



## Department of Petroleum Engineering

CRAFT & HAWKINS DEPARTMENT OF PETROLEUM ENGINEERING · SPRING 2010 · VOLUME 18

### 40<sup>th</sup> Year Anniversary of LSU Well #1 at the PERTT Lab

The article below originally appeared in the LSU campus newspaper "The Daily Reveille" in 1970 with the accompanying photo:

#### *Engineering Department Gets Oil Well*

*An oil well has been given to the Petroleum Engineering Department by three corporations, Murray F. Hawkins, Jr., department head has announced.*

*The donors were Midhurst Oil Corporation of Oklahoma City, High Crest Oils Inc. of Alberta, Canada and Atlantic Richfield Co. of Lafayette, Hawkins said.*

*The well, which has been plugged and abandoned, will be used by the department for instructional purposes. The well is situated south of John M. Parker Agricultural Center and east of the Livestock Development Barn.*

*The department had formerly obtained permission to use the well as part of its production laboratory. Students will receive practical experience running sub-surface recording pressure and temperature gauges down the well to get samples of the crude oil. The oil samples produced will be tested and measured by the students, according to Mark Rose, petroleum engineering student.*

*In accepting the well, the University will assume the responsibility of plugging it and abandoning it altogether, Hawkins said.*

*"I see no problems regarding the well's eventual abandonment, for it is equipped with valves that keep it closed in. Under artificial lift, as with a pump, the well will produce only salt water and a trace of oil," Hawkins said.*

**BLACK GOLD AT LSU-** The department of petroleum engineering has been given an oil well by three major corporations. Inspecting the well, which will be used for student research, are, left to right; Bill Hise, Associate Professor of petroleum engineering; Mark Rose and Don Solanas, petroleum engineering students; Jesse C. Brewer, district supervisor for Midhurst Oil Corporation; and Louis Soileau, vice-president of the Society of Petroleum Engineers.

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Forty years later, the PERTT Lab has made advancements to include 5 additional wells and instrumentation for conducting research related to borehole technology. The key components are a 1200-bbl. capacity drilling fluid mixing and circulating system;

# MESSAGE FROM THE CHAIR

## *Message from the Chair*

*The end of the 2009-2010 academic year has arrived, with students and faculty involved in final exams. We have continued to grow our department, adding both undergraduate and graduate students as well as a new faculty member, Dr. Arash Dahi, who has joined us after completing a PhD at the University of Texas. While the downturn in the economy has affected the job prospects for our students, we have still enjoyed a relatively high interest in our students by potential employers. I am hopeful that every one of our graduates will find employment by graduation or shortly thereafter.*

*This has been a year of review of our educational programs, both by ABET (the accreditation agency for our BS Program) and an LSU review of our BS, MS and PhD programs. We did very well in both reviews, with recognition given to the quality of our students and faculty. It did require significant effort on the part of all of the faculty and some of our student leaders, as well as our Industry Advisory Group, and I would like to thank everyone involved for helping us present the*



Stephen O. Sears, Chair

*department both positively and realistically.*

*The BP oil spill has been an unfortunate shock for all of us involved in the upstream oil and gas business. As of today, the well continues to flow, with efforts ongoing to both stop the flow and clean up the spill. John Smith, Ted Bourgoyne and myself have gotten a number of inquiries from the media. We are responding with the philosophy that our job is to educate and explain, but not to speculate where we don't have any information.*

*We greatly appreciate the support that we have received over the past year from our alumni and industry. With a growing student population and state funding static or declining, your support has allowed us to continue to offer the quality, hands on, practical education that has earned us the reputation we enjoy.*

*Thank you again, and we look forward to seeing many of you in the coming year.*

*-Steve Sears*

## 40<sup>th</sup> Year Anniversary of LSU Well #1 at the PERTT Lab (continued)

a high-pressure choke manifold and process control system; a 6,000-ft. model well for floating drilling operations; a 5,884-ft. model well for bottom supported drilling operations; a high pressure underground gas formation simulator; a full-scale model well diverter system; a 10,000-ft. drill pipe flow loop; and a 100-ft. derrick and 55-ft. inclined wellbore analog. Much of this equipment was assembled to support past research and training activities in the area of blowout prevention.

The department and the PERTT Lab are making efforts to workover Well #1. In-kind donations have previously been pledged by Key Well Services (rig services), BP America (selected tubulars), and GE Vetco (wellhead and valves). Cash donations have been pledged by Noble Corporation, Newfield Exploration, Plains Exploration & Production and Mr. Ernest D'Angelo. With this support, the PERTT Lab hopes to begin the workover process within the year.

In addition, the PERTT Lab continues to expand. An architect has submitted designs and will begin construction of a new classroom building. The funds for

this new classroom have been provided by Mr. and Mrs. Donald W. Keller and by Diamond Offshore Drilling.

