

The South Texan

2003 Marx Isaacs Award for Outstanding Large Section Newsletter



The March meeting is graciously sponsored by ConocoPhillips. See page 3 for reduced pricing info!

Monthly Meeting March 5, 2009
Location: Westchase Hilton Hotel

Gasification—the Enabling Technology

Speaker: ShunCheng Ji, Senior Staff Engineer, ConocoPhillips Gasification

Abstract: Gasification of solid feedstocks, such as coal and petroleum coke, is an efficient process to produce synthesis gas for use in combustion turbines and as a feedstock for chemical and fertilizer plants. Syngas can also be used to produce hydrogen and substitute natural gas (SNG, equivalent to pipeline quality natural gas). This presentation will overview the global and national applications and current markets for gasification technologies, and highlight ConocoPhillips' planned projects in Kentucky and Texas. The Kentucky NewGas project, a joint venture with Peabody Coal, will produce SNG from a blend of bituminous coal and petcoke. A project being evaluated for ConocoPhillips' Sweeny refinery will produce hydrogen, steam, power and SNG from petcoke. Both of these projects are evaluating designs for carbon capture to reduce CO₂ emissions.

Bio: ShunCheng Ji is the Senior Staff Engineer with the Gasification team at ConocoPhillips. In that capacity, he has been involved with preparing Process Design Packages for ConocoPhillips E-Gas Technology™ and led several technology development projects and feasibility studies. Prior to joining the Gasification team in 2005, Shuncheng was with ConocoPhillips' Gas-to-Liquids team for four years during which he coordinated various projects including technology benchmarking and new technology development. He has published 15 papers and holds one US patent.



Shuncheng received a Ph.D. in Chemical Engineering from the University of Oklahoma and a Masters degree in Chemical Engineering from East China University of Science and Technology.

Phil Amick is the co-author of this paper, but will not be presenting at the meeting. Mr. Amick is the Commercialization Director for Gasification at ConocoPhillips. His responsibilities include business and project development for gasification facilities featuring ConocoPhillips' E-Gas™ Technology for coal and petcoke gasification worldwide.

From 1990 to 1996, Phil was the Project Manager for the design and construction of the Wabash River syngas facility. Since the completion of the Wabash facility, Phil has been focused on a variety of business management, development and regulatory responsibilities in the gasification arena. Formerly the Chairman of the Gasification Technology Council, he still serves the GTC on the Executive Committee and is also a member of the Technical Subcommittee of the Coal Utilization Research Council.

Phil graduated from Rose-Hulman Institute of Technology in Terre Haute, Indiana in 1980 with a degree in Mechanical Engineering.



Meeting At-A-Glance

- Location: Westchase Hilton Hotel
- 2 Workshops, 5:30 PM
- Networking 6-7 PM
- Dinner at 7 PM
- Speaker at 8 PM

Inside this issue:

Workshops	2
Meeting Signup Details	3
Sponsors	4
YP Activity Review	4
Awards Given	5
Award Nominations!	6-7
Volunteers Needed	9
Contact Information	11
Subscribe/Unsubscribe	11

Workshops begin at 5:30 PM

Special Workshop!! Working With Gen-Y

Speaker: Adnan Siddiqui, Engineered Project Services LLC

Abstract: As Generation Y engineers enter the work force, what strategies and tactics should your firm and you adopt to integrate them into your team?

This workshop will discuss Generation Y characteristics and their goals and working styles. It will also discuss what you can do to attract and retain Generation Y engineers. The workshop will end with an interactive case study from the Harvard Business Review on a typical Generation Y conflict in the work place.

Bio: Adnan "A.D." Siddiqui is founder and president of Engineered Project Services LLC, which has developed the innovative new software, ConcepSys(TM). This new integrated tool is used for conceptual design and alternative evaluation of process industries capital projects. He has over 11 years of experience as project manager ranging in size from small plant-based projects to large emerging region mega-projects. He holds a Bachelor's and Master's in Civil Engineering as well as an MBA from The University of Texas at Austin.

Process Safety Management (PSM): Organizing Knowledge for PSM and Beyond

Speaker: Jack Chosnek, PhD, PE

Abstract: With the continuous turnover of experienced personnel, how do we ensure that their knowledge is not lost? How do we reduce the human error caused by lack of appropriate knowledge? We do it by creating an organized repository of knowledge that can be easily maintained, searched and disseminated. Existing tools such as document management systems (DMS) allow us to create and share such a repository. By providing a suitable structure to the knowledge (taxonomy), it can be continuously expanded within the working environment and properly maintained. The presentation will address the necessary features of a DMS for providing for information validation (we want our knowledge to be correct), security (to prevent information corruption), and updatability (to have the latest information), and for having the ability to be easily searched and shared. A knowledge structure that can be applied to an operating petrochemical plant and that will allow achieving the objectives of collecting, reviewing, and maintaining the correct information will be shown.

