Volume 118 Number 8

March 2018

The South Texan



Thursday, March 1, 2018

Monthly Meeting @ The Bougainvilleas
(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 8:00PM - 9:00PM Dinner Presentation/Speaker

Check us out on YouTube!

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March Dinner Meeting

Dinner Speaker: Pieter Schmal, M.Sc., Ph.D., Principal Applications Engineer & Head of PSE Academic

Title: The power of modelling – then, now and expected

Abstract: Models play an important role in industry. After a brief historic perspective considering how models were developed and used, current capabilities and examples are given to demonstrate the value of models in different industries ranging from chemicals, petro-chemicals to pharma. The use of models in on-line applications add the capability of automated and continuous optimization of operations. Models are however never perfect and auto-



mated updating of uncertain phenomena such as the degree of coking or fouling is crucial to ensure safe and optimal operation. The increased computational power has not only lead to ever more detailed and thus larger models, it also has led to an increased interest in uncertainties. Finally, some perspectives of future developments are discussed, such as cloud computing and new modelling capabilities.

Bio: Pieter Schmal has over 20 years of mathematical modelling experience using various software tools. He has worked with a wide variety of customers ranging from food, pharma, nuclear, paper, gas to liquid and base chemicals. Pieter has a M.Sc. and Ph.D. from TU Delft, The Netherlands in large-scale dynamic modelling. After his Ph.D. Pieter did two-post-docs on the heat-integrated distillation column investigating control and sustainability using irreversible thermodynamics. Pieter had his own company, Pi-productions, where he worked to commercialize a patent for a new separation method. In 2008 Pieter joined Process Systems Enterprise in London as a consultant. In 2010 he moved to the New Jersey office in the US to run Application Engineering in the Americas. In 2012 Pieter became the head of PSE Academic. At present he is a Principal Applications Engineer & Head of PSE Academic.

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



This month's meeting will be held at The Bougainvilleas (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>.

March 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:

Stuff Portabello Mushroom **

** This dish is by request only - reservation 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

Workshop I Information

Workshop starts at 5:30 PM:

Title: How Physical Property Accuracy Saves You Time and Money

Speaker: Nathan Lott

Abstract: In the late 1970's, the Design Institute for Physical Properties (DIPPR®) was established with a mission to ensure chemical processes are designed and operated as safely and efficiently as possible. DIPPR has accomplished this mission by becoming the leading authority in recommending accurate physical property values for industrially significant compounds. DIPPR continues in this role today, with stronger support than ever before. With the recent drastic shifts in the chemical industry and engineering workforce, DIPPR recognizes, and is uniquely positioned to satisfy, a critical need for training in the proper selection of physical properties for widely varying applications.

This presentation covers the following: The impact of data accuracy on safe, efficient, and profitable process design and operation, citing several specific examples DIPPR's unique "systems" evaluation approach to ensure accuracy Previews the DIPPR database contents and software tools.

Bio: Nathan Lott, AIChE

Nathan Lott started working with the Design Institute for Physical Properties (DIPPR) project, an AIChE Technology Alliance, as an undergraduate in the Brigham Young University Chemical Engineering Department in 2006. Nathan graduated in 2008 with a BS in Chemical Engineering from BYU, and continued his work with the DIPPR project. He is currently a full-time staff member of AIChE, where his primary role is the DIPPR Global Accounts Manager, while also assisting the sales and marketing activities of other various AIChE products.

Workshop II Information

Workshop starts at 5:30 PM:

Title: New technologies and breakthroughs to old Deionization applications

Speaker: Jim Wark

Abstract:

This presentation will focus on the following topics:

a. Basic water treatment methodologies Softeners, Carbon, Ultraviolet (UV) treatment, Filtration, Reverse Osmosis (RO) and Deionization (DI)

b. Specific water treatment (technologies or application) for Deionization Dual bed, Mixed Bed, EDI etc.

c. New technology twists to the DI system Double Pass RO, EDI with RO pretreatment

Industries that rely on these water treatment technologies:

Fuel manufacturing, pharmaceuticals, cosmetics, Data center humidity control, general labs, hospitals, solvent manufacturing, Electronics and electroplating

In this presentation, Jim also plans to highlight unique aspects of some of his current projects in Puerto Rico and the U.S.

