

The South Texan



Thursday, September 5, 2019

Monthly Meeting @ The Crown Plaza NRG
([8686 Kirby Dr, Houston, TX 77054](#))

5:30PM–6:30PM Workshops

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

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

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

Check us out on [YouTube!](#)

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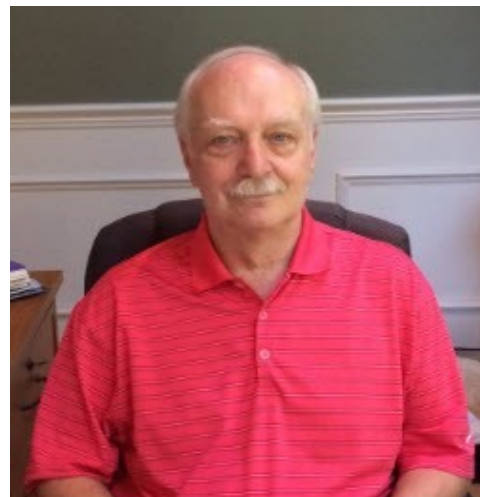
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September Dinner Meeting

Dinner Speaker: Mike Foggia,
Process Combustion Corporation



Title: *Flameless Thermal Oxidation—Achieve 99.999% DRE at < 2 ppmv NO_x*

Abstract: Oxidation Technology Presentation

BRIEF OVERVIEW OF PROCESS COMBUSTION CORPORATION (PCC)

WHO IS PCC?

DOMESTIC/GLOBAL LOCATIONS

“SOLUTIONS” SUPPLIER

OVERVIEW OF COMMON OXIDATION TECHNOLOGIES

EQUIPMENT SELECTION PROCESS

BASIC DESIGN PARAMETERS

TYPICAL TECHNOLOGIES

Recuperative/Non-Recuperative Thermal Oxidizers

Regenerative Thermal Oxidizers

Flameless Thermal Oxidizers

Biological Oxidizers

QUESTIONS & ANSWERS

September Dinner Meeting

Speaker Bio: Mr. Michael Foggia is the Business Development and Marketing Manager, for Process Combustion Corp in Pittsburg, PA. Mike spent 25+ years with Rohm & Haas (now Dow) working in the Specialty Chemicals group, focusing on new product and process commercialization, technical service/customer support, and Sales, Marketing and Business Development for chemical and photolithographic technology applications used in the electronics manufacturing sector. In 2006, he entered the air pollution control business, initially working on bio-oxidation technologies for the treatment of VOCs from industrial and municipal facilities and later diversifying into particulate removal/recovery, thermal oxidation and scrubber technologies.

September Meeting Workshops

WORKSHOP 1

Title: USING CHP SIMULATION MODELS TO ACCURATELY PREDICT TRUE NET UTILITIES OPEX IMPACT OF PROPOSED OR PLANNED PLANT PROJECTS

Abstract:

Plant utility systems - fuels, steam, power (mech + elec), water and sewer - have a complex inter-relationship especially if the facility uses

- Multiple fuels – solids, liquids, gas
- Multiple boilers generating steam at different pressures and quality
- Multiple steam headers (typically 3-5)
- Multiple steam and gas turbines for on-site power generation

Multiple utility suppliers/contracts, e.g. flat rate, step-rate, time-of-use, etc

The average cost for each utility estimated by the company's accounting department is designed for financial reporting purposes, but can be disastrously misleading for evaluating project economics. Combined Heat and Power (CHP) simulation models are a quick, cheap, accurate, and convenient solution for dealing with this problem.

The workshop will use the CHP model for an actual chemical plant to demonstrate how utility costs are affected by variations in

- steam and power usage
- condensate recovery rate
- Deaerator pressure

BFW quality (cycles of concentration)

and other significant operating parameters

The model will be provided as an Excel spreadsheet with approximate correlations for steam properties – good enough for preliminary screening and planning, but not for final design. Sometimes the sequence of implementing mutually dependent projects can also impact economics. A previously unpublished equation developed by the speaker to properly account for groups of dependent projects (savings from individual projects are not additive) will also be presented.

Workshop 1 Continued

Speaker Bio: Jimmy Kumana, founder & CEO of Kumana & Associates

Mr. Kumana holds an M.S. degree in Chemical Engineering from the University of Cincinnati. He has more than 35 years of experience in the areas of process design and energy/water optimization. He worked for both manufacturing and engineering design companies before establishing Kumana & Associates, a Houston-based consulting firm specializing in process optimization techniques, including Pinch Analysis, Load Management, Variable Speed Drives for rotating machinery, System Performance Analysis via Simulation Modeling, and KPIs.



He and his company have been consultants to blue-chip chemical and Oil & Gas companies world-wide, including DuPont, Union Carbide (Dow Chem), Monsanto, Solutia (now part of Eastman Chemical), Lubrizol, Mitsubishi, SASOL, SABIC, Saudi Aramco, PetroChina, Pemex, ConocoPhillips, and Tesoro. He has also been a consultant to major energy utilities including EPRI, GRI, Southern Cal Edison, Southern Cal Gas, Xcel Energy, and Dubai Gas, as well as to the US Dept of Energy, Natural Resources Canada, the Egyptian Ministry of Petroleum and Minerals, the World Bank (IFC), and UNIDO.

