

# The South Texan

2003 Marx Isaacs Award for Outstanding Large Section Newsletter

Voted "Best Newsletter" at 2009 AIChE Leadership Development Conference



## Highlights

- ◆ April 8 Meeting at Pelazzio Banquets
- ◆ PE Exam Review Course Information
- ◆ Young Professionals (YPs) News and Events
- ◆ 2009 Annual Awards Nomination
- ◆ OTC Volunteer Opportunities

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Monthly Meeting April 08, 2010

Location: Pelazzio Banquets (West side of Houston)

Meeting Time: 7.00 pm (Social Hour starts at 6.00 pm)

## "Remarks on Corrosion - Quantified by Vertical Scanning Interferometry"

**Speakers: Andreas Lüttge and Emil Peña, National Corrosion Center**

**Abstract:** With the estimated cost of corrosion pegged at \$276 million annually in the United States, according to transportation agency study, and an estimated 5% of global GDP being consumed due to corrosion, the National Corrosion Center was formed in 2008 at Rice University. The Mission of the Center is to support NCC members, which include private and public entities including other universities, by providing services that enhance performance, promote safety, and broaden public awareness of the corrosion industry's contributions to society and the environment.

Modern industrial societies struggle with an increasing number of challenging technical and environmental problems such as water pollution, waste management, carbon sequestration – and corrosion – to name only the four most pressing ones. A key process involved in these complex problems is the interaction between synthetic or natural solid matter and water. Prevention, solution or, at least, management of these problems require quantification and prediction of relevant fluid-solid interactions. Our success in this task, however, will depend critically on a fundamental understanding of the processes involved.

The NCC focuses on technologies that look at assessment of corrosion, prevent corrosion and explain the process of corrosion. Assessment technologies locate the dreaded stress corrosion cracking, scc, in materials such as iron and steel used in natural gas pipelines, but also delve into locating biologically induced corrosion through the advanced breakthrough technology of vertical scanning interferometry. Prevention technologies actually inhibit biologic and non-biologic corrosion on surfaces using super hydrophobic nano agents, for example, that repel moisture. The process of corrosion is explained through proper planning for the maintenance and operation of facilities. Because of aging infrastructures these measures cannot be ignored or deferred.

The faculties and researchers at our member institutions are evolving the science in these areas to improve the engineering in the application of the technologies. Advanced measurement of processes in nondestructive ways, materials development and process modeling all contribute to the advancement of corrosion control in all sectors- energy, transportation, construction and even the biosciences. Last, in conjunction with the National Association of Corrosion Engineers- NACE, training of technicians and engineers in this field has become vital. The current US administration's emphasis on infrastructure and its improvement has led to effort to improve the technologies and training either through government initiative or private sector awakening to the corrosion need.

Noted author and financier, Matt Simmons from Houston, stated at the Offshore Technology Conference in 2009 that the three biggest challenges facing the oil and gas industry were "rust, replacement of people and replacement of reserves, in that order!" To some, denial is a river in Egypt as the saying goes, but denial can no longer be tolerated when infrastructure failures are costing lives and mounting costs.

The NCC is headed by Director Dr. Andreas Luttge, Professor of Earth Science and Chemistry at Rice University and was educated at Tubinger University in Germany and Executive Director Emil Peña, a former Deputy Assistant Secretary of the US Department of Energy and energy industry specialist.



Andreas Lüttge



Emil Peña

## Workshops begin at 5:30 PM (Workshops are free and open to public)

### PD workshop

**Speaker: Elbert W. Link, P.E., F.NSPE**

#### Professional Engineering Registration Process

**Abstract:** Elbert W. Link, P.E., F.NSPE will speak about the professional engineering registration process in Texas including exam requirements and license maintenance. This seminar will be eligible for 1 PDH.

*Bio: Mr. Link joined the Texas Society of Professional Engineers (TSPE) in 1976 when he returned to this country from overseas, and has been active ever since. He has held every TSPE office at the chapter and state level, and was a National Director for three years. He was installed as State President in June 1999 and was selected as the Engineer of the Year for the Greater Houston Chapter and State of Texas in 2001. He is currently the Chair of the Ethical Practices Committee of TSPE and holds the membership grade of Fellow, NSPE. Mr. Link has worked over 20 years in the private sector consulting engineering and served 22 years in the U.S. Army Corps of Engineers and retired as a Lieutenant Colonel. He is a graduate of Rice University with a BS degree in architecture and holds a Masters in Civil Engineering from Stanford University.*

### CAST workshop

**Speaker: Klaus Stark, Scienomics LLC**

#### Molecular Modeling Applications for Chemical Engineering

**Abstract:** In the process of designing accurate predictive and transferable thermodynamic models scientists use experimental data for pure components and mixtures. Such a process can be easily time consuming and costly in particular in the case of systems for which few data if not at all exist. However, the development of molecular modeling techniques at various scales (classical and quantum) allow the accurate prediction of important data that are used in the design of thermodynamic models for the physical properties prediction.

