



## American Institute of Chemical Engineers Knoxville-Oak Ridge Section

For additional information see our Web site at: <http://www.ornl.gov/sci/aiche/>  
Or contact: Linda Puckett, [puckettlf@ornl.gov](mailto:puckettlf@ornl.gov), (865)574-6147 or  
Lori Daniels, [lori.daniels@utk.edu](mailto:lori.daniels@utk.edu), (865)974-2421

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## December 2009 Meeting – Joint with SWE

Date: Thursday, December 10, 2009  
Cost: \$20  
Location: Calhoun's, Turkey Creek, Farragut, TN – Private dining area

Menu: Buffet (Special menu available upon request)

5:30 pm Executive Committee Meeting (All members welcome)  
6:00 pm Dinner  
7:00 pm Program – Mrs. J. Banner, Schaad Companies, **Zero Energy Building Research Alliance**

**Abstract** – A case study of the formation of ZEBRAAlliance ("Zero Energy Building Research Alliance") and ZEBRAAlliance's first project will be presented from the perspective of the for-profit private partner, Schaad Companies. The presentation will include ZEBRAAlliance's first project, a four-house demonstration project, and energy efficiency in new residential construction. In addition, the lessons learned on the project, how it has been and will be used in the private sector, and the value of sharing the knowledge with others in the home construction industry will be discussed.

**Bio** – Jennifer S. Banner, CEO of Schaad Companies, is a graduate of the University of Tennessee where she received both her B.S. in Business Administration and Master of Accountancy with highest honors. Following graduation, she worked in Tampa, FL as a CPA for Ernst & Whinney, CPA's and returned to Knoxville to join Pershing Yoakley & Associates, CPA's and Consultants, where she was a shareholder and principal. In 2005 she became CEO of Schaad Companies, which is a 99 year old holding company comprised of businesses owned and controlled by members of the John H. Schaad, Jr. family. Its businesses include residential and commercial construction, residential and commercial development, residential and commercial real estate brokerage and management services, equipment leasing, and investments.

Currently Schaad Companies is collaborating with ORNL, which has support from TVA, DOE and a host of building industry partners, in a public private partnership, known as the ZEBRAAlliance, to change the way homes are built so that they will be more energy efficient.

Additional biographical information on Mrs. Banner is available on the local section web site at: <http://www.ornl.gov/sci/aiche/calendar.html>

Please make your reservations by noon, **December 10**, by contacting

Linda Puckett, [puckettlf@ornl.gov](mailto:puckettlf@ornl.gov), (865)574-6147 or  
Lori Daniels, [lori.daniels@utk.edu](mailto:lori.daniels@utk.edu), (865)974-2421

***The Section will subsidize up to 15 students,  
including graduate students***

## Ballot — Knoxville-Oak Ridge AIChE Officers for 2010

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**Chair** – Jacob Hutton  
(Automatic Succession from Chair-Elect)

**Chair-Elect** (Select one)

Michael Aident  
 Write in \_\_\_\_\_

**Secretary** (Select one)

David DePaoli  
 Write in \_\_\_\_\_

**Treasurer** (Select one)

Paul Taylor  
 Write in \_\_\_\_\_

**Director** (Select two)

Stuart Daw  
 Richard Denny  
 Write in \_\_\_\_\_

Please bring ballots to December meeting, or send by email to: Linda Puckett at [puckettlf@ornl.gov](mailto:puckettlf@ornl.gov) or by postal mail to:

Knoxville-Oak Ridge Section, AIChE  
c/o Linda Puckett,  
Oak Ridge National Laboratory,  
P. O. Box 2008-6152,  
Oak Ridge, TN 37831-6152

