

# *The South Texan*

*2003 Marx Isaacs Award for Outstanding Large Section Newsletter*

*Voted "Best Newsletter" at 2009 AIChE Leadership Development Conference*



## *December Monthly Meeting*



Please join us for a feast, fun, and networking for our annual December Social Meeting. We welcome spouses and family to this event, with entertainment by [Philip & Henry USA Inc.](#) Magician Lanny Kibbey will be amazing the crowd with his illusions. Lanny Kibbey is an award winning magician having performed in over 30,000 shows in the United States. In addition to the entertainment there will be games, raffles, and prizes awarded.



Thursday, December 2<sup>nd</sup> 6pm-9pm

Hilton Houston Westchase

Westwind Ballroom

9999 Westheimer Road

Houston, TX 77042



This meeting is organized by the [Young Professionals Group](#). The price for pre-registered participants is \$25. A discount price of \$20 is being offered for YP-Members who pre-register. The price will be \$35 at the door.

Register today! <http://sts.aiche.org/content/meeting-pre-registration>



**\*YP members:** Be SURE to use the dropdown list on the item page in the shopping cart to select "YP Member: Yes" or you will not receive the discount!

## 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.

| STS-AIChE: September meeting at Hilton Houston Westchase |                  |             |
|--|------------------|-------------|
|  | Pre-Registration | At the door |
| Regular/Retired  | \$25             | \$35        |
| Young Professionals (YP)                                 | \$20             | \$35        |

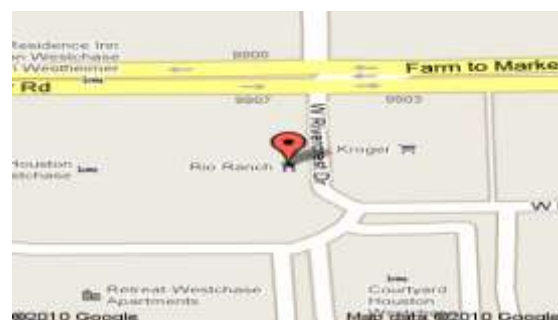
NOTE: You have until 4 PM CST on Dec 1<sup>st</sup> to pre-register online. After that, you will be required to pay the higher cost at the door.

Pre-registration for the meeting is now open through our new website at:

<http://sts.aiche.org/content/meeting-pre-registration>

## Meeting Location—Hilton Houston Westchase

This month's meeting will be held at [Hilton Houston Westchase](#) (9999 Westheimer Road Houston, TX 77042). Double click on the map for directions from your location.



## STS-AIChE Future Dinner Meeting Schedule, 2010

| Date             | Sponsor | Location               | Dinner Speaker Topic | Speaker | Workshops       |
|------------------|---------|------------------------|----------------------|---------|-----------------|
| January 13, 2011 | TBA     | <b>Brady's Landing</b> | TBA                  |         | PSM, PE/PO & PD |

## News from Other Professional Societies

### Wanted Mentors for Future City Competition.

The mission of the National Engineers Week Future City Competition is to provide a fun and exciting educational engineering program for sixth, seventh and eighth grade students that combines a stimulating engineering challenge with a "hands-on" application to present their vision of a city of the future. Mentors should have a technical background but license or degree is not mandatory. **When: September – January, Time: Generally 6-10 hrs/month, Where: A Middle School near you!** If interested, please contact Heather Gilligan, South Texas Regional Mentor Coordinator, at [hkgilligan@gmail.com](mailto:hkgilligan@gmail.com).

## November Meeting Update

Our scheduled speaker for the November 4 meeting, Dr. John Lienhard, had to cancel his presentation just days before the event due to chest pains that required him to be hospitalized. I am sure you join us in wishing him well, and a speedy recovery.

However, we are very grateful to Dr. Lienhard's University of Houston colleague Richard Willson (Moore's Professor of Chemical & Biomolecular Engineering, and Biology & Biochemistry, University of Houston), who agreed to speak in his place at very short notice. Dr. Willson gave an outstanding talk on Biochemical and Biomolecular Engineering. Thank you, Dr. Willson, for your excellent talk and for your flexibility.