*-Andi Donmyer*



An architectural rendering of the classroom to be constructed at the PERTT Lab.



Mark Rose, Don Solanas, and Lou Soileau visited the PERTT Lab in February 2010 to visit Well #1 and see the improvements at the facility. They are pictured here along with Chair, Stephen Sears and PERTT Lab Director, Darryl Bourgoyne.

# Mr. Mehran (Randy) Rasti's Retirement Luncheon

On Tuesday, February 2, 2010 the Craft & Hawkins Department of Petroleum Engineering hosted a luncheon in honor of newly-retired staff member Mr. Mehran (Randy) Rasti at the LSU Faculty Club. In addition to Randy's lovely wife Fereshteh, current faculty and staff celebrated this event with retired faculty. We felt fortunate to be joined by Dr. William Holden, Dr. Julius Langlinais, and Dr. Walter Whitehead.

During the luncheon, department chairman Dr. Stephen Sears said many kind words about Randy and presented him with a plaque from the department thanking him for his years of service. Randy had this to say: "I enjoyed working with all of LSU during my 12 years of service here. In all my long career, I daresay LSU Petroleum Engineering was the best, especially bosses like Dr. Bassiouni and Dr. Sears. The personality of the entire people in an organization usually follow the personality of their bosses, I have observed during long years of my career; and Petroleum Engineering is no exception. I guess I want to say I loved working with all of the faculty and staff members."

Mr. Rasti originally joined LSU in 1994 as a Network Administrator with LSU Libraries and began working for the department in 1996 as a Teaching Associate. In 1999, Randy received a promotion to the rank of Data Processing/Computer Services Manager. Operating as an IT Manager, Randy provided technical support and assistance to approximately 400 students, faculty, and staff. He set up and managed domain servers, web servers, data base servers, and application servers, and specified and ordered computer hardware and software in accordance with Louisiana State Contracts. Earning a Bachelor's degree from the department in 1971, Randy was already familiar with the petroleum industry. In addition to his knowledge in Petroleum Engineering, his love for computers, and his keen interest in writing software, Randy is best known for his creativity and presenting solutions. He has filed for six utility patents with USPTO, one of which got him the money to retire with! He has since moved to Virginia with his wife to be near their son and

daughter-in-law an also to be close to US Patent Office to invent more! We wish them all the best in the next chapter of their lives.

*-Andi Donmyer and Randy Rasti contributing*



Mauricio Toscano, Andrew Wojtanowicz, and Fereshteh Rasti smile together as Randy Rasti displays his department plaque.



Fereshteh Rasti, Stephen Sears, Andi Donmyer, Mayank Tyagi, Arash Dahi Taleghani, Bill Holden, Walt Whitehead, Fred Thurber, and Julius Langlinais enjoy the luncheon.



Randy and Fereshteh Rasti smile as Stephen Sears begins his speech.



On behalf of the department, Stephen Sears presents a plaque to Randy Rasti for his 16 years of service.



Jeanette Wooden, Randy and Fereshteh Rasti happily pose after the luncheon.

William S. Flores, Jr. (Bach 1980), one of the department's two co-chairs for the Forever LSU Campaign and currently an active member of our Industry Advisory Committee, is currently employed as Senior Vice President of Engineering at Houston Energy, L.P. He proudly recalls teaching PETE 2020 in his last year at LSU with Professor Murray Hawkins and boasts, "Holden, Whitehead, Hise, Kimble, Bassiouni – I studied with the last of the icons for Petroleum Engineering in this department. I even passed Well Logging successfully!"

Bill Flores entered into Petroleum Engineering because of his father. He recalls, "My father was a geologist. I was always fascinated by the drilling business and by what my father was working on." Upperclassmen influenced him, and he was always mechanically inclined. As a student, Bill worked as a roughneck on a land drilling rig. After graduating, he labored as a deckhand on a supply boat. In 1980, he got a job with Dow Chemical in Lafayette. Later, Apache bought Dow. Since then, he has moved from one position to another, through such companies as Stokes & Spiehler, C&G Production,

Ocean Energy (which was later acquired by Devon Energy), and W&T, which later became Houston Energy. In his more than 30 years in the petroleum industry, he has held positions centered around drilling, operations, and safety, and he has learned as much about each aspect as possible.

In the academic year 2001-2002, Bill served as the Chair of the Industry Advisory Committee, of which he has been a member since 1999. During one of the lunches, some of the students complained of the lack of jobs and internships that were available at the time. He mentioned to the students that he taught BOP control schools at the PERTT Lab during the height of the MMS training schools that occurred at the Lab. His advice to those students then, as well as the outgoing students now, is to take advantage of every opportunity to learn, and to learn as much as you can in order to become more valuable as an engineer. He said to not let a company pigeonhole you – remain open to new ideas and be willing to learn different aspects of the industry.