Bio: Jim Wark

James or better known as Jim, has been working in the water treatment field since 1981. He started with the Napa, California Branch of Culligan.

He has been involved with many water treatment projects globally; in countries such as India, the Philippines and Mexico. He met his wife Agnes in the Philippines where he was consulting and providing water treatment equipment to the pharmaceutical manufacturing facilities she was working for.

Besides the normal day to day projects Jim is working on, he also has a pet project hoping to be realized in the Philippines. This project involves providing safe drinking water to all schools at affordable cost, with revenues also going to the schools.

Jim and his wife Agnes plan to semi-retire in a few years hoping to work with others in the Philippines to solve water problems there, which are rampant at this time.

March 2018 STS-AIChE Chair's Letter - Carlos Salamanca

Hello South Texas Section,

Chemical Engineers, as many other professionals, are involved in creating change every day – change in organizations, and change to products, services, systems and processes. The challenges that change brings are compounded by the complexity caused by communication issues, technology, and globalization. Professionals are exposed to change and adapting to that change is key. As our chapter turns to its 75th anniversary, we have seen both a lot of change and resistance to change. It is part of human nature. Welcoming and adapting to change will help.

In January, we had our Winter planning meeting with very productive discussions with our Board members, active volunteers and local student chapters. One of our goals is to strengthen our relationships with the four Student Chapters in our area: University of Houston, Prairie View A&M, Rice



University, and Texas A&M. Looking forward to see the alumni from these colleges participate as excellent role models for this new generation of Chemical Engineers. We want to groom the future generation of STS leaders from within. It is interesting to identify incoming talent, so please support STS mentoring students and young professionals. The South Texas Section wants to thank all our volunteers and Board members for their time and contribution. March meeting will include College Night and presentation of scholarships.

The 2018 Engineers Week Celebration has been held on the week of February 18-24, 2018. Congratulations to the STS-AICHE Young Engineer of the Year, Morgan Reed, Senior Associate at Exponent Failure Analysis Associates. He deserves this recognition for his enthusiasm and dedication to the section. Morgan received his award at the Young Engineer of the Year banquet on February 19th, 2018.

Next monthly meeting will include Pieter Schmal with PSE. He will present on "The Power of Modeling – then, now, and expected". We also have two workshops: Nathan Lott with 'How Physical Property Accuracy saves you time and money; and Jim Wark with 'New Technologies and Breakthroughs to old deionization applications'.

It is exciting to see new trends in the southwest region. The US project landscape is dominated by Liquefied Natural Gas (LNG) export terminal and petrochemical project announcements. Cheap, readily available shale gas has provided the US with low-cost natural gas feedstock that has created a boom in natural gas processing and export capacity, along with a renaissance in the country's petrochemical sector.

Today's technologies provide for very sophisticated solutions to complex global challenges. While challenges in implementing new technology or accelerating commercial deployments can be abundant, the far bigger challenge is that of the human kind – i.e. getting people focused and working together! At our February meeting, we will have Dr. Friedman focus his talk on how to get all team members on the same page – with clear roles, goals and responsibilities. He will focus on a case study for a Petrochemical company.





