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Monthly Meeting November 6, 2008

Location: Crowne Plaza Hotel (I-10 and Hwy 6)

3D Conceptual™ - A Collaborative Work Environment

Speaker: Jatin Shah, KBR

Abstract: 3D Conceptual™ is a KBR proprietary work process to improve early project definition, reduce project cost and improve project schedule. It is a collaborative work environment that enables project teams to better visualize early front-end designs in 3D and facilitate objective decision-making during early phases of projects. The main objective of this work process is to align people, processes and facilities through visualization and collaboration.

3D Conceptual uses a flexible work process and innovative computer tools to create conceptual 3D models and a visual environment that encourages greater communication during early project definition. Early participation by project stakeholders such as construction, procurement, operation & maintenance, and other groups (not traditionally involved until later in a project) promotes innovation and facilitates "optioneering."

3D conceptual models are developed using varying degrees of details depending on facility complexity, availability of equipment data and/or model intent. The level of model is typically set at the project initiation but can be incrementally expanded into a more detailed model if required as the project progresses. The layout is then further optimized via collaborative reviews conducted by an experienced multi-discipline team to address design, safety, procurement, modularization, constructability, noise mitigation, operation and maintenance, etc. related issues. The 3D modeling environment has the capability to quickly re-arrange equipment to perform what-if analysis to show impact on bulk materials. The work process clearly gives the project team an ability to make early decisions to greatly improve all aspects of the FEL (Front-End Loading) and/or EPC project.

Collaborative reviews are the heart of the 3D Conceptual process. These reviews show the true value of the 3D Conceptual work process. By using this process at such an early stage of the project, rework can be lowered dramatically as substantially more information is available much earlier in the project.

3D Conceptual is a well-proven work process and has been successfully used by KBR for the last 6+ years for LNG (including floating LNG & LNG receiving terminals), ethylene, ammonia, gas to liquids, hydroprocessing and other facilities.

This presentation will provide an overview of the 3D conceptual work process, how the conceptual model is developed, how it is used during the collaborative sessions, what the benefits entail and share results of some of the layout optimization studies performed by KBR.

Bio: Jatin Shah is manager of Technology Support at KBR, Houston, Texas. He is currently responsible for management, application, and support of advanced chemical engineering technologies and front-end engineering automation solutions. He has over 25 years of experience working on various engineering and IT assignments and has a BS degree in chemical engineering from MS University, India and a MS degree in chemical engineering from The Ohio State University, Columbus, Ohio.

Meeting At-A-Glance

- Location: Crowne Plaza Hotel, I-10/Hwy 6
- Energy Symposium 4-6 PM
- Plant Tour 4-5 PM
- Networking 6-7 PM
- Dinner at 7 PM
- Speakers at 8 PM

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Design Tools and Practices to Improve Energy Efficiency—Special Symposium 4-6 PM

A special Energy Design Symposium will be held prior to the November STS meeting. The symposium is sponsored by Texas Industries of the Future and the STS-AIChE.



Texas Industries of the Future

3:30 to 4:00 pm	Forum Registration and Visit with Exhibitors
4:00 to 5:30 pm	Energy Management Forum See program below.
5:30 to 6:00 pm	“Save Energy Now” Plant Recognition State Energy Conservation Office and DOE
6:00 to 7:00 pm	Optional Networking and Exhibition (sponsored by AIChE-STS – info below)

Forum Moderator

Sean Diamond, Texas Petrochemicals LP

Chair, Chemical and Refining Advisory Committee, Texas IOF

Energy Forum Presentations

Plant modifications present an opportunity to engage your contractor to help you improve throughput, reduce your energy intensity and costs, and upgrade infrastructure. This panel discussion will look at the conceptual design process from several viewpoints: the end-user, the

E&C firm and specialist consultants. Learn how you can get the most out of this engagement by tapping the resources of the experts and incorporating energy efficiency into your specifications.

Speaker 1: Brian Goedke, LyondellBasell.

Brian will address a plant modification and describe the steps to incorporate energy efficiency into the design.

