

From the Department Chair–

Dr. Thomas W. Engler

Welcome to another informative and entertaining newsletter composed and published by the Petroleum Engineering program at New Mexico Tech. For your information, we are one of only two programs in the entire university that provides a newsletter to its alumni.



As you might have guessed from the picture, I am back as Chair of the Petroleum and Chemical Engineering programs. The duration of the sentence is 3 years, at which time Dr. Corey Leclerc, Associate Chair of Chemical Engineering, will rotate into the Chair position. This new rotational system will provide continuity to the leadership of the programs.

In the following pages you will find articles on recent events, scholarships and much more. The good news is enrollment is up, especially graduate students which is at an all time high. To support students, research grants have seen an increase, as well as donations from alumni, SPE, and companies. Of course the bad news is the limited job opportunities for our students. Hopefully, this trend will correct itself in the near future; however, in the meantime, anything you could do to promote and hire our students would be greatly appreciated.

As a final note, I strongly encourage you to come and visit NMT, Friday, April 30th through Saturday, May 1st. On Friday afternoon we have senior design presentations and that evening, the LBT banquet. On Saturday, is the Chen Classic Tournament, followed by a BBQ hosted by the SPE student chapter. Hope to see all of you there!

Inside the Petroleum Department

Inside this issue:

From the Department Chair	Front Page
Inside the Petroleum Department	2
Faculty Research and Other News	3
RPSEA Fellowship/Scholarship Program	4
2009-10 Scholarships	5-7
Alumni News	8-9
This Year in Pictures	10
49'ers Gold Rush Golf Scramble 2009 and Upcoming Scramble	11
SPE Student Chapter	12
Langdon Taylor Banquet & Weekend Events April 30 and May 1, 2010	13
Dr. Chen Classic	14
PRRC News	15

Going Electronic

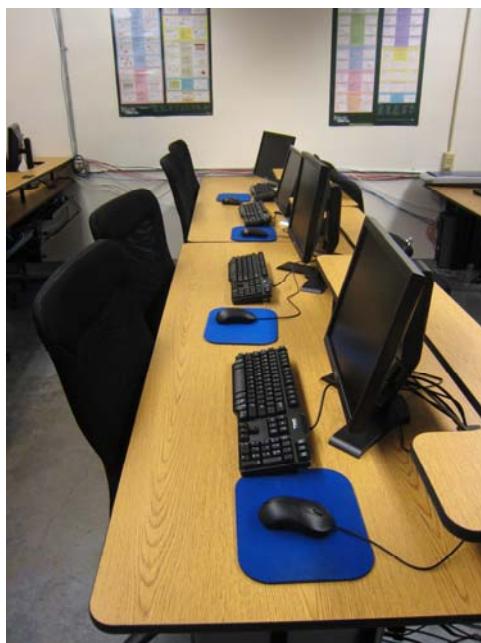
This year will be the first year we have not mailed out our annual newsletter. Due to rising costs in postage and budget cuts, we decided it would be more cost efficient to simply post our annual newsletter online.

The fastest way to receive our newsletter, and other department communications, is to make sure we have your current email address. Simply call Karen (575.835.5412) or send her an email (kmbalch@nmt.edu).

Moving forward, we will continue to utilize the website to post additional information.

Computer Lab-COMplete

A year and a half ago, along with the help of Charlie Birnie and another alumnus, we began to replace old computers in our computer lab. Desks to secure flat panel monitors replaced tables. With some additional funding, we have been able to complete the upgrades. We now have twenty computers, one instructor's station, and a server. We have replaced the tables with four more desks, new chairs, and have an overhead projector installed. The latest piece of technology added is an interactive smartboard.



Wild Well Control School March 26-28, 2010

This year, 20 students will attend a two and a half day school with Wild Well Control. The previous school had two simulators. This year, Wild Well Control is bringing four simulators.

We would like to thank this year's sponsors: William H. Marble and Chevron. Their funding will pay for the students' attendance and cover the meals.