-Andi Donmyer



William S. Flores, Jr.

## In memoriam:

The Craft & Hawkins Department of Petroleum Engineering would like to dedicate this issue of "Pipeline" in memory of the following alumni, family, and friends who will be greatly missed:

William D. Basham (B.S. 1947), Rodrigo Bastidas-Monge (B.S. 1947), Barrett E. Booth Sr. (B.S. 1940), Ronald A. Boze (B.S. 1954), George P. Catsulis (B.S. 1968), Harold W. Copeland (B.S. 1968), Earl W. Coxe (B.S. 1942), John J. Daigre (B.S. 1950), Kenneth H. Dowell (B.S. 1952), Patrick E. Golden (B.S. 1943), James C. Goodwin Jr. (B.S. 1961, MBA 1965), Berkeley T. Green (B.S. 1942), Adolphe G. Gueymard (B.S. 1935), Brandon S. Halligan (B.S. 1995), Tom G. Lewis (B.S. 1937), Charles K. Linder (B.S. 1961), Clarence O. Magee Sr. (B.S. 1941), Adrienne F. Marshall (Mast 1977), Harry R. Moseley (B.S. 1947), Paul B. Murphey (B.S. 1955), Joseph R. Newsome (B.S. 1949), Henry W. Ozley (B.S. 1958), Joseph P. Ratliff (B.S. 1942), Raymond J. Rodriguez (B.S. 1952), Charles E. Sonntag Jr. (B.S. 1950), Joe M. Spradley, Lloyd Stander (B.S. 1941), Claude O. Stephens (B.S. 1932), Ellis A. Terrebonne (B.S. 1947), James L. Tye (B.S. 1942), Leslie J. Waguespack (B.S. 1949), and Eddie Walls, Jr.

## Alumni and Supporter Recognition

- Mr. Ernest Angelo Jr. (B.S. 1956), Estate of Mr. Donald J. Barbier (B.S. 1955), Mr. and Mrs. John B. Brock, III (John, B.S. 1954 & Diane, B.S. 1953), Mr. and Mrs. William S. Flores, Jr. (William, B.S. 1980), Mr. Warren S. Hawkins (B.S. 1970), Mr. and Mrs. Murphy J. Hebert (Murphy, B.S. 1958), Mr. and Mrs. Donald W. Keller (B.S. 1957), Randy L. Limbacher (B.S. 1980), Mr. and Mrs. Don Lyle (Don, B.S. 1956 & Patsy, B.S. 1956), Mr. J. Darby Sere' (B.S. 1970), Mr. and Mrs. Jerry E. Shea Jr. (Jerry, B.S. 1972 and MBA 1974 & Beverly, B.S. 1972 and M.S. 1975), Mr. Louis C. Soileau, IV (B.S. 1971), Mr. and Mrs. William H. Stone (B.S. 1966), and Mr. and Mrs. David H. Welch (David, B.S. 1972 & Cynthia, B.S. 1970) are our Platinum Supporters for the Forever LSU Campaign.
- The companies and organizations Almar Foundation, AADE – Lafayette Chapter, AADE – New Orleans Chapter, Baker Hughes, BP America, Chevron Inc., ConocoPhillips, Devon Energy Corporation, Diamond Offshore Drilling, ExxonMobil, GE Vetco, Key Well Services, Marathon Oil Corporation, Newfield Exploration Company, Noble Corporation, Noble Drilling Services, Plains Exploration & Production Company, Schlumberger, Shell Oil Company are also our Platinum Supporters for the Forever LSU Campaign.

# Welcome

Dr. Arash Dahi Taleghani and Mr. John McGhee join the Craft & Hawkins Department of Petroleum Engineering this fall 2009 and spring 2010, respectively. Previous to this appointment, Dr. Dahi Taleghani was awarded his PhD from the University of Texas in Austin, where he studied petroleum engineering and wrote his dissertation entitled, "Modeling Hydraulic Fracture Propagation in Naturally Fractured Reservoirs." Currently, Dr. Dahi Taleghani is developing various research efforts which spe-

cialize in reservoir geomechanics and hydraulic fracturing. Mr. McGhee replaces Ms. Harriett Pooler as Associate Director of Development for Petroleum and Chemical Engineering. Previously, he was in the pharmaceutical industry in sales and sales training for 17 years. He graduated from LSU in 1990. He is married to Jennifer McGhee and they have 3 wonderful kids. We would like to welcome Dr. Dahi Taleghani and Mr. McGhee to the department.