Mr. Kumana has authored or co-authored over 70 technical papers and book chapters, and was the instructor for AIChE's course on Pinch Analysis for Heat Recovery Optimization for many years during the 1990s. For the past 7 years he has been teaching a course on Energy Efficiency Optimization in the Hydrocarbon Industries designed for plant engineers, offered twice a year in Houston. He can be reached at Jimmy.Kumana@gmail.com

Workshop 2

Title: "Single & Multi-Objective Optimizations Using Parallelized Process Simulators"

Abstract:

LNG liquefaction is an energy-intensive process, and thus lends itself to optimization. Our work highlights the propane/mixed refrigerant (C3MR) section of this process. A common practice for C3MR optimization is to connect a generic optimization engine to a process simulator. While this approach can work well for adjusting a single type of independent variable, attempting to adjust many variables can lead to local optima, trapping the optimization engine.

Using CHEMCAD's integrated optimization engine and multi-core technology, we can easily set up rigorous optimizations, run them efficiently, and have a high degree of confidence that our solution is the global optimum.



Speaker Bio: Trevor Rice at Chemstations

Trevor obtained his BS ChE from Rice University in 2011. Since then he has worked as a Systems Engineer for Chemstations. In 2016 Trevor served as the STS YP Chair, and he currently serves as the YP webmaster and assists with the audio/video setup.

September Dinner Meeting

Speaker Bio: Mr. Michael Foggia is the Business Development and Marketing Manager, for Process Combustion Corp in Pittsburg, PA. Mike spent 25+ years with Rohm & Haas (now Dow) working in the Specialty Chemicals group, focusing on new product and process commercialization, technical service/customer support, and Sales, Marketing and Business Development for chemical and photolithographic technology applications used in the electronics manufacturing sector. In 2006, he entered the air pollution control business, initially working on bio-oxidation technologies for the treatment of VOCs from industrial and municipal facilities and later diversifying into particulate removal/recovery, thermal oxidation and scrubber technologies.

September Meeting Workshops—More info coming soon!

Meeting Registration Information

Membership in STS-AIChE is a bargain at \$25/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	\$30	\$40	\$40	\$50
Student / Unemployed	\$20	\$20	\$30	\$30

Meeting Location— The Crowne Plaza NRG



This month's meeting will be held at The Crown Plaza NRG ([8686 Kirby Dr, Houston, TX 77054](#))

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

September Meeting Dinner Menu

Enjoy a BBQ Evening with STS AIChE!

Dinner Buffet:

Texas Cobb Salad - Romaine Lettuce, Eggs, Bacon, Cucumber, Blue Cheese Crumble

Cole Slaw & Mustard Potato Salad

Shiner Bock Chili with Fritos, Onions and Cheese

Honey Baked Beans

Green Beans with Caramelized Onions

Lone Star Chicken

Slow Smoked Beef Brisket

Honey Biscuits

Traditional Texas White Bread

Vegetarian Dinner Option:

Herb & Cheese Stuffed Eggplant with Asparagus and Lemon Garlic Roasted Artichokes

- *This dish is by request only and requires an online registration, registration date line for vegetarian dinner is Friday, August 30 2019 by 12:00 pm.*

Desserts:

Peach Cobbler a la Mode

Jack Daniels Bread Pudding

Seasonal fruit trays

Coffee Station:

Regular and Decaffeinated Coffee

Hot Water and Tea Option

Non-Alcoholic Beverages:

Iced Tea with Lemon Wedges

Water

Alcoholic Beverage:

Cash Bar**

***** Cash only – no electronic payment option***

Online Registration closes at 4PM the day prior to the event (Wednesday September 4th). After this time, you may register at the door.

September 2019 STS-AIChE Chair's Letter – Tom Rehm

Hello South Texas Section,

I hope each of you has had a good summer so far. I'm writing this at a kitchen table in Minooka, Illinois, about 30 miles southwest of Chicago. I worked in the Chicago area from 1972 to 1993 before moving to Kingwood. Some of my personal global warming anecdotes are from that period. By Thanksgiving my golf clubs were always out of the car trunk and into a closet at home because the whole place froze solid and didn't thaw out until March. As the planet has warmed Chicago area golfers can now golf through the winter! Regardless of how bad the spring weather was, my group of golfers – essentially all from UOP, where I ran the after-work golf league and company golf tournaments – played our first round of golf in the new year on Good Friday. On one Good Friday we had a clear sunny day with a high of 25°F. Someone picked a golf course that was packed with lakes, but it turned out just fine as they were all frozen solid so errant shots went a long ways. In another winter the forecast for the coming February weekend was for an unbelievable high of 41°F. If you've ever lived far north, you become acclimated such that 41°F is light jacket weather. Four of us went to the golf course; another beautiful sunny day. The first golfer bent down to push his wooden tee in on the first hole, but couldn't do it. The ground was frozen solid! We thought, "That's a bummer. Now what?" Then one golfer remembered he had a hammer in his car. He got it and we had an enjoyable round of golf, starting each hole hammering wooden tees into the frozen earth.