Speaker 2: Prakash Ramdoss, Technical Advisor—Process, KBR.

“Process Integration for Energy Efficiency”. Prakash will present the tools, strategies, and techniques used in implementing process integration in the overall design procedure to improve process energy efficiencies.

Speaker 3: Aspen-Tech, a consulting firm specializing in process modeling, will describe a number of the tools available, with a focus on the use of simulation modeling to explore and quantify the impact of modifications, reduce uncertainty and control costs early in the process.

Questions & Answers

Registration

There is no cost for attending the Energy Forum; however, pre-registration is requested so that we can provide adequate facilities. To register, go to <http://texasiof.ces.utexas.edu/tiof/energyforum110608.asp>.

Exhibiting

If you are interested in exhibiting at the event, contact Alan Rossiter, STS-AIChE, 713-660-9503 or via email at alan@rossiters.org

Sponsor

Funding for the Energy Management Forum is provided by the US Department of Energy, under a contract with the State Energy Conservation Office of the Texas Comptroller of Public Accounts and the South Texas Section of AIChE.

Networking and Exhibition 6 – 7 pm

A number of companies who bring value to the design phase with energy efficient processes, tools and systems will have table-top exhibits set up as a focal point for a networking session. A cash bar will also be available.

Meeting Registration Information

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

Reservations are accepted until 4 pm 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.

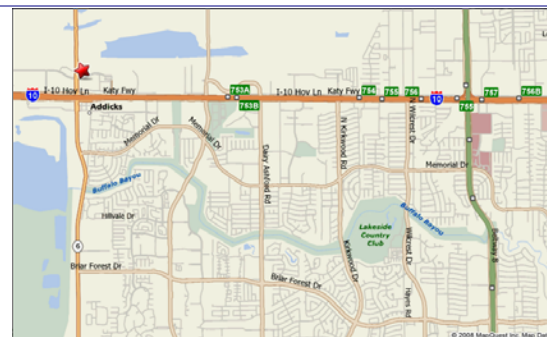
	<u>Pre-registered</u>	<u>At the door</u>
Regular/Retired	\$15	\$25
Student/Unemployed	\$10	\$20

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

Meeting Location - Crowne Plaza @ I-10/Hwy 6

This month's meeting will be held at the Crowne Plaza Hotel Houston, located at I-10 and Hwy 6. To use your own mapping program for directions, the address is 14703 Park Row, Houston, 77079. Click on the map to the right to open the map site.

NOTE: Construction of I-10 out to the west side is now complete, and getting to and from Highway 6 is fast and efficient in both directions!



Special Announcement—November Plant Tour!

KBR Technology Center

November 6th, 4-5 pm (No charge)

Registration required - email tjw@epcon.com by 10/31/2008 to reserve your spot.

Shuttle buses will leave the Crowne Plaza Hotel at I-10 and Highway 6 at 4 pm for a tour of the KBR Technology Center about 1 mile west of the November meeting hotel.

Located in Houston, Texas, the 70,000-square foot facility has been responsible for the creation and improvement of commercialized technologies, such as fluid catalytic cracking, ammonia synthesis and olefin production. The center contains numerous pilot plant facilities, analytical laboratories and pilot plant fabrication facilities and a talented staff of engineers, chemists, pilot plant specialists and craftsmen who develop and commercialize new and improved process technologies.

For more information about the Tech Center, please visit http://www.kbr.com/technology/technology_center.



Calendar of Events—Upcoming Meetings

Meeting Date	Sponsor	Location	Dinner Speaker Topic	Workshops
December 5, 2008 **Friday**	Young Professionals	Dickens Holiday Feast	Family/Significant Other Night	None
January 8, 2009 *2nd Thursday	Jacobs	Westchase Hilton	Petrochemical Pricing	4
February 5, 2009	TBD	TBD	(Student Awards Night)	4
March 5, 2009	TBD	TBD	(Regional AIChE Trade show)	4
April 2, 2009	Epcon, Int'l	Brady's Landing	(Energy Forum)	Energy Forum
May 7, 2009	TBD	TBD	(STS Awards Night)	4

2009 STS Officer Elections—It's that time again!

It's time once again to elect select officers for 2009. The Chair-Elect is elected every year. This year, the positions of Treasurer, Position 1-Education and Position 3-Communications are up for re-election.



