Volume 118 Number 16

January 2019

# The South Texan



Thursday, January 10, 2019

Monthly Meeting @ The Bougainvilleas Houston (12126 Westheimer Rd, Houston, TX 77077)

5:30PM - 6:30PM Workshops

6:00PM - 7:00PM Social/Networking Time

7:00PM - 8:00PM Dinner and STS Announcements

8:15PM - 9:00PM Dinner Presentation/Speaker

Check us out on YouTube!

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## **January Dinner Meeting**

Dinner Speaker: Mike Allison, Raptor Aerial Services, LLC

**Title:** Drones, a New Tool for Chemical Engineering Applications

Abstract: The use of UAVs, unmanned aerial vehicles or drones, as they are more commonly referred to, is rapidly growing in many industries including oil and gas. The first drones were used for military purposes. Today, even though there are over 20,000 drones used by various armed forces worldwide, most drones are used for civilian purposes. In a recent report, the estimated number of Enterprise or Commercial-use drone shipments in 2016









was 110,000. This number will reach over 800,000 by 2021. Consumer drone shipments are expected to be around 29 million by 2021.

This talk will briefly cover different types of drones and sensors; how drones work; and how they are being utilized to solve business problems in a more efficient, safer manner, and at a lower cost than traditional methods. FAA, Federal Aviation Administration, requirements, and regulations will also be covered. Examples of actionable data products generated from drone imagery including high-resolution aerial photos and videos, orthomosaics (photo maps), digital elevation models (DEM), 3D models, detailed measurements, such as area, volume, length, contours and surface profiles. Show some examples of other types of sensors being used on drones including lidar, gas leak detection, air quality, ground penetrating radar (GPR) and magnetometers. Specific applications in surface mining, flood control and both external and internal inspections will be discussed.

**Bio:** Mike Allison holds a BS and MS in Geology. He has 34 years of experience in the upstream oil & gas industry. Mike's experience and background in both Geoscience and IT make him uniquely qualified to recognize how technical solutions can solve E&P business problems. Much of Mike's experience has been focused on leading IT teams directly supporting key E&P departments including Geosciences, Engineering, Spatial/GIS, Land and SCADA. He has worked for different O&G companies including Majors (Gulf Oil and Chevron), Independents (Devon Energy and Fieldwood Energy) and several Service Companies (Exploration Logging, Landmark Graphics, Geoscience Data Management and Moblize).

After leaving Fieldwood Energy, he founded a drone services company named Raptor Aerial Services LLC (RAS). His company provides aerial mapping surveys, stockpile volumetric calculations, inspections, data collection and marketing to a variety of industries. The company provides solutions focused on increasing sales, reducing costs, saving time and improving safety. RAS is fully insured and FAA Part 107 certified.

Mike is an active member of AAPG, HGS and SPE. He has severed as the Treasurer-Elect and Treasurer on the HGS Board. Last October, Mike taught an HGS Continuing Education Course entitled, "Introduction to UAV (Drones) Aerial Surveys and Other Applications". He has made a number of presentations on the use of drones to various organizations including the Montgomery County Extension Office, Energy Drone Coalition Summit & Expo., HGS Flood Conference, Society of Independent Petroleum Earth Scientists (SIPES), Texas Association of Environmental Professionals (TAEP), University of Houston, Allied Geophysics Laboratory (AGL), and HGS Environmental & Engineering (E&E).

## **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 for the main meeting is now open through our website.

	Pre-Registration	Pre-Registration	At the door	At the door
	Members	Non-Members	Members	Non-Members
Regular/Retired	\$25	\$35	\$35	\$40
Student / Unemployed	\$15	\$20	\$25	\$30

## **Meeting Location—The Bougainvilleas Houston**



This month's meeting will be held at The Bougainvilleas Houston (12126 Westheimer Rd, Houston, TX 77077).

Double-click on the image to the left for directions from your location. For more details and information, please check our <u>website</u>.

## **January Meeting Dinner Menu**

#### An American BBQ Evening with STS AIChE at the Bougainvilleas

#### **Buffet Dinner:**

Garden Salad with Balsamic Vinaigrette Dinner Bread Rolls BBQ Chicken Brisket Potato Salad Cole Slaw

Fixings: Pickles, Onions, and Jalapenos

#### **Vegetarian Dinner Option:**

Vegetable Stuffed Portabello Mushroom with a Balsamic Glaze \*\*

\*\* This dish is by request only – reservations are due two (2) days before the event.

#### Dessert:

**Bread Pudding** 

#### **Coffee Station:**

Regular Coffee Decaffeinated Coffee

#### Non-Alcoholic Beverages:

Iced tea with Lemon Wedges Water

### Alcoholic Beverages:

Cash Bar\*\*

\*\* Cash only - no electronic payment option

## **Workshop I**

#### Workshop starts at 5:30 PM:

Title: Achieve Test Run Objectives with Advance Preparation and Real Time Information

Speaker: Charles D. Herzog P.E.