That's a long winded intro to some climate solutions news. Many things are happening!

On October 2nd, the 11th Annual Southwest Process Technology Conference will hold its first Climate Solutions Session, with me and Mark Harkness as co-chairs. We have a terrific lineup of four speakers, only one a ChE ... hey, climate solutions work requires all-hands-on-deck which must include all our engineering and industrial scientific cousins.

October 2, 8:00-11:00am, Sugar Land:

Stephanie Thomas, PhD Geologist, *Evidence of Climate Change: An Overview of the Science*

Hebab Quazi, PhD ChE, *Strategic Approaches in Developing and Implementing Mitigating Solutions*

Matthew Berg, PhD Hydrologist, *Risky Business? The Very Tangible Supply Chain Threats of Climate Change*

Rebecca Luman, Civil Engineer, *Facility Preparedness to Solutions for Today and Tomorrow*

Register for the SPTC at <https://www.aiche.org/conferences/southwest-process-technology-conference/2019>

On November 12th, I will chair a Climate Solutions Session at the Annual Meeting in Orlando, Florida. If you're going to be at the Annual Meeting, please pencil our session into your calendar. We have moved up from our 40 person capacity room at our April 2nd Climate Solutions Workshop in New Orleans to a 160 person capacity room on the 12th.

November 12, 3:30-6:00pm, Orlando FL:

Mary Ellen Terns, ChE and Environmental Lawyer, *AIChE Climate Change Policy Review Process – New Policy*

Jeffrey R. Seay, PhD ChE, *Plastics and Greenhouse Gas Emissions*

Jesse Jenkins, PhD Engineering Systems, *Getting to Zero: Options for Decarbonizing Electricity in the United States*

Tom Rehm, PhD ChE, *Climate Solutions' Path Forward*

September 2019 STS-AIChE Chair's Letter (Continued) – Tom Rehm

That's not all folks! If you want to be involved in climate solutions, you can join Climate Solutions for Texas, our local initiative of the AIChE Climate Solutions Community; contact me if interested. We are engaged with Texas A&M University in a multi-university proposal to the National Science Foundation for establishment of an Engineering Research Center on severe weather resiliency, with the Engineering Council of Houston on a public seminar in early 2020 on climate solutions, with the City of Houston in Houston's Climate Action Plan, and we will have a table at the October 19th Energy Day to raise awareness of climate change and climate solutions.



Okay, enough about climate change.

On September 5th, we are trying out a new venue, The Crowne Plaza NRG, 8686 Kirby Dr., Houston. Our speaker is Mike Foggia, Business Development and Marketing Manager, for Process Combustion Corporation in Pittsburg, PA. Mike will speak on "Flameless Thermal Oxidation - Achieve 99.999% DRE at < 2 ppmv NO_x." (DRE = Destruction and Removal Efficiency)

The Southwest Process Technology Conference will be held in the Houston area for the first time in many years. Please join us at Sugar Land Marriott Town Square October 1-2. The Keynote Speaker will be John Hofmeister, 2005-2008 President of Shell Oil Company. Our October 1 STS dinner speaker will be Joseph Powell, Shell Chief Scientist, Chemical Engineering.

On October 19, please join us in working a table for the South Texas Section at the Energy Day. This table is separate from the climate solutions table I mentioned earlier. Matt and Connor can use your help! To become involved, please contact Matt Kolodney; mkolodney1@comcast.net, or Connor Schonert; connorschonert@yahoo.com.

Pencil into your calendar our December Holiday Social, a mystery dinner theater on December 5. No STS dinner in December. Instead I can relax and help sort out the whodunit.

I hope to see everyone at our September 5th section dinner at the Crown Plaza NRG!

Sponsors for 2019 - Thank You

Silver Sponsors

Business Climate Leaders



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

Silver Sponsors

Microrganic Technologies



Sponsorship of the South Texas Section – now on a rolling 12-month basis

In past years, sponsorship was tied to a calendar year. Those who became sponsors later in the year had less exposure than full-year sponsors, but at the same cost as full-year sponsors. A proposal to the STS Executive Committee, for sponsorships over a rolling 12-month period, was approved in mid-January. The 12-month rolling period will be based on the date of sponsorship application.

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 [dinner meeting schedule](#).

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

Upcoming Events

The Southwest Process Technology Conference October 1-2, 2019

The South Texas Section of the AIChE, in partnership with AIChE HQ, is hosting its [11th Southwest Regional Process Technology Conference](#), now in Sugar Land. This conference highlights 8 core programming areas of chemical engineering and process technology, and features 2 keynote addresses.

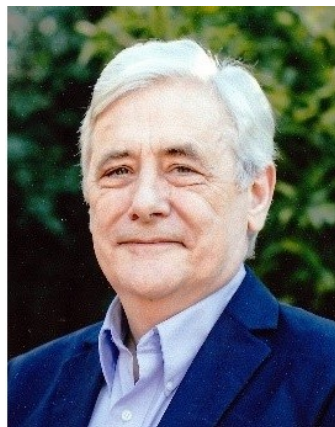
[Register now to experience featured sessions on these premiere topics:](#)

- Energy Efficiency
- Catalysis & Reaction Engineering
 - IIoT/Big Data
- Process Intensification
 - Process Safety
- Distillation & Separation
 - Climate Solutions
- Petroleum Refining Technology
- Chemical Process Technology Part 1 & Part 2



Keynote Session: Energy Transition

We are proud to announce that John Hofmeister, former President of Shell Oil Company, and Chief Executive Officer of Citizens for Affordable Energy will be giving our Tuesday Keynote Address discussing Energy Transition



Keynote Session: Cybersecurity

We are proud to announce Eric Cosman, 2019 president elect of the International Society of Automation (ISA) will be discussing "Imperatives for the Automation Profession in a Changing World" during his Keynote Address.