Bio: Jack is a PSM consultant and has thirty three years of experience in the petrochemical industry. He has consulted for companies in the refining, chemical, oil and gas, waste management and mining industries, developing policies and implementing process safety management systems, facilitating PHAs, writing operating procedures, investigating incidents, and conducting process safety audits. He has developed software for PHA facilitation and Management of Change (MOC).

He started his career with Celanese Chemicals where he successfully implemented OSHA 1910.119 and managed process safety at Celanese's largest site. He was part of the corporate steering team that developed the Company's PHA, Risk Assessment/Risk Management, Process Safety Audits and Incident Investigation programs.

Jack has a BS and MS from the Technion—Israel Institute of Technology, and a PhD from the University of Missouri at Rolla, all in Chemical Engineering.

Vital Links

South Texas Section website: <http://sts-aiche.org>

South Texas Section Young Professionals Group: <http://yp.sts-aiche.org>

National AIChE website: <http://www.aiche.org/> (Needs Flash Plug-in)

Earn CEP credits at AIChE functions: http://www.sts-aiche.org/Texas_PE_CEP_Rule.html

Download the CEP log form: http://www.sts-aiche.org/STS-AIChE_CEP_Log.xls

Previous Newsletters (PDF format): <http://sts-aiche.org/newsletterArchives.htm>

Link to THIS newsletter: <http://sts-aiche.org/newsletter/news2009/news0209.pdf>

Meeting Registration Information

Pre-register for the monthly meeting at: <http://www.sts-aiche.org/register.php>.

Reservations are accepted until 4 pm the Wednesday of meeting week.

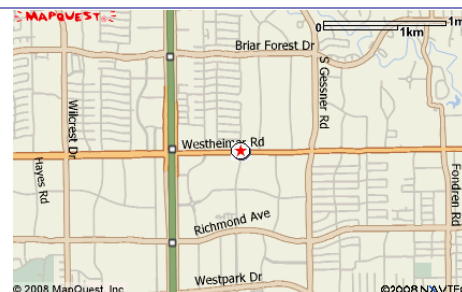
You may also **cancel a reservation** using this link. Please cancel your reservation if you have made one and find that you are unable to attend.

	<u>Pre-registered</u>	<u>At the door</u>
Regular/Retired	\$15	\$25
Student/Unemployed	\$10	\$20

Attendees of the meeting will earn 1 PDH for the Texas Professional Engineer Continuing Education Programs. Remember to track your hours!

Meeting Location - Westchase Hilton Hotel

This month's meeting will be held at Westchase Hilton Hotel, on the west side of town. To use your own mapping program for directions, the address is 9999 Westheimer, Houston, 77042. Click on the map to the right to open the map site.



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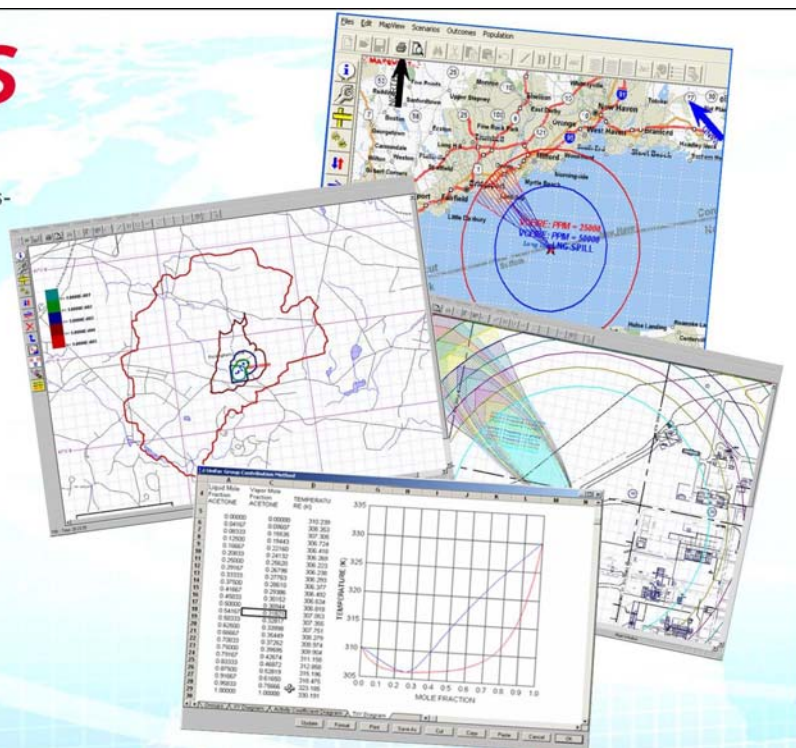
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Calendar of Events—Upcoming Meetings