Watch our website the first week of April for pictures!

HIGHLIGHTS: Faculty Research

Discrete Fracture Network Modeling in Naturally-Fractured Tight Gas Reservoirs

(Dr. Lawrence W. Teufel)

Tight gas reservoirs are considered unconventional since the low porosity and extremely low permeability of the matrix precludes economic flow rates. Only with the presence of interconnected, open natural fractures and the ability for wells to tap into the fracture network do tight gas reservoirs become a more viable exploration target. Fractures act as high permeability conduits that channel gas, stored in the matrix, to the wellbore. The effect is a reservoir-scale permeability that may be several orders of magnitude greater than core-scale matrix permeability.

Discrete fracture network (DFN) models are being used to characterize and simulate gas flow in naturally-fractured tight-gas sandstone reservoirs. The numerical DFN models consist of a stochastic fracture network generator and a single-phase gas flow simulator. Synthetic fracture network realizations are being developed by fitting statistical distributions of various network attributes that are based on outcrop data, geologic analogs and wellbore fracture data. Flow predictions of the models are being compared to initial well tests and production data. The research is sponsored by Shell Canada.

Other News

Grad students, Vidya Saga Bammidi and Weiwei Li, will travel to Lubbock, Texas, to compete in the **SPE Regional Student Paper Contest**, April 10, 2010. Good luck, Vidya and Weiwei!

Preparing for ATCE Florence Italy, Sept. 19-22, 2010. The department and students are busy preparing for travel in September. We hope to see some of our alumni there!

New Mexico Tech American Association for Drilling Engineers (AADE) student chapter! With the unrelenting help from Josh Kamas ('05), New Mexico Tech saw its first student drilling chapter formed in the fall semester, 2009. The student's chapter very first community service project occurred in October during National Breast Cancer Awareness month. The students raised \$250, and received matching funds from the Roswell community. All proceeds will stay in New Mexico and are being forwarded to the Patricia K. Jennings Foundation.



Langdon B. Taylor Award-Plaque Display. The SPE student chapter found the plaque (pictured left) last year and dusted it off to display on the floor. The seal that was on the plaque is missing and we plan to have it replaced. We have names from 1978/79-1992/93, and will be making efforts to have a new plaque made containing names from 1993/94 to current.

Fellowship/Scholarship Program Recipient Spotlight

RPSEA created the Fellowship/Scholarship Program to establish long-term, industry/education partnerships. RPSEA members Schlumberger and Strata Production Company designate financial resources through RPSEA to award multiple scholarships to the following member universities: Colorado School of Mines, Louisiana State University, New Mexico Institute of Mining and Technology, Stanford University, Texas A&M University, The University of Texas at Austin, The University of Oklahoma and West Virginia University. The most promising students with studies relevant to the oil and gas industry are awarded fellowships to help with their education and/or research activities. Through private funding from these two members, \$240,000 is established for these member universities to provide much needed support for 16 students per year for three years.



New Mexico Institute of Mining and Technology (NMT) graduate student Benjamin Dickinson was awarded a fellowship through the Fellowship/Scholarship Program for the 2008-09 school year. RPSEA spotlights Mr. Dickinson this quarter in the following interview, while wishing him success in his final year at NMT.

1. What was the title of your dissertation?

Sensitivity of Fracture Network Permeability within Flat Lying Lenticular Formations

2. Where did your project take place?

Socorro, New Mexico

3. What school were you attending during the fellowship?

New Mexico Institute of Mining and Technology

4. What was your degree and major while working on the fellowship?

Masters of Science in Petroleum Engineering

Prospective Graduation: May 2010

5. What was the time frame spent on the entire project?

I began working on the project in June 2009, and I will have it completed in May 2010.

6. Why did you pick this focus for your project?

I chose this topic because it incorporated aspects of applied simulation, engineering and geology. Although my research is a small part of a much larger field project, the basis of my study will provide valuable information on the analysis and development of fracture sensitivities.