Dr. Dahi Taleghani



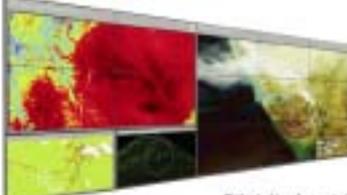
Mr. John McGhee

## Department Faculty and Staff Recognition

- Richard Hughes was awarded the Zaki Bassiouni Teaching Award for 2009 and John Rogers Smith received the Zaki Bassiouni Teaching Award for 2010.
- Fenelon Nunes received the Ed Steimel award in 2009.
- Chris White was recognized as an LSU Rainmaker – a distinction for outstanding research during the last year.
- Fred Thurber is the 2010 recipient of a Tiger Athletic Foundation Undergraduate Teaching Award.

### Chevron Reservoir Visualization Laboratory

The Chevron Reservoir Visualization is funded by a gift from Chevron to the Department of Petroleum Engineering. It has been designed by an interdisciplinary team, with extensive support from College of Engineering experts, ITS including Tier 3 visualization, with Facilities and Services guiding it through the architectural design phase. The laboratory will serve as a focus for advanced, interactive analysis of all aspects of reservoir description and performance prediction. It is also intended as a magnet for interdisciplinary collaboration, providing state-of-the-art hardware and software in a quiet, carefully-designed facility. The laboratory is expected to open in early 2011.



Tiled display at HHA

One of the most prominent features of the visualization laboratory will be a 3-by-3 "tiled" display of high-definition LCD monitors, which will provide almost 9 million pixels. This display can be connected to the workstations in the lab, allowing simultaneous display of results from many collaborating researchers. The display can also be used as one giant monitor, revealing details from a single visualization.

#### Room Features

- Tiered seating for 24
- Attractive furnishings and lighting
- Designed for collaboration, classes, meetings, and videoconferencing
- HD projectors and a smartboard
- Cameras for speaker, audience, and documents

#### Visualization Capabilities

- 120 inch tiled display
- Parallel rendering cluster
- Six high-performance workstations
- Data and power ports for 12 laptops
- Ultrafast 10 Gbps networking
- Large network attached file server

For more information: Prof. Chris White, [CDWhite@LSU.edu](mailto:CDWhite@LSU.edu)

## INDUSTRY ADVISORY COMMITTEE

Craft & Hawkins Department of Petroleum Engineering would like to thank the Industry Advisory Committee members for their continued service to the department.

**Gene Beck**

**Steve Bohnet**

**Lee Boothby**

**Russ Buettner, Jr.**

**Clyde Crouch**

**Jahnette deBlanc**

**Norman Duplantis**

**Bill Flores**

**Charlie Gibson**

**Lars Herbst**

**Bill Hunter**

**Ray Lasseigne**

**Chad LeBlanc**

**Eric Maidla**

**Marty Massey**

**Art Mixon**

**Walt Navoy**

**Will Pecue**

**Don Remson**

**Pedro Silva Lopez**

**Michael Sparacino**

**Brian Stewart**

**Bill Stone**

**Claiborne Vansant**

**Ted Zaleski**

We would also like to acknowledge and thank Doreen Grieve, Logan Magruder, Pat O'Bryan, Sid Ruiz, Randy Smith for their years of service to the department through the Industry Advisory Committee. Logan and Randy departed last year, and Doreen, Pat, and Sid will be leaving the committee this year. We feel fortunate to have worked alongside such wonderful people.

# UNDERGRADUATE HIGHLIGHTS

The LSU Craft & Hawkins Department of Petroleum Engineering undergraduate program began the fall 2009 semester with over 400 students. Nevertheless, when faculty or employers look at our undergraduate student body the one characteristic that stands out is not the size of our department, but the quality of our students. Throughout the last decade, we have been successful in recruiting academically prepared students into our program; as such, today LSU's Craft & Hawkins Department of Petroleum Engineering undergraduate program has, perhaps, the largest number of academically prepared students in its long history.

Despite the solid academic performance of our student body, some students have distinguished themselves, among their peers, with their superior academic performance. LSU honors top academically performing students by naming them to the Chancellor's Honor Roll or to the Dean's List.

To earn a place on the Chancellor's Honor Roll a student must earn a 4.0 grade point average on 15 or more credit hours of course work during a semester. LSU's Craft & Hawkins Department of Petroleum Engineering is pleased to announce that Mohammed Bousaleh, John Rivers Fike, and Peyton Keith Tippett are on LSU's Chancellor's Honor Roll for the spring 2009 semester, and Abdullah Alghamdi, Jared Scott Loup, Alex Odeious Pines, Ping Puyang, Ryan Patrick Rogers, Ryan Andrew Smith, and Peyton Keith Tippett are on LSU's Chancellor Honor Roll for the fall 2009 semester.