Check out the Technical Program to review the sessions offered at this year's SPTC and register by clicking [HERE](#) to secure your spot!

Upcoming Events

Friday, September 6th - First Friday Networking Lunch

The next STS-AIChE First Friday Networking Lunch (FFNL) will be held on Friday, **September 6th from 11:30AM - 1:00PM** at the **Wyndam Houston West Energy Corridor** ([14703 Park Row Dr. Houston, TX 77079](#)). The lunch menu is an all-inclusive buffet style for \$16 per person and STS-AIChE subsidizes the lunch by \$5. More speaker and topic information to come! The non-refundable \$11 registration fee includes the subsidized lunch buffet and attendance for the lunch presentation and networking. Pre-registration reserves your seat and walk-ins welcome on an as available basis. STS-AIChE members as well as non-members are welcome to attend. Select the below button to pre-register for this event:

[Register Now](#)

Have suggestions, ideas, comments or want to recommend a speaker for future FFNL events? Contact William Pittman at WilliamPittman@micropackamericas.com.

Friday, September 20th - Third Friday Networking Lunch

The next STS-AIChE Third Friday Networking Lunch (TFNL) will be held on Friday, **September 20th from 11:30AM - 1:00PM** at the **Pipeline Grill** ([10003 Spencer Hwy. La Porte, TX 77571](#)). More lunch and speaker information to come! STS-AIChE members as well as non-members are welcome to attend. Select the below button to pre-register for this event:

[Register Now](#)

2020 STS—UH PE Review Course

Will be offered in Spring of 2020
Revamped for Computer Based Test (CBT)
Class offered at UH on Friday afternoons 4-7pm*
January 31st – 1st Class
March 13th – Spring Break
April 24th – Last Class

\$900 for non-members
\$650 for members of National & STS AIChE

Contact Dale Embry for more details or visit the STS website.
Online registration starts in mid-September and closes on January 25th.
Click to register [HERE](#).

*All dates/times subject to change based on UH room availability

Upcoming Events

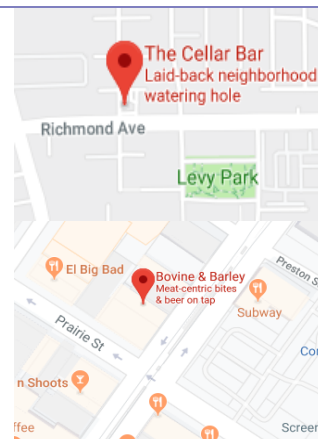
Young Professionals STS-AIChE Happy Hours!

Come out and have appetizers and drinks with the YPs!

The August Happy Hour is *this Friday* August 23rd at Cellar Bar (3140 Richmond Ave, Houston TX 77098) from 4 to 7pm!

The September Happy Hour will be held at Bovine and Barley (416 Main St, Houston, TX 77002) on September 27th from 4 to 7 pm!

Click on the maps for directions to the August and September Happy Hours. No RSVP Needed!



Third Annual AIChE Beer Brewing Competition

Fun and competition are brewing!

The third annual AIChE Beer Brewing Competition is being held at this year's Annual Meeting in Orlando, thanks in large part to the Young Professionals Committee. Among the competitors will be a team from Chemstations, Inc., in Houston.

On November 10th, the Chemstations crew will join other teams in presenting a poster detailing their beer's recipe, brewing process, and other specifics. Beers in different categories (dark and malty, light and hoppy) will be judged on taste, and the winners in all areas will be awarded prizes. To learn more about the competition, check out www.aiche.org/brewbeer.

If you're attending the 2019 AIChE Annual Meeting, come by and cheer on your Houston-area Young Professionals!



YP Announcement for attending the 2019 AIChE Annual Meeting

The Management Division has created a new program to help division member YPs (35 or younger) attend the 2019 AIChE Annual Meeting and recognize the efforts and contributions of YPs to Division activities. These activities include chairing or co-chairing and attending Division sessions.

For YPs that are just starting out their careers, attending an AIChE conference can be expensive, sometimes prohibitive, if you don't have financial support from your employer. Yet, attending the conference can lead to professional and personal development that adds value to the individual and the Chemical Engineering society.

Travel grants and registration subsidies will be awarded to qualifying candidates. [Click](#) for application details. The deadline for application submission/nomination is September 15th, 2019!

Upcoming Events

UH's "The New Energy Economy" Symposium — September 12th

University of Houston is holding a symposium on "The New Energy Economy" on September 12th. Free to attend! Click on the picture for more details!