7. What were the major accomplishments of your project?

The goals of my research were to develop insight on fractured reservoir characterization and the effect of fracture network parameters on reservoir performance.

8. How did RPSEA help you achieve your project goals?

The fellowship I received from RPSEA eased the burden of education related costs and gave me an edge on the successful completion of my project.

9. How have you grown both personally and professionally from your fellowship with RPSEA?

The support from the fellowship has helped me develop an understanding of the impact RPSEA has on both a local and national scale. Professionally, this program has granted me opportunities to attend conferences, network with industry personnel and discuss my project and its relation to concerns faced by industry today.

10. What is your role today?

Currently, I am a research assistant and will be finishing up my last semester of graduate school in the spring (2010) at New Mexico Tech.

SCHOLARSHIPS

Chevron Scholarship \$5,000

We would like to thank Chevron and Abel Lobato ('83) for providing scholarships to these students for the 2009-10 academic year, from left to right: Christopher Johnson, Tyler Robbins, Abel Lobato (NMT '92, Chevron), Robert Hernandez, Allan Abraham, Diego Merino Terán



Denver SPE Scholarship \$9,100

This year's recipients are: (back) Ronald Adegoke, Tom Shimura, Breanne Dunaway, Jesus Barraza; Sara Corman; (forefront) Gael Tawatieu, Diego Merino Teran. Each student received \$1,300.



Dallas SPE Scholarship \$2,000

The recipient of this year's scholarship was awarded to Breanne Dunaway.



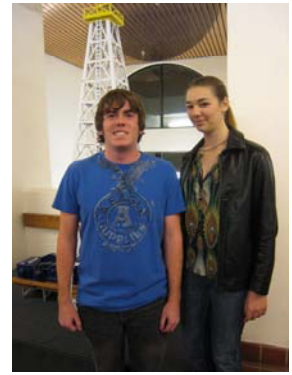
John M. Kelly Scholarship \$4,000

Every year incoming freshmen have the opportunity to receive a \$1000 scholarship, normally split between the fall and spring semester, and is renewable a second year with a maintained GPA. This year's recipients are (left to right): Spenser Moreland, Justin Coombes, William Barton Murphy (2nd year renewed, back), and Alan Ambrose.



William H. Marble Endowment \$2,800

This scholarship, set up by Bill Marble, is awarded to incoming students from states other than New Mexico. This year two freshmen, Patrick Breslin (CA), and Michelle Brann (RI), were each awarded a \$1,400 scholarship.



Roswell Landman \$500

William (Barton) Murphy was the recipient of this scholarship for the academic year.



SPE Hobbs Section \$2,000

This year's recipients are senior, Jesus Barraza, and freshman, Justin Coombes.



SPE Roswell Section \$1,000

The SPE Roswell Section awards a scholarship to a student from the SE corner of NM in the spring. This year's recipient was John Gray (junior).

JJ McGlasson ('00), SPE Roswell Section Chair, presented the check to John during an SPE Distinguished Lecture dinner in Roswell.



AADE Scholarship \$2,000

Two \$1,000 scholarships were awarded to junior, Breanne Dunaway, and senior, Jesus Barraza.



I. Grace Gorham Memorial Scholarship \$2,000

This endowed scholarship is designed to fund a Merit Scholarship for an undergraduate student in Petroleum Engineering, have a 3.0 GPA, and be a full-time regular student. Financial Aid and the Petroleum Engineering Department work together to select the student(s). This year's recipient was Craig Benally (not pictured).

Society of Petrophysicists and Well Log Analysts \$2,000

Graduate student, Olatokunbo Akanni, received a grant from SPWLA to help support his thesis research for the academic year.



Earl Debrine/Capitol Bar Scholarship \$1,000

To be eligible for this scholarship, a student has to be a resident of New Mexico or New York. The Capitol Bar/Earl DeBrine Scholarship is made possible by the generous support of Joanne and Earl DeBrine, Jr. in memory of their father Earl DeBrine, Sr.; Tech Alumnus (Petroleum Engineering, 1963) and former owner of the Capitol Bar. The scholarship is given to support a student who exhibits exemplary scholarship and character. Sara Corman, a senior from New Mexico, and Joshua Lugo, a junior from New York, each received a \$500 scholarship.



