A Message from the Chair

Goodby 2018, Hello 2019, Oil prices volatile, EOR Distinguished Lecturer for January, WRM in San Jose this coming April.

Dear Friends and Members of SPE,

Happy New Year! This coming year should be interesting for the energy industry, but hopefully not too interesting. As I write this, oil prices are $47.24 per barrel. Over the last couple of months, we have seen a dramatic drop in prices from a high of $75 per barrel to under $50 per barrel. The price swings make it difficult for operators to make long term plans. So, we may be in for a turbulent ride in 2019.

Speaking of turbulence, SPE Distinguished Lecturer Charles Pope gave an outstanding talk at our December Luncheon. Charles discussed the dynamics of coil tubing clean-outs in horizontal wells. The findings from his work were counter intuitive. Doing what is against “conventional wisdom”, in our industry, often generates results that are a significant improvement to the status quo.

We have another Distinguished Lecturer visiting us this month. Our January 8th Luncheon speaker will be Gary Teletzke. Gary is the Senior Technical Advisor for Enhanced Oil Recovery at ExxonMobil Upstream Research Company. He will review the status of CO2 Enhanced Oil Recovery and geologic storage, focusing on subsurface lessons learned and their implications for large-scale CO2 capture and storage. It will be another interesting talk.
Message from the Chair continues...

Looking forward, the Western Regional Meeting will be held in San Jose, California, April 22-25. Among the events at the Meeting will be the presenting of Regional SPE Awards. Nominations for these Awards will be in January and February. Please do nominate deserving fellow SPE members for the 2019 Awards.

I am looking forward to an exciting year. Help kick it off by joining us at the January 8th Luncheon at the Long Beach Petroleum Club.

Sincerely,

Robert Schaaf
SPE LA Basin Section Chair 2016-2018
rschaaf@socal.rr.com
CO2 in the Subsurface - From EOR to Storage
presented by Gary Teletzke of ExxonMobil Upstream Research
- Distinguished Lecturer -

Abstract
The Intergovernmental Panel on Climate Change (IPCC) and the International Energy Agency (IEA) have issued recent reports suggesting that deployment of carbon dioxide capture and storage (CCS) can significantly reduce the cost of achieving CO2 emission reduction targets. However, several questions remain: Under what circumstances will large-scale deployment take place? Where and when will this occur? How large a role will CCS play in stabilizing atmospheric concentrations of CO2? I will review the current status of CO2-EOR and geologic storage focusing on subsurface lessons learned and their implications for large-scale CCS.

Our industry has a long history with CO2-EOR that provides a strong experience base for CO2 storage. However, CO2-EOR alone will be insufficient to meet emission reduction targets and storage in deep saline aquifers is also being investigated. Experience from operating CCS projects shows that subsurface storage capacity in saline formations can be limited by dynamic injectability factors. Hundreds of years of CO2 storage capacity is potentially available, even after accounting for dynamic limitations, but the areal distribution of potential storage capacity is widely varied. Geologic and reservoir engineering studies will be essential for identifying storage sites having adequate capacity, containment, and injectivity. Petroleum engineers will play a key role in these studies.

Bio
Gary Teletzke is Senior Technical Advisor for Enhanced Oil Recovery at ExxonMobil Upstream Research Company. He has led research projects related to gas injection EOR, chemical EOR, and compositional reservoir simulation. He has also led several EOR field studies, integrating laboratory work, reservoir simulation, and pilot testing. For the past ten years, he has provided technical leadership to research efforts on CO2 sequestration. He has published more than 40 technical papers and patents. He has organized numerous SPE conferences over the past two decades and served as Executive Editor of SPEREE from 2015-2017. He was named an SPE Distinguished Member in 2013. He received a BS in chemical engineering from Northwestern University and PhD in chemical engineering from University of Minnesota.
PHOTOS OF THE
PETROLEUM TECHNOLOGY LUNCHEON
DEC 11TH

Stop, Drop and Circulate, an Engineered Approach to Coiled Tubing Intervention in Horizontal Wells
presented by Charles Pope, of Complete Shale
-Distinguished Lecturer-
SPE AWARDS - NOMINATE A COLLEAGUE

You know colleagues in your region who deserve to be recognized for distinguished achievement in the oil and gas industry. Motivate your section members to nominate a colleague for an SPE Award at the international or regional level. Some of the major SPE Awards are:

- **Honorary Membership**
- **Distinguished Membership**
- **Anthony F. Lucas Technical Leadership Gold Medal**
- **John Franklin Carll Distinguished Professional Award**
- **Lester C. Uren Technical Excellence Award**
- **Charles F. Rand Memorial Gold Medal**
- **DeGolyer Distinguished Service Medal**
- **Robert Earll McConnell Award**

**New!** Sustainability and Stewardship in the Oil and Gas Industry Award—In 2019 SPE will also recognize outstanding efforts of individuals in the upstream oil and gas industry in promoting and adopting the relatively new concepts of sustainable development. This award will be available at both the regional and international level.

