



# SJV SPE News

San Joaquin Valley Section Society of Petroleum Engineers

Issue 313

March 2014

Visit our website

<http://connect.spe.org/SJV/>

## In this issue:

General Section Meeting	1
From the Chair	3
Subsurface Study Group	4
SPE Board Information	5
Professional Spotlight	6
Lookback	8
Networking Bash	9
NB / Price of Oil	10
YP Announcement	11
SPE Golf Tournament	12
Engineering Day Success	13
Scholarships	15
Energy Tech. Program– Taft	16
SPE CSUB Chapter	17
Courses	18
Advertisements	22

## Editor & Asst. Editor:

Thomas J. Hampton

TJHampton@AeraEnergy.com

Mojtaba Ardali

Mojtaba\_Ardali@Oxy.com

March 20th, 2014

## General Section Meeting

### Solar Steam Generation for Thermal Recovery: Update

**Speaker:** John O'Donnell, VP Business Development, GlassPoint Solar

**Date:** Thursday, March 20<sup>th</sup> @ 11:30 AM

**Location:** The Petroleum Club, 12<sup>th</sup> Floor, 5060 California Avenue, Bakersfield

**Cost:** With online payment or RSVP: \$25 members, \$30 non-members

Walk-ins: \$30 members, \$35 non-members

No charge for Student Members, only RSVP

**Reservations:** RSVP by Tuesday morning March 18<sup>th</sup>, using one of the three options:

Using the corresponding link below to pay online using your Visa, MasterCard, American Express, Discover or PayPal account:

[PayPal Link for SPE Members - \\$25](#)

[PayPal Link for SPE Non-Members - \\$30](#)

OR if the above links don't work copy these links in your browser's address box

#### Members

[https://www.paypal.com/cgi-bin/webscr?cmd=s-xclick&hosted\\_button\\_id=5RWTXJP4EM4CG](https://www.paypal.com/cgi-bin/webscr?cmd=s-xclick&hosted_button_id=5RWTXJP4EM4CG)

#### Non-Members

[https://www.paypal.com/cgi-bin/webscr?cmd=s-xclick&hosted\\_button\\_id=RHA9ULKGUGMFE](https://www.paypal.com/cgi-bin/webscr?cmd=s-xclick&hosted_button_id=RHA9ULKGUGMFE)

OR

Email Blythe Miron at [BlytheMiron@chevron.com](mailto:BlytheMiron@chevron.com)

Call (661) 281-5713

Walk-ins and attendees with email/phone RSVP must pay by cash at the door. Sorry, no credit cards accepted at the door. RSVP no shows may be billed.



## General Section SPE Meeting

March 20, 2014

### Abstract

Solar steam generation offers cost-effective reductions in fuel costs and air emissions, and expanded total recovery in thermal EOR projects in California, the Middle East, and other sunny regions. GlassPoint's innovative Enclosed Trough technology was developed specifically for the needs of thermal recovery operations (EOR), and has proven its

reliability, cost-effectiveness, and process and environmental compatibility in pilot projects in California and Oman. The talk includes a review of the construction and operation of the pilot installations.

Solar EOR creates credits under California's Low Carbon Fuel Standard, potentially delivering large benefits to refiners as well as upstream operators. Solar steam generation can deliver 5 million LCFS credits or

more per annum serving just a fraction of current California thermal requirements, contributing to market stability and cost containment. Uniquely among compliance pathways, solar EOR delivers carbon intensity

reductions in petroleum fuels, extending the economic life and value of California's refineries and oilfields.

### Speaker's Short Bio

John O'Donnell is VP Business Development, GlassPoint Solar, Inc. Prior to joining GlassPoint, John was formerly founder and president of solar thermal provider Ausra (now Areva Solar). John started his career at USDOE's Princeton Plasma Physics Laboratory.

He was founder and holder of executive positions at Venearth Group, Pixelworks, Inc., Equator Technologies, Inc. and Multiflow Computer, Inc. John is named on nine U.S. patents. He has a B.Sc. with Special Distinction in Computer Science from Yale University and is a member of SPE.



## From the Chair, Jesse Frederick, WZI

[jfrdrck@wziinc.com](mailto:jfrdrck@wziinc.com)

Is it me, or are we all just as busy as a one-armed paper hangar? I remember the time when we engineers all anticipated the freedom that the paperless society would create. No more check prints and reverse sepias and.....slide rules!!! I was tasked as a young computer literate engineer with the duty of bringing personal computers and the first network to our workplace not to mention the first 3-d modeling computer and going to Mountain View in the Silicon Valley to pick a CAD system the size of two refrigerators (what was that?). With this sense of changes in mind I happened to be going over box loads of historic documents and found myself looking over books by Bill Rintoul and other historic texts and photos going back over a century of petroleum production and downstream treatment as part of another case involving legacy issues. Remarkable--Los Angeles in the 1920's was bursting at the seams with oil fields and refineries and manufacturing. The energy of the times was tangible in the photos and writings. Even the design documents exuded a certain faith in the future value of many things now considered mundane. Time has changed all that and the grand efforts are now often reduced to trite nostalgia or cursed as the bad old days reflecting bad old ways. The strategic value of hydrocarbon energy will never be lost in a sea of wishful thoughts. The challenges of our time is to couple the fact that our industry, like many operates with the permission of the public, with the demand that we achieve: a low tolerance of failure, a high interest innovation and a firm plan for education. We cannot return to certain past practices that may have eroded the current public confidence in our industry but we should continue to embrace the heroic enterpeneurial spirit of the early industry greats in pursuing the goals of our respective industry employers. The production of hydrocarbons and conversion to sources of raw material and energy is neither tired nor old and certainly is not without challenge. So---yeah, we are busy—isn't it great!!