Young Professional of the Month: Srihari Maganti

Our YP of the Month is Srihari Maganti. Srihari Maganti is a Senior Process Safety Consultant at Brown and Root Industrial Services. He is an active member of AIChE national and South Texas Section (STS). He served as AIChE Young Professional (YP) Directory Coordinator from 2012 to 2014, AIChE YP Gulf Region Representative from 2014 to 2015, 2018 STS YP Treasurer, and 2019 STS YP Co-chair. Srihari has chaired/co-chaired various AIChE and Global Congress on Process Safety technical sessions. He holds a Ph.D. in Chemical Engineering from South Dakota School of Mines & Technology.



2019 STS Opportunities

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 AIChE Annual Meeting in Pittsburgh last month, the Institute for Sustainability (IfS) and the AIChE 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 AIChE 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 Awards Update

2018 South Texas Section – AIChE Best Papers Awards

The 2018 STS – AIChE Best Papers Competition received two (2) nominations in the Applied category, three (3) in the Fundamental category, and one (1) in the Best In Practice Category. The winners in all categories will be announced at the Tuesday, October 1, 2019 South Texas Section – AIChE Monthly Dinner Meeting at the Sugar Land Marriott Town Square Hotel located at 16090 City Walk, Sugar Land, Texas, 77479.

STS Officer Elections

Dear STS-AIChE community,

We hope you have enjoyed attending the activities organized by the South Texas Section - American Institute of Chemical Engineers chapter in the recent years. These activities were possible due to the dedicated efforts of our volunteers. Thanks to their commitment and dedication, we were able to carry out many of those events successfully. On behalf of our current Executive Committee, we want to invite current and future members to participate in the upcoming leadership opportunities within STS-AIChE. There are four positions available for 2020 and many more roles within the chapter for those of you interested in playing a more active part in the STS chapter, while, at the same time, learning, networking, and developing those soft skills needed in our community.

Positions Available:

- **Chair-Elect for 2020 (and to succeed to the Chair in 2021 and Past Chair in 2022)**
 - One year term, from January 1st through December 31st of calendar year
 - Lead meetings and fill in for the Chair as needed
 - Responsible over Program Chair, Arrangements, YP, and Regional Activities (e.g. RPTC) and Chair in key leadership duties if not otherwise assigned to other STS-AIChE Member (per the organizational chart)
 - Organize volunteer opportunities with other local non-profits
 - Design goals and agenda, arrange for speaker, obtain presentation gift and make dinner reservations for September to June events with assistance from other officers
 - Introduce speaker at dinner meetings from January through December
 - Has signature authority, along with Chair-Elect for the bank account and authority to contractually obligate the STS-AIChE within the limits prescribed by the Executive Committee (per Article IX, Section 1 of the STS-AIChE Bylaws)
 - Execute special projects as deemed necessary by the chair or other officers
 - Fill the role of Chair from June 30-Dec31 if elected Chair is vacant. (per Article V, Section 4 of the STS-AIChE Bylaws)
 - At the term's end, orient the new Chair-Elect
 - **Secretary. Term for 2020-2021**
 - Two year term starting Jan 1 of even numbered year through Dec 31st of odd numbered year
 - If Chair, Chair-Elect, and Past Chair are unavailable, preside at all meetings (per Article IV Section 2 of STS-AIChE Bylaws)
 - Keep the Executive Committee and section meeting minutes. Accurately record discussions, motions and votes (per Article IV Section 3 of STS-AIChE Bylaws)
 - Distribute copies to the Executive Committee and have them approved, either as issued or amended, before the next meeting
 - Follow up on action items from previous meetings
 - Maintain the section files
 - Maintain tax exempt, legal and incorporation documents
 - Be familiar with the AIChE Constitution and Bylaws, as well as the section by laws
 - Work with the Executive Committee to prepare agendas for all section meetings
 - Correspond with AIChE on section business, including officer information changes, as they occur
 - Mail paper copies of the newsletter if applicable
 - At the term's end, orient the new secretary, turning over all records and section materials
 - **Position 2 (Outreach). Term for 2020-2021**
 - Two year term starting Jan 1 of even numbered year through Dec 31st of odd numbered year
 - Responsible for communicating with student chapters in STS region (UH, TX A&M, Rice, PV A&M), K-12 Programs, and Science Fair but may delegate (per the organizational chart)
 - Student Chapter Representative
 - Maintains ongoing relationship with local Student Chapter Advisors
 - Establishes communication with local Student Chapter President(s) each academic year
 - Communicates student needs to Local Section officers
 - Helps organize Ambassador/speaker visits for Student Chapter(s)
 - Organizes joint meetings between Local Section and Student Chapter throughout the year
 - Invites Student Chapters to attend Local Section meetings, with discounted dinner costs
 - Plans Local Section meeting on Student Chapter university campus to encourage student attendance
 - Arranges joint Local Section/Student Chapter plant tour
-

