

The South Texan



Thursday, April 6, 2017

Monthly Meeting @ Brady's Landing
([8505 Cypress St. Houston, TX 77012](#))

4:00PM - 6:00PM Energy Forum
6:00PM - 7:00PM Social/Networking Time
7:00PM - 8:00PM Dinner
8:00PM - 9:30PM Dinner Presentation/Speaker

[Register](#) for the monthly dinner meeting!
Check us out on [YouTube](#)!

April Dinner Meeting

Dinner Speaker: James Turner, Executive Process Director Fluor

Title: *Process Overpressure Protection - Challenging Yesterday, Today and Tomorrow*

Abstract: For most process and utility systems, the last line of defense against overpressuring equipment is the relief system. While the basic concepts of overpressure protection have been the same for several decades, there are still too many overpressure incidents, with some leading to explosions, fires and fatalities.

Case histories of overpressure scenarios and relief system design issues will be presented, with design traps and tips for each case history.

Bio: James Turner is an Executive Process Director in Fluor's Sugar Land Office.

He has more than 25 years of experience in process design for a wide range of projects in the refining and gas processing industry, in domestic and international locations.

He has published and presented many technical articles about process design and project execution, and holds patents for a combined hydrotreater process design. He has served as a Panelist at the NPRA Q&A and Technology Forum.

Active in several professional organizations, he is a Fellow of the American Institute of Chemical Engineers (AIChE), and has served as Chair Elect, Chair, and Past Chair of the South Texas Section of AIChE. He is also a Trustee on the AIChE Foundation Board, and has held several positions with AIChE, including member of the Executive Board Programming Committee, and several positions with the Fuels and Petrochemicals Division, including Chair of the Division, Director, Newsletter Editor, and Treasurer. In 2012 he received the Fuels and Petrochemicals Service Award for distinguished service to the division and industry.

He is a graduate of Texas A&M University with a bachelor's degree in Chemical Engineering. He serves on the Texas A&M Chemical Engineering Department Industry Advisory Council and the Texas A&M TEES Industry Advisory Council, and has been inducted into the Texas A&M Chemical Engineering Academy of Distinguished Alumni.



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Workshops - NONE

There will be no workshops this month. Workshops will resume in May 2017

Meeting Registration Information

Membership in STS-AIChE is a bargain at \$20/year. If you wish to become a member, you may join at the registration desk at the meeting.

	Pre-Registration	Onsite
Member	\$25	\$35
Non-Member	\$35	\$40

NOTE: Please bring your receipt. You have until 4PM CST on April 5th, 2017 to pre-register online. After that, you will be required to pay the higher cost at the door.

Pre-registration for the main meeting is now open through our [website](#).

Meeting Location— Brady's Landing



This month's meeting will be held at Brady's Landing ([8505 Cypress St, Houston, TX 77012](#)).

Double-click on the image to the left for directions from your location. For more details and information, please check our [website](#).

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Texas Industrial Energy Management Forum

Energy Forum starts at 4:00 PM

Title: Onboarding & Training Millennials: Trends, Challenges & Rewards

Speakers:

Stephen Garrett
Manager, Texas Territory
TLV Corporation

Kelley Hicks
HR Talent Manager - Chemical Plants
The Goodyear Tire & Rubber Company

Ed Kubis
Process Engineer, Heat Transfer & Energy Section
Exxon Mobil Research and Engineering

Susan McDonald
Functional Development Manager
Chevron Phillips Chemical Company

Abstract: Has your company hired or is it planning to hire young professionals as it prepares for the retirement of its Baby Boomers (individuals born between 1946 and 1964)? If so, effective transfer of institutional knowledge and training of these young professionals in the energy management best practices your company employs is probably high on your priorities. More and more, managers and senior personnel within companies are discovering different challenges in onboarding and training the Millennial generation – individuals born between 1980 and 2000 – than previous generations.

In 2015, Millennials comprised more than one-third of the workforce. So understanding these challenges and identifying onboarding and training methods/approaches that have proved successful with the millennial generation will be critical to the continued success of your energy management program, the future of your company and minimization of this expense. In this forum, you will hear from representatives from companies who will share their experiences, lessons learned and solutions as they have worked their way through this critical business issue.

Panelists will provide a 20 minute presentation on the forum topic followed by a panel discussion and Q&A from the audience.

To register, go to: <http://texasiof.ceer.utexas.edu/tiof/aprilforum2017.asp>

Full Program at: <http://texasiof.ceer.utexas.edu/>

EXHIBITORS



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April 2017 STS-AIChE Chair's Letter – David Rosenthal

Dear Fellow Members of South Texas Section of the American Institute of Chemical Engineers,

Our local section meeting again in March had a strong showing of over 90 attendees on March 2nd! We were treated to an excellent presentation by Will Whitehouse, Senior Trade Development Manager from Port Houston on the state of the Port of Houston, its environmental stewardship and a look forward. We also had two workshops on Process Safety and Resume Writing. Our next meeting on April 6th will feature the Energy Forum along with James Turner from Fluor talking about Overpressure Protection. Come out to a Dinner meeting!