In this presentation application examples where molecular simulation techniques such as quantum mechanics, classical atomistic simulation, mesoscale simulation and equation-of-state modeling have been used in a multi-scale simulation approach in order to predict a maximum of physical properties at a minimum time.

*Bio: Dr. Klaus Stark studied chemistry in Bielefeld, Germany and finished his diploma thesis in theoretical chemistry in 1991. During his PhD research he worked on the energetics and reaction dynamics of small molecular systems using highly correlated ab initio techniques and quasi-classical trajectory as well as quantum dynamics methods. He was awarded Dr. rer. nat. in April 1996 from the University of Stuttgart, Germany under the supervision of Prof. Dr. H.-J. Werner.*

*Dr. Stark joined Molecular Simulations Inc. (MSI) as an Applications Scientist on September 1, 1997. From April 1, 1999 Dr. Stark worked as Application Scientist for Materials Science from MSI's Munich office. In September 1, 2001 he took responsibility for Accelrys's quantum mechanics products as Product Manager in San Diego, CA followed by working from Houston, TX as a Lead Scientist.*

*In April 2009, Dr. Stark joined Scienomics SARL to work as Principal Research Scientist and Account Director for the United States. Dr. Stark recently published several articles in collaboration with researchers at BP, INEOS, Sasol, Accelrys, Argonne National Lab, North Western University and others.*

### ENV workshop

**Speaker: JAMES E. SMITH**

#### Litigation hold memorandum

**Abstract:** In order to understand and comply with the litigation hold memorandum, the engineers will need to know the facility's IT capabilities, the facility's document retention practices (for both electronic and paper documents), and start thinking more like lawyers. The litigation hold memorandum must reach all personnel with potentially relevant electronically stored information (ESI). Persons responsible for complying with the litigation hold memorandum will need to be familiar with all of the various groups within the facility, including the types of documents, and the many media, that may be subject to the memorandum. Complying with the memorandum will be a particular challenge in today's modern processing facility, because so many documents only exist as ESI, often with no expectation of maintaining those documents for any significant length of time. Complying with the memorandum will often involve contacting a wide variety of persons within the facility, and the use of IT support to preserve the documents.

*Bio: Jim Smith is a partner with the law firm of Beirne, Maynard & Parsons, a firm that specializes in representing business interests in litigation matters. Jim focuses on environmental enforcement and other litigation at Beirne, Maynard & Parsons, which he joined in 1993. Prior to joining Beirne, Maynard & Parsons, he was a partner in the environmental practice group of Baker Botts, L.L.P.*

*In addition to environmental matters, Jim's litigation experience has involved numerous refining and petrochemical facilities in matters related to construction disputes, intellectual property issues, and contracts. His trials often involve nationally known engineers, physicians, toxicologists, and real estate professionals, and have included defense of companies in mass toxic tort cases.*

*Jim received his law degree from the University of Texas, with honors, in 1982. Prior to that, he worked as a chemical engineer for a major oil company, having received his B.S. in chemical engineering from the University of Kansas in 1978, where he was selected for membership into the engineering honor society, Tau Beta Pi. He has received awards from bar and law related organizations, including recognition by the publication Best Lawyers in America for environmental litigation.*

## 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 April meeting.

	Pre-Registration Members	Pre-Registration Non-Members	At the door Members	At the door Non-Members
Regular/Retired	\$25	\$30	\$35	\$40
Student/Unemployed	\$15	\$20	\$25	\$30

**NOTE:** You have until 4 PM CST on April 7<sup>th</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>

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*Attendees of the meeting will earn 1 PDH*

*for the Texas Professional Engineer*

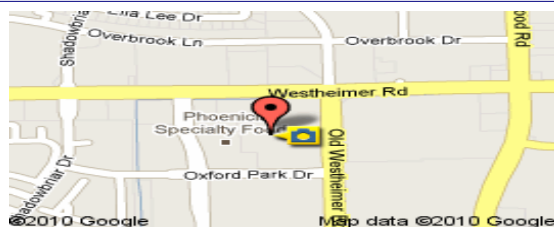
*Continuing Education Programs.*

*Remember to track your hours!*

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## Meeting Location—Pelazzio Banquets

This month's meeting will be held at [Pelazzio Banquets](#) (12121 Westheimer Rd Houston, TX 77077) Double click on the map to the right for directions from your location.