Monthly Meeting Sponsorship - Benefits

Bronze (\$500 – \$1,000) Non-Exclusive benefits

- Sponsor Logo display in the Newsletter and in the meeting slide show
- Acknowledgement at the meeting
- "Sixty seconds of shameless self-promotion" at the dinner meeting
- Two complementary dinner tickets
- Invitation to recruiting events
- · Social Media exposure

Silver (\$1,000 - \$2,999) Non-Exclusive benefits

- Bronze benefits above plus the following:
- A slide from the sponsor in the dinner meeting announcement slide
- A display table at the dinner meeting
- Two (2) additional complementary dinner tickets for a total of four (4)

Gold (\$3,000+) Exclusive benefits

- Silver benefits above plus the following:
- Sponsor to designate the invited Speaker and suitable topic for the dinner meeting
- Company season pass (1)
- One (1) Booth at Energy or Water Forum Meetings

Sponsors for 2018 – Thank you























MITIGATE HEAT EXCHANGER FOULING

HTRI engineers use state-of-the-art technology to provide companies with contract fouling services:

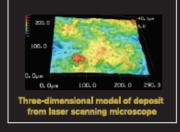
- · Measure the fouling propensity of a crude
- Evaluate the benefits of anti-foulant additives
- · Assess the impact of production additives
- · Compare the fouling potential of different crudes or blends
- Estimate fouling thresholds for temperature and velocity
- Evaluate the impact of metallurgy

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STS-AIChE Annual Awards

It's STS Awards Nomination Time!

Nominations are being accepted thru May 1, 2018 for the following STS Annual Awards:

- 2017 STS Best Applied Paper Award
- 2017 STS Best Fundamental Paper Award
- 2017 STS Best In Practice Paper Award **NEW!!**
- 2017 STS Outstanding Young Professional Award (Under 35)
- 2017 STS Distinguished Service Award (Over 36)
- 2017 STS Special Service Award(s)

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

Matt Christiansen281-544-6476Matthew.Christiansen@shell.comTom Menn281-485-3719ThomasMenn@SBCGlobal.netRyan Stephens281-544-8447Ryan.Stephens@Shell.com

Young Professional of the Month (February): Sanaz Taghvaii



Sanaz Taghvaii earned her BS in Chemical Engineering from the University of Massachusetts Amherst. As a university student she was research assistant with Dr. Fan's Engineering porous material group. She was also teaching assistant for sophomore chemical engineering courses and the Academic Chair of AIChE UMASS chapter in 2013-2014.

After graduation, Sanaz joined PFP Industries in Houston as Application Engineer, designing experiments, establishing procedures, and optimizing performance of different fracking stimulation chemicals and later as Technical Support Engineer in developing mobile fracking equipment. Sanaz has been an active member of AIChE since 2011. She is the current Social Network Administrator of STS-AIChE 2017-2018.

Young Professional of the Month (March): Srihari Maganti



Srihari Maganti is a Senior Process Safety Management Consultant, assisting clients with OSHA Process Safety Management (PSM) compliance. His expertise is in pressure relief systems and he has over six years' experience in PSM consulting work. Srihari is active with AlChE national and South Texas Section (STS). He served as a AlChE Young Professional (YP) Directory Coordinator from 2012 to 2014, and AlChE YP Gulf Region Representative from 2014 to 2015. He is serving as a 2018 STS YP Treasurer. Srihari has chaired and co-chaired various AlChE and Global Congress on Process Safety technical sessions. He holds a Ph.D. in Chemical Engineering from South Dakota School of Mines & Technology.

STS 2017 YP Chair Appreciation Plaque

At the January 11 South Texas Section Monthly Dinner Meeting at The Bougainvilleas, Morgan Reed was presented with the 2017 South Texas Section YP Chair Appreciation Plaque for his tireless efforts as 2017 STS YP Chair by 2018 STS Chair Carlos Salamanca.



2017
YP Chair Morgan Reed (C) is receives his 2017 STS YP Chair's Appreciation Plaque from 2018 STS Chair Carlos Salamanca (R) while AIChE
Secretary Freeman Self (L) looks on with approval.

STS-AIChE Volunteer Outreach

2018 Offshore Technology Conference

Volunteers Needed

(OTC Volunteer Registration Deadline: 10 April, 2018)

30 April–3 May 2018 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.

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

2018 Engineers' Week

The 2018 Engineers Week Celebration was held from the 18th to the 24th of February, 2018. Here are a few photos from the event.