My focus continues to be to bring value to every member of our section no matter how they interface with our organization. Our interfaces include:

Dinner Meetings
Education – Workshops and Conferences
Networking Events – Assisting those looking for work
College Students and Young Professionals Assistance
Awards and Recognition
K-12 Outreach



Our Dinner meeting program for 2017 which was organized in 2016 includes:

January - Improving Operational Resilience Using Dynamic Simulation
February - The Oldest Bioreactor - Wastewater Treatment
March - Port Of Houston Authority
April - Energy Forum - Overpressure Protection
May - Good Engineering Practice for Emergency Relief System Design
June – Houston Ship Channel Tour
September - Process Safety
October- Southwest Process Technology Conference Dinner
November- Water Forum - Houston Subsidence District

I would like to feature our Outreach programs. I am always impressed how many of our members volunteer for the various programs we participate in our community. We recently had a record number of judges attend the Science Fair. We have upcoming events:

- The Houston Independent School District "When I Grow Up" annual career fair will be held at the Hattie May White Educational Support Center, located at 4400 West 18th Street, on Saturday, April 22, 2017, from 10:00 - 2:00.
 - The Regional Boy Scout Fair will be held at the Minute Maid Park on Saturday, May 6, 2017, from 10:00 - 3:00.
-

April 2017 STS-AIChE Chair's Letter – David Rosenthal

I know our members get great satisfaction volunteering in our community supporting STEM events. Certainly they provide influence for students at a young age to get “hooked on” to science and technology. So keep volunteering!

We continue to look for sponsoring companies for our meetings. We have three levels of sponsorship. Your company has an opportunity to speak to our Dinner meeting attendees, provide literature, and attend the meeting complimentary. Your sponsorship lowers the price of our Dinner meetings for our members. Please consider being a Bronze, Silver or Gold sponsor! Contact the Chair for more details.

We are also looking for Dinner meeting locations. Can your company host a Dinner meeting? All we need is space for 100 people, workshop space, catering, and parking. We will even provide the speaker!

Our section also provides value in many other ways to our members. We are committed to assisting those looking for work through many different approaches. We are now holding First Friday meetings at the Omni Westside in Houston each month for those who need to network. At our Dinner Meetings we also identify name badges with those looking for work so others can provide advice. We also, announce opportunities and those who are looking for work during our Dinner meetings.

Remember, any member can attend our Executive Committee meetings held on the second Thursday of each month at La Madeleine at 10001 Westheimer Rd, Suite 2123, Houston, TX 77042 to either observe or volunteer to help.

In closing, I again take this opportunity thank you for your past support and I look forward to meeting each of you at an AIChE STS event.

David Rosenthal
2017 Chair
AIChE STS



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Silver Sponsor

Awards

Dale L Embry Receives AIChE Fellow Certificate & Pin

The March 2, 2017 Monthly Dinner Meeting of the South Texas Section – AIChE at Brady's Landing Restaurant served as the venue for Dale L. Embry to be recognized as one of the most recently elected Fellows of AIChE. The Fellow Certificate and Pin were presented to Dale by AIChE Fellow and 2017 STS Chair David Rosenthal.



Dale Embry (L) receives his AIChE Fellow Certificate and congratulations from 2017 STS Chair David Rosenthal (R)

Dale Embry

Dale L. Embry received his BSChE and MSChE from TAMU. Dale is a Principal Engineer in LNG Technology at ConocoPhillips and is an internal consultant for physical property modeling and process simulation. He has led development of many of physical property models for custody transfer for the American Petroleum Institute and the Gas Processors Association. Dale has participated in AIChE's DIPPR as an associate representative for ConocoPhillips. He also has three patents in steam assisted heavy oil production and has authored six technical papers.

The majority of Dale's AIChE service has been as the Bartlesville Local Section Secretary, Vice Chair, Chair, and Past Chair as well as the South Texas Section Executive Committee Position No. 4. He has also been directing and teaching professional engineering review courses for both the Bartlesville and South Texas Sections of AIChE. He is currently a member of the AIChE national PE Task Force and has served on Boards and Committees in and outside of AIChE.

Dale's wife of 33 years has been supportive of all his efforts and done her best to "make me a better person". They have a daughter, a University of Houston graduate in computer science, who is happily self-sufficient.

Dale! Congratulations on being elected a Fellow of the American Institute of Chemical Engineers.

Awards

It's Awards Time!

It is once again time to nominate an STS member for the 2016 South Texan Section Annual Awards:

- Outstanding Young Professional Award
- Distinguished Service Award
- Best Fundamental Paper
- Best Applied Paper Award

For requirements of each award, visit the web page: <http://sts.aiche.org/content/awards>

The page provides a summary of the awards, and contains links to more detailed descriptions of each award.

To nominate a member for an award, complete the online form at the web page:

<http://sts.aiche.org/content/award-nominations>

If you prefer the printed form, print out the forms from the next two pages.

NOTE: All 2016 Awards Nominations must be received by May 1, 2017!

Awards

South Texas Section – AIChE 2016 Annual Awards Nomination Form

THIS NOMINATION FORM MUST BE RECEIVED BY MAY 1, 2017 TO BE ACCEPTED!

Mail the completed form to:

Thomas E. Menn	Or	Ryan Stephens, PhD	Or	Matt Christiansen, PhD
Awards Chair		Best Papers Judging Chair		Best Papers Judging Co-Chair
P. O. Box 458		Shell Global Solutions (US) Inc.		Shell Projects and Technology
Pearland, Texas 77588-0548		Technology Center		
		3333 Highway 6 South		
		Houston, Texas 77082		
Tel.: 281-485-3719		Tel.: 281-544-8447		Tel: 281-544-6476

ThomasMenn@SBCGlobal.net Ryan.Stephens@shell.com Matthew.Christiansen@shell.com

Following receipt of the submitted nomination, you will receive an e-mail from the STS Awards Committee confirming receipt of the nomination after AIChE & STS Membership is verified. All Best Paper Nominees not Members of AIChE or STS may wish to join STS or STS and AIChE until May 31, 2016 in order to be eligible for the recognition due a STS – AIChE Member Best Paper Award Recipient.