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## From the Chair

A year ago STS-AIChE was doing extremely well. Our monthly meeting attendances were higher than at any time in recent memory, and there was growing activity across many areas, including young professionals, K-12 and technical programming. So, not surprisingly, as my term as Chair approached I **had a great sense of hope. That hope can be summarized as follows: "I sure HOPE I don't foul things up too badly!"**

Looking back during these waning days of my tenure, I can report that our monthly meeting attendances **have remained high, our YP group is as strong as ever under Kelly Richardson's leadership, and Heather Gilligan has built our hit-and-miss K-12 activities into a solid program.** In addition, our second annual **Regional Process Technology Conference in Galveston was just as successful as the previous year's** event. These accomplishments were due to the efforts of volunteers too numerous to mention, though I **have tried to single out a few each month in my "From the Chair" articles.**

We have also started several new programs this year. We ran our first PE Review course, under the inspirational direction of Dale Embry, who was ably assisted by an enthusiastic and effective team of volunteer lecturers, and supported by Ramanan Krishnamoorti and the University of Houston. David Keyes, Connie Carroll and Chris Tagoe have been instrumental in setting up our satellite group in The Woodlands, and Gary Gildert and Jay Chandrasekaran have taken on the task of webcasting our monthly meetings. And last time I checked our finances remain sound.

**There is one other thing I'd like to mention, in the area of governance. For many years successive** Executive Committees have tried unsuccessfully to update our bylaws. This year, under the direction of Ken Cox, we were able to carry out a comprehensive review of the bylaws. As a result we have proposed a number of amendments and these are included in our annual ballot, which is in progress at this writing.

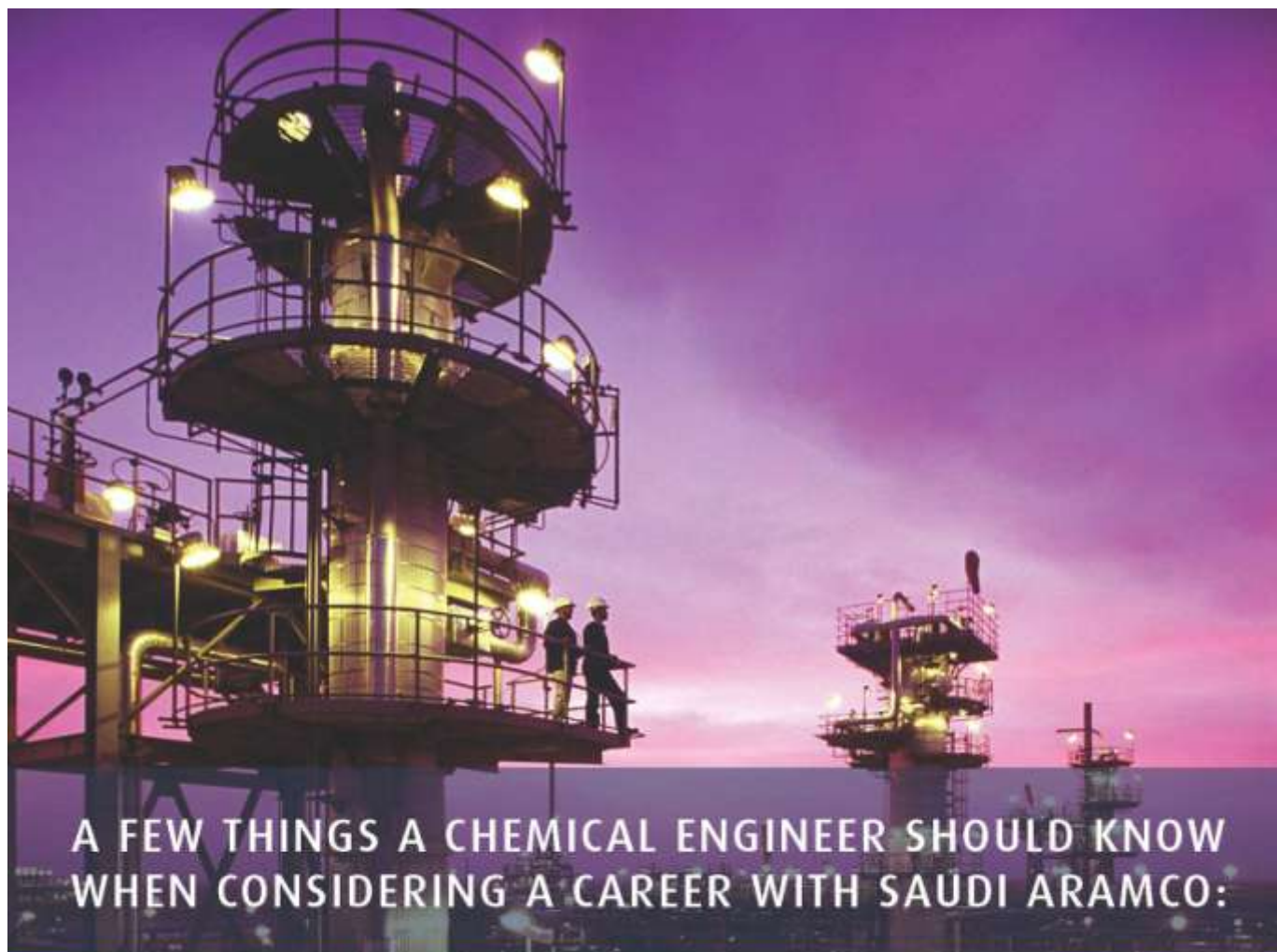
**So maybe I haven't fouled things up too badly. And, more to the point, I have had a lot of fun being a** part of everything that has been going on. It has been both a joy and a privilege to serve you all.