Abstract: Formal plant test runs are done for a variety of reasons, including:

- Demonstrating the capacity of a new or revamped unit
- Identifying specific equipment or piping that limits operating objectives
- Improving custody transfer accounting
- Determining capacity of existing utility system to support planned unit expansion
- Calculating process gains for controller tuning or for advanced process control

All test runs require the unit to be operated at a specific set of conditions for a given length of time, ranging from a few hours to several days or more. Often the specified test conditions include a particular feedstock and / or charge rate resulting in constrained equipment operation. Test runs usually require more detailed monitoring by operators and capture / analysis of special test run samples.

With the cost and inconvenience of performing a test run, it is essential for the data acquisition and calculations to be performed correctly so that the test does not have to be repeated. Operation must be steady during the test, so instrument and process control systems must be working properly. Equally important is to provide real-time information to operations staff, during the test, comparing actual unit operation to required test run conditions, so that adjustments can be made if necessary.

This presentation gives a generalized procedure for successful test run implementation, including advance preparation, test run operations, orifice flowmeter compensation, data reconciliation, and report generation. The procedure will be illustrated with examples from ethylene plants and crude oil distillation units .

## **Workshop I**

#### Speaker Bio:

Mr. Charles Herzog served the oil refining and petrochemical industries for over 40 years before retiring from full-time work in 2015. During his career, Charles has had assignments covering a wide variety of skill areas, including:

- a. Process design
- b. Ethylene plant operator
- c. Startup tech support
- d. Advanced process control (Multivariable and DCS-based)
- e. Performance test run management and accounting
- f. Ethylene technology, specializing in high purity distillation operations

Charles was one of the pioneers of QDMC implementation in the 1980s at Shell's OL-5 unit in Norco, La. He invented and commissioned the original version of Shell Advanced Level Control Algorithm, designed to maintain steady operation during furnace swaps in ethylene plants. He was the first engineer to close QDMC composition controls across the entire recovery section of an ethylene plant. His work with level control led to the concept of 'ramp variables' being designed into MVPC software.

Charles is the sole inventor of the 'Heat and Material Balance Method of Process Control', patented by Stone & Webster. This 'invention' is a process control strategy to maintain on-spec, steady operation in high-purity distillation systems, in the presence of equipment constraints.

Some of his in-plant technical accomplishments include the following:

- a. Conducted a test run to demonstrate that the capacity of an existing chemical plant could be substantially increased without upgrading the refrigeration system
- b. Conducted a refinery-wide performance test run to satisfy revamp contractual requirements
- c. Developed and taught a process control training course for operators and engineers in a new ethylene plant. As part of this course, Charles built an Excel-based simulator that the students used to solve example tuning problems.
- d. Used knowledge of sample systems to solve a problem with a critical analyzer on a startup
- e. Solved client's off-spec issues related to poor controller tuning on ethylene plant startup
- f. Re-designed process control strategy on 5 high purity distillation towers to keep them on-spec
- g. Wrote material balance app for DCS-based control of partial pressures in polyethylene reactor
- h. While doing a pre-startup walk-through, Charles identified a major piping error in the suction line of a product pump, in sufficient time to get the line changed out before startup.
- i. On another pre-startup walk-through, Charles identified that required connections for an important additive to a reactor had not been installed

Charles holds a Masters of Chemical Engineering degree from Rice University, and is a licensed P.E. in Texas. .

## **Workshop II**

#### Workshop starts at 5:30 PM:

**Title:** Blockchain in the Chemical Industry

Speakers: Lisa M. Smith and William Fox

**Abstract:** With respect to blockchain in the chemical industry we realize that broad familiarity with the power behind this technology starts with an understanding of its core concepts. Participants will receive an overview of three fundamental aspects of blockchain before we address the use cases we see for the industry.

- 1. Distributed Ledger
- 2. Smart Contracts
- 3. Trustless Interaction

What you can envision accomplishing is more important than the technology itself; Data Gumbo will provide a business value perspective toward evaluating blockchain-appropriate projects. The workshop will touch upon several use cases with the potential to disrupt the chemical industry.

#### 1. Intellectual Property and Licensing

3D printing offers the chemical industry an opportunity to develop tailor-made proprietary formulations and systems. As companies move to an on-demand manufacturing network digital blueprints will be shared with independent fabricators. With blockchain, data and rights holders could store metadata about any substance, from human cells to powdered aluminum, on the blockchain, in turn opening the limits of corporate manufacturing while also protecting intellectual property.