## Future Meetings

May 6, 2010

Topic: TBD

Location: Brady's Landing Restaurant, 8505 Cypress st, Houston, TX

## News from Other Professional Societies

### ASME Global Engineering Management Conference (GEMC)

The **GEMC** will provide hands-on, experiential learning from best-in-class organizations. Programming consists of technical sessions, continuing education unit (CEU) accreditation tutorials, networking events and professional exchange forums. GEMC will be held **April 11–14, 2010** at **The Fairmont, Dallas, Texas**. Visit the ASME conference website at <http://www.asmeconferences.org/GEMC10/> for more details.

### 2010 ASME Plant Engineering Trade Show

**ASME** is having it's Sixth Annual Engineering, Inspection and Maintenance Trade Show at **Pasadena Convention Center – 7902 Fairmont Parkway** on **Thursday Apr 22, 2010 10 am – 6 pm**: **FREE TO ATTEND**, Lunch Included. For booth or Event Sponsor, contact Clint Britt, [clint.britt@stress.com](mailto:clint.britt@stress.com). Visit <http://www.southtexasseminars.com> for more details.

### LinkedIn group for "Houston Process Safety"

There is a group on LinkedIn for Houston engineers called "Houston Process Safety". The main objectives is to provide a platform for exchanging loss prevention information and also help find jobs/etc. Visit the following link for more information [http://www.linkedin.com/groups?gid=2063368&trk=myg\\_ugrp\\_ovr](http://www.linkedin.com/groups?gid=2063368&trk=myg_ugrp_ovr)

### 2010 International Sustainable World (Energy, Engineering, and Environment) Project Olympiad

2010 International Sustainable World (Energy, Engineering, and Environment) Project Olympiad, I-SWEEEP 2010 will be held on **Saturday, April 17, 2010**, at the **George R. Brown Convention Center**. The I-SWEEEP Organizing committee is looking for engineers, specialists, researchers, scientists, and other professionals to evaluate research projects of young scientists. For further information, contact I-SWEEEP directly at 713-343-3333 X101 or via email at [info@isweeep.org](mailto:info@isweeep.org).

## 2010 AIChE Regional Process Technology Conference, Galveston, TX

The South Texas Section of the AIChE, in partnership with AIChE National, is hosting its **2nd Regional Process Technology Conference** at the **Moody Gardens Hotel in Galveston, October 7 & 8, 2010**. This conference will attract hundreds of chemical engineers living in the Greater Houston and Gulf Coast region to provide them with both technical sessions and industry solutions in process technology. Visit <http://www.aiche.org/Conferences/2010Regional/Galveston.aspx> for more details.


## Presentation Files from Previous Meetings

Presentation slides from previous meetings can be accessed from the following link <http://sts.aiche.org/content/meetingspresentations>

## Business Etiquette Tip of the Month


"Business Etiquette Tip of the Month" by <http://clubetiquette.com/>

Avoid office gossip. The next time gossip begins without you, it may be about you. Who wants to step into that "ring of fire"? In the long run, others appreciate the trust and confidence of those who are discerning about sensitive personal and business information.



# Bow Tie Master Class


Two-day Course on:



MANAGING RISK

## Safety Barriers & Bow Tie Analysis Using BowTieXP®

Validating Your Risk Management Program



**Bow Ties**  
 ➤ Analyze input from PHAs (eg. HAZIDs, LOPA)  
 ➤ Evaluate and calibrate effectiveness of barriers  
 ➤ Facilitate management and auditing of critical safety activities  
 ➤ Provide to management and all employees a clear understanding of risk exposure

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- Safety Barrier Methods/Background
- Bow Tie Analysis Training
- BowTieXP® Software Training
- Implementation of Bow Tie Program
- Barrier Evaluation/Scoring
- Case Studies

**Who should attend?**

- Plant /Operation Managers
- HSE Professionals
- Safety Directors, Coordinators
- Compliance Coordinators
- Process Control Engineers