The time is fast approaching when I must hand the reins over to Ken Cox. Ken brings a wide range of experience and wisdom to the Chairmanship, and I am confident in his ability to lead STS-AIChE on its next step. I sincerely hope that all of you will support him as well as you have supported me, so that STS-AIChE can continually improve in the way it serves the chemical engineers of South Texas.

Best wishes,

Alan Rossiter, Chair

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## A FEW THINGS A CHEMICAL ENGINEER SHOULD KNOW WHEN CONSIDERING A CAREER WITH SAUDI ARAMCO:

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## 2009 Awards Presented at the Oct & Nov STS Monthly Dinner Meeting

The South Texas Section – AIChE recognized five STS Members for their achievements in 2009. Another STS Member will be recognized at a later date due to scheduling conflicts. Some of the Awards were presented by STS Chair Alan Rossiter at our October meeting, and the remainder by STS Chair-Elect Ken Cox at the November meeting. Awards Chair Tom Menn read the citations. Before announcing the STS Annual Awards for 2009, the Best Papers Judging Committee was recognized and thanked for their hard work.

### STS 2009 Best Papers Judging Committee

There was a spirited Best Paper Competition again this past year, 2009, with a total of 11 papers nominated. Of these there were four (4) Applied Nominations and seven (7) Fundamental Nominations. Those who participated in the Best Papers Judging Committee which was chaired by Anand Nilekar:

Kailash Dangayach  
David Denley  
Wayo Dozal  
Elizabeth Endler  
Ray French  
Amrit Kalra  
Anand Nilekar  
Mike Reynolds  
Vish Subramaniam  
Jimmy Wales

Sue Degaleesan  
Aleksandra Dominik  
Smita Edulji  
Allison Falender  
Puneet Gupta  
Patrick Malone  
Chen Ramachandran  
John Saukaitis  
Rajneesh Varma



Kyriacos Zygourakis (R ) accepts the STS 2009 Best Fundamental Paper Award from STS Chair-Elect Ken Cox (L)

The STS-AIChE extends its thanks to Anand and all of those who participated in the judging process for all the hard work they did.

### Matteo Pasquail – STS 2009 Best Applied Paper Award Recipient

The STS 2009 Best Applied Paper was "True solutions of single-walled carbon nanotubes for assembly into macroscopic materials" by Virginia A. Davis, A. Nicholas G. Parra-Vasquez, Micah J. Green, Pradeep K. Rai, Natnael Behabtu, Valentin Prieto, Richard D. Booker, Judith Schmidt, Ellina Kesselman, Wei Zhou, Hua Fan, W. Wade Adams, Robert H. Hauge, John E. Fischer, Y. n Cohen, Y. Talmon, Richard E. Smalley (deceased), and Matteo Pasquali which was published in NATURE NANOTECHNOLOGY, Vol. 4, December 2009, pp. 830 - 834. Present to accept the STS 2009 Best Applied Paper Award were Matteo Pasquali and Nat Behabtu at the October 7th STS Monthly Dinner Meeting in Galveston.