To earn a place on the Dean's List a student must earn a 3.5 grade point average or greater on 15 or more credit hours of course work during a semester. LSU's Craft & Hawkins Department of Petroleum Engineering is pleased to announce that Hussain Al Majid, Carlos Eduardo Barboza, Robert James Will Ingram, Michael Cade Jackson, Kevin Marben, Simon Joel Martin, Zachary Hunter McCardell, Lawrence Daniel McCune, Noah Scott McGill, Anthony David Pananos, and Joseph Jules Sabrier IV are on the Dean's List for the spring 2009 semester, and Daniel Joseph Donovan, Ashton James Dussouy, Ismail Oluwakemi Folami, Alaina Claire Johnson, Allison Claire Kuykendall, Noah

Scott McGill, Jordan Thomas Milazzo, Joshua Taylor Smith, William Michael Smith, Alexander Lee Starlight, Jonathan Kent Webb, and Mohd Fazil Izham Zakaria are on the Dean's List for the fall 2009 semester.

In 2009, 37 undergraduate petroleum engineering students graduated from LSU's Craft & Hawkins Department of Petroleum Engineering with bachelor's degrees. Of the 37 undergraduate petroleum-engineering students who graduated in 2009, Benjamin Mark Bates and Cody Steele Rodriguez graduated Magna Cum Laude.

In addition to LSU's acknowledgement of our petroleum-engineering students' academic performance, Ms. Lauren Fogarty, received the Tom W. Dutton Scholarship Award for her outstanding commitment to community service. As president of LSU's Society of Petroleum Engineers (SPE) student chapter, Ms Fogarty demonstrated leadership skills by successfully encouraging fellow SPE members to participate in numerous civic events to help citizens in need from greater Baton Rouge community.

We expect the number of undergraduate petroleum engineering graduates to increase next year, as the increase in our department's student population permeates senior classes. Despite the increased number of students seeking an undergraduate degree in petroleum engineering from LSU, we continue to recruit students from high school who are academically prepared for the rigors of our program;

students who qualify to enroll in calculus their first semester at LSU and who performed excellent in their high school physics class/s.

Despite a tough economy and an increasing student population, all stakeholders do their part to help our department produce the petroleum engineers needed by our country and by the world. Support of LSU's Craft & Hawkins Department of Petroleum Engineering from industry, alumni, and friends remains strong. Our undergraduate students sedulously study during the fall and spring semesters, and many students gain vocational training to supplement their formal education by working internships in the petroleum industry during the summer. Each year our graduates begin their vocational training in earnest and begin to contribute to society by helping the world meet its energy needs, and, with time to establish themselves in their new professions, many graduates will give back to LSU by helping our department so that future petroleum engineering students will be able earn a Bachelor of Science in Petroleum Engineering, from LSU. For all who have helped our department ... our students, THANK YOU!

*-Fred Thurber*



A portion of our seniors are pictured after the SPE senior dinner

# SPE Delta section's Young Professionals Program



The SPE YPP and LSU student participants pose after the simulation competition with John R. Smith, LSU Associate Professor.

The LSU Petroleum Engineering department hosted a visit by the SPE Delta section's Young Professionals Program (YPP) on Friday, February 26, 2010. The visit featured a variety of activities at the LSU Petroleum Engineering Research and Technology Transfer Laboratory (PERTT Lab), helping to judge the LSU SPE MS Student Presentation Contest, and joining in the Friday afternoon faculty-student social. Highlights of the activities at the PERTT Lab included learning to drill and implement well control procedures on training simulators, practicing pump and choke control with full-scale rig equipment, controlling a natural gas kick and circulating it out of the LSU #2 well, and participating in a competition using the well control training simulators.

## About the visit

There were around 15 SPE YPP visitors. We spent the first part of the day at the PERTT Lab. The visit started with the introductory tour of the facility and the flow system, followed by a Well Control lecture by Dr. John R Smith and Darryl Bourgoyne. The subsequent, hands-on part of the learning exercise, included a well control simulation and modeling exercise, followed by killing a simulated gas kick in a PERTT Lab well, which was the culminating part of the experience. We covered in detail the following tasks:

- measuring pre-recorded information,
- kick identification,
- flow checks,
- hard shut-in procedure,
- record-keeping during control, and

- implementing the first circulation of the "driller's method" of well control.

Special emphasis was placed on practicing the proper operation of the choke and the pump during start-up, kick circulation, and shut-down, and calculating kill weight mud and initial circulating pressure. A number of current LSU students were assisting us along the way.