#### 2. Supply Chain Organization

Different partners can access the distributed ledger with the necessary permissions. The blockchain enables tracking of where products were produced, and which quality standards were applied including holding certifications in a historical and secure manner. Track and trace parameters can be captured on the blockchain and smart contracts can handle the complete payment process, including triggering higher fees for delays or incentives for timely delivery.

#### 3. Internet-of-Things Data Integrity

For Internet-of-Things, data integrity is key. Data from sensors and other devices along the production and logistics chain needs to be compatible and secured to derive business value and avoid harm. One way to ensure a safe and untampered data flow could be using blockchain technology that is built on authentication, encryption, and immutability of data.

## Workshop II

#### Speakers Bio:



**Lisa M. Smith** is Chief Corporate Development Officer for Data Gumbo. Lisa's passion for digital strategy is represented in her 30 years of management consulting and program delivery successes. She has launched and operated several overseas technical delivery centers, managed marketing and proposal centers and served as a trusted advisor to global clients. Lisa is focused on building Data Gumbo's brand, forming strategic partnerships and educating our clients on the power of blockchain-based solutions. Lisa holds an MBA from Emory University, a BS from the University of Iowa and has completed Executive Management programs at MIT and Dartmouth business schools.



**William Fox** graduated with a BA in History in 2005. After 4 years in the US Army he held several Project Management positions at NOV and MHWirth. In 2017, Mr. Fox then joined Data Gumbo, an industrial Blockchain As A Service provider. He currently serves as Chief Product Officer for Data Gumbo.

## **December 2018 STS-AICHE Chair's Letter - Tom Rehm**

Hello South Texas Section.

On December 1st, a group of South Texas Section leaders and volunteers joined me at my home in Atascosita (Humble) for the December Executive Committee Meeting and our Winter Planning Meeting. For those attending, sorry for the long commute. For the first time in three years, I had less than a one-hour commute!

In 2019 the theme of the South Texas Section will be Global Warming Solutions. Our 2019 Section dinner meeting schedule for March through May: Global warming: An engineering perspective (March 7), Gen IV Nuclear (April 4), and Extreme weather event resiliency (May 9). Also notice our October 10th STS dinner at the Southwest Process Technology Conference. We don't have an after-dinner speaker lined up yet, but it will be a prominent individual who will speak to global warming.



A note about global warming solutions news at the AIChE global level. At the 2018 AIChE Annual Meeting, the Institute for Sustainability (IfS) and the AIChE Board of Directors approved formation of a new community within the IfS: The Climate Solutions Community (TCSC). The TCSC vision is "Technically feasible and economically viable solutions to mitigate and/or adapt to climate change." The TCSC mission is "To collaborate with applicable fields of engineering and science in development of solutions." This will be a global community. I will be on the Executive Committee of this community. We are working on the community's launch. You will soon be able to join.

Back to STS 2019 plans. Aside from our eight STS monthly dinner meetings, we will continue hosting numerous networking events; co-hosting the April Energy Forum, the November Water Forum, and the Southwest Process Technology Conference (SPTC); and will continue many other events that our membership has come to expect – plant tours; YP happy hours; the June Ship Channel Tour; the July Astros game outing; the PE preparatory course; support of the Offshore Technology Conference; presence at the Energy Day and several K-12 events; support of the Beacon, a nonprofit organization helping the poor and homeless populations in the Houston area – to name a few. I am adding one more social, an August pool tournament at the pool hall I frequent on FM 1960, Bogies Billiards.

With so many activities, we need volunteers. Although we have a good solid core of 30-40 leaders and volunteers, we welcome all who want to join us. Volunteering is a good-good deal, good for us and good for the volunteer. Give it some thought, and then join us! If you are a chemical engineering student at the University of Houston, Rice University, Texas A&M, or Prairie View A&M, join us. Expand the leadership portion of your resume. We will be doing a lot of good in South Texas in 2019.

Become a 2019 STS patron by purchasing a season pass. For \$149 you can attend all eight monthly dinner meetings for the price of seven! This includes the October dinner meeting at the Southwest Process Technology Conference; to be held in Houston this year. Other benefits include: No need to register in advance for each dinner meeting (just show up!); you get your own 'limited edition' attractive name badge; and you are announced as an STS patron at each meeting with your affiliation and expertise byline.

I hope to see everyone at our first STS 2019 dinner, at The Bouganvilleas on January 10. Our after-dinner speaker, Mike Allison with Raptor Aerial Services, will bring one of his drones. He says it is about four feet in diameter, a very nice toy indeed. Not sure if we'll let him fly it around the ballroom.