ALUMNI NEWS

We are receiving more support from various alumni on a yearly basis. Contributions include: monetary, department support (i.e. teaching), and support for student activities. As always, we are appreciative.

ATCE 2009, New Orleans, LA. Over thirty students attended SPE's Annual Technical Conference & Exhibition in New Orleans. Alumni who joined the department and students included: William H. Marble (sponsor), Erick Estrada, Calvin Kessler, Dacun Li, Glenn McColpin, Babajide Ayangade, and Tom and Nancy Engler. SPE's Southwest North American Region Director, Billy Harris, also joined our group for a fun evening. Chevron was also a sponsor for the event.



Left to Right: Saleem Ghori, Glenn McColpin, Dacun Li



Kate and Bill Marble, and Calvin Kessler visit with graduate students, Gerald Hartono (left corner) and Assiya Bekniyazova (right)



Current grad, Dnyaneshwar Shinde, catches up with Babajide (Jide) Ayangade ('09)



Alumni Breakfast at the Engler's prior to the 2009 Dr. Chen Classic



Alumni team takes first place in the 2009 Dr. Chen Classic



Dr. Anil Kumar and Dr. Her-Yuan Chen



Erick Estrada ('05) and Joe Tyson



Assiya Bekniyazova, J. Michael Kelly, Jeff Corey, and Abel Lobato

This Year In Pictures



The student travel committee meets with Dr. Engler to discuss plans for Italy



2009 Halloween Costume Contest



Students at ATCE New Orleans



Bill Lyons Underbalanced Drilling Class
Fall 2009 field trip to Farmington, NM.



Abel Lobato helps Pinyok Kovisuith and Manny Hernandez with the grill at the SPE BBQ after the 2009 Dr. Chen Classic.



Spring 2010 field trip- Roswell, NM



Students attending an SPE Distinguished Lecture in Roswell the night before a field trip in the area.



Students attending a cover letter workshop



Students spend the morning greeting players arriving for the golf scramble





The 7th Annual SPE 49'ers Gold Rush Golf Scramble was another success and the biggest golf scramble to date! We had 22 teams (88 players) on the golf course, with an even bigger NMT alumni attendance.

We want to thank...

49'ers Golf Tournament Sponsors

NMT SPE Student Chapter (lunch)

Chevron

ConocoPhillips (Awards/Appetizers) –Dan Voeks, Brett Wendt, Kelly Jeffery

Three Forks Resources (breakfast and student team)

NonDarcy Oil & Gas (goodie bags)

Jim Linville and Devon

Robert Armstrong (team student)

Synergy Operating, LLC

Nadel & Gussman HEYCO

Calvin Kessler, Halliburton

Marbob Energy Corporation

Armstrong Energy Corporation

Nadel & Gussman, HEYCO, LLC

Harvard Petroleum Company, LLC

Citizens' Alliance for Responsible Energy (CARE)-Marita Noon

Babajide Ayangade

Gary Gourley

Matthew and Elizabeth Boese

Weatherford-Artesia

SPE Roswell Section

Yearly Contributions (Department)

Brian & Cheryl Luginbill

Dan Voeks, ConocoPhillips

Robert Schwering (Scholarship)

Ken Fagan

Abel Lobato, Chevron

William H. Marble

Veronica Stevenson

Warner Williams, Chevron

Petroleum Alumni Guys

Doug Pecore

Jim Linville, Devon

JJ McGlasson

Jeff Corey, ConocoPhillips

Calvin Kessler, Halliburton

Tom and Nancy Engler

Steve Trujillo, Samson

Local Businesses:

The Capitol Bar on the Plaza, Randy's ACE Hardware, First State Bank



Mark your calendars! ***The 8th Annual SPE 49'ers Gold Rush Golf Scramble will be held on Friday, October 22, 2010.***

\$49 per person - includes green fees, lunch & golf cart Registration Time: 8:30am Shotgun Tee Time:10:00am. 4-man scramble. Call 575.835.5412 or email kmbalch@nmt.edu by Oct. 19th to register. Sponsor deadline Oct. 1st (Tier 1), and Oct. 8th (Tier 2).