## SPE Subsurface Study Group Lunch

### Effective Reservoir Descriptions for Dynamic Model Updating

**Date:** Thursday, March 13, 2014, 11:30 a.m.

**Venue:** Petroleum Club (12<sup>th</sup> Floor) at 5060 California Ave. in Bakersfield

**Speaker:** Dr. Behnam Jafarpour, professor of petroleum engineering at USC Viterbi School of Engineering

RSVP via e-mail to [orkhan\\_pashayev@oxy.com](mailto:orkhan_pashayev@oxy.com)

Or reserve via PayPal:

**Members (\$25)**

[https://www.paypal.com/cgi-bin/webscr?cmd=s-xclick&hosted\\_button\\_id=V2NF4ECEY78A6](https://www.paypal.com/cgi-bin/webscr?cmd=s-xclick&hosted_button_id=V2NF4ECEY78A6)

**Non-Members (\$30)**

[https://www.paypal.com/cgi-bin/webscr?cmd=s-xclick&hosted\\_button\\_id=V2NF4ECEY78A6](https://www.paypal.com/cgi-bin/webscr?cmd=s-xclick&hosted_button_id=V2NF4ECEY78A6)

### Abstract

High resolution descriptions of geologic variability in reservoir models are important for modeling fluid flow and transport processes in the reservoir and predicting oil and gas production. However, data limitation and multi-scale heterogeneity of geologic formations necessitate interpolation and extrapolation of reservoir properties beyond the collected data, which is usually accompanied by simplifying assumptions. As a result, a significant level of uncertainty is introduced into description of reservoir properties, which directly affects development planning. In particular, estimating high-resolution heterogeneous reservoir model properties from dynamic production and monitoring measurements often leads to an underdetermined inverse problem, also known as history matching, that usually have many non-unique solutions. Since geologic depositions are formed as continuous layers with local discontinuities, they exhibit strong spatial correlations. Consequently, the salient connectivity features in reservoir property maps become amenable to compact representations, a property that can be exploited to improve the ill-posed nature of the history matching inverse problem. In this talk, I will review compact (or reduced-order) representation of rock property maps and discuss an effective reservoir description and history matching approach that offers flexibility and robustness against prevailing geologic uncertainty.

### Short Bio

Behnam Jafarpour is currently an assistant professor of petroleum and electrical engineering at USC Viterbi School of Engineering where he leads the Subsurface Energy and Environmental Systems lab. He previously served as an assistant professor of Petroleum Engineering at Texas A&M University from 2008 to 2011. He earned his MS and PhD degrees in electrical engineering and environmental engineering, respectively, from MIT in 2008. His research focuses on applying the principles of systems theory and signal processing to identification and development of subsurface systems and in particular oil and gas reservoirs. He is the recipient of the 2012 SPE Junior Faculty Research Initiation Award and the 2013 Distinguished Achievement Award of the SPE Western North America Region.

## SJV SPE Board of Directors 2013- 2014

POSITION	NAME	COMPANY	PHONE	E-MAIL
<b>Section Chair</b>	Jesse Frederick	WZI Inc.	(661) 326-1112	jfdreck@wziinc.com
<b>Program</b>	Blythe Miron	Chevron	(661) 281-5713	bmmiron@gmail.com
<b>Membership</b>	Neil Malpiede	Naftex Operating Co.	(661) 809-0139	nmalpiede@naftex.com
<b>Secretary</b>	Keith Kostelnik	Vintage Production Calif.	(661) 412-5580	Keith_Kostelnik@oxy.com
<b>Treasurer</b>	Pamela Willis	Aera Energy LLC	(661) 869-5790	PTWillis@aeraenergy.com
<b>Surface Study Group</b>	Jeff Kim	Aera Energy LLC	(661) 665-7420	HJKim@aeraenergy.com
<b>Sub-Surface Study Group</b>	Orhan Pashayev	Oxy Inc.	661-412-5173	Orkhan_Pashayev@oxy.com
<b>Newsletter Editor</b>	Tom Hampton	Aera Energy LLC	(661) 665-5227	TJHampton@aeraenergy.com
<b>Newsletter Co-Editor</b>	Mojtaba Ardali	Oxy Inc.	(661) 412-5536	Mojtaba_Ardali@oxy.com
<b>Website Administrator</b>	Rakesh Trehan	Halliburton	(661) 391-1969	rakesh.trehan@halliburton.com
<b>Continuing Education Program</b>	Terry Kloth	PG&E & Zodiac Exploration Inc.	(661) 342-1068 (661) 398-5952	TLKB@pge.com
<b>Continuing Education Arrangements</b>	Craig Pauley	Chevron	(661) 391 4360	CraigPauley@chevron.com
<b>Activities</b>	Tara Butler	Enova Solutions	(661) 327-2405	Tbutler@enovaes.com
<b>Community Outreach Education</b>	David Susko	Baker Hughes	(661) 336-3408	David.Susko@bakerhughes.com
<b>Young Professionals Liaison</b>	Tarang Lal	Aera Energy LLC	(661) 979-4697	TLal@aeraenergy.com
<b>Award Nominations</b>	Max Solanki	Oxy Inc.	(661) 412-5507	Max_Solanki@Oxy.com
<b>Western NA Regional Director</b>	Tom Walsh	Petrotechnical Resources	(907) 230-9840	twalsh@petroak.com
<b>Student Chapter Faculty Advisor</b>	Dr. Dana Abouenasr	CSUB	(661) 654-2661	dabouelnasr@csub.edu
<b>Student Chapter President</b>	Chris Reedy	CSUB	(661) 802-3058	chris.reedy@live.com

# PEOPLE



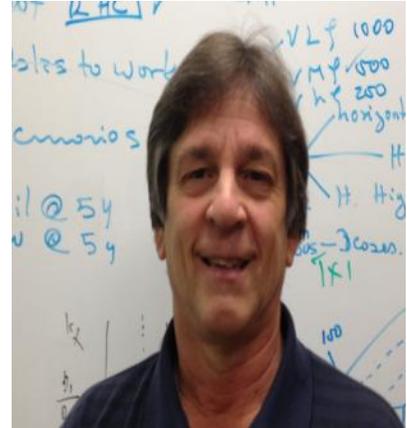
**Mojtaba Ardali**, SPE, is a Reservoir Engineer with Oxy. At Oxy, he works for Shale Development and

EOR team and he is involved in EOR reservoir simulation studies. He recently graduated from Texas A&M University and during his PhD, he conducted research in thermal recovery especially SAGD process for Canadian reservoirs. His areas of interest include reservoir modeling, production surveillance and hydraulic fracturing. Mojtaba has been an SPE member since 2004 and is a author of seven SPE papers. He serves on the SPE SJV Board since 2013.