At the end of the PERTT Lab visit the hosts teamed up with the visitors and competed in achieving the fastest control of the gas kick with the least gain (in 15 minutes of simulated rig time). The winners were:

1. Ekweribe Chiedozie & John Griffin
2. Courtney Wilson & Jeremy Guillory
3. Gani Sagingaliyev & Brandon Hartmann

The remainder of the day was spent at the LSU Petroleum Department, where the SPE YPP visitors assisted the LSU professors in judging the internal LSU SPE MS Student Presentation Contest. The contest was followed by a jovial social, which was an opportunity to further discuss the eventful day and newly surfaced opportunities for future cooperation.

This educational, interactive, enjoyable and fun event was possible because of:

- Jennifer Young, SPE YP General Chairperson, who came up with the idea
- Dr. Monika Valjak, SPE YP Student Liaison, who organized this event
- Dr. John R. Smith, Darryl Bourgoyne, Dr. Mileva Radonjic, Jeanette Wooden, LSU Faculty and staff, who organized this event
- Gani Sagingaliyev, SPE YP Treasurer,

who organized this event

- Chase Menard, T. Madray, Brandon Hartmann, Jordan Woods, Jeremy Guillory, current LSU students, who participated enthusiastically
- Around 15 petroleum engineers from the SPE Delta Chapter and the Nicholls State University student SPE Chapter, who participated enthusiastically

*-Monika Valjak, John R. Smith, and Gani Sagingaliyev contributing. Michelle Chauvin, photographer.*



LSU student Chase Menard explains and points out the choke control panel.



Courtney Wilson, NSU student, participates as Choke Operator for the kick circulation.



Darryl Bourgoyne, PERTT Lab Director, gives a tour to the SPE YPP near the mud tanks.



NSU Associate Professor John M. Griffin (LSU PhD 1991) discusses Well Control with LSU student John Cleveland.



# 2010 SPE Student Paper Contest

Earlier in the Spring semester, the department hosted an internal student paper contest in order to select six candidates to travel to the SPE Gulf Coast Regional Paper Contest, held April 10 at Texas Tech. Newfield Exploration generously donated the award money for the internal competition.

The competition for the master's students occurred on Friday, February 26, and six students participated. The PhD candidates' competition occurred on Friday, March 5, and ten students participated. For both graduate level competitions, faculty judged the competition, and the two highest scoring participants in each category earned the right to travel to Lubbock, Texas to compete in the regional contest. The master's student competition was also judged by the SPE Delta section's Young Professionals Program. We thank the SPE YPP group for assisting the department with this judging process. The winners of the graduate level are as follows:

PhD 1<sup>st</sup> place tied: Dayanand Saini, "Experimental Determination of Minimum Miscibility Pressure by Gas-Oil IFT Measurements for a Gas Injection EOR Project" and Yuanyuan Shuai, "Ensemble-based Optimization for Water Flooding Reservoir."

Masters 1<sup>st</sup> place: Tatyana Plaksina, "Geothermal Application of CO<sub>2</sub>"

Masters 2<sup>nd</sup> place: Jose Eduardo Chirinos, "A Simplified Method to Estimate Casing Pressure during Well Control Events"

The undergraduate competition was held over the course of two days, on Tuesday, March 2 and Thursday, March 4. All seniors enrolled in the senior projects course participated in the event. This year there were 16 senior project teams. Each team chose one representative to present the paper presentation. Faculty judged the competition, and the two highest scoring participants earned the right to compete in the regional contest. The winners are as follows:

1<sup>st</sup> place: Richard Maidla presented "Deepwater Well Intervention: Artificial Lift Technology Review" for his team, which also included Ross G. Cazenave, Kade N. McCollough, and J. Tyler Thomason

2<sup>nd</sup> place: Abdullah Alghamdi presented "The Effect of Water Injection on Fractures in Deep Geothermal Formations" for his group, which also included Hussain Al Majid and Shadi A. Sarhan.

We would like to congratulate Jose Chirinos for placing 3<sup>rd</sup> in Master's competition at the SPE Gulf Coast Regional Paper Contest, held at Texas Tech.

-Andi Donmyer

## GRADUATE CORNER

### Optimizing Your First Work Experience

I belong to a select fraternity within the LSU Petroleum Engineering graduate students. I have previously been gainfully employed within the oil and gas industry. Once I graduated from LSU in Mechanical Engineering, I sought a life of adventure and travel. There were plenty of jobs in Louisiana and Texas, but I'm from Louisiana - I wanted to move somewhere different and exciting. For this reason, I joined a prominent oil-field service company as a wireline engineer - in Wyoming!

I'd never been to Wyoming, but it's out West, and it sounded exciting. After two weeks of introductory training, I flew to Casper, Wyoming and reported for work. The day I showed up was just after one snowstorm and just before another. My experience with snow was relegated to a handful of days from my childhood with no accumulation. Now I was being asked to drive through blowing snow, two feet accumulation with more on the way. Needless to say I had an adventure on my hands.