Meeting Date	Sponsor	Location	Dinner Speaker Topic	Workshops
April 2, 2009	Epcon, Int'l	Brady's Landing	(Energy Forum)	Energy Forum
May 7, 2009	TBD	TBD	(STS Awards Night)	4

Meeting Sponsors—We thank you!

A mighty Thank You to all of our meeting sponsors!

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STS-YP Dim Sum Lunch

On Jan 31st, YP-STS held their infamous traditional Dim Sum Brunch at Chinatown. Roughly 12 people attended this event and got a chance to meet some new faces around Houston while enjoying Chinese New Year celebrations and the Dim Sum “experience!” Be sure to join us next time!



There will be many YP events coming up in the next few months ranging from technical, social and networking events to many Houston area community and volunteering efforts.

Please visit the YP site at <http://www.yp-sts-aiche.org> for more information!



STS Award of Appreciation

Alessandra Carreon receives 2007 STS Special Services Award

Pictured is Alessandra Carreon holding her 2007 STS Special Service Award with the Seattle, Washington, Space Needle in the background. Alessandra was honored with the South Texas Section AIChE's Special Service Award for 2007 for arranging the Environmental Workshops at the Monthly STS Meetings.



STS Member wins National Award—2009 Silver Star-Volunteer of the Year Award

Susan Cannon receives a 2009 Silver Star—Volunteer of the Year Award from National AIChE!

Our very own newsletter editor, webmaster, and shopping cart administrator Susan Cannon has been awarded a 2009 Silver Star award from the National AIChE organization! Congratulations to Mrs. Cannon on this award. It recognizes the exceptional effort that she puts into all of her volunteer work with the STS. The award includes attendance at one of the National Conferences, and Mrs. Cannon has elected to attend the Spring National Meeting to be held in Tampa, Florida at the end of April. It's not surprising, since Tampa is her hometown.





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It's Awards Time!

It is once again time to nominate an STS member for our annual awards:

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

For requirements of each award, visit the web page: http://www.sts-aiiche.org/list_of_awards.htm. The page provides a summary of the awards, and contains links to more detailed descriptions of each award.

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

http://www.sts-aiiche.org/nominate_awards.htm.

If you do not have web access or prefer the printed form, print out the form below and continued on the next page.

South Texas Section – AIChE 2008 Annual Awards Nomination Form

THIS NOMINATION FORM MUST BE RECEIVED BY APRIL 18, 2009 TO BE ACCEPTED!

E-mail the completed form to:

Thomas E. Menn
P. O. Box 458
Pearland, Texas 77588-0548

or

Easwar S. Ranganathan, Ph.D.
Research Engineer, Catalytic Cracking
Shell Global Solutions (US) Inc.
Westhollow Technology Center, MP-116
3333 Highway 6 South
Houston, Texas 77082
Tel: 281-544-8002
Fax: 281-544-6218
Easwar.Ranganathan@shell.com

281-485-3719

ThomasMenn@SBCGlobal.net

Once the nomination is submitted, you will receive an email from the STS Awards Committee confirming receipt of the nomination.

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

NOMINATOR'S NAME: _____
ADDRESS: STREET: _____
CITY: _____ **STATE:** _____ **ZIP CODE:** _____
TELEPHONE NUMBER: (____) _____
EMAIL ADDRESS: _____

I wish to nominate _____
(Enter Name of Nominee or Title of Paper on the above line.)