## **Sponsors for 2019 - Thank You**

Silver Sponsors

**Business Climate Leaders** 

BCL BUSINESS CLIMATE LEADERS Bronze Sponsors

Microrganic Technologies





Business Climate Leaders is an action team of Citizens' Climate Lobby

## 2019 Sponsorship Opportunities:

We will have eight STS meetings in 2019 in the greater Houston area on the west, east, north and south sides of the city so that we may try to cater to all our members across town. Please see the <u>dinner meeting schedule</u>.

In 2019 we are offering three levels of sponsorships:

	Bronze	Silver	Gold
Looping PowerPoint at each of our eight 2019 dinner meetings during the social hour	10 second still	20 second silent video	60 second audio video
Self-promotion at dinner meetings		60 seconds in one meeting	Two minutes in each of three meetings
Display table at dinner meetings		One meeting	Three meetings
Opportunity to speak at an STS dinner meeting in 2020			✓
Complimentary dinner tickets for use at any dinner meeting during 2019	2	4	8
Plaque with sponsoring company Logo			✓
Sponsor Logo display in the monthly STS newsletter	✓	✓	✓
Acknowledgment from the meeting podium	✓	✓	✓
Donation to the South Texas Section	\$500	\$1,000	\$2,000
Maximum number of sponsorships accepted at each level of sponsorship	20	10	5

#### 2019 STS Speaking Opportunities

In 2019, the South Texas Section and our partners will continue very successful events:

- Networking lunch programs, on the east and west sides of town, two per month;
- Monthly dinner meeting workshops;
- A stand-alone workshop evening in December 2019;
- The Energy Forum in April 2019;
- The Water Forum in November 2019; and
- The Southwest Process Technology Conference in October 2019.

If you would like to speak at any of these events, please contact me.

#### 2019 Exhibit Opportunities

There are exhibit opportunities at the Energy Forum, the Water Forum, and the Southwest Process Technology Conference (SPTC). In 2019, all will be held in the Houston area, including the SPTC which has been held in Galveston in recent years. If you choose to be a South Texas Section Sponsor, we can work out a discount arrangement for exhibiting at these three events.

#### 2019 STS Theme: Global Warming Solutions

In our 2019 STS Monthly Dinner and Social Schedule, please note the topics of our March, April, May, and October dinner presentations. We are living in an unprecedented time in human history. Through industrialization, we are seemingly harming our planet. With the wealth of fossil fuels at hand, putting it to use was inevitable and during much of that use who could have foreseen its effects? Until recent years, climate change observations could perhaps be argued, but no longer.

At the AlChE Annual Meeting in Pittsburgh last month, the Institute for Sustainability (IfS) and the AlChE Board of Directors approved the formation of The Climate Solutions Community (TCSC). This community will be within the IfS. As with the IfS membership, TCSC membership will be multi-disciplinary. All engineers and industrial scientists will be welcomed to join the AlChE with the objective of working together to identify and recommend technically viable and marketable solutions. We need to begin turning the corner on this problem so that it can be done to maximize the economic benefit to our country. Energy markets can benefit, including oil and gas sectors, with planning. The mix will gradually change, but we will continue to need energy and an ever-increasing amount of it. We need and welcome companies in the oil and gas sectors to work with us to solve this problem.

### **STS-AICHE Annual Awards**

## It's STS Awards Nomination Time!

Nominations are being accepted thru May 1, 2019 for the following STS Annual Awards:

- 2018 STS Best Applied Paper Award
- 2018 STS Best Fundamental Paper Award
- 2018 STS Best In Practice Paper Award \*\*NEW!!\*\*
- 2018 STS Outstanding Young Professional Award (Under 35)
- 2018 STS Distinguished Service Award (Over 36)
- 2018 STS Special Service Award(s)

Nomination Forms are available in *The South Texan* or nominations may be made using the STS web-site (<a href="https://www.aiche.org/community/sites/local-sections/sts/forms/sts-award-nomination-form">https://www.aiche.org/community/sites/local-sections/sts/forms/sts-award-nomination-form</a>) or by contacting:

Matt Christiansen 281-544-6476 Matthew.Christiansen@shell.com

Tom Menn 281-485-3719 <u>ThomasMenn@SBCGlobal.net</u>

Ryan Stephens 281-544-8447 Ryan.Stephens@Shell.com

## **STS-AIChE Annual Awards**

## South Texas Section – AIChE 2018 Annual Awards Nomination Form

#### THIS NOMINATION FORM MUST BE RECEIVED BY MAY 1, 2019 TO BE ACCEPTED!

Mail the completed form to:

Thomas E. Menn	Or	Matt Christiansen, PhD	Or Or	Ryan S	tephens, PhD	
Awards Chair		Best Papers Judging C	Chair	Best Pa	apers Judging Co-0	Chair
P. O. Box 458		Shell Projects and Tec	hnology	Shell G	lobal Solutions (US	S) Inc.
Pearland, Texas 77588-0548	В	Technology Center				
		3333 Highway 6 South				
		Houston, Texas 77082				
Tel.: 281-485-3719		Tel.: 281-544-6476		Tel: 28	1-544-8447	
ThomasMenn@SBCGlobal.	<u>net</u>	Matthew.Christiansen@	@shell.com	Ryan.S	tephens@shell.cor	<u>n</u>
Following receipt of the sul of the nomination after AIC AIChE may wish to join AIC STS – AIChE Member Best	hE & STS hE and/o	Membership is verified. r STS AIChE before <u>M</u>	All Best Pap	er Nominees	not Members of Al	ChE or STS
NOTE: ONLY ONE PERSOI	N OR PAP	<u>PER MAY BE NOMINATE</u>	D PER FORM!	_		
NOMINATOR'S NAME:						
ADDRESS:						
STREET	: <u> </u>					
CITY:			STATE:			
		ZIP CODE:			_	
TELEPH	ONE NU	MBER: AC:	NO:		_	
E-MAIL	ADDRES	SS:				
I wish to nominate						
		(Enter Name of Nominee	or Title of Paper or	n the above line.)		
ENTER CONTACT INFORM	ATION FO	R NOMINEE OR AUTHO	R:			
NOMINEE or AUTHOR	'S NAMI	E:				
ADDRESS:						
STREET	:					
CITY:			STATE:	:		
		ZIP CODE:			_	
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E-MAIL	ADDRES	SS:				

## **STS-AIChE Annual Awards**

TYPE O	NOMINATION: (PLEASE CHECK ONLY ONE SPACE BELOW.)	
	2018 STS Outstanding Young Professional Award (Under age 35)	
	2018 STS Distinguished Service Award (Over age 35)	
	2018 STS Best Fundamental Paper Award	
	2018 STS Best Applied Paper Award	
	2018 STS Best In Practice Paper Award **NEWII	
	Outstanding Young Member or Distinguished Service Awards, plans of this award back of this form and ignore the rest of the form.	
For B	est Paper Nominations	
Please 6	enter the name of the nominated 2018 Best Paper again:	
	(Sorry to trouble you but this is in case the sheet	ts get separated.)
Enter th	e contact Author's name again:	
	(Sorry to trouble you but this is in case the sheet	ts get separated.)
Check E	est Paper Category Again:	
	Fundamental	
	Applied	
	In Practice	

### **STS-AICHE Annual Awards**

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

#### **MEMBERSHIP**

	Note:	At <u>least</u> one (1) a	uthor must b	oe a STS Mer	nber.	<u>AICHE</u>	<u>STS</u>		
Co-Auth	nor # 1	·							
Co-Auth	or # 2	:							
Co-Auth	or # 3	:							
Co-Auth	or # 4	:							
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			[Add additi	ion Authors (	on an atta	ched shee	t as neces	ssary.]	
For Bes	t Pape	r Nominations, ple	ease provide	following in	formation	:			
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PLEASE ATTACH A COPY OF THE ARTICLE FROM THE PUBLICATION TO THIS FORM OR IF THIS IS NOMINATION IS TEN-DERED 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, 2019 in order to be eligible for the recognition due a STS – AIChE Member Best Paper Award Recipient.

## 2019 Offshore Technology Conference - Volunteers Needed

6 - 9 MAY 2019 at NRG Park, Houston, Texas, USA

Receive Free Pass\*, Parking\*, and all the free goodies/junk you can carry away! (\* entire OTC). Note: You can attend Technical Sessions.

Must volunteer before 10 April 2019 (estimated)

Attend Orientation Meeting (*mandatory*) & serve 4 hours in either Arrangements, Registration, or Student Tours, or "1st Timers" Lounge/Orientation.

Contact Tom Menn @ thomasmenn@sbcglobal.net

## **University Outreach Volunteer Request**

This fall, the Young Professionals will be reaching out to several universities in order to talk to their student AIChE chapters about career options, industry experience, and more!

If you're an alum of the University of Houston, Rice, Texas A&M, or Prairie View, or if you're just interested in sharing your chemical engineering experiences with students, then we would love to have you as a volunteer or even coordinator!

To volunteer, please contact Swarup Bade at <a href="mailto:sts-yp@aiche.org">sts-yp@aiche.org</a> and include any universities you'd be interested in helping with. We'll contact you once we've secured a time and place!

## **Upcoming Events**

## **Spring 2019 PE Review Course for Chemical Engineering**

The STS-AIChE & the University of Houston will sponsor a Chemical Engineering Professional Engineering Review Course, Spring of 2019.

Exam Dates in 2019 are 1(Jan-Mar) 2(Apr-Jun) 3(Jul-Sep) 4(Oct-Dec).