Nominations will be accepted through 15 February 2019 for International Awards & 1 March 2019 for Regional Awards.

Hear what Maria Capello has to say about awards.

Questions? Email Us

Learn more about all SPE awards including nominee eligibility and how to nominate.
INTRODUCTION TO NUMERICAL MODELING IN GEOTECHNICAL ENGINEERING WITH EMPHASIS ON FLAC MODELING

January 25-26, 2019 • Los Angeles, CA • 10 PDH Available • $1,500

Instructor: Dr. Siavash Zamiran, P.E., MEA, Inc.
Winner of the ASCE St. Louis Young Engineer Award for Professional Achievement

Topics covered in the workshop include:

- Introduction to Computation Geotechnics
- Commercial Geotechnical Programs
- Theoretical Considerations
- Principles of Numerical Modeling
- Numerical Modeling in FLAC

Recommended For:
- Civil Engineers
- Geotechnical Engineers
- Mining Engineers
- Petroleum Engineers
- Geological Engineers

For more information and registration, see
www.meacorporation.com/event/FLAC

Use code SPE for $200 off 2 day registration!
LASPE BOARD OF DIRECTORS NOMINATION ANNOUNCEMENT

The Los Angeles Basin Section of the Society of Petroleum Engineers (LASPE) is seeking nominees for open Board of Directors (BOD) positions.

If you would like to be considered for the position, please submit a brief biography emphasizing your previous involvement in and contribution to SPE. Other pertinent information are education, work experience, and petroleum industry related activities. Comments on your enthusiasm for performing volunteer activities, and availability and commitment for supporting LASPE would be welcomed.

Commitment for this position involves attending the monthly BOD meetings (10:30 to 11:30 a.m.) on the second Tuesday of each month. The meetings typically take place at the Long Beach Petroleum Club before the monthly technical talks. In addition, the BOD member may be asked to volunteer to be on LASPE committees and/or get involved in SPE regional committees.

You will be expected to familiarize yourself with SPE operations using www.spe.org as a guide, and the LASPE bylaws found at http://connect.spe.org/losangelesbasin/aboutus/laspebylaws. You will help run the local section and represent the local members in the regional and national SPE affairs.

LASPE is looking forward to receiving your biography and any other pertinent information you feel will assist in evaluating your candidacy to become a BOD. Please submit your nomination document to Robert Schaaf (pro-tem Nomination Committee Chair) at rschaaf@socal.rr.com.

If you have questions, please contact Robert Schaaf at rschaaf@socal.rr.com.

On behalf of the 2018-2019 LASPE Nomination Committee
Attendance:

Robert Schaaf, Chair, Board Member through 2018
Bill Sanz, Vice Chair, Board Member through 2020
Francois Florence, Treasurer, Board Member through 2021
Andrew López, Secretary, Board Member through 2021
Ryan Kwong, Awards Committee, Board Member through 2020 (not present) – Proxy by Robert
Brian Tran, Scholarship Committee, Board Member through 2019 (not present) – Proxy by Robert
Ted Frankiewicz, Jr Past Chair 2014-2015 and Board Member
JR Smoyer, Board Member through 2020 (not present) – Proxy by Robert
Mark Ghann-Amoah, Board member through 2020 (not present) – Proxy by Robert

Committee Members and Affiliates:
Baldev Gill, Past Board Member, 2018 WRM Co-chair (not present)
Rick Finken (not present)
AB Gorashi, Education Committee (not present)
Sam Sarem, Membership Committee (not present)
Steve Shryock, Student Liaison
Ramin Aliyev, USC Student Chapter President (not present)
Ted Hayrapetian, USC Student Chapter, Secretary (not present)
Alex Walter, CSULB Student Chapter President (not present)
Jalal Torabzadeh, CSULB Faculty Advisor (not present)
Scott Hara, Outreach Committee
Vanessa Perez, Outreach Committee (not present)
Steve Cheung (not present)
Omar De Gante, USC Vice President
Dylan Chennault, USC (not present)
Karen Vo, USC (not present)

Call to Order – 10:45AM; quorum check

1) Approval of the Agenda
Robert moved to approve agenda. Bill seconded. Agenda approved.