STS Officer Elections – Continued

•Position 4 – Human Resources

Two year term starting Jan 1 of even numbered year through Dec 31st of odd numbered year
Responsible for Membership, Company Relations, Minority Affaris, Professional Relations, but may delegate (per the organizational chart)
Membership Chair
Manages sign up at meetings and provide a welcoming atmosphere for newcomers
Maintains member information, both from AIChE as well as by Local Section participation
Provides information to recruit new members through Local Section website, responding to all inquiries
Speaks at companies, organizations to recruit members
Meets with local company managers and executives to discuss how the involvement of their chemical engineers in the Local Section would benefit their company
Reaches out to university graduates and new hires who move to the area
Work with the Young Professional Group chair to involve young chemical engineers
Reaches out to members who have missed a number of meetings to encourage their involvement
Organizes membership drives to increase participation
Communicates with AIChE to receive updated lists of chemical engineers in the Local Section area who should be contacted for potential membership
Serves as a resource of knowledge of the benefits of membership in AIChE
Help involve new members to make them feel welcome at Local Section meetings
Industrial Liaison
Communicates with managers and executives in local companies to share upcoming Local Section events
Assesses on a yearly basis what continuing education or programming local managers and executives would find most useful for their employees to receive and share this information with Local Section officers
Employment Info Chair
Establishes contact with local company's HR representatives to receive updates of chemical engineering job opportunities
Distributes employment opportunities to Local Section members
Encourages Local Section members to use AIChE's CareerEngineer

If you feel you want to participate actively by being an officer, or if you know someone who you feel is interested in these roles, please let us know by the 30th of August, 2019. You can contact any of the Elections Committee members (Contact information at the end) for more details. If you are nominating a friend, make sure to copy him/her on the nomination email.

We will need a brief bio, current objectives for your role within the chapter, and a recent picture. You can nominate your name for multiple roles, but only one will be selected before the voting begins. You can prepare a brief election campaign pitch to be given during our September and/or October monthly meetings. The elections will take place between mid-October and mid-November. Details about our Fall elections will be provided soon.

Looking forward to see you joining our Executive Committee.

Thank you,
STS- AIChE Elections Committee

Aniket Patankar	Patankar@gmail.com
Carlos A Salamanca	casalamanca@hotmail.com
Dale Embry	dale.l.embry@gmail.com
John Middleton	John.Middleton@WorleyParsons.com
Kelly Richardson	kelly_s_richardson@hotmail.com
Morgan Reed	mreed51@yahoo.com
Swarup Bade	swarupbade@gmail.com

Volunteer Outreach

2019 Southwest Process Technology Conference – Call for Volunteers!

11th Southwest Process Technology Conference October 1 – 2, 2019
Sugar Land Marriot Town Square

Volunteer duties typically include working at registration, as session aides for the technical presentations, assisting exhibitors, working meals and collecting event tickets.
Receive Free Registration for the day or days they volunteer!

Contact David Silarski @ sts-membership@aiiche.org and let him know if you can work one or both days.
Further information including a schedule will be sent out later!

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 sts-yp@aiiche.org and include any universities you'd be interested in helping with. We'll contact you once we've secured a time and place!

Upcoming K-12 Outreach Events!

Sally Ride Science Festival – October 12 at Rice University from 11:00 - 4:00

Energy Day – October 19 from 11:00 - 4:00 at Sam Houston Park (downtown)

The STS will have a K-12 outreach table at each event! We will have several volunteers at each event, so we don't overwork our volunteers! We will defray the cost of parking and lunch.

If you would like to volunteer for all or part of either day, or would would like further information, please contact **Matt Kolodney**, STS K-12 Outreach Coordinator, 713-471-8956 (c), mkolodney1@comcast.net

Past Events - Young Professionals

The Annual YP Sponsored Astros Game was sold out this year! The Astros won and we got to witness a fireworks display for the 50th anniversary of the First Landing on the Moon! Looking forward to another sold out event next year!



The May Happy Hour at Lupe Tortilla was also a blast!
Can't wait for our September one!



Past Events - 2019 Offshore Technology Conference

STS-AIChE OTC Committee Volunteers Again Successful at 2019 OTC

The 2019 Offshore Technology Conference was a success for South Texas Section which was credited having a total of 34 South Texas Section - AIChE members plus a few AIChE non-members serve as OTC Volunteers. Some of the volunteers worked two (2) shifts. *(STS probably had more volunteers but some volunteers failed to check the "AIChE" box on the OTC Volunteer Registration form.)* These 34 volunteers provided a significant portion of the staffing for the Arrangements, Registration, and First Timers Orientation Committees. For giving of their time to help out at the OTC, each volunteer received a complimentary OTC registration for themselves and their spouses and a reserved area parking pass with in/out privileges with both the registration and parking pass good for the entire OTC.

As STS-AIChE had enough volunteers, STS received an honorarium of \$1,000 from the OTC. It is hoped that STS will be able to repeat this feat in future years. The funds are to be used to provide handouts and career guidance materials to the High School Students and Teachers taking part in the OTC Student Tours as well as the Middle, Junior High, and High School Teachers participating in the OTC Teacher Workshop (NEED/STEM).