## PROFESSIONAL SPOTLIGHT

### Larry Murray

Larry is currently the manager for Occidental Petroleum's California Exploitation Process Optimization team. He has been with Oxy in Bakersfield for 9 years in a variety of reservoir simulation related positions. Larry holds B.S. degrees in chemistry and chemical engineering from the University of California at Irvine and Santa Barbara, and an M.S. degree in chemical engineering from UC Berkeley. Larry has specialized in reservoir simulation his entire career including positions with Unocal in their research and geothermal divisions, and MidAmerican Energy in their geothermal business units. Larry has extensive worldwide modeling experience with geothermal fields, oil and gas waterflood and EOR processes, and Monterey shale reservoirs. In recent years he has focused considerable attention on uncertainty analysis as applied to reservoir simulation, and he was an early developer of commercial assisted history matching software in the early 1990s.



In recent years he has focused considerable attention on uncertainty analysis as applied to reservoir simulation, and he was an early developer of commercial assisted history matching software in the early 1990s.

#### NOMINATE YOUR COLLEAGUE TODAY!

Do you know someone who has done something special or would like to share his/her insight on the profession?

Nominate your colleague for Professional Spotlight!

Send your suggestions to

[Mojtaba\\_ardali@oxy.com](mailto:Mojtaba_ardali@oxy.com)

#### ASK SPE PROFESSIONAL !

Have a question you want to ask a Professional in Spotlight? Very easy! Send your questions to

[Mojtaba\\_ardali@oxy.com](mailto:Mojtaba_ardali@oxy.com)

and the best ones will be included into interviews!

#### SPE SJV: Please tell us a little bit about your current work responsibilities?

**LM:** My current job position is to manage a technical studies group responsible for providing flow modeling studies of key California-based Oxy development projects. These projects range from improving mature waterfloods, proposing new waterflood and EOR pilots, recommending well spacing and types in new field developments, identifying remaining oil in place targets for development drilling, and providing a secondary technical basis for reserve estimation. As a group we are ultimately challenged to make sure our studies can add value to the organization and find ways to move our technical studies work into implementation within the business units.

#### SPE SJV: What is the most interesting assignment / project you worked on that really stands out for you?

**LM:** No two projects are ever alike and each has its own set of unique technical challenges. From a manager's perspective, I think my team's work on Oxy's Elk Hills ASP pilot two years ago was particularly interesting because it brought into play technical issues associated with complex chemical behavior, core flood modeling, pilot performance interpretation, and rigorous uncertainty analysis to support a future ASP expansion. From an individual point of view, my work on developing an industry-standard geothermal simulator coupled with flow visualization and assisted history matching features in the early 1990s was particularly satisfying.

*Continued next page*

# PEOPLE



## NOMINATE YOUR COLLEAGUE TODAY!

Do you know someone who has done something special or would like to share his/her insight on the profession? Nominate your colleague for Professional Spotlight!

Send your suggestions to [mojtaba\\_ardali@oxy.com](mailto:mojtaba_ardali@oxy.com)

## ASK SPE PROFESSIONAL !

Have a question you want to ask a Professional in Spotlight? Very easy! Send your questions to

[mojtaba\\_ardali@oxy.com](mailto:mojtaba_ardali@oxy.com)  
or  
[TJHampton@aeraenergy.com](mailto:TJHampton@aeraenergy.com)  
and the best ones will be included into interviews!

## LET US KNOW WHAT YOU THINK

We would love to hear from you! Please forward your questions, suggestions or comments about this column or the Newsletter to

[mojtaba\\_ardali@oxy.com](mailto:mojtaba_ardali@oxy.com)  
or  
[TJHampton@aeraenergy.com](mailto:TJHampton@aeraenergy.com)

Find more interesting articles and local SPE news at

<http://connect.spe.org/SJV>

## PROFESSIONAL SPOTLIGHT: Larry Murray

(continued from previous page)

**SPE SJV: There are several tools for reservoir management including numerical reservoir simulators. Please tell us a little about the importance and usefulness of reservoir simulators. In addition, how do you recommend using simulators cost-effectively?**

**LM:** I can honestly say that the biggest challenge I face as a manager is to bring value and relevance to the use of reservoir simulation for projects. For many outsiders, reservoir simulation looks like a black box process. Done correctly, reservoir simulation is a fantastic tool that provides reservoir engineers with a unique opportunity to test ideas, integrate data, and support business decisions surrounding the development and exploitation of reservoirs. Done incorrectly, the tool takes over and really does become a black box.

**SPE SJV: Overreliance on computerized workflows seems to be an important recent issue among petroleum engineers and in fact was criticized by previous interviewees. I would like to know your opinion regarding this issue and how do you think it is possible to avoid it?**

**LM:** I would probably agree with previous criticism. I would offer some of the following solutions.

**I.** Do not consider reservoir simulation to be a substitute for good reservoir engineering, it is a tool that requires an intelligent engineer on the other end of it.

**II.** Reservoir simulation models should not be considered the end product of reservoir simulation. I think the end products are good technical and business decisions that are guided by the learnings from all aspects of the simulation process – even when we build models we don't like. Since reservoir simulation is a data integration process, this is the one time that multiple disciplines have a chance to reflect on what is really happening underground and how best to extract the oil.

**III.** Avoid the “complex is better” mentality. Adding platoons of geos and engineers, along with building complicated models, does not add credibility to a modeling process.

**IV.** Stop looking for deterministic solutions and embrace uncertainties as part of the simulation process.

**SPE SJV: If you would not have joined the oil industry, what would you be doing today?**

**LM:** Honestly I have always loved working in the industry and have never considered a career outside of it.

**SPE SJV: Work-life balance is a hot topic in many industries as job demands get higher and higher. How do you manage to maintain that balance?**

**LM:** It's actually quite easy to do in Bakersfield since most of our jobs are in offices close to home. That eliminates the commute issue and frees up a lot of extra time that can be divided between work and home as needed. I think as professionals we all learn time management skills and how to decide when the job needs extra attention or not.

**SPE SJV: What keeps you busy outside of work?**

**LM:** I'm still trying to figure out how to stop hooking a golf ball or double-faulting on a tennis court. It looks like solving those problems are life-long endeavors.