2) Approval of the Minutes for the Board Meetings held on October 9, 2018
Bill moved to approve the minutes. Francois seconded. Minutes approved.
3) **Actions:**
   a) Board discussed moving meeting location to CRC. Other options include LB Energy Resources (formerly LBGO) office at Spring & Junipero and the new DOGGR office at a TBD location.
   b) The state of the LASPE Board was discussed.
      ▪ Robert made motion to nominate Andrew López as board secretary, Ted F seconded motion. Board voted unanimously to appoint Andrew to board.
      ▪ We also need a new Program Chair. The Chair position also needs to be filled.
   c) Ted F discussed outstanding money left in WRM account. There is an outstanding check for $150 left uncashed. Will wait to close out account to prevent check from bouncing.
   d) 2019 SPE WRM will be held April 23\(^{rd}\) – 26\(^{th}\) in San Jose and is hosted by the Golden Gate Section.
   e) Robert and Andrew to reach out to additional speakers for 2019 LA SPE meetings.
   f) SPE board would like additional company involvement.

4) **REPORTS:**
   b) Program Chair – Robert Schaaf – Today is “Best Practices to Reduce Venting and Flaring with Economic Benefit” with Jeff Voorhis. We have speakers through January.
   c) Golf Committee – JR Smoyer, Ryan Kwong, Brian Tran, Bill Sanz, Francois Florence, Mark Ghann-Amoah – No update.
   d) Outreach Activities – Scott Hara – MESA Days are scheduled for March 2\(^{nd}\) and March 16\(^{th}\), with regionals on April 13\(^{th}\). This year events will be held at UCR.
   e) YP Activities – Robert Schaaf – Would like someone at OCEC meetings representing SPE.
   f) Awards Committee – Ryan Kwong – No upcoming awards that we are aware.
   g) Student Liaison – Steve Shryock – Would like a letter for local funds. Steve Shryock is helping draft.

5) **Student Chapter Reports**
   a) USC – No report
   b) CSULB – Andrew López will present at the November meeting (11/29). SPE chapter is interested in additional speakers for 2019.

6) **Adjournment**
   The meeting was adjourned at 11:15 am (Pacific Time Zone).

   Respectfully submitted,
   Andrew López
   Secretary
SELECTED SPE UPCOMING EVENTS 2019

<table>
<thead>
<tr>
<th>Date</th>
<th>Title</th>
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<tbody>
<tr>
<td>January 8*</td>
<td>Gary F. Teletzke - Distinguished Lecturer</td>
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<td></td>
<td>&quot;CO2 in the subsurface - From EOR to Storage&quot;</td>
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<td>February 12*</td>
<td>Dan Dudak - Southern District Deputy - California Department of</td>
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<td>Conservation - Division of Oil, Gas, and Geothermal Resources</td>
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<td>March 12*</td>
<td>Med Kamal - Distinguished Lecturer</td>
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<td>&quot;Conventional and Unconventional Reservoirs - What's Is In and Out in</td>
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<td>Today's Pressure Rate Transient Analysis&quot;</td>
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<tr>
<td>April 23-26</td>
<td>WRM 2019 San Jose, California</td>
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<tr>
<td>May 14*</td>
<td>Roy Ledgerwood III - Distinguished Lecturer</td>
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<td></td>
<td>“Solving the Mystery of Low Rate Penetration in Deep Wells”</td>
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* Asterisk * on date indicates a Board of Directors meeting starts at 10:30 AM prior to Petroleum Technology Luncheon. All are welcome to attend.

DEADLINES FOR NEWSLETTER ARTICLE SUBMISSION

<table>
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<tr>
<th>Month</th>
<th>1st Submission Call</th>
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<th>No Submissions Accepted After</th>
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<td>4/26/19</td>
<td>5/1/19</td>
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POSITION AVAILABLE

SENTINEL PEAK RESOURCES LLC
Exciting and challenging opportunities await you at Sentinel Peak Resources (SPR) in the Los Angeles Basin and Bakersfield, CA. We are an independent oil and gas company engaged in the activities of acquiring, developing, and producing oil and gas properties primarily focusing on heavy oil development in California.