Currently paid-up members of the National AIChE as well as the South Texas Section are eligible to vote. We confirm membership information with the National organization. Please ensure your dues are up to date!

A web page has been set up, <http://www.sts-aiche.org/elections08.htm>, where the candidates and their bios may be reviewed as they are available. Those eligible to vote will be contacted by email.

We will have a ballot box available for voting at the October and November dinner meetings. Confirmation of your National AIChE Member Number will be required to vote at the meetings. You can find your member number either on your renewal form, membership card, or by contacting National via the website <http://www.aiche.org>.

If you are unable to attend a meeting, you may also vote by regular US Mail or email. The ballot is available online at the website for downloading. To vote by regular mail, print out the ballot and complete. On the outside of the envelope, print your name and National AIChE member number. Any ballots received without your name and member number will not be counted. Mail to:

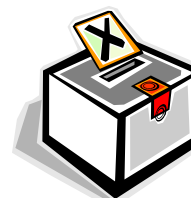
STS-AIChE Election, P. O. Box 1741, Deer Park, TX 77536

To vote by email, save the ballot (directions on the website) to your computer, complete, and email as an attachment to Election@sts-aiche.org. Ensure the email contains your National AIChE member number and name, otherwise your ballot will not be counted.

Balloting will be closed at the end of the November 6, 2008 meeting.

Candidates for 2009 officer positions are:

Chair-Elect	Alan Rossiter, Rossiter & Associates (Unopposed) President	
Treasurer	Hiren Patani, Mustang Engineering Process Engineer	Ven Pinjala Process Engineer
Position 1-Education	Lou Diamond, Chevron Technology Company Energy Conservation and Utilities Yoojung Kim, Solutia Inc. Process Engineer	
Position 3-Communication	Nemoy Rau, Jacobs Engineering Process Engineer Daniel Shiosaki, LyondellBasell Process Engineer	



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December 2008 STS function—"Dickens Holiday Feast!" **Friday event**

STS December 5th Monthly Meeting for You and A Guest



Traditional Dickens Feast - Private Motor Coach from Houston

7:00 p.m. **Friday**, December 5 [1880 Garten Verein](#), 2704 Avenue O, Galveston, TX



A private motor coach will leave from both the Sugarland and Astrodome areas at 5:30 pm and return you by 11:00 pm. The ride down and back will be a fun time with the Young Professionals running the show (monthly announcements, fun/games, and snacks).

When you arrive in Galveston, you will be driven through the downtown area to see all the Christmas decorations and then be taken to the Garten Verein – an historic turn-of-the-century German built ball-room facility. Next, see the Queen arrive in her horse drawn carriage with the guest of honor - Henry Dickens Hawksley who is playing the role of his great-great grandfather, Charles Dickens.

Feast on fine food and enjoy a cheerful evening in the festive atmosphere with Queen Victoria and her entourage at the head table. The Dickens classic "A Christmas Carol" will then be recited by Charles Dickens (played by his great-great Grandson). Old fashion Christmas toys are given out and you can have a copy of A Christmas Carol signed by Charles Dickens' great-great grandson. Includes wine, Champagne, and an elegant 4 course meal with the Christmas Carol recited in 3 parts between each course of your meal. You can come dressed in Victorian era dress or modern fare as you desire. This is sure to be a wonderful holiday experience that you will not forget!

Itinerary: **Buses leave at 5:30 pm** – arrive at approximately 6:30 pm with time for a driving tour of downtown with the Christmas lights and decorations. Dinner is from 7:00 pm to around 9:30 pm. The buses would leave Galveston at approximately 10:00 pm and will be back in Houston around 11:00 pm.

You may join us in Galveston if you live close to the area.

Cost: Only \$25 per person (normally \$65 per person – sponsored by STS-AICHe), and we must limit attendance to two persons per registration. Signup will be available following the November 6 STS meeting.