**\*\*Please note that the opinions expressed are personal opinions and do not reflect any position of OXY**

## ***LOOKBACK for February 2014***



**Engineering Day at CSUB – BBQ provided by Halliburton**



**SPE visits CSUB's new engineering program .**

**Jesse Fredrick's presents " PDQ Engineering" for CSUB students.**



## **Announcing the SPE SJV Section Monthly Networking Bash**

**The March Sponsor is Weatherford.**



**Thursday, March 27<sup>th</sup>, 2014**

**5:30-7:30 @**

**Lengthwise Brewery "The Pub" - Northwest**

**2900 Calloway Drive**



**SPE Networking bashes are held monthly as a service to our members.  
This is a great opportunity to come out and meet people from all areas of our industry  
in a social setting.**

**Our sponsor generously provides appetizers for your enjoyment while you are meeting  
new people  
or visiting with a long time colleague.  
Non-member guests are always welcome to attend.**

**RSVP to Tara Butler @ [tbutler@novaes.com](mailto:tbutler@novaes.com) or 661-319-4022**

The SPE SJV Section would like to thank  
Weatherford for sponsoring our  
February Monthly Networking Bash!



Wireline Services  
Tubing Conveyed Perforating  
Secure Drilling Services

**Chevron 13 API Crude Price**  
(Daily Posted Price)



Source: Chevron California Crude Oil Price Bulletin

# University of Southern California Viterbi School of Engineering

Please join us for an  
Information Session at

## Society of Petroleum Engineers: Bakersfield, CA



Date: Wednesday March 19<sup>th</sup>, 2014

Time: 6:00pm – 7:00pm

Location: Petroleum Club (5060 California Ave. Bakersfield, CA 93309)

### *Why Attend?*

- Discover the 40+ graduate engineering programs offered completely online through the Distance Education Network [DEN@Viterbi]
- Learn about the flexibility and interactivity provided by DEN@Viterbi, a **Top 5 ranked Online Engineering Graduate Program** (*U.S. News and World Report, 2014*).
- Find out how you can begin taking classes for the Fall 2014 Semester
- Lunch will be provided!

Questions? Email [DEN@viterbi.usc.edu](mailto:DEN@viterbi.usc.edu)

[Paypal \(SPE Members\)- Free](#)

[Paypal \(SPE None-Members\)-Free](#)

# 2014 SPE Golf tournament

Single Flight—9:00am Shotgun Start  
Raffle, Great Food, Beverages & FUN !!



Tournament  
Date: April 11,  
2014

## Online Registration Only

### Golf & Sponsorship Registration



**Weatherford**<sup>®</sup>



**Cannon**



**Kenaj**  
DRILLING



**enova**



**Scientific Drilling**

**Mi SWACO**

**HALLIBURTON**

**Schlumberger**

Date: April 11, 2014 - 9:00 am Shotgun Start

Location: Sundale Country Club

Format: 4 Person Scramble

Cost: \$125 / Player

Registration Deadline: March 28th

Registration Information: Pam Willis @ [PTWillis@aeraenergy.com](mailto:PTWillis@aeraenergy.com)

Sponsors Info: Larry Miller @ [Larry.Miller@Halliburton.com](mailto:Larry.Miller@Halliburton.com)



## Engineering Day 2014 – Another Success

On February 21st, California State University Bakersfield hosted another successful Engineering Day. Over 500 students from 30 Kern County high schools toured the campus and interacted with members of local industry and academia. Local industry, colleges, Kern County Superintendent of Schools and SPE helped make a difference for the students wanting to learn more about STEM careers.

With a full spectrum of experience from students to seasoned professionals, our presenters covered a variety of subjects. Topics included a discussion of their personal career arcs, how engineering is responsible for our modern conveniences, and the benefits of a career in engineering. Students left with a better understanding of the career of an engineer and how engineering impacts our daily lives.

The exhibitor hall gave the students the opportunity to speak directly with members of local industry, representatives of professional organizations, and faculty and staff of local colleges. The popular flight simulator from Edwards Air Force Base returned for another year. Rock and mineral samples, frac fluid demonstrations, equipment mock-ups, and games were just some of the many interactive and informative exhibits. The students witnessed demonstrations while touring the robotics, physics, chemistry, biosystems, engineering science, and petroleum engineering laboratories of the CSUB campus.

The local media brought exposure of Engineering Day to our entire community. KGET and KERO ran stories on their evening news programs.

We would like to thank all of our generous sponsors, informative exhibitors, engaging presenters, and hard-working volunteers for contributing to the success of the 14<sup>th</sup> annual Engineering Day:

### Sponsors



Lunch for over 600 students and volunteers generously provided by:

**HALLIBURTON**

### Exhibitors

Aera Energy LLC  
 American Association of Safety  
 Engineers  
 California State University Bakersfield  
 Cannon  
 Chevron  
 Diversified Project Services  
 International, Inc

Edwards AFB Flight Test Center  
 Halliburton  
 Occidental Petroleum  
 San Joaquin Geological Society  
 Schlumberger Oilfield Services  
 Society of Petroleum Engineers  
 Taft College  
 Willbros Engineers

### Presenters

Mick Bowen – *Edwards AFB Flight Test  
 Center*  
 Erin Daniel – *Aera Energy LLC*  
 Rita Waugh – *Aera Energy LLC*  
 Jesse Frederick – *WZI Inc*

*Chris Reedy – CSUB, SPE*  
*Kevin Wagner – Chevron*  
*Malou Guerrero – Aera Energy LLC*  
*Paul Blake – Taft College*  
 Linda Mohammed – *Aera Energy LLC*

# 2014 College Scholarship Applications Available online

The San Joaquin Valley (SJV) chapter of the Society of Petroleum Engineers is offering a college scholarship program for Fall 2014. The Scholarship is co-funded by SJV member activities and SPE headquarters.

***Submittal deadline is May 9<sup>th</sup>, 2014.***

Scholarships will be awarded to graduating high school seniors & undergraduate-level college students. Awarded candidates will receive up to \$5000 depending on academic achievement and overall strength of the applicant pool.