**Tuesday - Wednesday**  
**May 25-26, 2010**  
**8am-5pm**

**DNV Office**  
**1400 Ravello Drive**  
**Katy, TX 77449**  
*off Mason Rd. on the North side of I-10*

**BowTieXP® Software**  
**License valued at over**  
**\$2000 included**

**\$1,750 early discount**  
*prior to May 10, 2010*  
**\$1,950 regular**

**For registration e-mail: [bowtie@dnv.com](mailto:bowtie@dnv.com)**



## Becoming a Professional Engineer - II, By Dale Embry

As I mentioned in the February 2010 newsletter, the Young Professional's of the STS-AIChE are working on several avenues to help you become a professional engineer in Texas. In April, there will be a professional development workshop about applying for and maintaining licensure in Texas. Another workshop on licensure is being considered for the May meeting. Secondly, STS-AIChE with the assistance of the University of Houston will be offering a Chemical Engineering PE exam review course for people planning to sit for the exam in October. The course will be held on Friday afternoons at the University of Houston main campus. Information about the course cost and mail in registration forms are available in the next two pages of this newsletter and also in the STS-AIChE website <http://sts.aiche.org/content/pe-examen-review-course/> which includes Online registration as well. If you are interested in taking the course please contact Jay Chandrasekaran at [jayachandran.chandrasekaran@kbr.com](mailto:jayachandran.chandrasekaran@kbr.com) or Jayce Mathews at [Jayce.Mathews@kbr.com](mailto:Jayce.Mathews@kbr.com) to get more information.

In February newsletter, I provided information about the basic requirements to become a registered professional engineer. This month, I will discuss some the experience requirement in more detail. As a reminder, the information supplied in this article is believed to be accurate, but the ultimate arbitrator of licensure is the Texas Board of Professional Engineers, TBPE. More information is available on their web page [http://www.tbpe.state.tx.us/lic\\_basic.htm](http://www.tbpe.state.tx.us/lic_basic.htm) with a license application packet available for download from <http://www.tbpe.state.tx.us/downloads.htm#license>.

### Experience

In order to apply for a PE license, you will have to have at least 4 years of active engineering work that demonstrates your engineering skills, knowledge and judgment. The board may allow experience credit for advanced degrees. They may also require additional experience due to your degree program or request for exam waivers. You should contact the TBPE if you have any specific questions about your situation.

What work experience will be deemed acceptable for licensure and how does one document that experience? According to the board, the most common acceptable experience is for design and analysis of engineering systems. There is a lot of leeway in the interpretation of what constitutes design and analysis. The expectation is that as you progress, you will take on more responsibility for either a larger portion of a project or will be designing more complex systems. In chemical engineering practice this might mean that during early assignments you will be sizing equipment and performing heat and material balances according to some general guidelines. In the early years, it is expected that your work will be closely supervised and reviewed by another professional engineer. As you gain experience, you will be expected to take on the role of defining the limits and reviewing the guidelines.

Your experience should show increased capability and responsibility over the years. You will also have to have references to each work period you document. I will provide additional information about this in the next newsletter.



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**or call 1.800.CHEMCAD for details.**

\*Must be used within a year of purchase. \*\*Certain restrictions apply.

## AIChE South Texas Section – PE Exam Review



**Become a  
Licensed  
Professional  
Engineer!**



**UNIVERSITY of HOUSTON**

PE Exam Review Course for passing the PE Exam in Chemical Engineering

August 13, 2010 – October 23, 2010. 33 hours of expert instruction from STS/AIChE lecturers at the University of Houston.

Date	Subject	Hours
13-Aug	Mass/Energy Balances & Thermodynamics I	3
20-Aug	Mass/Energy Balances & Thermodynamics II	3
27-Aug	Mass/Energy Balances & Thermodynamics III	1
27-Aug	Fluid Mechanics I	2
10-Sep	Fluid Mechanics II	3
17-Sep	Heat Transfer I	3
24-Sep	Heat Transfer II	1
24-Sep	Mass Transfer I	2
1-Oct	Mass Transfer II	3
8-Oct	Mass Transfer III	1
8-Oct	Kinetics I	2
15-Oct	Kinetics II	2
15-Oct	Economics	1
22-Oct	Plant Design & Operations	3
23-Oct	Sample Test Exam	3

- ◆ Prepare for the October 29<sup>th</sup>, 2010 PE Exam for Chemical Engineering
- ◆ Includes all recommended course books and materials (*a \$300 value*)
- ◆ Review all major test subject areas on a weekly basis
- ◆ Convenient 3-hour class each Friday afternoon at the University of Houston
- ◆ Sample test exam on October 23<sup>rd</sup>
- ◆ Taught by experienced instructors familiar with the PE exam requirements
- ◆ Comprehensive PE exam review course designed for Chemical Engineers
- ◆ Co-sponsored by the American Institute of Chemical Engineers & UH
- ◆ Blackboard instructional based curriculum allows review of any lecture

**Course Fees:** (limited class size – does not include exam registration fees)

AIChE Discount Fee - **\$595** (requires AIChE National membership & STS local section membership), Non-AIChE members - **\$795**