Events in February

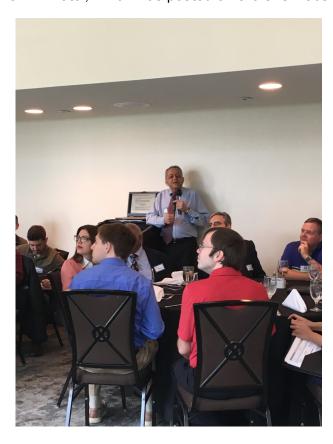
Jimmy Kumana participated in 2 events on behalf of STS within the last month. The first one was a talk at the U of H student chapter attended by about 50 students.

Here's the outline of the talk and a photo taken at the event:

- Choosing a Career Path
- The Campus Interview
- The On-site Interview
- Keys to Career Success Personal View



The second talk was on steam turbine integration at the West-side monthly networking luncheon at the Omni hotel, which was posted on the STS website for the benefit of all STS members.





Events in February

The Young Professionals chapter had a YP Happy Hour at the Yard House Grill in City Center that had a good turnout. The current YP Chair Swarup Bade and STS AlChE President Carlos Salamanca were amongst those who attended,





The STS AIChE also had a successful plant tour at the Schlumberger Testing & Process Systems R&D lab. Here are a few photos from the tour. About 20 engineers attended the tour and had interactions and discussions with the Schlumberger personnel.





Events in February

Here are some photos from the dinner meeting:









Upcoming Events Information

Spring 2018 PE Review Course for Chemical Engineering

The STS-AIChE & the University of Houston will sponsor a Chemical Engineering Professional Engineering Review Course, Spring of 2018.

Exam Dates in 2018 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 2nd through April 26. The cost for the course (not including books) is \$900 for non-members, \$650 for members of both National AlChE and STS-AlChE. We have continued to update the curriculum based upon feedback from the students over the past three course offerings.

Contact Dale Embry at dembry@uh.edu or 832-815-1552 for more information.

Texas Board of Professional Engineers (TBPE)

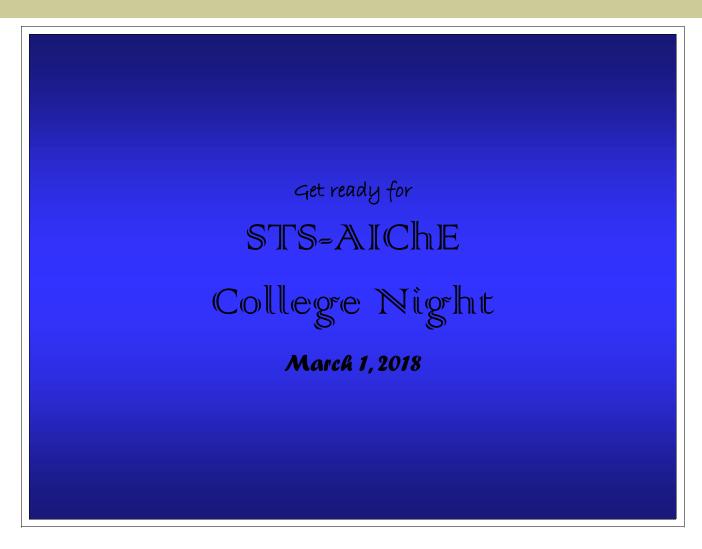
National Council of Examiners for Engineering and Surveying (NCEES):

Books used in the course: Study Materials can be found at http://ppi2pass.com/ & www.ncees.org Chemical Engineering Reference Manual for the PE Exam ISBN-10:1-59126-007-8 NCEES PE Exam

Chemical Sample Questions and Solutions ISBN:978-1-932613-52-0

Reminder: January 19th is the course registration deadline.