To be eligible an applicant must be:

A Student pursuing a degree in a petroleum-related field (any branch of engineering, environmental or earth sciences) and,

**Either**

A California resident (or a non-resident if the child of a current San Joaquin Valley SPE member)

**Or**

A non-resident with petroleum industry work experience in California, including summer internships & Comet program internships

**For more information, please contact:**

Dave Susko, Community Outreach Director, (661) 336-3408

Or via email: [david.susko@bakerhughes.com](mailto:david.susko@bakerhughes.com)

Download the application directly at: <http://sjv.spe.org/aboutus/scholarships>



## **ENERGY TECHNOLOGY PROGRAM**

The Taft College Energy Technology program provides training and education in technical and professional skills to enable individuals to be job ready and professionally prepared. This program was developed in collaboration with the energy sector with the goals of preparing students for the workplace and supporting the energy sector with skilled workers. The program first offered in Fall 2010 started with approximately 21 students and as of Fall 2013 this number has grown to estimated 126 students. The program has an emphasis in the petroleum industry, but it teaches the fundamentals of the energy sector so that the skills attained are transferable across industries.

To meet the goal of producing skilled workers, the program addresses both technical and professional skill preparation. Technical skills topics include: computer applications, data management, petroleum processes, safety, and instrumentation, while professional skill topics include: business communication, ethics & values, conflict resolution, and teamwork.

Students in the program range from recent high school graduates to working adults. The program is ideal for those interested in the petroleum industry, whether they are looking for a career change, or wanting to advance their careers more broadly. Students may choose to receive an Associate's degree and/or one five certificate options.

Students gain practical work experience along with their studies. Taft College has partnered with several oil & gas companies plus the US Bureau of Land Management to offer interested students with internship opportunities. Therefore, a number of our students have received paid internship opportunities with some of our oil & gas sector partners. Furthermore, some students have been able to secure full-time employment within the oil and gas industry sector, while others have been able to advance their careers within the industry. This program is only possible working in partnership with area industry, including: Holmes Western, Chevron, Linn Energy (formerly Berry Petroleum), Freeport-McMoRan (formerly PXP), Oxy, E&B Natural Resources, Nabors, Halliburton, Gene Watson, Sempra Energy, Workforce Staffing, Aera, Electrical Power Services, Inc., PCL, and Westec.

For more information about the Energy Technology Program, contact 661-763-7748/661-763-7967 or [CareerReady@taftcollege.edu](mailto:CareerReady@taftcollege.edu)

# SPE SJV STUDENT CHAPTER CSU BAKERSFIELD

## Guest Speakers

On Monday January 27th the SPE SJV Student Chapter had the first guest speaker of the year. The guest speaker was Deanne Renting and her presentation was on "Production of Diatomite"

David Wolfer, president of IES, was our second guest speaker of the year and took place February 24<sup>th</sup>, 2014.

We, the student chapter, would like to thank our guests for being part and taking time from their busy schedules to provide us with valuable insights of their career and the industry. We are truly thankful.

---

## *Starting the new year on the right path*

---

First, we would like to thank our guest speakers for the month of January and February for taking part and motivating us to keep looking forward. As a student chapter, it is our main goal to provide valuable presentations of the industry.

Our student executive board is excited into bringing free tutoring sessions for our engineering students at CSUB. We know how much dedication and perseverance it takes to be an engineering student and we would like to start a tutoring program for them to keep them motivated.

As of right now, there is not an official tutoring program for engineering students, but it is in the talk and we can't wait to make this possible! Meanwhile, we are providing study sessions for midterms and upcoming finals. We not only find this a great way to study, but also a way to be able to communicate with our student members.

The SPE student board was excited to volunteer and take part on Engineering day that took place Friday February 21, 2014. This was a great way to interact with high school students from all over Kern County and motivate them into pursuing STEM majors.

Our SPE Student Chapter at CSUB is very excited and motivated to bring new ideas on the table that will benefit our members, students, faculty, and our community as a whole. We would like to thank everyone that has helped us in one way or another to make this student chapter the best it can be.

-SPE Student Chapter at California State University



## Society of Petroleum Engineers TRAINING COURSES

*Setting the standard for technical excellence.*

[www.spe.org/training](http://www.spe.org/training)

### Coiled Tubing and Its Applications

9 April 2014 :: 0800–1700

University of Phoenix  
4900 California Ave.  
Bakersfield, CA 93309

This course provides an introduction to coiled tubing (CT) as a tool for workover and drilling and completion services. It includes an overview of CT extended-reach operations, typical field applications, the properties of CT, its manufacture, surface equipment required for downhole deployment, as well as discussion of downhole CT tools. A significant portion of the course covers CT mechanical performance, including working limits, buckling, and fatigue. A discussion of CT drilling technology and hydraulics is also included.

#### Topics include:

- An introduction to surface equipment required to deploy CT during field operations
- Basic understanding of CT job modeling and fatigue tracking, and why it's important
- Introduction to typical CT field applications
- Overview of selected new CT technology

**Learning Level** - Introductory

**Course Length** - 1 Day

**Why You Should Attend** - This is an introductory course for engineers and others new to the field of CT. This course will provide an improved understanding of critical issues related to successful CT field operations.

**Who Should Attend** - Engineers and others that are involved in the design of CT equipment or uses of CT field services.

**CEUs** - .8 CEUs (Continuing Education Units) will be awarded for this 1-day course.

**Ed Smalley** has more than 30 years of oilfield experience, including assignments in new product development, field operations, sales, and management. His areas of expertise include coiled tubing, formation evaluation, coalbed methane, hydraulic fracturing, and commercialization of emerging technology.

He started his career with Schlumberger where he held various positions of increasing responsibility in sales and operations. Ed then joined Gas Technology Institute as Director of E&P Business Development, where he spearheaded the commercial launch of more than 60 new E&P products. He has been with NOV CTES in Conroe, TX, for the past 9 years and serves as General Manager, responsible for the overall management of the organization. NOV CTES is a provider of leading-edge downhole modeling software and advanced measuring devices that support the coiled tubing, wireline, and drilling segments of the industry. Mr. Smalley holds a B.S. Engineering degree from Kansas State University and has published numerous SPE papers. He is an active member of SPE, ICoTA, and SPWLA.