**Included Course Materials - a \$300 value!**

1. Chemical Engineering Reference Manual, Lindenburg
2. PE Chemical Engineering Sample Questions and Solutions Book
3. Six-Minute Solutions for Chemical PE Exam Problems

**Online Registration (click the link below):**

<http://sts.aiche.org/content/pe-examen-review-course>

**See Next page for Mail-in Registration Form Information**

## PE Exam Review - Mail-in Registration Form

First Name \_\_\_\_\_ Last Name \_\_\_\_\_

Company \_\_\_\_\_ Email Address \_\_\_\_\_

Phone \_\_\_\_\_ Fax \_\_\_\_\_

### Shipping Address

Address \_\_\_\_\_

City \_\_\_\_\_ State/Province \_\_\_\_\_ Postal Code \_\_\_\_\_

**Billing Address** ☐ check if same as shipping address

Address \_\_\_\_\_

City \_\_\_\_\_ State/Province \_\_\_\_\_ Postal Code \_\_\_\_\_

**Payment Type** ☐ Visa ☐ Mastercard ☐ Discover ☐ Check (enclosed)

Card # \_\_\_\_\_ Expiration Date \_\_\_\_\_ Security Code \_\_\_\_\_

I authorize STS-AIChE to charge \$\_\_\_\_\_ for payment of the PE Exam Review Course using the above credit card information provided. For AIChE/STS members - \$595, non-members - \$795

*(if you are an AIChE National member, STS membership is only \$20 extra).*

Signature \_\_\_\_\_ Date \_\_\_\_\_

### Please mail your registration form to:

STS-AIChE, P.O. Box # 820252, Houston, TX 77282

You will receive a confirmation by email within several days of receipt.

**Limited space** - reserve your space now (cut-off for class registration - July 16<sup>th</sup>)

*Cancellation Policy -by 7/16 - full refund, 8/13 - ½ refund, after 8/13 - no refund*

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Learn more or apply online: [www.aramco.jobs/ce](http://www.aramco.jobs/ce)

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## STS-AIChE Young Engineer Award



Carol Schmidt was awarded the STS-AIChE Young Engineer of the Year Award on February 15th at the Houston Engineering Week Young Engineer Banquet at the Intercontinental Hotel. Carol Schmidt was elected in honor of her multiple roles and extensive work for the STS-AICHE Young Professional Association. Carol has been actively involved in the South Texas Section since her graduation from University of Houston in 2007. She is a past-Chair of the Young Professionals and the current Secretary for STS. She currently works for Waldemar S. Nelson as a process engineer, EIT. Congratulations Carol Schmidt!

*Carol Schmidt and her husband (Nathan Schmidt) after accepting the award*

## Lifetime Achievement award

Laura J. Gimpelson, PE, president of LG Environmental Engineering, received the Lifetime Achievement award from the Central Florida Chapter of the Society of Women Engineers and the Central Florida Engineers' Week Organization.

Ms. Gimpelson is a life member of AICHE and was formerly Chair of the South Texas Section of AICHE.



## Thank you Note from ECH

The Engineering, Science, and Technology Council of Houston (ECH) wishes to thank the South Texas Section - AIChE for its extensive help in the February 27, 2010 Intersociety Workshop on Young Professional Issues. In particular, we wish to thank speakers from STS: Brian Daly, Carol Schmidt, Jim Murphy, Heather Gilligan, and Mickey Reeves. We also wish to thank Alan Rossiter, Kelly Richardson, Todd Willman and others for assistance with the arrangements, and the numerous STS YPs who attended. The STS Executive Committee and K-12 Outreach Committee wish to thank the many STS members who participated in planning the science fair and STS' participation. We particularly wish to thank Ernie Althaus and Kelly Richardson, our co-chairs for SEFH. We also wish to thank the numerous YPs who assisted in judge recruiting, as well as the many members who participated as SEFH placement judges, STS Special Award judges, and in any other volunteer capacities. We apologize for waiting till the last minute with this thank you, as we don't have time to assemble the names of the many public spirited members.

## Volunteers Needed—2010 OTC

The 2010 Offshore Technology Conference will be held **3-6 May at Reliant Park**. Volunteers will receive a complimentary OTC registration and a free parking pass (good for the entire OTC) for attending an orientation meeting the on **Friday, April 30 from 10:00 - 11:00 am** (to pick up badges and parking passes) and for contributing about four hours time to the Arrangements Conduct Committee during the OTC. As of March 17, 31 Committee openings were available with all but two being Registration Committee positions.