NOTE: ONLY ONE PERSON OR PAPER MAY BE NOMINATED PER FORM!

NOMINATOR'S NAME: _____

ADDRESS:

STREET: _____

CITY: _____ STATE: _____

ZIP CODE: _____

TELEPHONE NUMBER: AC: _____ NO: _____

E-MAIL ADDRESS: _____

I wish to nominate _____

(Enter Name of Nominee or Title of Paper on the above line.)

ENTER CONTACT INFORMATION FOR NOMINEE OR AUTHOR:

NOMINEE or AUTHOR'S NAME: _____

ADDRESS:

STREET: _____

CITY: _____ STATE: _____

ZIP CODE: _____

TELEPHONE NUMBER: AC: _____ NO: _____

E-MAIL ADDRESS: _____

TYPE OF NOMINATION: (PLEASE CHECK ONLY ONE SPACE BELOW.)

2016 STS Outstanding Young Professional Award (*Under age 35*) _____

2016 STS Distinguished Service Award (*Over age 35*) _____

2016 STS Best Fundamental Paper Award _____

2016 STS Best Applied Paper Award _____

For STS Outstanding Young Member or Distinguished Service Awards, please state the reason you feel that this person is deserving of this award back of this form and ignore the rest of the form. You may attach any supporting documentation to this form.

For Best Paper Nominations, please continue and complete page 2 of this form.

Awards

Please enter the name of the 2016 Best Paper again:

(Sorry to trouble you but this is in case the sheets get separated.)

Enter the contact Author's name again:

(Sorry to trouble you but this is in case the sheets get separated.)

FOR BEST PAPER NOMINATIONS, LIST THE NAMES OF THE AUTHORS AND CHECK ALL BLANKS THAT APPLY:

MEMBERSHIP

Note: At least one (1) author must be a STS Member. AICHE STS

Co-Author # 1: _____

Co-Author # 2: _____

Co-Author # 3: _____

Co-Author # 4: _____

Co-Author # 5: _____

Co-Author # 6: _____

Co-Author # 7: _____

Co-Author # 8: _____

Co-Author # 9: _____

[Add addition Authors on an attached sheet as necessary.]

For Best Paper Nominations, please provide following information:

NAME OF PUBLICATION: _____

DATE OF PUBLICATION: _____

VOLUME NO. (If known): _____ PAGES: _____ to _____

PLEASE ATTACH A COPY OF THE ARTICLE FROM THE PUBLICATION TO THIS FORM OR IF THIS IS NOMINATION IS TENDERED BY E-MAIL, PLEASE ATTACH AN ELECTRONIC VERSION OF THE PUBLISHED ARTICLE.

Following receipt of the submitted nomination, you will receive an e-mail from the STS Awards Committee confirming receipt of the nomination after AIChE & STS Membership is verified. All Best Paper Nominees not Members of AIChE or STS may wish to join STS or AIChE and STS until May 31, 2017 in order to be eligible for the recognition due a STS – AIChE Member Best Paper Award Recipient.

STS-AIChE 2017 Monthly Dinner Meeting Schedule

Date	Location	Meeting Details (Speaker/Company/Topic)
January 12	Brady's Landing	Julie D. White, SIS-TECH. <i>Improving Operational Resilience Using Dynamic Simulation</i>
February 2	Brady's Landing	The Oldest Bioreactor - Wastewater Treatment
March 2	Brady's Landing	Port of Houston Authority <i>State of the Port, Global trade, and Environmental Stewardship</i>
April 6	Brady's Landing	Energy Forum <i>Overpressure Protection</i>
May 4	Pelazzio	Good Engineering Practice for Emergency Relief System Design
September 7	Pelazzio	Process Safety
October 12-13	Moody Gardens	SPTC TBD
November 9	Pelazzio	Water Forum - Houston Subsidence District

South Texas Section-American Institute of Chemical Engineers (STS-AIChE) Season Pass

The STS-AIChE Season Pass for the 2017 technical monthly dinner meetings is being offered for \$131. Please visit the STS-AIChE website to signup (<http://sts.aiche.org/content/2017-season-pass>).

The STS-AIChE Season Pass offers the convenience of a single sign-up and single payment for all eight technical meetings in the 2017 season. The meetings included are the January through May and September through November technical monthly dinner meetings. The December Social meeting is not included in the Season Pass. Season Pass holders also get priority sign-up for all special events. The schedule of topics and venues will be posted on the website (sts.aiche.org) once finalized.

Season Pass holders are recognized as patrons on the STS-AIChE website and in our newsletter. This is a great way to show your support for your section at no additional cost. Season Pass holders will be issued a permanent name tag – no need for sticky paper name tags. Your fellow members will recognize you as a patron and regular attendee.

STS-AIChE 2017 Season Pass

General Comments

The STS-AIChE Season Pass offered the convenience of a single sign-up and single payment for all eight technical meetings in the 2017 season. Season Pass holders also received priority sign-up for all special events.