YP Events

On Sept 25, YP-STS hosted a technical session aimed at young engineers working in engineering and construction companies. The event was held at Jacobs facility off of Beltway 8 and Harwin. Snacks and drinks were provided on behalf of Jacobs. About 20 people showed up outside of presenters and organizers. The presentations were How to Give an Effective P&ID Review by Ed Simon (Waldemar S. Nelson & Co, Inc) and Different Phases of a Typical Engineering Design Project by Francois Tremblay and James Turner (Fluor Corp).

Each presentation was 30 minutes long. An informal survey of those who attended felt that each presentation was effective and they would attempt another event like this. After the event, an informal and impromptu happy hour was announced at a nearby bar and was attended by a few of those at the technical event. YP-STS committee members at the presentation were Brian Daly, Jasmine Lee, Kelly Richardson, Nemoy Rau, and Carol Schimdt.

On October 4, the YP held a picnic that was open to all. A three legged race (photo, right) was one of many fun events. Be sure to join us next year!

For more information on YP events, please visit their site

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



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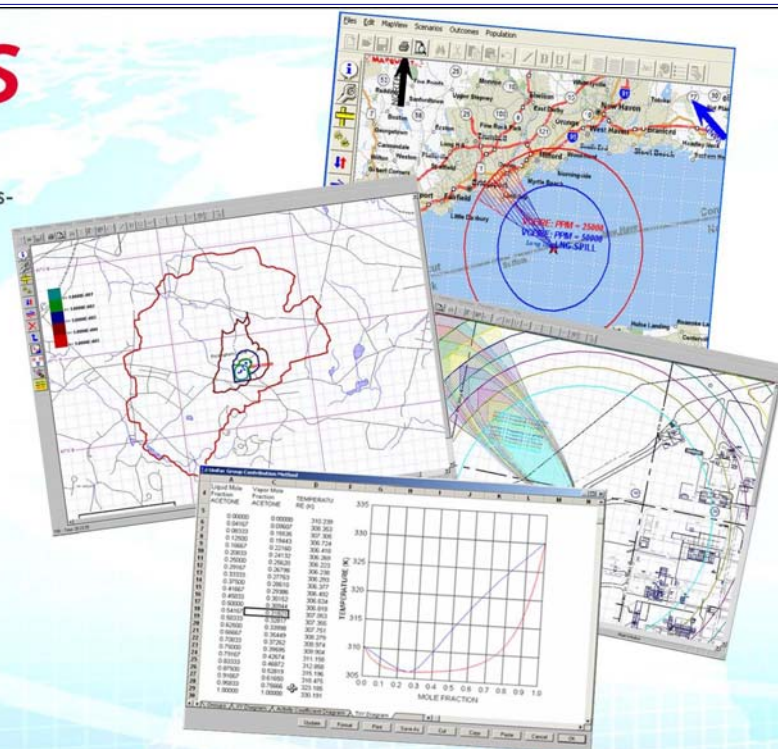
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Vital Links

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/news2008/news1108.pdf>



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From the Editor

Here we are again, nearing the end of another year. Can you believe it? The holiday season is nearly upon us. I remember the days when they used to wait at least until they put the Halloween decorations away in the stores before bringing out the Christmas stuff—not so anymore! And soon we will be ringing in yet another year.

It is election time, for both the STS and the Nation. Changes are coming, one way or another. No matter what your predilection is, it is imperative that you do get out and vote. We are fortunate in Texas to have early voting—you do not have to wait until Election Day to cast your ballot. While you are considering your choice for local and national offices, please also consider voting for your STS leadership. This is your organization, after all, and it takes the efforts of many to keep it rolling. If you are a member of the National organization and STS, you are eligible to cast your vote. Please do!

There are many changes coming, not only related to politics. The current economic turndown might have a large impact on our industry—this is yet to be seen. We can all hope that the economy sorts itself out quickly, and that we will continue business as usual. The STS has been here for its members since its inception in 1943, and will continue to do so as long as there are chemical engineers in Houston. My guess is, that is going to be a very long time!