ENTER CONTACT INFORMATION FOR NOMINEE OR AUTHOR:

NOMINEE or AUTHOR'S NAME: _____
ADDRESS: STREET: _____
CITY: _____ **STATE:** _____ **ZIP CODE:** _____
TELEPHONE NUMBER: (____) _____
EMAIL ADDRESS: _____

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

_____ 2008 STS Outstanding Young Professional Award (Under age 35)*

_____ 2008 STS Distinguished Service Award (Over age 35)*

_____ 2008 STS Best Fundamental Paper Award (*Please complete page 2*)

_____ 2008 STS Best Applied Paper Award (*Please complete Page 2*)

*For STS Outstanding Young Member or Distinguished Service Awards, please provide a supporting document stating the reason you feel that this person is deserving of this award. E-mail the completed form and recommendation to one of the addresses above.

It's Awards Time! (Page 2)

2008 Annual Awards Nomination Form (Page 2 of 2)

Please enter the name of the Best Paper again: _____

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

Enter the contact Author's name again: _____

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

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

MEMBERSHIP

Note: At least one author must be an STS Member.

	AICHE	STS
Co-Author #1: _____	_____	_____
Co-Author #2: _____	_____	_____
Co-Author #3: _____	_____	_____
Co-Author #4: _____	_____	_____
Co-Author #5: _____	_____	_____
Co-Author #6: _____	_____	_____
Co-Author #7: _____	_____	_____
Co-Author #8: _____	_____	_____

[Add additional authors on an attached sheet if necessary.]

For Best Paper nominations, please provide following information:

NAME OF PUBLICATION: _____

DATE OF PUBLICATION: _____

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

PLEASE ATTACH AN ELECTRONIC VERSION (*.PDF) OF THE PUBLISHED ARTICLE.

Once the nomination is submitted, you will receive an email from the STS Awards Committee confirming receipt of the nomination.



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Volunteers Needed—'09 OTC

The 2009 Offshore Technology Conference will be held **4-7 May** at Reliant Park. As the STS will have no role as an OTC Conduct Committee Sponsor, an attempt will be made to provide volunteers for either the Arrangements or Registration Conduct Committees. For information contact: Thomas E. Menn, P. O. Box 458 Pearland, Texas 77588-0458. Tom's phone number is 281-485-3719 and his e-mail address is thomasmenn@SBCglobal.net.

STS-AIChE Volunteer Opportunities

Join the team and help STS grow by volunteering. The following volunteer positions are open:

Membership Secretary

Duties include recording details of STS member sign ups, forward payments to Treasurer, and issue annual renewal notices. No prior experience is required.

Assistant Advertising Manager

Duties include

- Issue renewal notices for existing newsletter advertisers
- Solicit new advertisers for the newsletter
- Solicit exhibitors and sponsors for energy forums and other events
- Maintain records of advertisers, exhibitors and sponsors
- Issue invoices
- Forward payments to Treasurer.

No prior experience is required.

Associate Treasurer – works with the Treasurer and learns the ropes. Develops basic accounting skills, which will be useful if you want to go into management. Informal grooming for STS Treasurer position. If you decide to become Treasurer, you'll hit the ground running, with minimum stress.

ECH Councilor – Contact with other technical societies in Houston. Learn from their similarities and differences. Opens additional professional development opportunities for you. You can learn elsewhere and bring the knowledge back to STS.

Engineers Week Committee Delegate – Learn about E-Week. Encourage STS participation. Network with members of other organizations, particularly YPs. The duties do not need to be heavy.

Webmaster – Learn about organizational web sites. STS will implement the new AIChE Content Management System. We may have all-volunteer implementation, or may use a part time contract webmaster. AIChE National will have web training events for local section webmasters.

Associate Webmaster – Learn skills noted above. If we go all-volunteer, there will be opportunity for an associate webmaster to contribute.

Membership Chair – encourage chemical engineers to join STS. Ensure that membership applications and dues get forwarded. Design a membership poster & brochure. Keep the membership list updated. Opportunity for membership program.

Liaison Committee Chair – keep in touch with contacts at employers of multiple chemical engineers. Remind them to post meeting announcements and remind individuals of meetings.

Arrangements Committee Chair – identify good locations for monthly meetings. Keep the caterer manager abreast of anticipated meeting attendance. Arrange for meeting rooms and audio-visual equipment. Check the head count (or mouth-count) just before the meal. You'll be cooperating with the Treasurer, workshop coordinators, and webmaster, so you won't be doing all the work yourself.

K-12 Outreach Committee Members – work with HUNSTEM to identify schools interested in contacts with STS and the topics we could productively present. Arrange to borrow demonstration gear and lesson plans. Keep a list of interested presenters and opportunities to present.

Interested? Please contact Alan Rossiter (alan@rossiters.org, or phone 713-660-9503), or Matt Kolodney (mkolodne@tceq.state.tx.us, or phone 713-767-3752).