Please note that that Dr. R. E. Smalley is no stranger to the STS as he appeared as the after dinner speaker at an STS Monthly Dinner Meeting a number of years ago.

### Kyriacos Zygourakis – STS 2009 Best Fundamental Paper Award Recipient

The STS 2009 Best Fundamental Paper was "A 3D Hybrid Model for Tissue Growth: The Interplay between Cell Population and Mass Transport Dynamics" by Gang Cheng, Pauline Markenscoff, and Kyriacos Zygourakis which was published in Biophysical Journal, Vol. 97, 401-414 (2009). Dr. Zygourakis was present to accept the STS 2009 Best Fundamental Paper Award. The award was presented to Dr. Zygourakis at the November 4th STS Monthly Dinner Meeting in Houston.

### Heather K. Gilligan – STS 2009 Best Fundamental Paper Award Recipient

The STS announced Heather K. Gilligan as the recipient of the STS 2009 Best Fundamental Paper Award Recipient for her K-12 Student Programs Committee Work in 2009. Due to various conflicts, Ms Gilligan could not be present to accept the award which will be presented at a later date.

### Daniel T. Shiosaki – STS 2009 Outstanding Young Professional Award Recipient

The 2009 Outstanding Young Professional Award Recipient is Daniel T. Shiosaki, who graduated from the University of California -- Berkeley in May, 2007 with a BS in chemical engineering. After graduation Daniel joined LyondellBasell. His first assignment was in Central Engineering at Channelview working on projects for various LyondellBasell sites which lasted for two years. For the past year, Daniel has been assigned to the LyondellBasell Houston refinery as the process engineer on the Ultra-Low Sulfur Diesel Units.

After graduation, Daniel continued his involvement with AIChE and has held several positions nationally and locally. Locally he is the current Position 3 on STS-AIChE Executive Committee (Communications), helps out with advertising sales, and has served as the Young Professionals Treasurer. Nationally, he was a member of the AIChE Young Professional National Advisory Board. As a member of the YPAB, Daniel has attended several Regional and National AIChE conferences to increase awareness of young professionals to become and stay involved with AIChE after graduation. He has also co-published a "How-To" document (with Brian Daly) that is nationally used as a guide to aid AIChE Local Sections in forming their own Young Professional groups. Daniel tries to continually stay involved and hold positions as work permits.

This award was presented to Daniel at the October 7th STS Monthly Dinner Meeting in Galveston.

## 2009 Awards Presented at the Oct & Nov STS Monthly Dinner Meeting (Continued)

### Norman F. Carnahan -- STS 2009 Distinguished Service Award Recipient

The 2009 Distinguished Service Award Recipient is Norman F. Carnahan. He originally hails from New Iberia, Louisiana where he was born to Frank L. Carnahan and Viola M. Armentor. Norman attended grade school in Louisiana and Texas and graduated from St. Pius X High School in Houston in 1960. He earned his BSChE degree at the University of Houston in 1965 and worked for Dow Chemical Company's Louisiana Division until 1968.

He then entered graduate school at The University of Oklahoma, as a student of Professor K.E. Starling, and earned his doctorate in Chemical Engineering in 1971. Norman's early publications and dissertation introduced the Carnahan-Starling equation of state that is used for fundamental studies of fluid physics and molecular thermodynamics. **(For more on this episode of Norman's life, see page 8 of the November 2009 issue of The South Texan for an article by Patsy S. Chappelear.)** He completed post-doctoral fellowships at Rice University with Professors Tom Leland and Riki Kobayashi, and continued the association with Rice University as adjunct faculty, lecturer, and researcher for many years. As adjunct faculty at the University of Houston, Norman taught courses in thermodynamics, process simulation & modeling, and petroleum fluid properties & phase behavior. He is a consultant to numerous companies and organizations on challenging problems involving applied thermodynamics and fundamentals of fluid physics, complex phase behavior, interfacial phenomena, process engineering and design, petroleum reservoir fluids, subsea production systems, flow assurance, and rheology.