CURRENT OPPORTUNITIES:

Senior Reservoir Engineer (Los Angeles Basin):
• Minimum of 10 years of reservoir engineering experience, preferably in the oil and gas industry, with a technical proficiency in all areas of reservoir engineering.
• BS in Petroleum or Mechanical Engineering, MS chemical, Petroleum, or Mechanical Engineering Preferred.

HOW TO APPLY:
Submit Resume via email to careers@sentinelpeakresources.com EOE, M/F/D/V SPR does not provide sponsorship. No walk-ins.
Being Unconventional is What Set Us Apart.

Since day one Summit ESP was founded on the principal of functioning Unconventionally. Employing the most technically gifted people, giving them the tools to succeed, and responding quickly to our customer’s needs has made Summit ESP the industry leader in producing unconventional wells.

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Society of Petroleum Engineers
Los Angeles Basin Section
www.laspe.org
## 2018-2019 LASPE OFFICERS, BOARD & CONTACTS

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
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<tbody>
<tr>
<td>Robert Schaaf</td>
<td>LASPE Chairperson 2016-2018</td>
<td><a href="mailto:rschaaf@socal.rr.com">rschaaf@socal.rr.com</a></td>
</tr>
<tr>
<td>Bill Sanz</td>
<td>Vice Chair - Board Member thru 2020</td>
<td><a href="mailto:william.sanz@ecodyne.com">william.sanz@ecodyne.com</a></td>
</tr>
<tr>
<td>Dr. Ted Frankiewicz</td>
<td>Past Chair - Board Member</td>
<td><a href="mailto:tcfrankiewicz@gmail.com">tcfrankiewicz@gmail.com</a></td>
</tr>
<tr>
<td>Ryan Kwong</td>
<td>Board member through 2020</td>
<td><a href="mailto:ryankwong30@gmail.com">ryankwong30@gmail.com</a></td>
</tr>
<tr>
<td>Francois Florence</td>
<td>Treasurer - Board member through 2020</td>
<td><a href="mailto:francois.florence@gmail.com">francois.florence@gmail.com</a></td>
</tr>
<tr>
<td>Andrew Lopez</td>
<td>Secretary - Board member through 2021</td>
<td><a href="mailto:alopez@specservices.com">alopez@specservices.com</a></td>
</tr>
<tr>
<td>Brian Tran</td>
<td>Board member through 2019</td>
<td><a href="mailto:briantran01@yahoo.com">briantran01@yahoo.com</a></td>
</tr>
<tr>
<td>JR Smoyer</td>
<td>Board member through 2020</td>
<td><a href="mailto:jr.smoyer@tigerwireline.com">jr.smoyer@tigerwireline.com</a></td>
</tr>
<tr>
<td>Mark Ghann-Amoah</td>
<td>Board member through 2021</td>
<td><a href="mailto:mark.ghan_amoah@yahoo.com">mark.ghan_amoah@yahoo.com</a></td>
</tr>
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**Committee Chairs**

- **Ryan Kwong**: Awards, Forum and Program Chair; ryankwong30@gmail.com
- **JR Smoyer**: Golf Chair; Jr.smoyer@tigerwireline.com
- **Scott Hara**: Community Outreach/STEM; scotthara@yahoo.com
- **Dr. Sam Sarem**: Membership; Sam4IPRC@aol.com
- **Dr. Iraj Ershaghi**: Publication Mentor; ershaghi@usc.edu
- **Brian Tran**: Scholarship; briantran01@yahoo.com
- **A.B. Gorash**: Training; goras9@aol.com
- **JR Smoyer**: Young Professional; JR.smoyer@tigerwireline.com
- **Robert Schaaf**: Nominations pro tem; rschaaf@socal.rr.com
- **Larry Gilpin**: Newsletter & Website Editor / Publisher; Larry@4thForge.com
- **Steve Shyrock**: Student Chapter Liaison; sgshryock@aol.com
- **Dr. Jalal Torabzadeh**: Student Chapter Advisor - CSULB; jalal.torabzadeh@csulb.edu
- **Aaron Perez**: Student Chapter President - CSULB; aaron.Perez02@student.csulb.edu

- **Dr. Iraj Ershaghi**: Student Chapter Advisor – USC; ershaghi@usc.edu
- **Ramin Aliyev**: Student Chapter President - USC; uscspe@usc.edu
- **Dr. Steve Cheung**: Regional Director-North America; stevespe@yahoo.com
- **SPE International**: Contact for Sections; sections@SPE.org