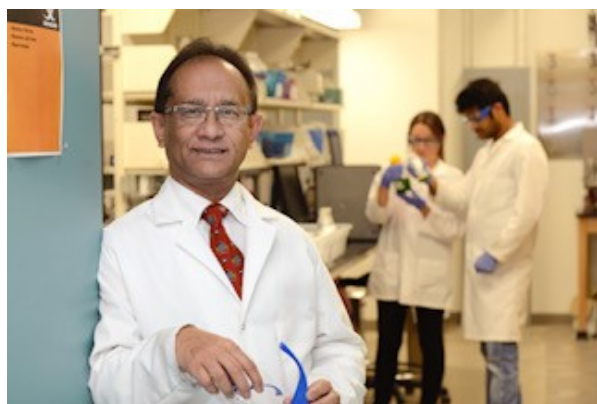
Those who served on one or more of the Arrangements, Registration, and Student Tours Committees are:

Dewayne Anderson	Susan Bayley
Steven Briley	Arthur Camero
Ryan Chun	Yurika Diaz Bialowas
Joseph Greenbaum	James Grubb
Sivashankarappay Gurusiddappa	Debra Haney
Dannis Jen	Jim Keller
Marie Laplante	Ken Lloyd
Ric Massie	James Menn
Tom Menn	John Middleton
Bob Naeger	Mary Needham
Israel Perez	Syamal Poddar
Tushar Poddar	Gary Reeves
Stephany Romanow	Carlos Salamanca
Tushar Shah	Tencha Shoemaker
David Silarski	Mark Smith
Roger Trandell	Deanna Wightman
James Woods	John Woods

If anyone has been missed or a name has been misspelled, please contact Tom Menn.

Thanks to all these volunteers for volunteering their time, talents, and efforts to the 2019 Offshore Technology Conference on behalf of the South Texas Section – AIChE.

Remembering Dr. Naz Karim



Dr. Muhammad Nazmul Karim, head of the Texas A&M University Artie McFerrin Department of Chemical Engineering, passed away on June 21, 2019 in Delf, The Netherlands. He was in the Netherlands attending a Technical Conference.

He received his Ph.D. in chemical engineering from the University of Manchester Institute of Science and Technology on a British Commonwealth Scholarship. Prior to that, he graduated from the Bangladesh University of Engineering and Technology (BUET) in 1972, where he was the First in Order of Merit, first Honors Graduate of BUET University in chemical engineering.

His professors at BUET described him as one of the most brilliant students they had ever encountered.

From the University of Manchester, he became a member of the research faculty in the Dynamics and Control Laboratory at Twente Technical University in Enschede, Holland, followed by a research associate at the Department of Chemical Engineering at the University of Alberta in Edmonton, Canada. In 1978, he became an assistant professor at The University of Texas Permian Basin and in 1980, he joined the faculty at Colorado State University in Fort Collins, Colorado, where he eventually became the associate department chair from 1993-99. In 2010, he became the Whitacre Endowed Department Chair in Chemical Engineering at Texas Tech University, and in 2012, he became the holder of the Michael O'Connor Chair II Professor and head of Artie McFerrin Department of Chemical Engineering at Texas A&M University.

Dr. Karim was an active supporter and contributor to the American Institute of Chemical Engineers (AIChE), and was an AIChE Fellow. He graduated more than 25 doctoral students and Karim's research interests were in model-based control, nonlinear control, data-based control and optimization, and bioprocess analysis and control. Last year, the Fuels & Petrochemicals Division of AIChE named an award after him, the Professor M. Nazmul Karim Award in Process Control and Automation.

Over the course of an impressive 30-plus year career, he authored more than 250 refereed publications, and gave over 400 technical invited and contributed presentations at national and international conferences. He was the co-author of the textbook, "Chemical and Bioprocess Control," which is used in over 50 universities worldwide. "Naz was an esteemed researcher and an asset to the College of Engineering," said Dr. M. Katherine Banks, vice chancellor and dean of engineering at Texas A&M University. "Under his leadership, the department was among the top chemical engineering programs in the country, and he continuously worked to find ways to improve the program and attract top faculty and students."

Dr. Karim, or "Naz" as he was commonly known among his friends and colleagues, was a tremendous scholar and teacher. In addition to his hundreds of publications and dozens of grants, he will be remembered for his energetic lectures, as well as his incredible mentoring and relationship-building skills. Often quoting Tagore or simply starting talks with a joke — he once started a lecture to graduating seniors by walking into the room wearing sunglasses because, "Boy, the future was bright," — and he knew how to capture the audience's attention. He influenced thousands of undergraduates and hundreds of graduate students during his academic career. He was invited to give hundreds of talks all around the world, including spending two sabbaticals at the International Center for Cooperative Research in Biotechnology at Osaka University in Japan; the Department of Chemical and Process Engineering at the University of Newcastle, England; the Laboratory of Automation at the Helsinki University of Technology in Espoo, Finland; and the Department of Chemical Engineering at the Technical University of Denmark in Lyngby.

He remained true to his roots - he made every attempt to connect BUET's chemical engineering department and students to other universities around the world. He funded a health clinic in his home village in Muktagacha. His generosity and heart touched everyone that he met. He loved cricket, fishing, reciting and writing poetry and cooking.

He is survived by his wife, two daughters, two grandchildren, and his brother and sister. A memorial service was held in Colorado on June 30.