Norman Carnahan (L) receives his AIChE Fellow Certificate from nomination initiator Tom Menn (R)

Norman is a Fellow of AIChE and has served the South Texas Section as a member of the Audit Committee for two Spring National AIChE Meetings, STS Executive Committee Position 1, STS Chair-Elect, STS Chair (1985), STS Past Chair, and has been a member of various OTC Conduct Committees since 1980 including serving as Co-chair of an OTC Registration Committee. **He has delivered two invited lectures on AIChE's behalf, two plenary lectures, and presented numerous papers of which 49 have been published on a variety of subjects including:**

- Thermodynamics & equations of state;
- Asphaltene, resin, & wax equilibrium in petroleum;
- Light hydrocarbon & hydrate research;
- Flow assurance or fluid flow dynamics.

Norman has even presented a paper that looked strangely like a Civil Engineering paper as it was on the use of things called "J-Hook Pilings" in a subsea environment.

Norman and his wife, Lirio, are the proud parents of three (3) children and are even prouder of their three (3) grandchildren. He also enjoys gardening, wood working, cooking, and grilling food. He also is a member of the Society of Petroleum Engineers as well as a registered professional engineer in Texas.

This award was presented to Norman at the October 7th STS Monthly Dinner Meeting in Galveston.

### Norman F. Carnahan elected Fellow of AIChE

Norman F. Carnahan received his Fellow Certificate and Pin at the STS November Monthly Dinner after being elected a Fellow of AIChE this past March.

Norman has served the South Texas Section as a member of two Spring National AIChE Meeting Audit Committees, STS Executive Committee Position 1, STS Chair-Elect, 1985 STS Chair, STS Past Chair, and has served on various OTC Conduct Committees since 1980 including serving as Co-chair of an OTC Registration Committee. **He has delivered two invited lectures on AIChE's behalf, two plenary lectures, and presented numerous papers of which 49 have been published on a variety of subjects.** Norman has received the 1986 STS Chair Appreciation Award and the 2009 STS Distinguished Service Award.

**Norman received his BSChE from the University of Houston ('65) and his Ph. D. from the University of Oklahoma ('68).** While a graduate student at OU, he introduced the Carnahan-Starling Equation of State. Norman completed his post-doctoral work at Rice University with Professors Tom Leland and Riki Kobayashi.

Norman worked for Dow Chemical Company (La. Division) before he began his graduate studies, Rice University and the University of Houston in various adjunct academic roles following his post-doctoral work, and as a consultant to numerous companies and organizations on applied thermodynamics and fundamentals of fluid physics, complex phase behavior, interfacial phenomena, process engineering and design, petroleum reservoir fluids, subsea production systems, flow assurance, and rheology. He is a member of the Society of Petroleum Engineers as well as a registered professional engineer in Texas.

## From the YP Chair

Dear Young Professionals,

We have enjoyed bowling, rock climbing, and parties. We have presented workshops at the local universities. We have volunteered in the community at a Homeless Assistance Center, Houston Science Fair, and at a Career Day. Through our participation in academic, technical, social and volunteer activities, we have supported the mission and vision of AIChE in 2010. I would like to thank all of the STS-AIChE Young Professionals (YPs) which served on the YP Board in 2010.

Carol Schmidt, Yoojung Kim, Katherine Leskin, Carlos Salamanca, Brian Daly, Gabriel Garcia, Jayce Mathews, Linton Wong, Nemoy Rau, Jayachandran Chandrasekaran, and Bryan Pourchot, thank you all for helping STS-AIChE develop programming for Young Professionals. Thank you also to Heather Gilligan, Julie White, Lisa Swanson and Maxine Madison for volunteering as well during several of our events.

Congratulations to Jayce Mathews who will serve as the YP Chair and Lisa Swanson who will serve as the YP Vice-Chair in 2011! Active participation in STS-AIChE is a rewarding experience.

