

**Special Notes**

- **Location: Aramco Services Company**
- Workshops 5:30 PM-6:30 PM: PE/PO and PSM this month
- Networking 6-7 PM
- Dinner at 7 PM
- Speaker at 8 PM
- Full Dinner Meeting

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Monthly Meeting September 6, 2007**Location: Aramco Services Company!****Corrosion Basics for Chemical Engineers****Speaker: K. Daniel Efird, Efird Corrosion International, Inc.**

Abstract: This presentation provides a general overview of the chemistry of corrosion, forms of corrosion, corrosion control and corrosion monitoring applied to the chemical process industry. Specific areas covered are corrosion fundamentals, forms of corrosion, corrosion control methods, corrosion detection and monitoring, and the principles of a corrosion management system.

Outline

- **Corrosion Fundamentals**
 - o Theory of Corrosion
 - o Effect of Environment
- **Forms of Corrosion**
 - o General Corrosion
 - o Localized Corrosion
 - o Stress induced Corrosion
 - o Flow Induced Corrosion
 - o Microbiological Corrosion
- **Corrosion Control**
 - o Materials Selection
 - o Design
 - o Cathodic Protection
 - o Coatings
 - o Elimination of Corrosives
- **Corrosion Detection**
 - o Monitoring
 - o Inspection
- **Corrosion Management System**



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Bio: K. Daniel Efird is a registered Professional Engineer in CA and NACE Corrosion Specialist. He is President of Efird Corrosion International Inc. and is a recognized authority on corrosion prevention and control. He holds BS degrees in Metallurgical Engineering and Chemical Engineering from North Carolina State University, and a MS degree in Materials Engineering from the University of Florida. His professional background comprises 40 years of research, engineering and supervisory experience in corrosion, materials, and metallurgical engineering.

Before starting Efird Corrosion, he held positions with Dow Chemical, International Nickel, Occidental Petroleum, and Exxon Production Research. He has extensively published in the technical literature on corrosion and corrosion control, with numerous technical presentations and received the NACE A. B. Campbell Award and Technical Achievement Award. His close association with NACE International for over 35 years includes numerous technical committee, standing committee and symposium chairmanships, and a term as a Director of the Association.

Workshop Details: Workshops begin at 5:30 PM

No CAST (Computing and Systems Technology) workshop this month.

Process Safety: Selected Papers from PPSS 2007 (from the Risk Assessment and Design sessions)

Speaker: Jack Chosnek, KnowledgeOne

Abstract: The Process Plant Safety Symposium (PPSS), which is part of the Global Congress on Process Safety, was a success this year. A review of selected papers from this year's PPSS will be presented, concentrating on the Risk Assessment/Risk Management and Design and Construction sessions of the symposium.

Bio: Jack Chosnek is a PSM consultant with over thirty years of experience in the petrochemical industry. He has consulted for companies in the 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). Jack is currently the chair for the 2008 Process Plant Safety Symposium which will be held as part of the 4th Global Congress on Process Safety in New Orleans. 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. He is a registered professional engineer in the state of Texas.

Process Engineering/Plant Operations (PE/PO): Advantages of modular construction over conventional field construction

Speaker: Heskell Baher, Koch Modular Process Systems

Abstract: There are a number of advantages to erecting process systems completed in a shop, under controlled conditions, versus construction of the same system at a plant site in the field. This talk will cover the major advantages that modular construction offers over conventional field construction. The major advantages include:

- Significantly shorter project schedules
- Lower cost/lump sum prices
- Improved safety/minimal plant site interruption
- Construction proceeds while waiting for permits
- Single source responsibility/minimization of end user resources in favor of use of modular system provider resources

Bio: Heskell Baher is Director of Sales and Marketing for Koch Modular Process Systems, LLC (KMPS), a company that designs and supplies modular mass transfer systems. Heskell has held this position with KMPS for the past five years. Prior to that, Heskell was with Koch-Glitsch, LP, a company that designs and supplies mass transfer packings, trays, and internals, for over 30 years, in a variety of roles including National Sales Director, Managing Director of Sales for North America, etc. Heskell holds a BS in chemical engineering from MIT.