Check our website page "PE Refresher Course Offered Spring 2018" for more information



SPE Hiring Event



STS-AIChE 2018 Meeting Schedule

Date	Location	Meeting Details (Speaker/Company/Topic)
January 11	Bougainvilleas	Process Safety
February 1	The Battleground Golf Course	Alignment, Engagement and Execution: Creating Strong Team Performance and Results –Or, How to Herd Cats!
March 1	Bougainvilleas	The Power of Modelling – Then, Now and Expected
April 5	Shaffaii Hall and Garden	Energy Forum
May 3	Bougainvilleas	OTC, Awards Night
September 6	Bougainvilleas	TBD
October 9	Moody Gardens	SPTC TBD
November 1	Shaffaii Hall and Garden	Water Forum
December 6	Trini Mendenhall Community Center	Workshops

This coming year features many great speakers and topics at our STS AIChE Dinner meetings. We look forward to seeing you at each meeting.

STS-AIChE 2018 Season Pass

2018 STS-AICHE Patrons

Name	Affiliation
Travis Fixmer	Huntsman
Gary Miller	Air Liquide
Carlos Salamanca	SCG
Yurika Diaz Bialowas	Chemstations Inc.
Sanjay Sharma	Honeywell
Fabian Solberg	Eisenmann Corporation USA
David Rosenthal	RSIC
Ravi Saxena	ANR Consulting
Vic Edwards	VHE Technical Analysis
Trevor Rice	Chemstations Inc.
Gus Georgeton	Stress Engineering Services
Wendy Young	Chemstations Inc.
Syamal Poddar	Poddar & Associates
George Redd	Synergen Consulting
Dale Embry	ConocoPhillips
Thomas Rehm	TERehm Consultancy LLC
Joseph T. Ramey	Westchase Design LLC
Kamal Shah	IHI E&C International
Matthew Kolodney	Entech Engineering
Arnab Baksi	Bechtel Hydrocarbon Technology Solutions

Name	Affiliation
William Paul Waits	
Matthew Clark	Armstrong Engineering Associates
James Turner	Fluor
Julie D. White, P.E.	
Thomas E Menn	
George Duane Vouraceris, P.E.	Airgas Merchant Gases
Jordan Pearce	PSE
Dimitrios Georgis	PSE
Jack Chosnek	KnowledgeOne LLC
Maximo Salazar	
Nicholas D'Ambrosio	En-Fab Inc.
John Middleton	WorleyParsons
Helen Kester	Fitiri
YP	STS AIChE YP Guest
Carol Schmidt	Wood
Erin Green-Colaco	
Larry Chriswell	Keelson Company
Jim Brigman	Ingenero Inc

Job Inquiry and Posting

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

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

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

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

South Texas Section Corporate Liaison Program

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

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

Responsibilities and benefits are listed in the table below.

STS-AIChE	Liaison	Company			
Responsibilities					
 → Provide meetings and events → Maintain list of liaisons → Send out special emails to liaisons → Advertise program and recognize liaisons and companies 	 ★ 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 	 → Support the liaison → Advertise where applicable 			
	Benefits				
→ Higher attendance→ Better corporate relations	 → Personalized Nametag for meetings → Demonstrated leadership within company → Increased networking ability within corporation → PDH credits/technical education 	 → Recognition at meetings → PDHs / education for employees → Networking/team building opportunities 			

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

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

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

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



South Texas Section AIChE

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

2018 Officers and Contact Information

Officers

Chair Carlos Salamanca

sts-chair@aiche.org

Chair Elect Tom Rehm

sts-chairelect@aiche.org

Past Chair David Rosenthal

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: Phil Purpich Young Professionals: Morgan Reed

SOUTH TEXAS SECTION MISSION STATEMENT

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

Vision 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: http://www.aiche.org/

Contact the AIChE for PERMANENT ADDRESS CORRECTIONS:

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

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

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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

Submit an article!

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

Contact:



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