Season Pass holders receive a significant savings when comparing the on-site cost of the dinner meetings. No need to continue to monitor when meeting registrations are open. Save the hidden costs of multiple transactions and tracking the payments and reimbursements, if applicable.

Frequently Asked Questions (FAQ)

As a Season Pass Holder do I need to register for each dinner meeting?

No, there is no need to register or RSVP for the individual meetings once you have made your payment to become a Season Pass holder. We do however ask that you sign in at the registration table during the day of the event at the meeting venue.

What if I cannot attend a dinner meeting?

Guests and visitors are always welcome. Feel free to send someone else in your place and just let the people at the registration table know of the substitution.

What if I cannot attend the meeting and cannot find a substitute?

Even the most dedicated members cannot make every meeting. The season pass is priced assuming that you will miss a meeting. If you can provide at least a one week notice, by e-mailing the Chair-Elect at sts-chairelect@aiche.org, we can give you a guest pass for the next meeting. That way, you can invite your boss to the next meeting to see what you missed!

I am a big supporter of the section, but I don't want my name posted all over the web. Can I opt-out of the publications?

Yes, just let us know and we will not put your name on our list so that you can continue to fly under the radar. You always have the option of hand writing a name tag.

Will I still get in if I forget my name tag at home?

Yes. We keep a master sign-up list at the door. Patrons are at the top of the list!

I normally sign up in advance. Am I still saving money?

Yes. The Season Pass is eight meetings for the price of seven. You will also save the time and effort of multiple payments.

STS-AIChE 2017 Season Pass

2017 STS-AIChE Patrons

Name	Affiliation
Dale Embry	ConocoPhillips
Yurika Díaz Bialowas	Chemstations Inc.
David Rosenthal	Reliability Strategy and Implementation Consultancy, LLC
Erin Green Colaco	
Gary Miller	Air Liquide
George Redd	S&B Engineers
George Vourazeris	Air Liquide Industrial U.S. LP
Gus Georgetown	Stress Engineering Services
Irvin Osborne-Lee	Prairie View A&M University
Jack Chosnek	KnowledgeOne
Jeffrey Melland	Melland Consulting LLC
Matt Kolodney	
Morgan Reed	
Ravindra Saxena	
Sheena Reeves	Prairie View A&M University
Syamal Poddar	Poddar & Associates
Thomas E Menn	
Thomas Rehm	TERehm Consulting LLC
Travis Fixmer	Huntsman
Jordan Pearce	Process Systems Enterprise (PSE)
Dimitrios Georgis	Process Systems Enterprise (PSE)
Victor Edwards	VHE Technical Analysis
Ronald Lutz	Braskem America
Carol Schmidt	SGL Group
Joseph Ramey	Westchase Design, L.L.C.

STS-AIChE 2017 Season Pass

2017 STS-AIChE Patrons

Name	Affiliation
Sanjay Sharma	Honeywell
Matthew Clark	Armstrong Engineering Associates
Trevor Rice	Chemstations
Phillip Purpich	Johnson Controls
Lawrence Chriswell	
Wendy Reed	
Paul Waits	
Julie White	SIS-TECH
Nicholas D'Ambrosio	En-Fab, Inc



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Upcoming Events Information

April First Friday Networking Lunch

The First Friday Networking Lunch series is springing into April with Mr. Mark Lockhart, P.E. from Burns & McDonnell speaking about how to conduct a job search. Mr. Lockhart has experienced being “surplus” and “laid-off” twice in his career. Both times have led him to develop best practices about conducting an effective job search, practices that led him to being hired within a few months each time.

April's networking lunch will be held on Friday, April 7th from 11:30AM - 1:00PM at the Café on the Lake in the Omni Hotel at Westside (13210 Katy Freeway, Houston, TX 77079). The Café lunch menu ranges from \$8 to \$15, and the South Texas Section will subsidize this event by \$5 per attendee.

This is a networking event to bring together engineers who are seeking to improve their employment situation, with experienced industry management and professionals. Everyone is welcome to attend!

Mark W. Lockhart, P.E., is the Process Technology Manager for Burns & McDonnell in the P&I Group in Houston, Texas. He is responsible for Process Engineering and Technology Applications for the Refining and Petrochemicals sector. Mr. Lockhart has extensive experience in manufacturing, engineering and Technology Licensing in the Refining and Petrochemicals industry. He has held positions as plant process engineer, process design lead for major projects, Manager and V.P. of Process Engineering and Director of Refining and Petrochemical Technologies. Mr. Lockhart holds a B.S. degree in Chemical and Petroleum Refining Engineering from the Colorado School of Mines and has over 35 years of experience in the Refining and Petrochemical industry. Please register at the following link:

<https://www.aiche.org/community/sites/local-sections/sts/forms/april-7th-first-friday-lunch-networking-lunch-registration>

2017 OTC

2017 Offshore Technology Conference – Head's Up! The 2017 OTC will take place May 1 to 4 at NRG Park, Houston, TX. Volunteers will receive a Free OTC Pass*, complimentary parking* with in/out privileges, and all the free goodies/junk you can carry away! In return, OTC Volunteers agree to attend an Orientation Meeting & serve 4 or 5 hours in either Arrangements, Registration, or Student Tours. (* Pass & Parking are good for entire OTC.)