Besides acclimating myself to the weather and culture, there were other things I learned along the way that I believe would prove useful to our graduate students when they do get picked up by their operator or service company of choice.

- Save money. Ours is a volatile business where one day's oil prices mean expand, and the next day's oil prices mean reviewing last year's performance appraisals for places to save money. If you're lucky and you've got no loans to repay, you will be receiving more money than you've probably seen before. Don't panic! You don't have to spend it. You don't

need a new watch, skis, or car.

- Take pictures. Before you realize it, you'll be using the experiences you've had as stories to build from for the rest of your life. If only you have a picture of that workover rig perched on the side of a cliff. If only you had a picture of the roustabout with earplugs glued to the top of his hardhat without his knowledge.
- Bathe before getting into bed. This may seem silly to point out, but if you visit a wellsite and get a speck of oil-based mud on your clothes, your bed will smell like oil-based mud for weeks.
- Turn off your phone during time off. If you answer work phone calls during time off, it isn't time off. If you make a habit of answering weekend calls to come in and work more, someone will make a habit of asking you to.
- Keep an updated resume. Your first job is seldom your last job. Even if you remain in the same company, it's good to put your value down on paper to justify a promotion. If the unexpected happens, you won't waste a moment sending your resume to prospective new employers.
- Have fun. No one will have it for you.



-Law Dickerson

# STUDENT ORGANIZATIONS

LSU's Craft & Hawkins Department of Petroleum Engineering boasts the following student organizations: the Society of Petroleum Engineers (SPE), the American Association of Drilling Engineers (AADE), and Pi Epsilon Tau. All contribute to developing a culture of academic achievement, service to its members and others, and personal leadership development among student members. To all who have helped our student organizations through their generous financial support and/or personal participation in organizational events, we thank you! Without your help, the rich academic environment kindled by student organizations would not be possible.

## SPE

The SPE Student Chapter is proud to announce that the organization was voted Most Outstanding LSU Student Organization for 2009-2010. Many events occurred to become eligible for the nomination, which was written and submitted to LSU by the student chapter's liaison to SPE Delta Section and Industry Advisory Committee member Michael Sparacino, Baker Hughes. Many of the events and activities are detailed below.

### Energy education activities and outreach

Prof. Mayank Tyagi (SPE Student Chapter Faculty Advisor) and Ms. Lauren Fogarty (SPE Student Chapter President) gave a lecture to the seventh grade mathematics class at Glasgow Middle School during Spring 2009 (04/30/09). The presentation title was "Petroleum Engineers Make a World of Difference". The students participated in class discussions and asked series of questions ranging from usage of energy, environmental impacts to how women find petroleum engineering as their professional career.

### Golf Tournament 2009

It was a great turn out on Friday, October 23, 2009. The LSU chapter of SPE had been planning the annual SPE Golf Tournament for 5 months and was very excited to host it at the LSU Golf Course. Chevron was very generous and was named the tournament main sponsor this year. Brunch began at 10:30am below the Schlumberger tent with coffee, muffins, and fruit as everyone began to arrive. Twenty industry teams with over 40 industry representatives and five student

teams took to the links at noon for a shotgun tee-off. The day was full of networking, golf, and food. "We could not have asked for a better day to play," said many golfers throughout the day. Many students found career opportunities and made important contacts during the tournament. Some senior students were able to play with their senior project industry advisors, which gave them time to talk about project goals. As the players began to trickle back to the tent, Perfolog, who had been cooking all afternoon, began to serve up a steak dinner with all the amenities, which capped off a perfect day.

The tournament was able to fund the 2009 ATCE trip to New Orleans that gave students the opportunity to learn and network on the exhibit floor and during SPE paper presentations. This was a terrific opportunity because of the comparatively different state of the industry to last year. LSU students need all the exposure we can get so that we can become strong engineers with social backgrounds.

It was a great success and we always appreciate the industry support that LSU SPE has received throughout the year. With your support, we are able to participate in industry events and host presentations during our SPE meetings. The companies that played in the tournament were Baker Hughes, Cameron, Chevron, Compressco, Conoco Phillips, Devon Energy, EOG Resources, EXCO Resources, Hudson Services, Marathon, Mariner Energy, Newfield, Nexen Petroleum, Perfolog, PetroTigers, Schlumberger, Slider, Southwestern Energy, SPE Delta, and Wild Well Control. Thanks to all that participated and we hope to see you and more next year!

### Community Service

The LSU SPE student chapter was very dedicated to community service during the Fall 2009 semester. This was kicked off by a build with Habitat for Humanity of Baton Rouge. Twelve students spent the morning nailing together frames to make the walls of a house, and then raised and secured the walls in place in the afternoon. All participants spent a nice day outside doing some hard work and giving back to the community!