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](mailto:thomasmenn@SBCglobal.net). Or go to the South Texas Section Website, <http://sts.aiche.org/>, and scroll down the Home Page to "Volunteer at OTC 2010". Click on "more ..." and at the bottom of the page are the "Volunteer Responsibilities 2010.doc" and the "10OTC\_Volunteer\_Online.pdf". Complete the "10OTC\_Volunteer\_Online.pdf" and send to Diane Knippa ([dknippa.spe.org](mailto:dknippa.spe.org)) and let Tom Menn know if you volunteered.

## It's Awards Time!

It is once again time to nominate an STS member for our annual awards for 2009:

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

For requirements of each award, visit the web page: <http://sts.aiche.org/content/awards>. 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, please print out the forms from next two pages.

## South Texas Section – AIChE - 2009 Annual Awards Nomination Form (Page 1 of 2)

THIS NOMINATION FORM MUST BE RECEIVED BY APRIL 17, 2010 TO BE ACCEPTED!

E-mail the completed form to:

Thomas E. Menn	or	Easwar S. Ranganathan, Ph.D.	or	Anand Nilekar, PhD
P. O. Box 458		Shell Global Solutions (US) Inc.		Research Engineer, Catalytic Cracking.
Pearland, Texas 77588-0548		Westhollow Technology Center, MP-116		Shell Global Solutions (US) Inc.
Tel: 281-485-3719		3333 Highway 6 South		Westhollow Technology Center
ThomasMenn@SBCGlobal.net		Houston, Texas 77082		3333 Highway 6 South
		Tel: 281-544-8002		Houston, Texas 77082
		Fax: 281-544-6218		Tel: 281-544-6289
		Easwar.Ranganathan@shell.com		Anand.Nilekar@Shell.com

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.)

\_\_\_\_\_ 2009 STS Outstanding Young Professional Award (Under age 35)\*  
 \_\_\_\_\_ 2009 STS Distinguished Service Award (Over age 35)\*  
 \_\_\_\_\_ 2009 STS Best Fundamental Paper Award (Please complete page 2)  
 \_\_\_\_\_ 2009 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.

## South Texas Section – AIChE - 2009 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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## Young Professionals (YPs) News and Events

STS-AIChE YP would like to welcome the following new YP members:

Susan Sierra  
Ramon Farach  
Mark McKinney  
Cedric Modoufeh  
Joseph Omodele  
Amro Gaber  
Alper Gulludag

We hope that you will join us for our upcoming events! For additional details please visit our YP webpage.

<http://www.yp.sts-aiche.org/>

### Meet Bryan Pourchot! - 2010 Events Coordinator for STS-AICHE YP

Bryan Pourchot is the Social Events Coordinator for STS-AICHE YP and the newest YP executive board member. We welcome Bryan to the board and are excited that he has been actively involved in the local section since January of 2010. In fact, Bryan has already planned three social events for the Young Professionals this year!

A native of Alvin, TX, Bryan received his BS in Chemical Engineering at The University of Houston (Main Campus) in May of 2007. During his time there, Bryan took on internships with Lyondell (now Lyondell/Basel), BP, and Fluor Enterprises. Shortly after graduation, he started working full time at Fluor and stayed for about 1.5 years working as an Associate Process Engineer. He has been employed with Haldor Topsoe, Inc. as a Sales and Service Engineer for DeNOx Catalyst since February 2009. We would like to thank Bryan for his involvement which is allowing us to reach more YPs in the South Texas Section. Keep up the good work!



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## Young Professionals (YPs) News and Events Continued

Career Development Corner, By Maxine Madison

The STS-AIChE March Dinner Meeting provided a great opportunity to get an edge on your colleagues by attending the "Five Immutable Steps to Superior Performance" professional development workshop. The workshop was presented by Stephen Blakesley, CEO of GMS Talent Inc. and Managing Partner of GMS Talent LP. Stephen Blakesley has a background in chemistry and was eager to share his five superior performance steps which he developed from 35 years of industrial and business experience. Blakesley is highly regarded in the talent development field, and his book, *Strategic Hiring: Tomorrow's Benefits Today*, was named one of the top 50 business books of 2006 by Business Book Review. His latest book, *The Target - The Secret to Superior Performance* will be released in May. (To obtain an advanced copy, click here: <http://www.tatepublishing.com/bookstore/book.php?w=978-1-61663-029-4>)

Outlined in the presentation were the following five steps to superior performance: Job Clarity, Job Fit, Emotional Awareness, Work Strategies and Organizational Emotional Intelligence

One major difficulty encountered in excelling at work is not knowing exactly what the job entails. Blakesley encouraged the workshop attendees to know from Day 1 how your performance will be judged because if you don't know what success in your position looks like, how will you know when you have achieved it?