OTC Volunteer Registration is now open until April 10, 2017. To obtain the OTC Volunteer Registration Link and password, contact Tom Menn at thomasmenn@SBCGlobal.net



Upcoming Events Information

University of Houston Applications of Heterogeneous Catalysis Short Course

May 1-5, 2017

We are pleased to announce the next presentation of our short course "Applications of Heterogeneous Catalysis" for May 1 – 5, 2017. The course is organized to match the needs of chemists and chemical engineers entering the practice of heterogeneous catalysis. However, it is equally suited to individuals experienced in certain areas but who wish to acquire an overview of the field. We do not emphasize research methodology but concentrate on applications to real problems.

The course has been given sixty-four times in Houston since 1971, fifteen times at various locations in Europe, and adapted many times for in-house courses at major companies. Many companies routinely send their personnel to us for training.

Course Description

Successful applications of the principles of catalysis to process design require a combination of physics, chemistry and engineering, together with considerable state-of-the-art “know-how” and guidance from theory. Contemporary catalysis has made significant progress in recent years toward the scientific design of optimum catalyst systems for specific process requirements. The purpose of this course is to cover current knowledge for both the researcher in catalysis and the engineer interested in process optimization. It will serve as a review for those knowledgeable in the subject and as an introduction to newcomers to the field.

The short course covers how to:

- Select an appropriate catalyst
- Prepare catalysts
- Characterize catalyst properties
- Test catalytic performance
- Model a catalyst
- Use a catalyst

The nature of catalytic components, such as supports, active materials and promoters, is discussed in detail from the perspective of process applications. Prediction of catalytic properties and design of specific systems are treated with reference to modern theories of catalysis and the correlations of kinetic properties. Guidelines for selecting potential catalytic “candidates” for target processes are given. Laboratory and commercial methods of catalyst preparation are reviewed, with emphasis on proven process catalysts.

Modern instrumental methods for the characterization of catalyst physical and chemical properties are covered, especially techniques for measurement of surface areas, pore properties, crystallite sizes, acidities, etc. Catalytic kinetics, both chemical and diffusional, are considered, and the relationship of surface mechanisms to catalyst properties fully outlined.

Upcoming Events Information

University of Houston Applications of Heterogeneous Catalysis Short Course

The course also treats the design and construction of experimental reactors used to test catalytic properties, together with techniques for modeling process reactors. Also included are catalyst deactivation and regeneration.

Finally, several case histories demonstrate how laboratory catalysts are scaled-up to industrial processes. Critical aspects are emphasized, such as modeling, parametric sensitivity, stability and regeneration. Covered material emphasizes not only important applications to the refining and petrochemical industries but also to the rapidly growing fields of environmental catalysis, methane conversion,, zeolites, structured catalysts, among others.

Fee

The registration fee is \$2,000, which includes a complete set of notes, coffee breaks, and an introductory lunch. Payment may be made with a personal or company check, credit card or we can send an invoice.

Registration

Please contact Ms. Nicolette Solano, Department of Chemical and Biomolecular Engineering, University of Houston (e-mail: nsolano2@central.uh.edu; phone: 713-743-4304; fax: 713-743-4323; or the co-directors for registration information). The deadline is April 20, 2017 with the registration fee paid in full. No cancellations will be accepted after April 20, 2017, but registrants may send substitutes or defer attendance to the next scheduled course.

Location

The course will be given on campus at the University of Houston, tentatively in the University Center. Sessions are from 9-12 pm and 2-5 pm Monday through Friday. Exact instructions for transportation to the University of Houston will be sent to registrants.

Hotel accommodations

Hotel accommodation is available at the recently renovated University Hilton Hotel on campus for a rate of \$140/night plus tax. Details will be sent to registrants. Recommendations for other local hotels with arranged discounts will be mailed on request.

Upcoming Events Information

University of Houston Applications of Heterogeneous Catalysis Short Course

Schedule

Monday, May 1

9 a.m. Introduction to catalysis, general concepts, overview - Jeff Rimer

12 pm. Introductory lunch

2 p.m. Adsorption, catalytic kinetics, and reaction mechanisms - Jeff Rimer

Tuesday, May 2

9 a.m. Kinetics measurements and analysis, kinetic modeling - Mike Harold

2 p.m. Reaction and diffusion, transport disguise of catalyst performance - Dan Luss

Wednesday, May 3

9 a.m. Computational Catalyst Design – Trends in Heterogeneous Catalysis - Lars Grabow

2 p.m. Mechanistic-based Computational Catalyst Design – The Sabatier Principle and the Volcano Curve
- Lars Grabow

Thursday, May 4

9 a.m. Reactor modelling and design - Dan Luss

2 p.m. Structured catalytic reactors, recent developments in emission catalysis - Mike Harold

Friday, May 5

9 a.m. Catalytic materials – solid acids and zeolites - Jeff Rimer

2 p.m. Catalyst and reactor deactivation - Dan Luss

Lecturers

Dan Luss, Ph.D. (University of Minnesota)

Cullen Professor of Chemical and Biomolecular Engineering, University of Houston

Dr. Luss joined the University of Houston in 1967 and specializes in chemical reaction engineering. He is a member of the National Academy of Engineering and the recipient of the AIChE Allan P. Colburn, Professional Progress, Wilhelm and Founders Awards and the ASEE Curtis McGraw Award. He is an experienced consultant to industry in reaction-engineering problems.