The course will be held at UH from 4:00 to 7:00pm on Friday afternoons beginning February 1st through April 26. The cost for the course (not including books) is \$900 for non-members, \$650 for members of both National AIChE and STS-AIChE. We have continued to update the curriculum based upon feedback from the students over the past course offerings.

Course Materials UH Logistics Blackboard

Contacts: Dale Embry Nicolette Solano Joseph McDonough

Phone: 832-815-1552 713-743-4304 713-743-9972

Email: <a href="mailto:dembry@uh.edu">dembry@uh.edu</a> <a href="mailto:nsolano2@uh.edu">nsolano2@uh.edu</a> <a href="mailto:jcmcdonough@uh.edu">jcmcdonough@uh.edu</a>

#### **Resources:**

Texas Board of Professional Engineers (TBPE)

National Council of Examiners for Engineering and Surveying (NCEES)

**Professional Publications** 

**Testing Booklet:** Login to <a href="www.ncees.org">www.ncees.org</a>, Common Tasks/Useful Documents/Reference Handbooks/PE Chemical Reference Handbook

#### Books used in the course:

Available from Professional Publications:

Chemical Engineering Reference Manual for the PE Exam (CHRM7)

PE Chemical Sample Questions and Solutions

Six-Minute Solutions for Chemical PE Exam Problems (SXCH)

Available from NCEES: PE Chemical Practice Exam (ISBN 978-1-932613-52-0)

Reminder: January 19th is the course registration deadline. Register here!!

Check our website page "PE Refresher Course Offered Spring 2019" for more information

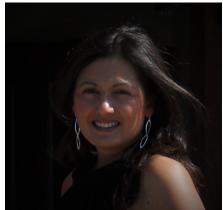
## **Upcoming Events**

### **Nominations - 2019 AICHE Board**

The following are the nominations for Treasurer for the 2019 AIChE Board Elections. Note that we still need nominations for Position 4: Education as this position is also open for election this year.

#### Treasurer

#### Candidate 1: Yurika Díaz Bialowas



Yurika Díaz Bialowas is a Senior Technical Support Engineer at Chemstations Inc, where she troubleshoots simulations using CHEMCAD Suite software, provides support to clients' needs regarding engineering principals, process simulation, heat transfer, thermodynamics, installation and licensing. Yurika earned her BS in Chemical Engineering from the University of Calgary in Calgary, Alberta Canada. She has been an active member of AlChE since 2009. Yurika is the current STS-AlChE Treasurer, through her term she has

work closely with all board committee members and listening to STS members concerns and requests. Through the past two years, she has implemented changes, a few of her accomplishment are listed below.

- Updated the registration system to an online and onsite system that makes registration easier. Our members and guest may enter their information and select a form of payment with ease.
- Implemented a new internal invoice system which makes it easier to track income and expenses, our vendors are invoiced via email, this minimizes paper and assures that the correct vendor has received the invoice.
- · Worked along with the Chair and Chair Elect to select suitable venue locations to cater all members across the Houston area.

If elected, I would like to continue being of help and work closely together with every board member; I would like to continue addressing the logistic hurdles for events so that board members may continue their focus in obtaining sponsorship, speakers, and special events guests. I will continue to promote transparency across all committees, continue to strive for excellence, and manage STS-AIChE budget with the utmost care.

## **Upcoming Events**

### **Nominations - 2019 AICHE Board**

#### Treasurer

#### Candidate 2: David Silarski

During the twenty plus years that I have been active in the South Texas Section of AIChE, my main concern has been the needs of its members. This is a huge challenge due to the diversity of the



Section's membership and the large geographical area that the Section covers. Much has been done to fulfill the STS members' needs: CEO, Young Members & Regional Meetings, Safety Symposiums, professional development programs including workshops and technical symposiums, website, and electronic newsletters. I want to continue improving the activities of the section, including better communication and organization, while being mindful of the cost - benefit relationships. The goal is to make the South Texas Section more relevant to the membership and recruit new graduates.

I am a Lifetime Member of AIChE and have been active as your 2008 Chair. I wish to continue my guidance as your Treasurer. I was active in the local section in Philadelphia and Corpus Christi before moving to Houston. During

my years in the South Texas section, I have served as 2008 Chair, co-founder of SPTC, was monthly meeting door-person, Spring National Meeting General Arrangements Committee Chair, Regional and Young Member Committee Chair, Process Forum meeting Organizer and now Co-Chair for the Diamond Jubilee as well as current STS local Membership Chair. Now, having more schedule flexibility, I can again devote more time to the Section and I would be honored to represent the section as treasurer for 2019.

I have Bachelor and Masters of Chemical Engineering degrees from the Purdue University. I have been employed by several refining, petrochemical, and chemical companies. I am a founder and past Vice-President of the Gulf Coast GTOs, was Treasurer of Houston Purdue University Alumni Club and past treasurer of the Gulf Coast Tau Beta Pi Alumni chapter. I am also a Registered Professional Engineer.