**Michael Aident, PE** received his BS Chemical Engineering degree from the University of Maryland in 1979. He is a registered professional engineer in Tennessee and most recently received his accreditation as a Certified Energy Manager. Mike has been with Shaw Environmental (formerly IT Environmental) since coming to Knoxville in 1984. As a Senior Process Engineer with Shaw he has led teams of engineers and scientists in various projects including research and development, pilot testing, conceptual process design, detailed system design, equipment fabrication, operator training, system startup, and performance testing. Mike has specific expertise in the process design and evaluation in a number of industries including CO<sub>2</sub> capture and sequestration, energy management, as well as waste recycling and treatment. He has authored and published numerous technical papers on waste treatment systems that primarily focused on combustion and thermal treatment systems and their ancillary systems such as waste feed systems, burner systems, waste heat recovery systems, gas cleaning systems, and wastewater treatment systems.

**C. Stuart Daw, P.E.** a native of Florida, received his B.S. in Chemical Engineering from the University of Florida and his M.S. and Ph.D. degrees in Chemical Engineering from the University of Tennessee. He is currently a Distinguished R&D Staff Member in the Engineering Science and Technology Division of the Oak Ridge National Laboratory (ORNL) and an adjunct faculty member in both Chemical and Mechanical Engineering at the University of Tennessee. He has worked at ORNL since 1979, primarily in combustion, waste treatment, emissions control, and applications of chaos theory. Prior to that time he was employed by DuPont where he specialized in chemical reactor modeling and process development. Dr. Daw has over 130 publications on combustion, multi-phase transport phenomena, chemical reactor modeling, catalysis, and nonlinear dynamics. Dr. Daw is a member of the American Institute of Chemical Engineers and the Combustion Institute, the ORNL representative to the American Flame Research Committee, and a former member of the Board of Advisors of the Central States Section of the Combustion Institute. He currently is a co-leader of the DOE Crosscut Lean Exhaust Emissions Reduction Simulation (CLEERS) activity of the DOE Diesel Crosscut Team.

**David DePaoli** is the group leader of the Separations and Materials Research group of the Nuclear Science and Technology Division at Oak Ridge National Laboratory. The group conducts fundamental and applied research aimed at applying chemical engineering principles to topics of national interest, including efficient chemical processing, advanced energy technologies, high-performance computing, and nanotechnology. David received a BS in chemical engineering from the University of Michigan, and a Ph.D in chemical engineering from the University of Tennessee. He has previously held several officer positions in the Knoxville-Oak Ridge local section and was a director of the Separations Division of AIChE from 2002 through 2007.

**Richard Denny, P.E.** retired in 2005, but continues to pursue and complete consulting assignments for Barnes and Click (a Division of R. W. Beck, Dallas, TX) and other clients. Richard graduated from the University of Idaho with a BSChE degree in 1956, and joined Shell Chemical at the Martinez, CA chemical plant where he gained experience in specialty petrochemical process engineering, economic evaluation, operations management, plant trouble shooting and start-up. Subsequent positions at Phillips Petroleum, Stanford Research, Northern Natural Gas, Northwest Pipeline Company and Petro Source resulted in experience in general management, new project development, project management, feasibility studies, contract negotiations, energy marketing, and process development as related to natural gas, natural gas liquids, crude oil refining, nuclear fuel reprocessing, synthetic natural gas, coal gasification, LNG and petrochemicals. Upon joining Barnes and Click in 1988, Richard became an internationally known consultant concentrating on hydrocarbon processing economics and energy project development strategy. Richard is a registered professional engineer in Texas.

**Paul Taylor, P.E.** is a senior development engineer in the Nuclear Science and Technology Division at Oak Ridge National Laboratory. He has been the membership chairman of the local section for many years, and has previously served as Chair, Treasurer, and Director. Paul is a registered professional engineer, and is a member of the National Society of Professional Engineers and the Water Environment Federation in addition to AIChE.