Upcoming Events Information

University of Houston Applications of Heterogeneous Catalysis Short Course

Jeffrey D. Rimer, Ph.D. (University of Delaware)

Ernest J. and Barbara M. Henley Associate Professor of Chemical and Biomolecular Engineering, University of Houston

Dr. Rimer joined the University of Houston in 2009 and specializes in the synthesis, characterization, and testing of microporous materials. He is chair of the Southwest Catalysis Society, vice-chair of the International Zeolite Association Synthesis Commission, and is the recipient of several honors that include the American Chemical Society PRF DNI award, the NSF CAREER award, and the Owens Corning Early Career Award from AIChE.

Michael P. Harold, Ph.D. (University of Houston)

M. D. Anderson Professor of Chemical and Biomolecular Engineering, University of Houston

Dr. Harold has had a mixed academia-industrial career (eight years at the University of Massachusetts, seven years at DuPont) before joining the University of Houston in 2000. He specializes in catalytic reaction engineering, spanning applications involving catalytic membranes, environmental catalysis, structured reactors, and biofuels. He organized the on-campus Texas Diesel Testing Facility and currently serves as Editor-in-Chief of the AIChE Journal.

Lars C. Grabow, Ph.D. (University of Wisconsin, Madison)

Assistant Professor of Chemical and Biomolecular Engineering, University of Houston

Dr. Grabow joined the University of Houston in 2011 and specializes in computational catalysis using density functional theory (DFT), microkinetic modeling, kinetic Monte Carlo simulations and descriptor-based catalyst design. He has been awarded early career awards from the U.S. Department of Energy, the National Science Foundation, and the American Chemical Society. He currently serves as the 2nd Vice Chair of the Catalysis and Reaction Engineering Division of AIChE and has authored a tutorial-style book chapter on “Computational Catalyst Screening” in the book “Computational Catalysis” in the RSC Catalysis Series.

PE Review Class

We are near the end of another great PE Review Course semester, with 31 people from all over Houston and even reaching to Freeport. This course has covered Mass/Energy Balances, Thermodynamics, Fluid Mechanics, Kinetics, Heat Transfer, Plant Design Economics, Separation Processes, and Plant Design and Operations. April 7th marks the end of the course with a mock exam and pizza party, before the April 21st PE Exam. We wish all those taking the exam this April the best of luck and skill.

Over 175 potential professional engineers have utilized this course to help them achieve their goals since 2010. This course would not be possible without the facilities at UH, the instructors/support from STS-AIChE, and the demand from our excellent chemical engineering community. A big thanks to Nicolette Solano, Debbie Boyer, and the support of UH and the Chemical & Biomolecular department. Thanks also to our great instructors: Dale Embry, Gary Gilbert, Todd Willman, Carol Schmidt, Dennis Glascock, Jose Bravo, and Mariella Raven.

With April being the last time a Chemical Engineering version paper exam is offered, we will be revising the course to start teaching to the new, computerized style for 2018. Course information for 2018 will be available in the STS-AIChE newsletter by this November. We look forward to continuing to support those chemical engineers looking to obtain a professional engineering license.



K12 Outreach Volunteers

Call for STS K-12 Outreach Volunteers For STS Booth at

HISD Annual When I Grow Up Career Expo

Saturday, April 22 10:00 – 2:00

Hattie May White Educational Support Center

4400 West 18th Street

STS will have a booth

HISD provides free admission, free parking, & free lunch

We would like 2 shifts of 4 volunteers each

To RSVP or for further information, contact Matt Kolodney

713-471-8956 or MKolodney1@comcast.net



K12 Outreach Volunteers

Call for K-12 Outreach Volunteers for STS Booth at 2017 Boy Scout Fair

STS will have a booth at the 2017 Boy Scout Fair

Saturday, May 6 at Minute Maid Park

We are requesting 4 volunteers each for two shifts:

Morning 9:30 – 12:30

Afternoon 12:30 – 3:30

For RSVP or Questions contact Matt Kolodney

713-471-8956 or MKolodne1@comcast.net



STS First Friday Networking Program

A highly interactive workshop on "Creating a Winning Resume" was given by Mark Friedman at the March First Friday Networking Lunch. By the end of the session, attendees had the tools to complete a written resume.

Mark is a principal in MJF Associates that specializes in Executive Coaching, Leadership Development, Strategic Focus, Team Building, Career Management and Outplacement. During the last 25 years Mark has helped over 3000 people in career transition.

Mark received his Ph.D. in Industrial / Organizational Psychology at the University of Tennessee and has over 25 years of experience. For over eight years he has coached some 55 Executive MBA candidates at Rice University on leadership, career management and change management. His clients include Air Liquide, Praxair, National Oilwell Varco, Port of Houston Authority, FMC Technology, LyondellBasel, BP, Exxon/Mobil, City of Houston, US Postal Service, The Houston Texans (NFL team), Hewlett-Packard Company, Dell, Johnson Controls, and ABB Lummus Global. He can be reached at markf@mjfassociates.com.