Second on the list is job fit. Interview candidates often overlook the fact that their background, skills, and interests may not fit a given job description. Instead, job seekers are tempted to take the first job offered even if it doesn't fit mainly due to weariness with the job search. Blakesley pointed out that one needs to be selective in the job search and only take a job when it is a good fit for the individual.

Emotional Awareness is a hot topic today, largely due to Daniel Goleman's book, *Emotional Intelligence: Why It Can Matter More than IQ*. Blakesley referenced this book when he described emotional awareness as the ability to recognize your emotions and the emotions of others and leverage them for your benefit. He mentioned four other aspects that fall under emotional awareness - self awareness, social awareness, self management (managing efforts) and social management.

Work Strategies was fourth in the steps to superior performance. These strategies are detailed in Robert E. Kelley's book, *How to be a Star at Work: 9 Breakthrough Strategies You Need to Succeed*. They include "initiative, networking, self management, perspective, followership, leadership, teamwork, organizational savvy, and show-and-tell". Kelley's book also does an excellent job of debunking myths about what each of these strategies looks like in the workplace, and Blakesley offers workshops on these strategies throughout the year.

Organizational emotional intelligence is the final step to superior performance. It's not enough for the employee to understand his/her emotions and the emotions of others, but the employer also has a responsibility to create an environment where employees can perform at their highest level. Some organizations are more cognizant of this than others, so the individual must choose employers wisely. Blakesley believes with his five steps every employee can learn to be a star performer at work!

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## From the STS-AIChE Chair

Chemical engineering has been good to me. It's not just that it has provided financially for my household, although of course that's part of it. Chemical engineering has also given me endless stimulating and challenging technical problems to solve, opportunities for travel, and many friends around the world – including quite a few right here at STS-AIChE. Most of us can probably say the same, although the details are of course different for each of us.

What of the future? The economy is going through a tough time right now, but this will pass – and chemical engineers will be at the forefront of innovation and economic development for decades to come. According to a recent Wall Street Journal article, eight of the top 10 best-paid college majors are in engineering. Who more than those of us who have benefited from this profession should introduce these opportunities to the next generation of chemical engineers?

This is why STS-AIChE places so much emphasis on K-12 and college programs and activities. Our organization was a major supporter of the 51st Science and Engineering Fair of Houston in March, and quite a number of our members served as judges. Our members also participate in career fairs and other programs that promote engineering at various school levels, and a large part of our budget is devoted to scholarships and other support for chemical engineering students in our local colleges. If you haven't taken the opportunity to participate in some of these activities yet, why not give it a try? It can be a lot of fun, and it's a great way to give back to the profession that has given us so much.

Alan Rossiter

(Engineering Grads Earn The Most, Joe Walker, WSJ on-line, March 10, 2010, [http://online.wsj.com/article/SB10001424052748703625304575116170339369354.html?mod=dist\\_smartbrief](http://online.wsj.com/article/SB10001424052748703625304575116170339369354.html?mod=dist_smartbrief), accessed 3/18/2010)

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## STS Volunteer Opportunities

**General considerations.** It would be great if AIChE had an implantable chip to distribute to members giving them instant chemical engineering expertise. Unfortunately, AIChE National says that's a long way off. Additionally, thinking back to engineering school, if we wanted to learn to be an engineer, we had to go to class and do homework. As STS members, we can benefit from attending meetings, from networking, and from reading CEP, but even greater benefits are the experience and the contacts that come from being an active volunteer.

At STS, we have a number of opportunities to volunteer and grow. You can exercise your current skills or learn new skills. You can ask for and choose a job you want (would enjoy doing). Your volunteer job can help prepare you for a paid job. Others will be happy to assist you in learning and performing it. We want you to succeed and grow. We have found that if you do something you enjoy, you'll do well. It's a win-win situation, for you and for us. This is also an opportunity to try something new, to see if you like it, and to do so without risking your current job.

**PEPO Chair** – Our current PEPO Chair is about to be promoted (to Section Chair), and would be happy to train his PEPO successor. An excellent opportunity for a technically oriented person. Keep up with what's hot in your field. You can develop a focus group of colleagues to help you identify the "hot topics" in your field, and the meeting topics that will yield a good turnout. This is also a good job growth opportunity, as you will meet & impress the speakers by good preparations for the talk, and most speakers are managers with hiring authority.

