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Contact Information

Visit our website:

<http://www.wscaiche.org>

Email us at:

sec@wscaiche.org

November Meeting Thank You

WSCAICHE would like to extend a thank you to Mr. Manfred Gollent for presenting a wonderful presentation on effective communication and networking. This very informative presentation was attended by about 20 people.

January Meeting: ANSYS 12 - Computational Fluid Dynamics

Dr. Robert Harwood received his PhD in Civil Engineering from the University of Sheffield in the UK. After spending 3 years with Fluent Europe, he transferred to Fluent Inc. (U.S.) in 2003. In 2006, Fluent was bought out by ANSYS. Since 2003, Rob has been involved with business development for the Fluent product line and has been heavily involved with fluid dynamics in the health care and chemical industries.

Rob will demonstrate a "start to finish" mixing tank example showing the power of ANSYS 12 to evaluate mixing phenomena, fluid blending, scale-up, and reactions.

ANSYS develops, markets, and supports engineering simulation software used to predict how product designs will operate and how manufacturing processes will behave in real-world environments. ANSYS 12 is their latest product release. It offers advanced simulation technology spanning all key engineering disciplines in an integrated software platform designed for Simulation Driven Product Development.

We will also hear from Dr. James Leylek, Executive Director, CU-CCMS (on the ICAR Campus). He will discuss how Clemson University Computational Center for Mobility Systems (CU-CCMS) uses ANSYS technologies to push the limits of high performance computing simulations and how they deliver simulations to industrial clients through a unique, long term technology partnership with ANSYS Inc.

JANUARY MEETING SUMMARY

DATE: Tuesday, January 12, 2010
TIME: 6:00 PM Social
6:30 PM Dinner
7:00 PM Presentation
LOCATION: Hilton, Greenville
45 West Orchard Park Drive
Greenville, SC 29615
DIRECTIONS: I-385 @ Haywood Road Exit #39
COST: \$10 for Members
\$15 for Non-members
Free to Attend Presentation Only

Please reply to Secretary Jeremiah Batiste at sec@wscaiche.org by NOON Monday, January 11, 2010. Remember to include any dietary restrictions.

Note that the dinner portion of the meeting is not mandatory. Arrive by 7:00 pm if you want to attend the presentation without dinner.

Only RSVP if you plan to dine with us.

Sponsoring Opportunities

We would like to offer a sponsorship opportunity to any organization that would like to advertise in our newsletter. Rates for advertisements are as follows:

	1 Issue	3 Issues	7 Issues
Banner (6" x 1.5")	\$50	\$135	\$290
Half Page	\$70	\$190	\$400
Full Page	\$120	\$330	\$685

We are also offering single meeting sponsorships for \$500 which includes up to a full page advertisement in that month's newsletter and recognition at the monthly meeting. Please contact Jeremiah Batiste at sec@wscaiche.org for more information.

December CCPS Process Safety Beacon Highlights

The Bhopal Tragedy –25 Years Ago

One of the worst tragedies in the history of the process industries occurred 25 years ago this month. A highly toxic gas, Methyl Isocyanate (MIC), was released from a pesticide plant in Bhopal, India shortly after midnight on December 3, 1984. The number of fatalities may never be known, but estimates have been in the range of 2000-4000, with estimated injuries of 100,000 or more people. The International Medical Commission on Bhopal estimated that, as of 1994, more than 50,000 people remained partially or totally disabled as a result of exposure to MIC.

Bhopal was a reactive chemistry incident. MIC reacts exothermically with water. An MIC storage tank was contaminated with water, and the reaction generated heat and pressure causing a relief valve to open. Safety systems had been taken out of service without doing a management of change evaluation, or they were unable to deal with the release.

Approximately 40 tons of highly toxic MIC was released into the community, exposing tens of thousands of people.

Do you know?

- Reactive chemistry incidents continue to occur in the process industries. For example, on September 15, 2009, the US Chemical Safety and Hazard Investigation Board released a report on a runaway chemical reaction incident in Florida which killed 4 people and injured 32 (www.csb.gov).
- The material released from a relief valve, rupture disk, or other pressure relief device must discharge to a safe location or treatment system.
- Critical safety systems must always be properly maintained and fully operational.

What can you do?

- Learn more about what happened at Bhopal from Internet resources and the December 2004 Process Safety Beacon (a "read only" copy of that Beacon can be viewed at www.sache.org).
- Apply the lessons from Bhopal to your facility – for example, understanding all process hazards, including reactive chemistry hazards; understanding the worst case consequences of a possible accident; maintaining critical safety systems; emergency response preparation.
- Never become complacent about the hazards in your facility – remember what can go wrong!

www.aische.org/CCPS/Publications/Beacon/index.asp

2009-2010 Calendar of Events

DATE	LOCATION	TOPIC
12 Jan 2010	Hilton	ANSYS - Computational Fluid Dynamics
13 Feb 2010	Roper Mountain Science Center	Kids Engineering Day
16 Feb 2010	Hilton	TBD - Clemson University Provided Speaker
16 Mar 2010	Hilton	WESCO - Safety Systems 101
20 Apr 2010	TBD	Plant Tour
May 2010	Fluor Field	Social

Clemson Scholarship Reminder

This year, WSAICHE will again support the Chemical Engineering program at Clemson by offering a \$1,000 scholarship. The application is available on our Website – www.wscaiche.org. Applications should be complete by January 31, 2010.

Reminder: Roper Mountain Science Center - Second Saturday, February 13th KIDS ENGINEERING

For Engineering Day, February 13, 2010, we will again do our workshop entitled "Kids Engineering - Making It Matter" It will be again sponsored by AIChE and Fluor.

The activities to be covered will be:

1. Learn what Engineers do
2. Polymer Possibilities
3. Label Checks
4. Basic Facts
5. Make an electrical circuit
6. Make a block and tackle
7. Materials, Structures and Bridges
8. Computers in Engineering
9. Learn How Electricity gets to your house
10. Draw a floor plan of your house



These will fulfill requirements for Junior Girl Scout badge, Making It Matter; and Webelos Cub Scout activity badge, Engineering. We've averaged about 300+ kids for each of the last 3 years and know that everyone has had a great time. Please volunteer to help.

2009-2010 Officers and Executive Committee

Many thanks to the continued efforts of those in providing leadership to our Section. Members with a desire to serve can contact any Officer or Executive Committee member.

POSITION	NAME	EMAIL	PHONE
Chair	Austin Crooks	ajcrooks06@gmail.com	864-704-8910
Vice-Chair	Rick Vogel	rvogel1@hotmail.com	864-254-6474
Secretary	Jeremiah Batiste	sec@wscaiche.org	423-534-6836
Treasurer	David Laursen	david.laursen@fluor.com	864-281-5981
Historian	Aaron Ross	aaaronr11@gmail.com	404-642-3390
Webmaster	Eugene Gill	eugene.gill@fluor.com	864-281-8627
Other Executive Committee Members are: Oren Webb, Mary Ferris, David Harshbarger, Ann Marie Jones, and James Young.			

Active participation in professional societies as well as attending our professional and technical presentations count towards Continuing Professional Competency requirements for Licensed Professional Engineers. Upon request, the Section Secretary can provide attendance verifications for this purpose to our members.