PAY IT FORWARD NETWORKING PROGRAMS

Location: Memorial Drive Christian Church
11750 Memorial Dr, Houston, TX 77024

Coordinator: Susan E. Bayley
susan.e.bayley@gmail.com
(918) 720-3973

April 3

1:00 – 1:30	Introduction to PiFNP by PiFNP Members
1:30 – 2:00	<i>Keys to Job Search Success</i> , Dr. Johana Lopez, Gulf Coast Oil and Gas Initiative Workforce Solutions
2:00 – 2:30	Break
2:30 – 4:00	<i>Navigating the Certification Minefield – Which One is Right For Me?</i> , Teresa Jurgens-Kowal, Global NP Solutions, LLC (AIChE Guest Speaker)
4:00 – 5:00	<i>Ready-to-Work Grant and other Workforce Solutions Resources</i> , Aminta Rodriguez, Workforce Solutions

April 10

1:00 – 1:30	Introduction to PiFNP by PiFNP Members
1:30 – 2:30	<i>Networking - What to do Before, During and After Attending an Industry Event</i> , Della Mullan, Process Safety and Reliability Group (PSRG)
2:30 – 3:00	Break
3:00 – 4:30	<i>Creating a Winning Resume for the Cyber Marketplace</i> , Mark Friedman, MJF Associates (AIChE Guest Speaker)
4:30 – 5:00	Networking and Close

PAY IT FORWARD NETWORKING PROGRAMS

Keys to Job Search Success

Dr. Johana Lopez, Gulf Coast Oil and Gas Initiative Workforce Solutions

Johana helps attendees examine ways to find the right opportunities, and land the job you want. This includes four keys to job search success: 1) How to increase your professional visibility 2) How to be more effective and expand your network 3) How to create a job search plan and manage your time efficiently 4) How to enhance your professional development opportunities.

Johana Lopez is the Training Coordinator and Career Coach for the Gulf Coast Oil and Gas Initiative. She holds a B.A. in Psychology from Pontificia Universidad Javeriana in Colombia, a M.A. in Administration from Western Kentucky University and a PhD in Organizational Leadership from Purdue University in Indiana. Johana has also completed post-graduate studies on Leadership and Management at Harvard University and Massachusetts Institute of Technology. Johana is an Adjunct Professor at University Houston for the Human Resource Development Department.

Navigating the Certification Mine Field: Which One is Right for Me?

Teresa Jurgens-Kowal, PhD, PE (State of Louisiana) MBA, PMP®, NPDP, PEM, SMC

Today's job market is tough. Employers are seeking to reduce costs and want employees to hit the ground running. Job openings not only ask for experience but employers also want you to demonstrate specific skills to "prove" you can do the job. Many jobs require certification or licensing in order to even apply for the opening.

Certification is growing rapidly as a way to demonstrate knowledge, experience, and education. Yet, there are so many options! In this presentation, you will learn about a variety of desirable certifications available for engineers to demonstrate knowledge and experience. These include Project Management Professional (PMP®), New Product Development Professional (NPDP), Professional Engineering Manager (PEM), Scrum Master, and Six Sigma (Yellow Belt, Green Belt, and Black Belt). Marketing and sales certifications are also available for engineers that want to enter a business role. Of course, all engineers should consider FE and PE licensing. It's a mine field, so we'll break it down for you to choose the right certification based on your experience and career goals.

Teresa is the president of Global NP Solutions consulting in innovation best practices. Simple-PDH.com is our sister website offering diverse on-line and face-to-face certification and PDH (professional development hour) training courses. Teresa has a PhD in Chemical Engineering from the University of Washington, a BS in Chemical Engineering from the University of Idaho, and an MBA from West Texas A&M University. She has over 20 years of experience working in the petrochemical industry and teaching at the college/university level. She has a passion for lifelong learning and can be reached at teresa@globalnpsolutions.com or 281-280-8717. In her free time, Teresa enjoys scrapbooking and bicycling.

Ready-to-Work Grant and other Workforce Solutions Resources

Aminta Rodriguez, Workforce Solutions

PAY IT FORWARD NETWORKING PROGRAMS

Networking - What to do Before, During and After Attending an Industry Event

Della Mullan, Process Safety and Reliability Group (PSRG)

Della is a Business Development Manager with PSRG, a safety and risk engineering consulting firm based in Houston, and likes to think of herself as a fearless networker! Working in Business Development is all about networking; meeting new people, developing relationships and promoting what the firm has to offer. Searching for a new employment opportunity is no different. You need to network and meet new people, develop relationships and promote what you have to offer! This presentation will help guide you through what you should focus on before, during and after attending a networking event to get the most out of your time spent networking.

Creating a Winning Resume

Mark Friedman, MJF Associates (AIChE Guest Speaker)

The resume is one of the most important documents in a job search. Yet many people fail to get enough mileage from it. First and foremost, a resume is your ticket to an interview. In that sense, a resume is like a presentation to management, designed to get you in the door. Secondly, the resume can be used as a "calling card;" a leave behind after an informational interview.

In a fast-paced presentation, Mark Friedman will provide some key pointers about how to create a winning resume. The talk will include: resume design and format, telegraphic messages, accomplishment statements and how to make your resume powerful, yet concise. He will also answer those vexing questions like what should I put in and leave out.

Mark is a principal in MJF Associates, a full-service Human Resources Development Consulting firm based in Houston, Texas that specializes in Executive Coaching, Leadership Development, Strategic Focus, Team Building, Career Management and Outplacement. Mark received his Ph.D. in Industrial / Organizational Psychology at the University of Tennessee and has over 25 years of experience. His clients include Exxon/ Mobil, City of Houston, The Port of Houston Authority, US Postal Service, The Houston Texans (NFL team), Hewlett-Packard Company, The City of Houston, Houston Independent School District, Johnson Controls, and ABB Lummus Global, Air Liquide and URS Washington Division. During the last 25 years Mark has helped over 3000 people in career transition. He can be reached at markf@mjfassociates.com or 281-493-0641.