No Environmental workshop this month.

Does more than one workshop interest you?

In response to our Member Survey, we'd like to know if you are interested in more than one workshop at any given meeting. If you are, please visit the workshop you would have liked to attend (but chose another), and let the host know of your interest.

If there are enough people showing interest, perhaps that session could be given again at a later meeting. We are also evaluating taping workshops and making them available to members afterward.

Logistics, legal issues, and the need for taping are all being evaluated to determine what is easiest and best for the hosts as well as members. Until we get it all sorted out, please ensure you let additional workshops know you are interested. Thanks!

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Meeting Registration Information

Pre-register for the monthly meeting at:

<http://sts-aiche.org/sts-aichereservation.htm>.

Reservations are accepted until 4pm the Tuesday 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.

Phone reservations are not accepted.

The cost for this meeting, per person, is:

| | <u>Pre-registered</u> | <u>At the door</u> |
|--------------------|-----------------------|--------------------|
| Regular/Retired | \$25 pre-registered | \$35 |
| Student/Unemployed | \$15 | \$25 |

The workshops are free to attend.

Meeting Location - Aramco Services Company

The September meeting will be held at Aramco Services Company. To use your own mapping program for directions, the address is 9009 West Loop South, Houston, 77096. Click on the map to open the map site.



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

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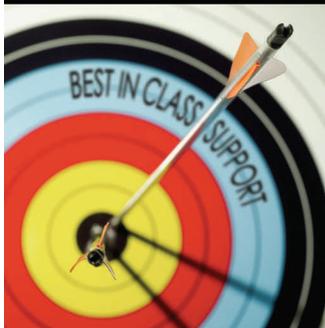
We are very close to accepting credit cards to pre-pay for meetings on our website. There are just a few more details to iron out and we'll be ready to go.

We need to sort out details like if we are going to require everyone to pre-pay online or allow some to pre-register without prepaying, what will be our policy if someone prepays but find they cannot attend the meeting, and so on.

We will send out a notice via the email list or in the next newsletter with a full policy once it is all set up. Be on the lookout!!



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Calendar of Events

This year's meetings are tentatively scheduled as follows. Mark your calendars!!

October 4
 November 1 (Energy Forum, Brady's Landing)
 December 6
 January 10 '08 (2nd week of January)

February 7
 March 6
 April 3
 May 1



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Scholarship Winners—2007 Texas A&M

Congratulations to the 2007 STS-AIChE scholarship winners attending Texas A&M University. Wendy Young and Alan Rossiter attended the A&M Chemical Engineering Department awards dinner to present the awards. This year's winners are Brenda Thomas and Michael Stacey.



Wendy Young (AIChE National Board and STS Member), Scholarship winner Brenda Thomas, and Alan Rossiter (STS Position 4 officer)



Wendy Young (AIChE National Board and STS Member), Scholarship winner Michael Stacey, and Alan Rossiter (STS Position 4 officer)

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- 3** Validate the magnitude of an airborne emission?
- 4** Quickly assess the impact to sensitive locations such as a school or elder care facility?
- 5** Document and defend your decisions?

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Call for Papers: 10th Process Plant Safety Symposium

The 10th Process Plant Safety Symposium (PPSS), organized by the AIChE Safety and Health Division, Group 11B, will be held as part of the 4th Global Congress on Process Safety in New Orleans, LA. The PPSS was originally organized by the South Texas section of AIChE, and today continues to focus on process safety and risk issues and solutions for immediate application at process plants and throughout industry.

