fellowship
Harish Kumar

College of Engineering Graduate Enhancement Fellowship
Jarrod Tooley
Amy Zou

Anne and David Dunlap Fellowship
Mitchell Berggen
Gabriel Dubrule

Harold M. Hoffmeister Fellowship
Hongquan Chen
Paul Lacoin
Shiwei Wu

Steve and Ann Holditch Fellowship
Jordan R. Etten
Taniya Kar
Manoj-Kumar Valluri

Myra W. and Robert L. Mills Fellowship
Zachary Benamram
Tian Liu
Zhenzhen Wang
Wenyu Zhang

George J. Moridis Fellowship
(Split for Spring 2013)
Mohammadreza Ghasemi
Yuhe Wang
Craig C. Brown Award

Steven Fly was one of nine students honored by the Dwight Look College of Engineering at Texas A&M University with its Craig C. Brown Outstanding Senior Engineer Award during a banquet on Sept. 19, 2013, at the Memorial Student Center on the Texas A&M campus.

Fly, a senior petroleum engineering major, has received a variety of scholarly awards, is an active member in his church’s college ministry, was a team leader for MSC Hospitality and has participated in a mission trip and service and learning trip. He works with hippotherapy organizations across the world to assist them in using his own original design to construct Stretching Barrels intended for disabled clients. Steven has interned with Hilcorp Energy Company, participated in Texas A&M’s Champe Fitzhung Summer Honors Leadership Invitational Program in Italy and worked as a crewman on a fishing boat in Alaska for two summers.

Paper Contest News

Gulf Coast Region

The Gulf Coast Regional Student Paper Competition was hosted in April 2014 by the University of Houston. Texas A&M petroleum engineering students received prizes in each of the three categories. First place in the doctoral division went to Junjing Zhang. Third place in the masters division went to Katherine Briggs. First place in the undergraduate division went to Ryan Rice. Both Zhang and Rice went on to compete at the SPE International meeting in Amsterdam in the fall of 2014.

International Competition

Carter Henderson, a junior Texas A&M petroleum engineering student, obtained third place in the Student Paper Contest held at the Fifth Annual East Meets West International Student Petroleum Congress and Career Expo. He is shown in the photo above on the far right.

The contest was held in Krakow, Poland in April 2014 and gathered 22 students of undergraduate and graduate level from all over the world to display their technical work. First and second place were awarded to master level students from the University of Texas and the University of Leoben in Austria.

Henderson’s project started last fall as part of the SPE Mentorship Program. The program is intended to provide guidance and tools for undergraduate students in order to develop their Student Paper Contest work. Henderson was mentored by Ernesto Valbuena, a Ph.D. candidate, and was supervised by Maria Barrufet and John Killough, while he did research on the integration of surface and subsurface models to evaluate liquid yield production in tight gas reservoirs and combined this with his summer internship experiences.
The Department of Petroleum Engineering at Texas A&M and the AGH University of Science and Technology Student Chapter financially supported Henderson’s attendance of the four-day long conference in Poland. Over 100 students from 30 countries joined the congress to share ideas and learn more about the energy industry. The conference included several technical and networking activities to disseminate knowledge and inspire future leaders.

Petrobowl

On Sept. 30, 2013, the Texas A&M Society of Petroleum Engineers (SPE) student chapter PetroBowl team finished third place overall in the competition held during the SPE annual technical conference and exhibition in New Orleans, Louisiana. The team members were Joseph Cox, Ryan Rice, Jennifer Wisler, Ritthy Son, and Michael Stewart (shown from left to right below), and they were directed by Masoud Alfi.

Alfi also reported that the highlight of the competition was the spirit and support given by the 12th Man. “Our designated yell leader, Alex Dyson, led students and faculty in traditional Aggie yells to cheer on the team,” said Alfi. “The team is looking forward to competing again next year and would like to thank the department for all its support.”

Alfi said the team joined 35 other SPE student chapter teams against each other in a fast-paced quiz competition. The competing teams are challenged to answer both technical and nontechnical questions associated with the oil and gas industry.

Petrobowl is an annual competition pitting SPE student chapter teams against each other in a fast-paced quiz competition. The competing teams are challenged to answer both technical and nontechnical questions associated with the oil and gas industry.
SPE Student Chapter

On April 5, 2014, The SPE Student Chapter at Texas A&M University (TAMU SPE) organized a workshop dedicated to leadership training. Speakers included industry and academia gurus such as: B.P. Huddleston, Tony Brown, Kevin Cuyler, Tom Blasingame, Janeen Judah, Preston Abbott, Fred Dupriest, and many others. TAMU SPE also hosted a 2013 SPE Student Summit from Feb. 6-8, 2013. The theme of that event was “The Art of Facing Unconventional Challenges,” and focused on the critical thinking and innovative solutions associated with the development of unconventional resources such as shale oil and gas, deepwater, and heavy oil.

Targeting engineering and geoscience students from different universities across the nation, these two events combined lectures, panel sessions, technical exhibition, networking, and (where possible) visits to companies’ facilities to enhance the learning experience.

Because they have been huge successes, more TAMU SPE workshops are set to take place bi-annually starting in the fall of 2014.