## “Bachus Pump Course”

**Instructor:** Mr. Larry Bachus

**Date:** June 9-13<sup>th</sup>, 2014 (8:00 am to 5:00 pm)

**Location:** University of Phoenix, 4900 California, Ave, Bakersfield, California.

### Announcement:

SJV SPE is proudly sponsoring the – Bachus Pump Course. This is an intensive five day course which explains the design, operation, and maintenance of process pumps with emphasis on petroleum applications and pumps used in petroleum production and refining. Students should bring their laptops and a calculator to assist in the learning process.

### Questions:

Please call Terry L. Kloth @ 661-328-5952 (office); 661- 342-1068 (mobile) or e-mail TLKB@pge.com if you have questions or need additional information.

### Payment & Cost:

Payment can be made by check at the door on the first day of class (RSVP in advance by e-mail) or register & pay with a credit card via PayPal (below). The course is limited to 50 students. The price of this course for SPE members and non - members is \$1,800 per person. The text book “Everything You Need to Know about Pumps” is included with the course. Morning and afternoon snacks, cold and hot drinks, and a light lunch is included.

### PayPal Link:

[https://www.paypal.com/cgi-bin/webscr?cmd=\\_s-xclick&hosted\\_button\\_id=ZNWNEMZ24USZA](https://www.paypal.com/cgi-bin/webscr?cmd=_s-xclick&hosted_button_id=ZNWNEMZ24USZA)

**RSVP:** Please RSVP to [TLKB@pge.com](mailto:TLKB@pge.com) or Craig Pauley @ [craigpauley@chevron.com](mailto:craigpauley@chevron.com)

### Target Audience:

Facility Engineers, Facility Engineering Supervisors, Construction Engineers, operational personnel, supervision, Piping engineers, designers Project Engineers, Project managers, and anyone whom would like a better understanding of pumps.

### Course Outline:

- |   |  |
|---|--|
| 1) Pump Principles                      | 10) Pump and Motor Alignment             |
| 2) NPSH, Net Positive Suction Head      | 11) Pump Bearings & care                 |
| 3) Cavitation- Types- Prevention        | 12) Pump Shaft Packing                   |
| 4) The Affinity Laws                    | 13) Mechanical Seals                     |
| 5) Useful Work and Pump Efficiency      | 14) Failure Analysis of Mechanical Seals |
| 6) Pump Classification – Types of Pumps | 15) Common Sense Failure Analysis        |
| 7) Understanding Pump Curves            | 16) Avoiding Wear in Centrifugal Pumps   |
| 8) The “Pumping” system curve           | 17) Proper Fluid Piping                  |
| 9) Pump Shaft Deflection                |  |

### Instructors Biography:

Mr. Larry Bachus has over 40-years of experience working with Industrial Pumps, including almost 20-years dedicated to refinery pumps. His areas of expertise include the design selection, operation, and maintenance of petroleum process pumps. For many years, Larry operated his own pump rebuild/repair facility where he serviced pumps for Gulf, Sunoco, Hess, Mobil, Esso, Shell DuPont and PDVSA. Today, Larry travels the world as mentor-trainer to global refiners SASOL, PETRONAS Petroleum, ECOPETROL de Colombia, Chevron Nigeria, Chevron South Africa, SAPREF and India Oil. He is instrumental in drastically improving the service time (MTBF) of industrial pumps. Larry has authored many “pump” articles and papers. He has authored two books “Know and Understand Centrifugal Pumps” and “Everything you need to Know about Pumps”. Larry wrote the second book in English and Spanish at the same time. Larry has a certificate in Maintenance Management from the University of Alabama, and is currently working on a Master’s Degree at Middle Tennessee State University. Larry is a U.S. Navy veteran and is CEO of Bachus Company, Inc. Larry is known worldwide as “The Pump Guy”.

**Special Requirements: Lap Tops and calculator.**

# Thermal oil recovery SHORT COURSE

MAY 5-7, 2014

OUR 36<sup>TH</sup> YEAR

PRACTICAL 3-DAY COURSE

EXPERIENCED INSTRUCTORS

USEFUL PC PROGRAMS

## Course Description

This 3-day thermal recovery course is designed to provide an understanding of heat and fluid flow in heavy oil reservoirs, prediction of thermal performance, and a review of field experience. Special attention is paid to current technologies such as operation of mature steamfloods, horizontal well applications, SAGD, VAPEX, etc. The course is designed for reservoir and production engineers but will also be useful for geologists, technicians and managers working in heavy oil production.

Easy-to-use PC programs and spreadsheets are provided to help the participants understand thermal processes and make engineering predictions.

## TEXTS

Attendees will receive a comprehensive revised manual.

## COMPUTER PROGRAMS

IBM PC programs in Visual Basic and Excel worksheets are provided to estimate steam zone development, heat loss, cyclic steaming performance, pressure drop in steam lines, steamflood performance, SAGD calculations, etc.

## Instructors

Farouq Ali has taught similar short courses to over 7000 industry participants during the past 48 years. He specializes in thermal recovery and simulation. Farouq Ali has written three books and over 500 technical papers on these subjects. He has designed more than 40 oil recovery projects in various countries. Among many awards, he received the 1997 SPE Thermal Recovery Pioneer, 2007 SPE Anthony F. Lucas, 2002 SPE Improved Recovery Pioneer and 1996 SPE Lester C. Uren awards. He is a member of the U.S. National Academy of Engineering.

Jeff Jones is Vice President, Reservoir Engineering with E & B Resources, in Bakersfield, and has over 40 years' experience in all facets of thermal recovery engineering. Jeff has worked on steamflood, cyclic steaming, and in situ combustion projects, and has experience with reservoir, production, and facilities engineering. An accomplished programmer, he has published many technical papers and

holds a number of U.S. patents on thermal recovery related devices. Jeff received Society of Petroleum Engineers' Production Engineering Award in 2002. He was a SPE Distinguished Lecturer for 2004-2005. He received the Society of Petroleum Engineers' Thermal Recovery Pioneer award in 2010.

## Location

Four Points Sheraton, Inn, 5101 California Ave.