Papers are selected based on the abstracts submitted by authors. Manuscripts must be well written, contain new technical content or applications, and be immediately useful to the industry. Accepted papers will be published in the Symposium Proceedings and presented at the PPSS in New Orleans. The technical sessions are:

- I. Hazard Identification and Risk Assessment Tools
- II. Conduct of Operations for Process Safety
- III. Plant Process Safety Management Systems
- IV. Applications of Safety Culture
- V. Maintaining Instrument and Mechanical Integrity
- VI. Case Histories and Lessons Learned

If you are interested in presenting a paper at the PPSS, please contact [Jack Chosnek](#), or the persons listed for the topical session of interest and submit a 150-300 word abstract. We will accept abstracts **through September 30, 2007** or until all sessions are filled with high quality materials. Early submittal of abstracts is highly encouraged.

Details and contact information may be found in the file posted online at <http://www.sts-aiiche.org/2008PPSS.pdf>.

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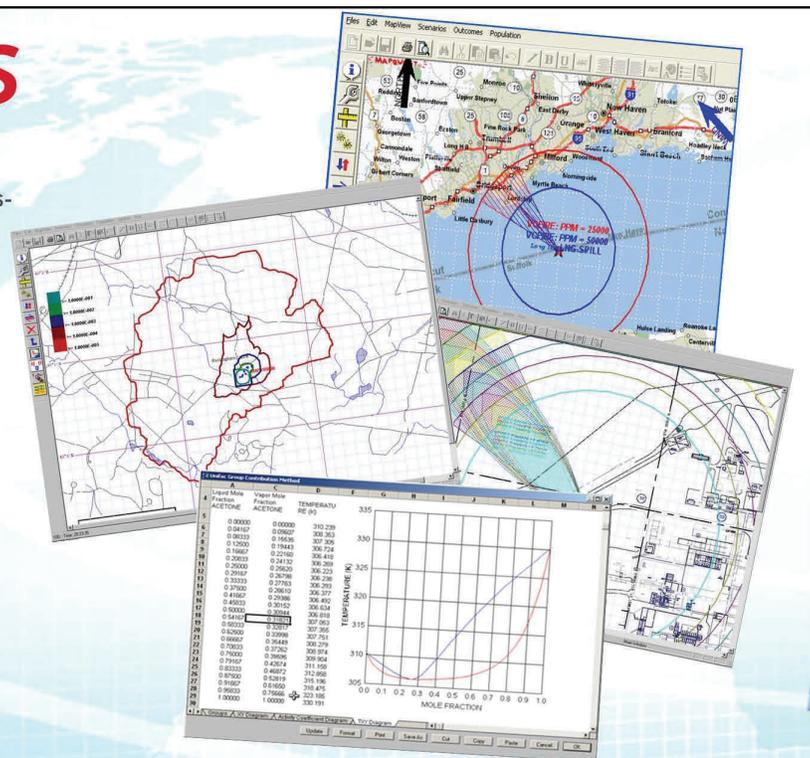
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- Designs Piping & Instrumentation Diagrams (P&ID's)
- Specifies equipment and instrumentation
- Participates in design and safety reviews
- Interfaces with client and project engineering teams

REQUIREMENTS:

- Bachelor Degree (or equivalent) and/or an advanced degree in Chemical Engineering required.
- Minimum of 3 years experience in engineering design or operating plant, front-end engineering experience preferred
- Exposure to software platforms such as Hysys, Pro II, Aspen, Smart-Plant also a plus

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2007 OTC Recap

This year the South Texas Section was not charged with the responsibility of staffing and recruiting volunteers for any 2007 OTC Conduct Committee. However, STS did provide 19 volunteers for the OTC Arrangements Conduct Committee and we wish to thank them for their efforts in behalf of STS-AIChE. Some of these are not STS or AIChE members or even Ch. E.'s but they have been around as one of the volunteers that we know we can call on, they are considered "honorary" members for the OTC.

Marisol Alfonso
Robert Alexander
Ewald J. Burckhardt
Norman Carnahan
Darin Cunningham
Caleb Davis
Mark W. Demark

Robert Karesh
Frank Kleinschrodt
Raj Kulkarni
Jasmine D. Lee
Gerry D. Ludwig
James Menn

Tom Menn
Jim (Red) Murphy
Symal Poddar
Scott Provost
Aziz A. Siddiqi
Roger Trandell

We also would like to give special thanks to Susan Cannon, STS Newsletter Editor and (*assistant*) STS Web Master for her help in this effort.