## Activities Calendar

Date	Time	Topic	Speaker	Location
Dec 10	6:00 PM	Zero Energy Homes	Jennifer Banner, Schadd Cos./Brian McMurry, Barber McMurry Architects	Calhoun's, Turkey Creek
Jan 21	6:00 PM	Status of Progress in UT College of Engineering	Wayne T. Davis, Dean of UT College of Engineering	Calhoun's, Turkey Creek
Feb 9	6:00 PM	Joint with ANS	Stan Milora, Fusion Energy Division Director, ORNL	TBD
Mar 18	6:00 PM	TBD	TBD	Calhoun's, Turkey Creek
Mar 21-25		AICHE Spring Meeting		San Antonio, TX
Apr	6:00 PM	U.T. Student Awards Night	TBD	TBD
May	6:00 PM	TBD	TBD	Calhoun's, Turkey Creek

## Sponsoring Opportunities

We continue to accept advertising in the newsletter in order to provide funds to support student participation in the meetings.

Rates per newsletter are:

**\$80** full-page advertisement

**\$45** half-page advertisement

**\$25** quarter-page advertisement

The section will also continue to accept individual or corporate sponsors to provide student meals at section meetings. The sponsor will be recognized at the meeting and in the Newsletter.

The cost to sponsor one meeting is **\$200**. It's a great way to encourage students to attend the local meetings and become future members in the Institute!

I have not failed.  
I've just found  
10,000 ways that  
won't work.

**Thomas A. Edison**  
American Inventor  
(1847-1931)

## Officers

<b>Chair:</b>	Michael Hollander	300-5645	<a href="mailto:enviroms@att.net">enviroms@att.net</a>
<b>Chair-Elect:</b>	Jacob Hutton	560-1706	<a href="mailto:jacob.hutton@power.alstom.com">jacob.hutton@power.alstom.com</a>
<b>Secretary:</b>	David DePaoli	574-6817	<a href="mailto:depaolidw@ornl.gov">depaolidw@ornl.gov</a>
<b>Treasurer:</b>	Paul Taylor	574-1965	<a href="mailto:taylorpa@ornl.gov">taylorpa@ornl.gov</a>
<b>Directors:</b>	Sharon Robinson	574-6779	<a href="mailto:robinsonsm@ornl.gov">robinsonsm@ornl.gov</a>
<b>Term ends 2010</b>	Mark Swientoniewski	220-4730	<a href="mailto:swientoniemd@bechteljacobs.org">swientoniemd@bechteljacobs.org</a>
<b>Term ends 2010</b>	Ed Alperin	694-7335	<a href="mailto:Ed.alperin@shawgrp.com">Ed.alperin@shawgrp.com</a>
<b>Term ends 2009</b>	Stuart Daw	946-1341	<a href="mailto:dawcs@ornl.gov">dawcs@ornl.gov</a>
<b>Term ends 2009</b>	Tom Busmann	694-7517	<a href="mailto:tbusmann@focusenv.com">tbusmann@focusenv.com</a>
<b>Membership:</b>	Paul Taylor	574-1965	<a href="mailto:taylorpa@ornl.gov">taylorpa@ornl.gov</a>
<b>Newsletter:</b>	Linda Puckett	574-6147	<a href="mailto:puckettlf@ornl.gov">puckettlf@ornl.gov</a>
<b>Webmaster:</b>	Ben Lewis	574-4091	<a href="mailto:lewisbejr@ornl.gov">lewisbejr@ornl.gov</a>
<b>E-mail:</b>			<a href="mailto:aiche-chat@chem.engr.utk.edu">aiche-chat@chem.engr.utk.edu</a>
<b>Website</b>			<a href="http://www.ornl.gov/aiche">http://www.ornl.gov/aiche</a>

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We're on the Web!

See us at:

<http://www.ornl.gov/sci/aiche/>

***About Our Organization... Career Management Center***

The AIChE Career Management Center includes a variety of tools to assist you in finding a job, posting a job, as well as tools to enhance your skills.

To learn more about this valuable member benefit check out the AIChE web site at: <http://www.aiche.org/CareerResources/>.

(Source: AIChE web site:  
<http://www.aiche.org/CareerResources/>)

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