Fundraising will be to cover travel costs to ATCE Florence, Italy, and spring events, including LBT Banquet.

Information, including the brochure, sponsor and registration forms, are posted on www.nmt.edu/~spe/49ers and will be continuously updated.



I would like to welcome everyone back to a new semester at New Mexico Tech. I hope everyone had a great winter break and are now ready to take on the challenges of a new year. A very special welcome to our new students, on behalf of the NMT SPE Student Chapter, we wish you all success and hope you will enjoy your time at Tech.

Fall Semester Review:

The Fall semester began with the traditional Welcome Back BBQ at Dr. Chen's house. The BBQ was fun and provided a great opportunity for the new students to socialize with everyone in the department, as well as a chance to unwind before a tough semester began.

This year's SPE Annual Technical Conference and Exhibition was held in New Orleans, Louisiana. Thirty-three students were able to attend this year, thanks to the generous contributions of the Roswell SPE Section, PRRC, Alumni, and chapter funds. The conference was a success in many areas. Students had the opportunity to hand out resumes, attend technical presentations and short courses, and get a first hand look of all the new promising technologies in the oil and gas industry. There was also plenty of time for fun, socializing, and spending time on the famous Bourbon Street.

In October, the SPE student chapter sponsored the 7th Annual SPE 49'ers Gold Rush Golf Scramble. The scramble was a huge success, due in large part to Karen Balch, officers, and students' persistence and hard work on getting a large number of sponsors. This year's tournament has the privilege of being the largest tournament with 49 golfers. Trophies for 1st, 2nd, 3rd, and last place were handed out. In addition, two small competitions included closest to the pin (9th and 17th holes) and a putting competition on the putting green. The prizes for the two competitions were a putter and two wedges, which were gratefully donated by Alumni.

Also in October, in conjunction with NMT AADE, SPE did a fundraiser for Breast Cancer Awareness. Students showed off their baking ability and baked brownies and cookies to sell. For two days a booth was set up in Fidel and the baked goods along with other goodies provided by Karen and various Alumni were sold. Thanks to the hard work of our student volunteers, SPE was able to raise over \$500, which was donated to the Susan G. Komen Foundation; the NMT AADE newly formed student chapter donated half to the Patricia K. Jennings Foundation (NM).

The fall semester ended with a BBQ at Dr. Chen's House. Also, we had our traditional end of the year potluck. Having such a diverse group of students in the department enables different and favorite ethnic dishes to be shared with everyone at the potluck. The potluck was a lot of fun and provided quality time to socialize with friends and reminisce on all the wonderful times of the fall semester.

Spring Semester Forward:

In the Spring we plan on having our welcome and end of the semester BBQ's. Also, we intend to provide educational field trips and continue our involvement in community services. Then for the first time in recent years the SPE student chapter will hold, in February, an SPE student paper contest. There are three categories: undergrad, Masters, and Ph.D. The winner of each category will represent NMT at the Annual SPE Regional Student Paper contest which will be held at Texas Tech University in March. To end the semester we will be hosting our Annual Langdon B. Taylor Banquet along with the Dr. Chen Classic Golf Tournament, followed by a year end BBQ.

Finally, I would like to take this opportunity on behalf of the NMT SPE Student Chapter to thank all the Alumni, donors, companies, and everyone else who has donated, or in other ways has helped out the student chapter in the past year. We look forward to your continued support of our chapter and hope to see everyone at the Langdon B. Taylor Banquet.