## REGISTRATION

Registration fee is \$3,300

Call (780) 461-2944

Fax (780) 461-8494

e-mail: farouq@telusplanet.net

## “Introduction to API Storage Tank Standards”

**Instructor:** Mr. John Cornell

**Date:** November 4-6<sup>th</sup>, 2014 (8:00 am to 5:00 pm)

**Location:** University of Phoenix, 4900 California, Ave, Bakersfield, California.

### Announcement:

SJVSPE is proudly sponsoring the – “Introduction to API Storage Tank Standards”. This is an intensive three day course which is designed for petroleum industry personnel, Facility Engineers, Project Engineers and Managers, suppliers, engineering firms, and operating personnel and contractors responsible for the design, construction, inspection, maintenance, regulatory, compliance, or operation of both large and small above ground storage tanks, A complete set of course materials are provided in a binder for each student.

### Questions:

Please call Terry L. Kloth @ 661-328-5952 (office); 661- 342-1068 (mobile) or e-mail [TLKB@pge.com](mailto:TLKB@pge.com) if you have questions or need additional information.

### Payment & Cost:

Payment can be made by check at the door on the first day of class (RSVP in advance by e-mail) or register & pay with a credit card via PayPal (below). The price of this course for SPE members and non - members is \$ 1,510 per person. Morning and afternoon snacks, cold and hot drinks, and a light lunch is included,

**PayPal Link:** [https://www.paypal.com/cgi-bin/webscr?cmd=s-xclick&hosted\\_button\\_id=QZKFHWAKE7FXC](https://www.paypal.com/cgi-bin/webscr?cmd=s-xclick&hosted_button_id=QZKFHWAKE7FXC)

**RSVP:** Please RSVP to [TLKB@pge.com](mailto:TLKB@pge.com)

### Target Audience:

Facility Engineers, Facility Engineering Supervisors, Construction Engineers, Operational personnel, Supervision, Piping engineers, Contractors, Suppliers, designers, Project Engineers, Project managers, and anyone whom would like a better understanding Refining and Production Tanks.

### Course Outline:

**Day One:** Large Atmospheric Tanks (API-650) - Tank introduction, Materials, Design, Fabrication, Construction, External/ Internal floating roofs, Marking, and additional design and construction details.

**Day two:** Existing Tank Evaluation ( API-653) – Introduction to tank failures, Brittle fracture, Inspection drivers and considerations, Inspection types and schedules, Safety concerns around tanks, Failure (corrosion) types, etc.

**Day three:** Production Tanks (API -12F -12B) Tank Materials, Design, Fabrication. Also, (API-12R1), Inspection of field production tanks.

### Instructors Biography:

Mr. John Cornell is a Senior Tank Specialist for and owner of H.I.R. Technical Services which is a well-recognized tank consulting firm for storage tank design , fabrication, construction, inspection, and repair. He is currently an Official contracted training provider for The American Petroleum Institute worldwide and has been offering tank training courses on standards such as but not limited to API-620, API-650, and API-653 for many years. Mr. Cornell has worked for several suppliers of both internal and external floating roofs and is now considered to be an expert on floating roof systems of all design. Mr. Cornell discovered a gap in the training that was currently available to tank owners so he has assembled and now offers “The Advanced Tank Training” course which is intended to increase the knowledge of tank owners. Mr. Cornell is The Senior Training Provider for The USDOT for PHSMA as relating to Large Breakout tanks. Mr. Cornell is also an API-653 Certified Tank Inspector.

**Special Requirements:** Lap Tops are “not required” and the students are discouraged from using lap tops or smart phones during class.

# SPE Western North America and Rocky Mountain Joint Regional Meeting



16-18 April 2014  
Denver, Colorado USA

## Register Now!

Come join us and experience the first-ever joint SPE Technical Conference and Exhibition organized by two major North America Regions. The [SPE Western North America and Rocky Mountain Joint Regional Meeting](#) will be held on 16-18 April, 2014 in Denver, Colorado, USA. The theme of the meeting is "From the Rockies to the Pacific – Bridging the Unconventional and Conventional through Technology."

This two-day event will blend the technology ideas and know-how between conventional and unconventional assets. The program includes interesting and challenging topics ranging from newest horizontal well technologies to 100 year old waterflood and steam operations.

For those exploiting the unconventional, this conference provides a great opportunity to understand the Bakken and the Niobrara plays. For those from the conventional asset, in addition to hearing case histories and technology of Waterflood and EOR projects, you will also have a chance to learn whether there are new unconventional technologies that will help further your efforts to maximize production and recovery.

Register today to be a part of this conference!

Register Now



2014 Western North America and Rocky Mountain Joint Conference and Exhibition  
April 15-18, 2014 | Denver, Colorado

## Knowledge Will Soar Rocky Mountain High at This Year's SPE Conference in Denver.



The Society of Petroleum Engineers announces its first-ever Joint SPE Technical Conference and Exhibit organized by two major North American Regions – Western North America and Rocky Mountain. Expand your knowledge and cross-pollinate ideas and know-how between Unconventional and Conventional assets.

### Reasons to Attend the Conference:

- Keynote Speakers
  - The Honorable Gov. Hickenlooper (Friday, April 18th)
  - Respected Helge Hove Halderson, Statoil
- Panel Discussions with Oil and Gas Commission Chairs from 5 states
- Technical sessions with more than 80 papers
- Exceptional short courses from oil and gas industry experts
- Excellent opportunity to network and experience the great mile high city of Denver



Honorable Governor  
Hickenlooper

**Come join us at the  
Sheraton Downtown Denver Hotel  
1550 Court Place  
Denver, Colorado 80202**

**Exhibition, Sponsorship,  
and Marketing Information:  
Julianna Sipeki +1 303 277 0270  
jsipeki@mhausa.com**

Register at [www.wrmjce.org](http://www.wrmjce.org)



We match up the latest innovations with breakthrough thinkers to expand what's possible. In Bakersfield, you'll collaborate with the best in the industry on leading-edge projects like cogeneration, enhanced oil recovery, and digital iFields. At Chevron, you'll join a team with the technology to take on big challenges, the integrity to do it responsibly, and the drive to keep the world moving forward.