Here's to all that is to come, good and bad.....

Susan Cannon, Editor
SusanCannon119@aol.com
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2007 STS Awards Presented at October 2008 meeting

South Texas Section-AIChE Annual Awards Night

Thursday, October 2nd, was the South Texas Section – AIChE's Annual Awards Night for 2007. A total of six awards were announced and presented. Three recipients were unable to attend and their plaques will be or have been forwarded to them.

STS SPECIAL SERVICE AWARD FOR 2007

The South Texas Section – AIChE recognized two of our members for their work on behalf of the section with the Special Service Award for 2007:

Frank J. Kleinschrodt who is now employed in the US Virgin Islands received the Special Service Award for his efforts to secure advertisers for the STS Newsletter, *The South Texan*. Unfortunately, Frank can't be here to accept the award as he now is employed in the US Virgin Islands so we sent it to him and he promises to send us a photo of him holding his plaque in an interesting location.

Alessandra R. Carreon who is now employed in the Seattle area received the Special Service Award for her arranging the Environmental Workshops at the Monthly STS Meetings. After being notified of the Award, Alessandra e-mailed that she couldn't attend to receive the Award. Her plaque will be sent to her with the request that she send us a photo of her holding the plaque in an interesting location. While she could not attend, she also wrote:

"I wanted to express briefly my sincerest appreciation to the STS Awards Committee for such an honor! I am genuinely grateful that I've been considered for such a meaningful and great award! ...while I may be nearly 2,500 miles away in (at the moment) sunny Seattle, I wanted to convey my heartfelt thanks for recognition in doing something I truly enjoyed! I took great pleasure from organizing the workshops and seminar and can without question see its positive impact on my professional development. AIChE's done so much for me from college to this very day--and I am more than happy to give back when I can!"

STS Outstanding Young Professional for 2007

The recipient of the 2007 South Texas Section Young Professional Award is **Hui Zhao**. Hui has BS degrees in Chemical and Industrial Engineering from Tianjin University (China) and a Masters in Chemical Engineering from the University of Kansas. While at Kansas she worked as a research assistant. Upon graduation, Hui joined Kimberly-Clark Corporation, Analytical and Measurement Technology in Roswell, Georgia and later transferred to their Essential Science Division in Neenah, Wisconsin. Seeking better opportunities, Hui joined KBR where she is presently employed. Since joining AIChE in 2003, Hui has presented research about computational modeling and simulation in 2003 as well as prepared a research poster for AIChE 2004 and received the Computer and Systems Technology Director's award for best poster in CAST session. She served as the Chair of Young Professional Group in STS-AIChE from 2007 to 2008 in which she recruited planning committee members and organized a series of activities to get more young engineers involved in AIChE and boosted the young professional attending in STS AIChE monthly meeting.

Distinguished Service Award for 2007

The recipient of the 2007 South Texas Section Distinguished Service Award is **Dr. Richard Newman**. Richard has been an AIChE member since 1968 and has served as Arrangements chair of the South Texas Section for the past 15 years. He has a B.S. degree in Chemical Engineering from Lamar University and M.S. and Ph.D. degrees from the University of California at Berkeley, where he worked with John Prausnitz. He has worked for Monsanto, Gulf Oil, Hoechst Celanese, Huntsman and is currently with Shell Global Solutions at the Westhollow location. He is also a Registered Professional Engineer in Texas.

Congratulations to all our award winners!



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South Texas Section
P. O. Box 1741
Deer Park, TX 77536-1741

2008 Officers and Contact Information

Officers

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chair@sts-aiche.org

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

Past Chair David Karesh, Jacobs Engineering
Past-chair@sts-aiche.org

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

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Executive Committee

Position 1: Education
Chris Knudsen
position1@sts-aiche.org

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

Position 3: Communications
Yoojung Kim
position3@sts-aiche.org

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

Volunteers

Arrangements Richard Newman, Criterion Catalysts

Membership Jerry Gresham, Gresham & Gresham

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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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
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