Bottom left corner: Jesus Barraza and Bart Hegarty attend the SPE Officers Workshop at ATCE New Orleans



Seniors: Devin Melusa, Robert Blakney, Emmanuel Hernandez and Jesus Barraza

Department & SPE Weekend-Long Events

Please join us!

Friday April 30, 2010

Lunch Social! NOON Around MSEC 384 (Conference Room). Join the students, faculty, and staff during the lunch hour. Lunch sponsored by the department.

Senior Design Presentations 1:00pm-3:00pm, MSEC 101

Petroleum Engineering Industrial Advisory Board Meeting 3:00pm. Location TBA

Langdon Taylor Banquet Sponsored by NMT SPE Student Chapter, Macey Center, Upper Lobby

5:00pm Social Hour

6:00pm Dinner

7:00pm Guest Speaker: Michael Tunstall of Halliburton and Denver's SPE Section Chair

Awards following Dinner \$20/person OR \$25 at the door (Registration form attached)

RAFFLE TICKETS AVAILABLE! You can find tickets on our website to download, print, and send to us.

Saturday, May 1, 2010

Alumni Breakfast. TBA. Watch website for further details.

Dr. Chen Classic: 11:00am Lunch and registration. 12:00pm Shotgun Tee-off.

\$25 per person - includes green fees, lunch & golf cart. 2-man or 4-man scramble depending on number in attendance

SPE BBQ: Awards for the Dr. Chen Classic will be given at the barbecue immediately following the Dr. Chen Classic.

ALL RESERVATIONS DUE BY TUESDAY, APRIL 27, 2010

Call 575.835.5412 to register or email: kmbalch@nmt.edu



Senior Design Teams



Dr. Chen Classic

Dr. Chen's Classic Golf Tournament-May 1, 2010

Spend the night after the banquet and join us for breakfast before heading to the golf course to play 18 holes in the Dr. Chen Classic. Last year we had an alumni team, a faculty team and a student team and there were a lot of laughs involved. 1st, 2nd, and 3rd place awards will be presented during the SPE student chapter sponsored BBQ and Awards, immediately following the Dr. Chen Classic.

Registration and lunch is at 11:00am.

12pm Shot Gun Start

The fee is \$25 and includes lunch, green fees, and a golf cart.

RSVP by Tuesday, April 27, 2010

You can send in your payment or bring it with you the day of the Tournament. Checks & credit cards accepted- please do not send cash.

Awards to be given immediately following the Dr. Chen Classic at the SPE BBQ.

Join the students for their end of semester bbq.



Petroleum Recovery Research Center News



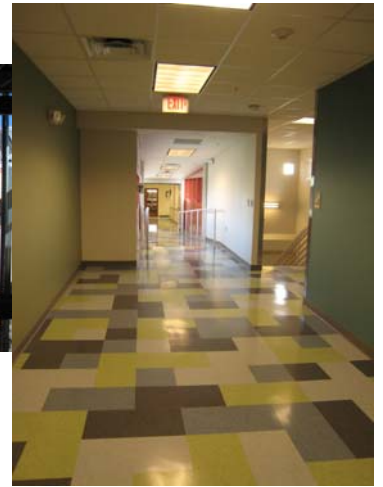
PRRC Construction, October 2008

John M. and
Esther L. Kelly
Building-
Then & Now



PRRC Now

The addition to the Petroleum Recovery Research Center was completed and research scientists moved into their new offices in August, 2009. There was an official ribbon cutting ceremony on October 20, 2009. With on-going research, new labs were constructed in the new wing, as well as additional conference rooms. Under the Direction of Dr. Robert Lee, the scientists still employ many of our undergraduate and graduate students to assist with various research projects, including the carbon sequestration project. If you ever find yourself on campus, please take some time to stop in and say hello. You'll be greeted with a smile and a hand shake, and a personal tour! It's a beautiful building and one everyone is proud of.



NMT Petroleum Engineering students with Dr. Kelly, Dr. Lee, Dr. Lopez, and the Board of Regents at the Ribbon Cutting Ceremony.

This page intentionally left blank