**Are you up to the job?** Learn more about Bakersfield engineering opportunities at [chevron.com/BakersfieldJobs](http://chevron.com/BakersfieldJobs)

**JOIN THE  
CHALLENGE.**



Human Energy®

## ZEECO: smokeless, reliable well site flaring<sup>z</sup>



At Zeeco, we understand the everyday realities of environmental compliance in the oil and gas production fields. Our enclosed flare systems achieve **greater than 98% VOC destruction efficiency, meeting EPA Quad O regulations and keeping you in compliance.** They operate safely, smokelessly, and with fewer service issues. From well site and tank vent flares to compressor and central gathering site flares, Zeeco delivers exactly what you need. Choose the combustion experts with the field experience to back you up and with the engineered, standardized flares and thermal oxidizers you need in inventory right now. Choose a company where humans answer the phone and where deadlines mean something.

**Choose Zeeco.**

*open / enclosed flares • high / low pressure flares • thermal oxidizers • rentals*



Zeeco, Inc. 22151 E. 91st St., Broken Arrow, OK 74014 USA

+1-918-258-8551 sales@zeeco.com zeeco.com



# PROU

**Processes Unlimited International, Inc. (ProU)** is an experienced Multi-Discipline, Engineering, Design, Project Management, and Safety Services firm, with corporate headquarters in Bakersfield, CA since 1985.

Since 1985 ProU is committed to providing superior value and service to our clients with a focus on quality work and accountability.

## INDUSTRIES

- Oil & Gas
- Refining
- Food & Beverage
- Power & Utilities
- Alternative Energy
- Chemicals
- Cement, Mining, Minerals,  
& Metals
- Building Products
- Plastics & Packaging
- Pulp & Paper
- Light Industrial

## SERVICES

- Mechanical Engineering
- Civil Engineering
- Structural Engineering
- Electrical Engineering
- Instrumentation
- Controls



5500 Ming Ave., Suite 400 | Bakersfield, CA 93309

Other Offices: Atlanta, GA | Dallas, TX | Fresno, CA

Nashville, TN | Pasadena, CA | San Ramon, CA



[WWW.PROU.COM](http://WWW.PROU.COM)

**Increase  
PRODUCTION  
and PROFITS**



## 300% Increase in Downhole Pump Run Life

A recent Six Sigma Study shows 300% increase in downhole pump run life.

Watch this 2 minute video comparing a downhole pump with a conventional plunger vs. a FARR plunger, [Click here](#). You will be amazed.

By making one small change in your downhole pumps, you will experience:

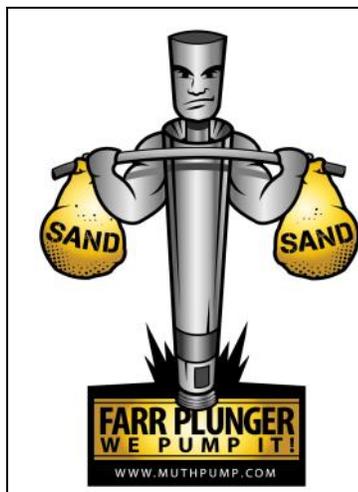
1. Reduce rig count on lease.
2. Reduce personnel and vehicles on lease.
3. **Reduce Health & Safety incidents.**
4. Reduce Exposure to Environmental Spill Incidents.
5. Reduce Operating Expenses and Save your company Money.

You don't even have to change your pump shop or pump supplier, just request a FARR Plunger in your next pump.

Muth Pump has been in business for more than 15 years and we have more than 15,000 FARR Plungers in wells in 17 states in the USA and in 10 different countries. It is proven technology that works.

Please visit our website [www.muthpump.com](http://www.muthpump.com) or give us a call for more information.

***"By FARR, We Make Your Rod Pumps The Best In The Industry!"***



**MUTH PUMP  
LLC**

4308 Resnik Court #206

Bakersfield, CA 93313

Office (661) 588-8700

Fax (661) 836-1512



**Make Your Mark.**

# GROW with Oxy

Growth and financial stability are at the core of our company. We'll promise you the same focus — opportunities for growth, development and success throughout your career.

Apply today at [www.oxy.com/careers](http://www.oxy.com/careers)



[www.oxy.com](http://www.oxy.com)



**Advertising Order Form for the monthly newsletter of the  
San Joaquin Valley Section of Society of Petroleum Engineers**

SJV Section of SPE, PO BOX 21135, Bakersfield, CA 93390

sjv.spe.org

Taxpayer ID# 75-2001539

**Company Information:**

Company:	
Address:	
City, State, Zip:	
Business Phone:	
Fax:	
Contact Name:	
Date of Request:	

**Monthly Advertising Rates: (circle one)**

Size, inches	Rate, \$ / Month	Description
2 X 3.5	25.00	(One business card size)
4 X 3.5	50.00	(Two business cards size)
6 X 3.5	75.00	(Three business cards size)
8 X 3.5	100.00	(Four business cards size)
10 X 3.5	125.00	(1/2 page, one column)
2 X 7	50.00	(Two business cards size)
4 X 7	100.00	(Four business cards size)
5 X 7	125.00	(1/2 page)
6 X 7	150.00	(Six business cards size)
10 X 7	250.00	(full page)

**Advertising Order Form:**

Ad Size	Start Date:	<input type="checkbox"/>	Paid in Full
One Month Cost		<input type="checkbox"/>	Payment Due
# Months Run	_____		
TOTAL Due:			

*If possible, please provide payment at time of placing advertisement.*

**Please make checks payable to "San Joaquin Valley Section of SPE"**

**Special Instructions:**

**Art Work: (circle one)**

Camera Ready Art	Black & White Copy
Business Card	Diskette

**Please send camera ready art work or business card for ad and this form to:**

**Thomas J. Hampton, SPE Board Member**

**Aera Energy, LLC**

**Or Preferably Email to**

**TJHampton@AeraEnergy.com**

**SUPPORT THE SJV SPE NEWSLETTER BY PURCHASING ADVERTISING SPACE**

MONTHLY NEWSLETTER DISTRIBUTED TO THE SAN JOAQUIN VALLEY SECTION

MEMBERS FREE OF CHARGE. A PDF OF THE NEWSLETTER IS POSTED TO THE WEBSITE .

Rates start at only \$25/month.