MJF Associates

MJF Associates

Organization and Leadership Development

We have over 30 years of experience in helping leaders and their teams get critical results and in helping individuals manage their careers

Our services include:

- Executive Coaching
- Career Transition/ Job Search/ Outplacement
- Strategic Alignment/ Planning
- 360-Assessments, Myers-Briggs Type Inventory
- Team Building

Call us at 281-493-0641 or email: MarkF@MJFAssociates.com
<http://mjfassociates.com>

STS-AIChE YP

Calling all young professionals! Get involved and participate in happy hours, planning meetings, and other fun activities! Check out the new [STS-AIChE YP Website](#) for more information.



Happy Hour at the Fox and Hound
March 2017

Job Inquiry and Posting

AIChE-STS will start a post listing chemical engineers seeking employment and companies to fill positions.

If you are a member seeking employment provide a few sentences of the position you seek and the email attached to your AIChE membership for the response. You will be listed anonymously.

If you are a company provide a few sentences of the job description you seek to fill and your contact information. You will be listed anonymously.

Contact STS Chairman David Rosenthal at sts-chair@aiche.org with this information.

South Texas Section Corporate Liaison Program

The intent of the program is to have a liaison contact at companies in the region that employ a large group of Chemical Engineers, so that the liaison can pass on information on upcoming events, and encourage attendance at STS-AIChE Events.

This program will make it easier for Chemical Engineers to learn about meetings and events that may interest them, and by providing a “personal touch” and intra-company networking opportunity, overcome potential fears or objections to participating. The program will also provide a potential opportunity for employees to be recognized as leaders within their company.

Responsibilities and benefits are listed in the table below.

STS-AIChE	Liaison	Company
Responsibilities		
<ul style="list-style-type: none"> ✦ Provide meetings and events ✦ Maintain list of liaisons ✦ Send out special emails to liaisons ✦ Advertise program and recognize liaisons and companies 	<ul style="list-style-type: none"> ✦ Forward STS-prepared emails to department/group ✦ Create meeting invitations for coworkers ✦ Try to set up carpools where able ✦ Attend meetings where possible ✦ Interface with Company Management on STS activities and sponsorship opportunities (as applicable) ✦ Provide feedback to STS Officers on company interests and comments 	<ul style="list-style-type: none"> ✦ Support the liaison ✦ Advertise where applicable
Benefits		
<ul style="list-style-type: none"> ✦ Higher attendance ✦ Better corporate relations 	<ul style="list-style-type: none"> ✦ Personalized Nametag for meetings ✦ Demonstrated leadership within company ✦ Increased networking ability within corporation ✦ PDH credits/technical education 	<ul style="list-style-type: none"> ✦ Recognition at meetings ✦ PDHs / education for employees ✦ Networking/team building opportunities

In early 2016, Travis Fixmer, a Process Optimization and Design Engineer with Huntsman Performance Products, developed an intranet website which promotes our Section and its activities within Huntsman. He offered to be a resource to individuals who would like to do the same. If you would like to promote our Section, Travis can provide you with guidance on how to proceed.

Others in our section send intra-company emails promoting the South Texas Section. This can be easily done by simply forwarding the STS monthly meeting notice email to employees in your company.

There is no cost for liaisons or companies to participate. Participation as a liaison is completely voluntary, and companies can transition to a new liaison or end their participation at any time.

If you have any questions, please contact STS Human Resources Director, Tom Rehm, at tom@tomrehm.com or 832-331-6491.



South Texas Section AIChE

STS-AIChE
P.O. Box 421373
Houston, TX 77242

2017 Officers and Contact Information

Officers

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sts-chair@aiche.org

Chair Elect Carlos Salamanca
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Past Chair Syamal Poddar
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Sanjay Sharma
sts-position1@aiche.org

Position 2: Outreach
Sheena Reeves
sts-position2@aiche.org

Position 3: Communications
Kevin Allen
sts-position3@aiche.org

Position 4: Human Resources
Tom Rehm
sts-position4@aiche.org

Volunteers

Arrangements: [John Middleton](#)
Awards: [Tom Menn](#)
Membership: [David Silarski](#)
Webmaster: [Phil Purpich](#)
Young Professionals: [Morgan Reed](#)

SOUTH TEXAS SECTION MISSION STATEMENT

As a section of AIChE, we serve chemical engineering professionals in the South Texas region through education, professional development, and networking.

Vision 2017

We will become an organization with strong and active membership. We will accomplish this through:

1. Increasing awareness
2. Improving relevancy of our programs
3. Improving our governance
4. Hospitality/Welcome/Social

—— SUBSCRIBE/UNSUBSCRIBE INFORMATION ——

Our newsletter subscription list is by invitation only.

Subscribe: Click on the following link: [Subscribe](#).

Unsubscribe: Click on the following link: [Unsubscribe](#). Your email address will be removed from the subscriber list.

—— MAINTAIN YOUR CONTACT INFORMATION WITH STS ——

Maintain your contact information with the South Texas Section using the online community: <http://www.aiche.org/>

Contact the AIChE for PERMANENT ADDRESS CORRECTIONS:



<http://www.aiche.org/contact/form>



1-800-AIChemE (1-800-242-4363)



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The South Texan Newsletter Crew

WHAT DO YOU THINK OF THE NEWSLETTER? We want to know!

Contact us at sts-newsletter@aiche.org with comments, questions, suggestions, and ideas for next month.

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