## **Upcoming Events**

## **Nominations - 2019 AICHE Board**

Position 4 - Human Resources

Candidate 1: Dr. William Pittman, Ph.D.



Dr. Pittman holds a Ph.D. in Chemical Engineering from Texas A&M University and received the university's Safety Engineering Certificate in August 2015. He has 10 years of experience with process safety research working mostly with Texas A&M's Mary Kay O'Connor Process Safety Center (MKOPSC). He has worked in process safety consulting and incident investigation for 5 years. After receiving his doctorate, he briefly served as a post-doctoral research scientist with MKOPSC before joining Smith and Burgess to work as a Safety Relief Engineer. He now works with Micropack (Detection) Americas as a Fire and Gas Detection Consultant.

He has authored or co-authored 6 peer-reviewed papers and 3 technical papers on topics including the West Fertilizer explosion, risk communication, and confirmation of process de-energization. He was the instructor for Texas A&M's Industrial Safety Engineering class as well as short-courses offered by MKOPSC.

## **Upcoming Events**

## **AIChE - Company Tour at Lloyd's Register**

A company tour of Lloyd's Register (LR) has been arranged for the Young Professionals. As part of the tour, the YPs will get to meet with the different departments within the company serving both upstream and downstream projects. They will also get a brief overview of the technical services that LR provides to it's clients, in addition to the software tools used for conducting these services, etc. The YPs will have an opportunity to interact with LR employees and ask questions about the company, the work they do, etc. Refreshments will be provided.

When: TBD

Where: Lloyd's Register: 1330 Enclave Parkway, Suite 200, Houston, TX 77077

Please respond via email at <a href="mailto:sts-yp@aiche.org">sts-yp@aiche.org</a> so that we have a headcount of those interested and can fix up a suitable date.

Here's some brief information about Lloyd's Register:

Lloyd's Register started out in 1760 as a marine classification society. Today, LR is one of the world's leading providers of professional services for engineering and technology – improving safety and increasing the performance of critical infrastructures for clients in over 75 countries worldwide. The profit LR generates funds the Lloyd's Register Foundation, a charity which supports engineering-related research, education, and public engagement around everything we do. All of this helps LR stand by the purpose that drives them every single day - Working together for a safer world. LR helps businesses evolve, by connecting them with tomorrow's thinking, today. Combining deep technical and domain expertise, industry knowledge, and an empathy rooted in over 250 years' experience, LR exists to assure a better future for clients, customers and the world. For more info about LR, please visit their website at <a href="https://www.lr.org/">https://www.lr.org/</a>





Contact Swarup Bade at sts-yp@aiche.org for additional information about the tour.

# **Upcoming Events at a Glance**

## January

10	Education	<u>Workshops</u>
10	STS	Monthly Dinner Meeting: Drones - A new tool for industrial applications by Mike Allison
17	STS	EXCOM Meeting
19	PE	PE Review Course Registration Deadline
20	Outreach	Chevron Houston Marathon®, Aramco Houston Half Marathon & We Are Houston® 5K

## May

7-8	Summit	National Carbon Pricing Summit by Business Climate Leaders
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## **2019 STS-AIChE Monthly Dinner and Social Schedule**

#### January 10, The Bouganvilleas, 12126 Westheimer Rd, Houston

Mike Allison, Raptor Aerial Services

Drones, a new tool for industrial applications

#### February 7, Holiday Inn Houston NE (Bush Airport Area)

Andrew Smith, Sympatec
Advances in lab and process particle characterization

### March 7, The Bouganvilleas

Professor Mark Holtzapple, Texas A&M ChE Department: Global warming: An engineering perspective

## April 11 (in conjunction with the Energy Forum), Shaffai Hall, 1622 Federal Rd, Houston

Professor Pavel Tsvetkov, Texas A&M Nuclear Engineering Department Gen IV Nuclear

#### May 9, The Bouganvilleas

Fanxu Meng, Houston Advanced Research Center Extreme weather event resiliency

June - Ship channel cruise

July - Astros game

August - Alternate shot two-player-team pool tournament

#### September 5, The Bouganvilleas

Mike Foggia, Process Combustion Corporation:

Flameless thermal oxidation - Achieve 99.9999% DRE at < 2ppmv NOx

October 10 (in conjunction with the Southwest Process Technology Conference), TBD (southside of Houston)

The presenter will be a significant celebrity with involvement in global warming solutions

## November 7 (in conjunction with the Water Forum), Shaffai Hall

David Drerup, Operational Sustainability

Best practices in PSM data management

December - Holiday Season Social

This schedule does not include other STS events, such as networking lunches, workshops, plant tours, Young Professional events, K-12 outreach, PE review course offerings, etc. 2019 will be an exciting year for the South Texas Section. To become an STS volunteer, contact Tom Rehm at <a href="mailto:tom@tomrehm.com">tom@tomrehm.com</a> or 832-331-6491.