In closing on this subject we would like to add that we will be recruiting volunteers for the 2008 Registration Conduct Committee as the STS-AIChE has been assigned this Conduct Committee.

Also, Jim Murphy, Symal Poddar, and Tom Menn helped staff AIChE's Booth in the Reliant Center Lobby providing assistance to Ilia Killeen and Joe Cramer of AIChE's NY Office.



The AIChE Booth at the 2007 Offshore Technology Conference

Calling Professional Engineers

Do you need your **Ethics PDH**?
 Rossiter & Associates is running *Engineering Ethics: Principles & Practice* seminars September 12 and 13 at three Houston locations. Details at www.rossiters.org/associates or phone 713-660-9503.

Vital Links

Main South Texas Section site: <http://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/news2007/news0907.pdf>

Survey Results

A great huge **thank you** to all the folks who responded to our survey this summer! We had a great response. We invited not only those members who were signed up for the newsletter email list, but also any National AIChE members reporting local addresses that we could not match up to our local list. Here are some of the results:

Nearly half of the respondents come to monthly meetings. Some of the reasons people gave for not being able to attend meetings are that they are held in areas they cannot get to easily, they have too many activities going on in the evening, they don't know the meeting details, or they are simply too tired to go. We'll keep having them, though, so perhaps one day they'll be able to make it to one.

Overall, the STS is meeting the sections' needs by moving the meetings around, and holding them the first Thursday of the month. There's no one day that would please everyone (though the 2nd week of the month edged slightly ahead of the 1st), and no one location that would be easiest to get to.

Most respondents also felt that full dinners were not necessarily required; hors d'ouvres are acceptable.

A lot of people would like more fun events at meetings for people to get to know each other.

Over 40% of respondents go to workshops; others do not mostly because they can't get to the workshops by 5:30 PM or they haven't found one to interest them.

The favorite workshop is PE/PQ, and many said that occasionally there is more than one workshop they would like to attend at the same meeting. *We're going to do something about this!*

The vast majority of respondents would pre-pay for meeting attendance online using a credit card (but not PayPal!!!) if it were available. *More on this very soon!!!*

On a personal note, if the 23 persons who don't like the newsletter would like to drop me a note and let me know how we can improve, I'd be glad to know. Write me at SusanCannon119@aol.com. I'm a perfectionist at heart and would like to make sure we are reaching those that need the information provided.

Comments about making the website better by putting meeting information on the home page, fixing broken links, and having past meeting/workshop available were taken to heart, and some of this is already in the works. I hope to get it finished soon...

Over 100 people would like the STS to have more social events, and about 150 would like more professional development training classes. Saturdays were the highest ranked day, with a high response to having training sessions as part of the monthly meetings.

The majority of responders are proud of their membership in AIChE. That is great news. The majority also feel they are getting something out of their membership. That is good too, and we're working on providing additional features to reach those who might not feel that way.

The responders were 84% men, 30% in the 50-59 range and 23% in the 40-49 range. We're grateful for the 6% in the 70+ range, and the YP group is trying to attract more of the 20-29 range (only 9% of responders were in this group). The rest were evenly split between 30-39 and 60-69.

All business industries were represented, with the most (28%) in E&C—not surprising in today's workforce market.

Only a small few consider themselves active in STS activities. It's hard to determine if the reasons more people aren't active would be the same as why people don't attend meetings, or because we don't (yet) offer more activities to attend.

The results were reviewed in detail by the Executive Committee, and specific meeting/workshop topics were given to those responsible. We heard you, and will be working on using your suggestions.

Many thanks again to all those who took the time to respond. If you are interested in seeing detailed results, just let me know at SusanCannon119@aol.com.



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Young Professionals Hui Zhao, KBR

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 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](#).

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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.

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