**K-12 Outreach Committee.** An excellent opportunity for engineers who want to work with others. You can experience different ideas and methods in educational outreach, and help AIChE plan the upcoming STS K-12 outreach program. Interface with AIChE (national) SIOC, work with other technical people, with other local societies, with students and parents, and with teachers. Other people have already developed the outreach activities. We can provide contacts in school systems, contacts with various local outreach programs, pre-developed activities, and examples of outreach in other local sections. For now, you get to show up for a day, get the experience, and report back to us at AIChE. If and when you like, you can try out some of your own ideas. The contacts, experience, and understanding you have developed will help your own program to succeed.

**Custom-Designed Opportunities.** If you'd like to get involved, but none of these opportunities is close enough to what you want, contact the STS Volunteer Recruiter (me), and we'll try to design an opportunity to meet your individual needs. It has been done successfully in the past.

**If you're interested contact our STS Volunteer Recruiter, Matt Kolodney, [mkolodne@tceq.state.tx.us](mailto:mkolodne@tceq.state.tx.us).**

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## K12 Volunteer Opportunities

AIChE and STS are working to start up K12 outreach programs. We are encouraging STS members to attend various local outreach events and report back to STS and AIChE on their experience. We are encouraging STS members to report back to Matt Kolodney ([mkolodne@tceq.state.tx.us](mailto:mkolodne@tceq.state.tx.us)) with one-page descriptions of their K12 outreach experiences, what worked well and what didn't. These will be reviewed locally and passed on to the AIChE National K12 program. Some local K12 opportunities are listed below.

**HUNCON** – Feb 20-21, 2009 (Fri/Sat) – @ UH Downtown. For the Greater Houston area. HUNCon includes teachers, administrators, students, parents, and technical professionals. Organized by HUNSTEM (Houston Urban Network for Science, Technical, Engineering, and Math Education). A DOD-funded consortium. Preregistration encouraged. The HUNCon web site <http://hunstem.uhd.edu/HUNCon> has extensive information on the conference, including a schedule and abstracts and speaker bios.

**HUNSTEM** web site: <http://hunstem.uhd.edu/> Already has a wide range of educational resources for use by interested teachers and volunteers. AIChE (national) is encouraging cooperation with organizations such as HUNSTEM.

**IEEE** [http://www.ieee-houston.org/Committees/SAC/Brochure IEEE%20Houston 7 Oct 2007.pdf](http://www.ieee-houston.org/Committees/SAC/Brochure%20Houston%207%20Oct%202007.pdf) This ongoing Houston Area program assists local schools with teacher training demonstrations.

**SEFH** <http://hunstem.uhd.edu/SEFH/> Science and Engineering Fair of Houston

**Houston Museum of Natural Science** (<http://www.hmns.org>) has ongoing outreach programs and could use more volunteers.

**The Houston Children's Museum** (<http://www.cmhouston.org>) also has outreach programs.

For more information, contact Matt Kolodney (713-471-8956) or [mkolodne@tceq.state.tx.us](mailto:mkolodne@tceq.state.tx.us).

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## Chemical / Engineering Opportunities (C/EO)

**Are you unemployed and looking for work?** The STS provides a service that finds engineers work.

Since it began in 1983, Chemical/Engineering Opportunities (C/EO) has provided more than 1,000 chemical engineers and chemists to chemical manufacturing companies, analytical chemical laboratories, environmental firms and process design firms seeking such individuals to meet their technical needs.

C/EO is sponsored by South Texas Section of the American Institute of Chemical Engineers. The charter of the committee is to facilitate the re-employment of chemical engineers in the Houston area.

Chemical engineers wanting to participate in C/EO must meet the following criteria:

- \* You are unemployed.
- \* You are a member of **both** the National AIChE and the STS Local Section. When you visit our office, have your membership card available.
- \* You must volunteer a minimum of 3 hours per week in the C/EO office, helping answer the phones, indoctrinate new Volunteers and, most importantly, help in the mailing of the Profiles.
- \* Volunteers must reside in the Houston Metropolitan area. Volunteers who fail to show are delisted.
- \* Provide addresses, phone numbers and contact names of 14 companies which typically employ chemical engineers or chemists. This ensures our database remains current.

For more information, please contact the C/EO Director, Jim Murphy, at [jrmurphy2@aol.com](mailto:jrmurphy2@aol.com). The C/EO page on the STS website is: <http://sts.aiche.org/content/ceo-chemical-engineering-opportunities>.

The C/EO Office is located at:


c/o Halliburton Co. USA

10200 Bellaire Blvd., Suite BNW 3

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# South Texas Section AIChE

South Texas Section  
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[sts-chairelect@aiche.org](mailto:sts-chairelect@aiche.org)

**Past Chair** Todd Willman, Epcon International  
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**Position 4: Human Resources**  
Shilpa Dubey  
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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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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:



[xpress@aiche.org](mailto:xpress@aiche.org)



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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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