STS Book Advertisement

***“Careers in Chemical and Biomolecular Engineering”* by Victor Edwards & Suzanne Shelley**

Careers in Chemical and Biomolecular Engineering

Victor Edwards
VHE Technical Analysis

Suzanne Shelley
Precision Prose Inc.
Chemical Engineering Magazine
Pharmaceutical Commerce Magazine

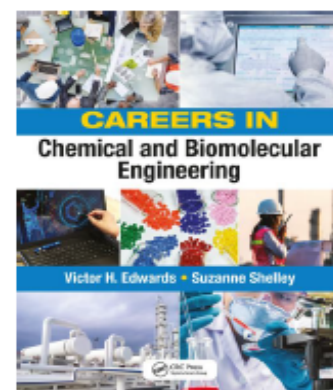
Providing a unique approach, this book conveys the scope of chemical and biomolecular engineering practice with the goal of helping interested potential students as well as graduating engineers understand the many engaging career pathways that are available in these dynamic fields.

KEY FEATURES

- Defines chemical and biomolecular engineering in practical terms, with emphasis on relating "classroom learning" to "real-world applications" to identify and describe potential career pathways.
- Describes both traditional and emerging careers pathways illustrated by in-depth profiles of 25 distinguished chemical and biomolecular engineers.
- Describes innovative alternative careers available to students with the knowledge, skills, intellectual rigor and problem solving capabilities that today's chemical engineer and biomolecular engineer possess.
- Helps students, parents, teachers, and advisors make informed choices when deciding whether to select these rigorous majors, and to broaden their search when seeking internships during college and graduate school, and post-graduation employment.

SELECTED CONTENTS

Profiles of 25 Working Engineers
Preface for Students, Guidance Counselors, Mentors, and Teachers
About the Authors
Chapter 1 What Are Chemical Engineering and Biomolecular Engineering?
Chapter 2 Historical Adventures in Chemical and Biomolecular Engineering
Chapter 3 Where Do Most Chemical and Biomolecular Engineers Work? How Much Are They Paid?
Chapter 4 Basic Concepts: Chemical Processes and Unit Operations
Chapter 5 Basic Concepts: Equilibrium and Rate Processes
Chapter 6 Basic Concepts: Separation Processes and Other Unit Operations
Chapter 7 Basic Concepts: Dynamics and Control of Chemical Reactions and Processes
Chapter 8 Basic Concepts: Creation and Stewardship of the Sustainable Process Plant
Chapter 9 Roles Chemical and Biomolecular Engineers Play
Chapter 10 Future Directions in Chemical and Biomolecular Engineering



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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 IAH, 15222 JFK Boulevard, Houston
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 Crowne Plaza NRG
Mike Foggia, Process Combustion Corporation:
Flameless thermal oxidation – Achieve 99.9999% DRE at < 2ppmv NOx

October 1 (in conjunction with the Southwest Process Technology Conference), Sugar Land Marriott Town Square, 16090 City Walk, Sugar Land, TX
Joseph Powell, Shell Chief Scientist, Chemical Engineering
Addressing Climate Change, an Energy Industry Perspective

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 tom@tomrehm.com or 832-331-6491.

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

First Name	Last Name	Company Name
Yurika	Diaz Bialowas	Chemstations, Inc.
Travis	Fixmer	LyondellBasell
Jordan	Pearce	PSE
William Paul	Waits	Core Engineering
Jack	Chosnek	KnowledgeOne LLC
Dale	Embry	ConocoPhillips
Matt	Clark	Armstrong Engineering Associates
George	Vourazeris	Airgas Merchant Gases
Matthew	Kolodney	Entech Engineering
Victor	Edwards	
Sanjay	Sharma	Honeywell
Maximo	Salazar	Process Eng
Tom	Rehm	The Climate Solutions Community
Tom	Menn	
Gus	Georgeton	LyondellBasell
Joseph	Ramey	Westchase Design
Gary	Miller	Air Liquide
John	Middleton	WorleyParsons
Julie	White	Chevron
Erin	Green-Colaco	
Jay	McCorkle	WorleyParsons
Gary	Gildert	Vanguard Catalyst, LLC.
Ravindra	Saxena	ANR Consulting
Talia	Sanchez	Spirit Environmental, LLC
Jeffrey	Melland	Melland Engineering & Consulting
Trevor	Rice	Chemstations, Inc.
Carol	Schmidt	Wood
Venkat R.	Voruganti	Continental Carbon Company
Deborah	Evans	

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 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 Mark S. Harkness
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
Babak Rafienia
sts-position1@aiche.org

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

Position 3: Communications
Meghan Spivak
sts-position3@aiche.org

Position 4: Human Resources
Dr. William Pittman, Ph.D.
sts-position4@aiche.org

Volunteers

Arrangements: [John Middleton](#)
Awards: [Tom Menn](#)
Membership: [David Silarski](#)
Webmaster: [Talia Sanchez](#)
Young Professionals: [Emily Jackson](#)

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: [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)



AIChE Home Office
120 Wall Street, FL 23
New York, NY 10005-4020

AIChE Customer Service Center
100 Mill Plain Rd 3rd Fl
Danbury, CT 06811

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.

Newsletter Editor

Meghan Spivak
sts-position3@aiche.org

Submit an article! Contact:

Matt Kolodney
713-471-8956
MKolodney1@comcast.net

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