Introduction to PETROLEUM REFINING ECONOMICS

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This course presents an introduction to petroleum refining economics. The focus is on transportation fuels refineries, however petrochemical production is also presented. The first part of the program includes an overview of crude oil and petroleum products. This is followed with a description of refinery process technology. Key refining technologies are described such as crude oil distillation, heavy oil conversion options, hydrotreating, and catalytic reforming.

Profitable refinery operations involve many economic decisions. These include crude oil selection, production planning and product blending. The refinery planning organization typically performs these calculations, and therefore, the second part of the program presents a discussion of key refinery planning applications. This includes an introduction to linear programming, which is widely used for economic decision-making. A case study for a new refinery project is presented, and includes capital costs, operating costs and project economics. The course will conclude with a discussion of how refiners increase profitability through strategic initiatives and operation excellence.

Class Outline

Crude Oil — Crude oil reserves, production trends & key crude oil qualities

Petroleum Products — Product consumption trends and key specifications

Refinery Process Technology — Overview of process technology, with a focus on crude oil distillation and heavy oil conversion options. Other refinery processes are also covered

Refinery Types, Complexity and Margins — The major categories of refinery complexity are described along with their impact on refinery product slate and profitability

Refinery Economics Modeling — Overview of linear programming and refinery modeling

Economic Decision Making for Operating Refineries — Crude oil evaluation, production planning, product blending

Refinery Project Economics — Typical steps in new refinery projects are discussed. This includes a case study including capital cost, operating costs, & project economics

Key Economic Factors — How refiners gain competitive advantage via strategic positioning and operational excellence. This includes integration with petrochemical production such as aromatics and olefins. Biofuels are also discussed

For Whom Intended

Business, sales, technical, and scientific personnel with limited or no refinery experience. Technical sales personnel, involved in selling equipment or supplies to the refining industry, will benefit from this course, as well as entry-level engineering and operating personnel.

Course Director

Dave Geddes is an economics and planning consultant for the refining and petrochemical industry. His experience includes 20 years at Bechtel Corporation. He has worked on feasibility studies and economic evaluations of oil refineries and petrochemical plants in the U.S., Asia, the Middle East, and South America. While at Bechtel he also managed the group that developed, marketed, and supported the PIMS linear programming system that is now widely used for refinery and petrochemical economic studies and other planning applications. Mr. Geddes received a B.S. in Petroleum Refining from the Colorado School of Mines, & an M.S. in Chemical Engineering from the University of Colorado.

Fees & Registration

The registration fee is \$995 (US), which includes tuition, breaks, and text materials. It does not include meals or lodging. CSM will award 1.3 CEU's for course participation.



South Texas Section AIChE

South Texas Section
P. O. Box 73174
Houston, TX 77273

2009 Officers and Contact Information

Officers

Chair Todd Willman, Epcon International
chair@sts-aiche.org

Chair Elect Alan Rossiter, Rossiter & Assoc.
Chair-elect@sts-aiche.org

Past Chair David Silarski
Past-chair@sts-aiche.org

Secretary Jasmine Lee, Siemens
secretary@sts-aiche.org

Treasurer Hiren Patani, Mustang Eng.

Executive Committee

Position 1: Education
Lou Diamond
position1@sts-aiche.org

Position 2: Outreach
Ken Cox
position2@sts-aiche.org

Position 3: Communications
Daniel Shiosaki
position3@sts-aiche.org

Position 4: Human Resources
Pete Belmonte, ENSR | AECOM
position4@sts-aiche.org

Volunteers

Arrangements Richard Newman, Criterion Catalysts

Membership David Silarski

Young Professionals Carol Schmidt

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 2008

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

1. Increasing awareness of the South Texas Section of the AIChE
2. Improving relevancy of our programs
3. Improving our governance
4. Hospitality/Welcoming/Social

The South Texan is issued monthly, except June, July and August, by the American Institute of Chemical Engineers, South Texas Section. Opinions expressed are those of the authors and not of AIChE. The newsletter is published electronically.

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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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The South Texan Newsletter Crew

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

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

Newsletter Editor

Susan Cannon
KBR
601 Jefferson Avenue
Houston, TX 77002
(713) 753-8626
SusanCannon119@aol.com

Submit an article! Contact:

Matt Kolodney
TCEQ
5425 Polk Avenue, Suite H
Houston, TX 77023-1486
(713) 767-3752
mkolodne@tceq.state.tx.us

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