If you are interested in becoming more involved in STS-AIChEYP please contact us at [info@sts-yp.org](mailto:info@sts-yp.org). To receive details regarding our 2011 Winter Planning Meeting please sign-up for our mailing list by visiting our website at <http://www.yp.sts-aiCHE.org>.

Sincerely,

Kelly Richardson  
2010 STS-AIChEYP Chair



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## YP News and Events

### STS-AIChE YP House Party

When: Saturday, November 20th 7PM-10PM

Details: Bryan Pourchot has graciously provided his house for the occasion. Food & drinks will be provided! There will be ping pong, foosball, darts, pool, Wii, and some assorted board/card games.

For additional event details please visit the STS-AIChE YP website at <http://www.yp.sts-aiche.org/>

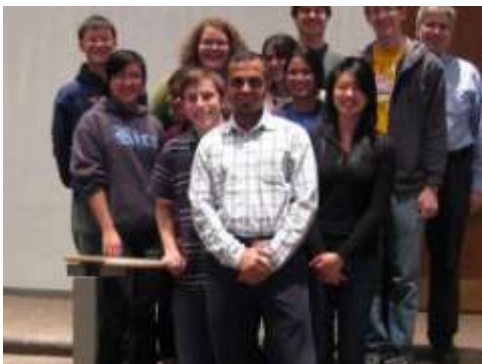
### STS-AIChE YP Star Pizza Member Appreciation Night

When: Thursday, December 9th 7PM-10PM

Details: Food & drinks will be provided! We will be playing pool and card games.

For additional event details please visit the STS-AIChE YP website at <http://www.yp.sts-aiche.org/>

### Young Professionals visit Rice University



**The Young Professionals (YP) visited Rice University's AIChE Student Chapter on November 16th and gave a presentation on STS-AIChE. The presentation focused on the importance of AIChE involvement before and after graduation and, how it could help them in professional development. The talk also highlighted the activities of STS-AIChE in the Houston region and how it could be beneficial for them. This was followed by a Q&A session wherein the YP's took questions from students. The students expressed their interest to get active with STS-YP events and also continue their involvement with AIChE after graduation.**

Kelly Richardson, Jayce Mathews and Bryan Pourchot represented YP. Dr Ken Cox from STS-AIChE and Rice University was also present. **The YP's would like to thank Dr Ken Cox, Nick Hoeft and Jim Wong of Rice University for helping them with the visit.**







## South Texas Section AICHE

South Texas Section  
P. O. Box 820252  
Houston, TX 77282

2010 Officers and Contact Information

### Officers

**Chair** Alan Rossiter, Rossiter & Assoc.  
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**Chair Elect** Kenneth R. Cox  
[sts-chairelect@aiche.org](mailto:sts-chairelect@aiche.org)

**Past Chair** Todd Willman, Epcon International  
[sts-pastchair@aiche.org](mailto:sts-pastchair@aiche.org)

**Secretary** Carol Schmidt  
[sts-secretary@aiche.org](mailto:sts-secretary@aiche.org)

**Treasurer** Hiren Patani  
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### Executive Committee

**Position 1: Education**  
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**Position 2: Outreach**  
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**Position 4: Human Resources**  
John Super  
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### Volunteers

**Arrangements:** Richard Newman,  
David Silarski

**Membership:** David Silarski

**Young Professionals:** Kelly Richardson

**Awards:** Tom Menn

### 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 2013

<<To be developed>>



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Our newsletter subscription list is by invitation only.

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### — MAINTAIN YOUR CONTACT INFORMATION WITH STS —




Maintain your contact information with the South Texas Section using the online community:

<https://www.memberconnections.com/olc/pub/CHM/>

To update your information, log in, then select [Member Directory](#).

Select the link to [View/Update Your Online Directory Listing](#).

Contact the New York office for PERMANENT ADDRESS CORRECTIONS:

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 1-800-AIChemE (1-800-242-4363)  
 AIChExpress Service Center  
3 Park Avenue  
New York, New York 10016-5991

## The South Texan Newsletter Crew

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

Contact us at [sts-newsletter@aiche.org](mailto:sts-newsletter@aiche.org) with comments, questions, suggestions, and ideas for next month.

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