SPWLA Recognition

Kai Cheng, Huangye Chen, and Assistant Professor Zoya Heidari (shown in left to right order above) received special acknowledgements for their presentations given during the 2014 Society of Petrophysicists and Well Log Analysts (SPWLA) 55th Annual Symposium held in the Abu Dhabi National Exhibition Center on May 18-22.

Cheng, a graduate student, and Heidari, a Chevron Corporation Faculty Fellow in the Harold Vance Department of Petroleum Engineering at Texas A&M, presented a paper during the meeting, “Quantifying the Impact of Petrophysical Properties on Spatial Distribution of Contrasting Nanoparticle Agents in Naturally Fractured Organic-Shale Formations.” Other authors of this work include Aderonke Aderibigbe, Masoud Alfi, and Professor John Killough, all from the department of petroleum engineering. Their paper was selected by the 2014 Technology Committee as the Best Poster Presentation at the symposium. As awardees of the Best Poster Presentation, Cheng and Heidari have become part of the Distinguished Speaker Program and will be called upon to share their work with other SPWLA chapters. Cheng’s research interests focus on the application of nanoparticles for enhanced well-log measurements.

The paper by Chen, another graduate student, and Heidari, entitled “Pore-Scale Evaluation of Dielectric Measurements in Formations with Complex Pore and Grain Structures,” was also selected as part of the Distinguished Speaker Program. The program provides the list of distinguished speakers to local SPWLA chapters so the presenters can be called upon to share their research at local meetings. Chen’s areas of research interest include electrical and dielectric properties of organic-rich source rocks.

In addition to these two awards, three of Heidari’s students (Lu Chi, Mehrnoosh Sanifar, and Huangye Chen) also received fellowships from SPWLA.
Study Abroad

From May 16 to 31, 2014, 11 Texas A&M University petroleum engineering students attended a study abroad program in China. The course, taught by professors Ding Zhu, Rashid Hasan and Jiajing Lin, is PETE 325, Petroleum Production Systems, and is an introduction to production operations and oil field equipment.

This was a two-week program. The first week, the students went to China Petroleum University to study production operations such as: multiphase flow in pipes, bottomhole pressure prediction, inflow and outflow performance, production systems and backpressure analysis, hydraulic fracturing fluids and equipment; downhole and artificial lift equipment, tubulars, workover, completion and procedures; produced fluids, fluid separation and metering, safety systems, pressure boosting and monitoring. The second week, the students went to Dagang Oilfield. During the oilfield trip, the students visited a rod pump, completion, and workover facility.

The students were given the opportunity to visit three places in Beijing: the Great Wall, the Forbidden City Chinese History Museum, and the Olympic Village. While staying in housing at the China Petroleum University, several Chinese students attended the class, giving the Texas A&M students the opportunity for cross-cultural exchanges and new friendships.
2014 Graduation Awards

There were 195 May graduates in the Harold Vance Department of Petroleum Engineering: 160 Bachelor of Science, 13 Master of Engineering, 17 Master of Science, and 5 Doctor of Philosophy.

Students Graduating with Honors


Summa Cum Laude (3.9-4.0): Steven Fly, Charles Benson, Abdelrahman Kotb, Kevin Lafferty, Brady Lain, Michelle Noto, Kevin Pollak, Michael Stewart, Fredrik Vaage, and Jacob Young.

Faculty Awards of Excellence

The Faculty Awards of Excellence were established by our PE Faculty to recognize academic and research scholarship among our graduates. At the Undergraduate level, this award is given to the undergraduate student who has the highest GPA upon graduation. This year we had a five-way tie with each student having a GPA of 4.0: Stephen Fly, Abdelrahman Kotb, Kevin Lafferty, Brady Lain, and Kevin Pollak.
At the Graduate level, students are nominated by their advisors and then voted on by a committee.

Master’s level winners: Ahmed Assem and Albina Mukhametshina (Albina is a December graduate and currently works for Lukoil Oil Company in Siberia, Russia).

Doctoral level winner: Mohammed Sayed.

The Albert B. Stevens Memorial Award was established by George McGehee to help deserving undergraduate students transition from student to practicing engineer.
Students are nominated for this award by fellow students and faculty, and then voted on by the faculty. Winner: Raymond Earwood.

The Harold Vance Award is given to the student who has shown the most improvement in their academic grades and who is involved in extracurricular activities. Winner: Brandi Little, who had an overall GPA improvement of 0.612 and finished her last two semesters with a 4.0 GPA.

Students are nominated for this award by fellow students and faculty, and then voted on by the faculty. Winner: Michael Staff, who had a cumulative GPA of 3.68 and served as SPE Vice-President for 2013-2014.

The Robert L. Whiting Award is given to an “Outstanding Undergraduate” based on grades and extra-curricular activities within the university and community.

The Petroleum Engineering Department Award for Excellence in Teaching recognizes full-time faculty members who maintain high expectations of their students and ensure academic rigor in their undergraduate courses. Faculty members are voted on by our seniors. Winner: Yucel Akkutlu.

Congratulations to all our graduates and best wishes in your careers.