During LSU Homecoming Week, SPE students contributed to a canned food

drive. With 100 cans donated by our students, the SPE was able to fill up a whole donation bin for Homecoming's "CANapalooza." The food was donated to the Baton Rouge Food Bank.

Several students also attended a service project organized by "Volunteer Baton Rouge." Students used their arts and crafts skills to make baby books for Headstart children in the area. These books will be used as a learning tool, and as a special keepsake because each book was personalized with the child's name and pictures.

Another project with "Volunteer Baton Rouge" took place in the last week of November. Students visited a community home to decorate it for the holidays. Groups decorated bedroom doors with wrapping paper, garlands, and other holiday ornaments. The ladies who lived in the home appreciated it very much and the SPE students got into the holiday spirit of giving!

The chapter now has a "SPE Volunteering" T-shirt for students to wear to events. These shirts are free to students who volunteer. The funds for shirts were donated by Schlumberger. Thank you very much for your generosity!

We would like to thank all the students who were able to take some time to help out for these projects. You really have made a difference! There will be more in the future, and we hope to have even more people participate.

*-Mayank Tyagi, Faculty Advisor;  
Lauren Fogarty, President; and  
J. Tyler Thomason, Golf Chairman  
contributing*

## AADE

The LSU Chapter of AADE currently has 35 members which include both undergraduate and graduate students. The 2009-2010 officers are President Jerred Clark, Vice-President Jordan Woods, Secretary Anthony Sylvia, Treasurer Chris Marshall, and Social Chair Roy Knight. The AADE meetings consist of presentations on topics that apply to the drilling aspects of Petroleum Engineering followed by a social at a local restaurant. The meetings this year have been presented by Chevron, Devon Energy, Mi SWACO, Wild Well Control, and Shell. AADE at LSU also took a field

trip this year, utilizing our sponsorship funds donated by Chevron, to Wild Well Control in Houston. There, all of the participating senior and graduate students received well control certification. Our LSU AADE members proudly passed the Wild Well Control class with flying colors. AADE recently had its last meeting of the 2009-2010 year ending with the elections of its 2010-2011 officers, President Roy Knight, Vice-President Sean Quarls, Secretary Cody Leathers, Treasurer Kurlan Barbosa, and Social Chair Hassan Ramzi.

Graduate student AADE members, Koray Kinik, Rahul Gajbhiye, and Muhammad Zulqarnain, travelled to Houston to compete in the AADE Premier Drilling Fluids Conference student poster presentation contest at the AADE 2010 Premier Fluids Conference on April 6 & 7. We are proud to announce that Rahul Gajbhiye took 3rd place in this contest. All of the members appreciate the scholarship support received from the Lafayette and New Orleans AADE chapters and the New Orleans chapter's support for our drilling fluids laboratory.

*-John R. Smith, Faculty Advisor and Roy Knight, incoming President contributing*

## Pi Epsilon Tau

The Pi Epsilon Tau Petroleum Engineering Honor Society at LSU currently has 30 members, both undergraduate and graduate students. The new members initiated in the spring 2009 participated in a team building exercise with officers at the University Recreation Ropes Course. They tackled various exercises pushing the limits of their comfort zone and relying on each other to accomplish various tasks. This year's officers are Brandon Hartmann (president), Lauren Fogarty (vice-president), Joseph Sabrier (treasurer), and Kristen Barrett (secretary). New members will be initiated and new officers elected this spring.

Pi Epsilon Tau offers its members an opportunity to set themselves apart from other students. A student must excel in his or her Petroleum Engineering curriculum as well as maintain a high overall GPA to be inducted. Its members strive to uphold the excellence, collegiality, and high character of the Craft and Hawkins Department of Petroleum Engineering through their academic achievements and their careers in industry.

*-John R. Smith, Faculty Advisor*



Graduating senior SPE officers Kristen Barrett and J. Tyler Thomason are pictured with SPE president Lauren Fogarty, Michael Sparacino of Baker Hughes, and SPE officer Shadi Sarhan to celebrate the "Most Outstanding LSU Student Organization for 2009-2010" award.



Pictured Left to right: Glasgow Middle School teacher Mark Alan Zweig (7th grade Math), Prof. Mayank Tyagi (LSU), and Ms. Lauren Fogarty (SPE Student Chapter President).



Pictured left to right: Dave Moran, Richard Maidla, Lauren Fogarty, Kristen Barrett, Robert Ingram, Noah McGill, Tyler Thomason, Matthew Carter, and Prof. Mayank Tyagi are ready to start building a house!



**WE WOULD LIKE TO ACKNOWLEDGE AND THANK OUR 2009-10 SUPPORTERS ONCE AGAIN!**

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