### **STS-AICHE Season Pass Information**

The STS-AIChE Season Pass for the 2019 technical monthly dinner meetings is being offered for \$149.

The STS-AIChE Season Pass offers the convenience of a single sign-up and single payment for all eight technical meetings in the 2019 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.

This coming year features many great speakers and topics at our STS AIChE Dinner meetings. Our Season's Pass program is a great way not to miss a single meeting!

Over 35 of our members enjoyed the benefits of our 2018 Season Pass program such as:

One price to attend all eight monthly dinner meetings for the price of seven!

No need to register in advance for each dinner meeting

Your get to own our limited edition attractive name badge!

Announcement of your participation at each meeting

Includes the SPTC STS AICHE Dinner meeting

The good news is that we are offering the season pass for \$149 per person, so there is no price increase for 2018. This coming year's meetings will feature different events and workshops.

So don't delay and sign up for the 2019 Season's Pass on our <u>website</u> by our first meeting on January 10th! We look forward to seeing you at each meeting.

Here's a link to the 2019 Season Pass Registration Form.

### **STS-AICHE Season Pass Information**

#### 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 2019 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 2019 Season Pass**

## 2019 STS-AIChE Patrons

Name	Affiliation
Yurika Diaz Bialowas	Chemstations, Inc.
Travis Fixmer	Lyondell Basell
Jordan Pearce	PSE
William Paul Waits	Core Engineering
Jack Chosnek	Knowledge One, LLC
Dale Embry	Conoco Phillips
Matt Clark	Armstrong Engineering Associates
George Vourazeris	Airgas Merchant Gases
Matthew Kolodney	Entech Engineering
Victor Edwards	
Sanjay Sharma	Honeywell
Maximo Salazar	Process Engineer
Tom Rehm	The Climate Solutions Community

## **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> <li>Provide meetings and events</li> <li>Maintain list of liaisons</li> <li>Send out special emails to liaisons</li> <li>Advertise program and recognize liaisons and companies</li> <li>Provide meetings and</li> <li>Create meeting invitations for coworkers</li> <li>Try to set up carpools where able</li> <li>Attend meetings where possible</li> <li>Interface with Company Management on STS activities and sponsorship opportunities (as applicable)</li> <li>Provide feedback to STS Officers on company interests and comments</li> </ul>		<ul> <li>★ Support the liaison</li> <li>★ Advertise where applicable</li> </ul>
	Benefits	
<ul><li>→ Higher attendance</li><li>→ Better corporate relations</li></ul>	<ul> <li>→ Personalized Nametag for meetings</li> <li>→ Demonstrated leadership within company</li> <li>→ Increased networking ability within corporation</li> <li>→ PDH credits/technical education</li> </ul>	<ul> <li>Recognition at meetings</li> <li>PDHs / education for employees</li> <li>Networking/team building opportunities</li> </ul>

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 Tom Rehm at tom@tomrehm.com or 832-331-6491.



### South Texas Section AIChE

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

2018 Officers and Contact Information

#### **Officers**

Chair Tom Rehm

sts-chair@aiche.org

Chair Elect TBD

sts-chairelect@aiche.org

Past Chair Carlos Salamanca

sts-pastchair@aiche.org

Secretary Debra McCall

sts-secretary@aiche.org

Treasurer Yurika Díaz Bialowas

sts-treasurer@aiche.org

#### **Executive Committee**

Position 1: Education

Sanjay Sharma sts-position1@aiche.org

Position 2: Outreach

Sheena Reeves sts-position2@aiche.org

**Position 3: Communications** 

Aniket Patankar sts-position3@aiche.org

Position 4: Human Resources

Jimmy D. Kumana sts-position4@aiche.org

#### **Volunteers**

Arrangements: John Middleton
Awards: Tom Menn
Membership: David Silarski
Webmaster: Talia Sanchez
Young Professionals: Swarup Bade

#### 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 2018

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: <u>Unsubscribe</u>. 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: <a href="http://www.aiche.org/">http://www.aiche.org/</a>

Contact the AIChE for PERMANENT ADDRESS CORRECTIONS:

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

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

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New York, NY 10005-4020

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### **The South Texan Newsletter Crew**

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

Contact us at <a href="mailto:sts-newsletter@aiche.org">sts-newsletter@aiche.org</a> with comments, questions, suggestions, and ideas for next month.

**Newsletter Editor** 

Aniket Patankar sts-position3@aiche.org Submit an article! Contact:

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