

## 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 2010 Meeting – Bring Your Spouse Night

Date: Thursday, December 9, 2010  
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 – Mr. David Moon, President of Moon Capital Management, **After the Crash: Investing following the decade that wasn't**

**Abstract** – Legendary investor Sir John Templeton said that the most dangerous words an investor can utter are “this time things are different.” Following a ten-year period that saw the Dow Jones Industrial Average experience 40 percent declines twice and finish the decade basically unchanged, investors are asking themselves if the stock market has relinquished its role as a place of opportunity, especially for the small investor. Are things actually different now? Or are traditional valuation metrics simply being applied in a different environment? David will examine the historic relationships between earnings, interest rates and corporate profits for insights as to what the next investment period might hold.

**Bio** – David Moon, President of Moon Capital Management, is also a regular contributor to CNBC's “After The Bell.” His editorial writing has been featured in the *Wall Street Journal*, *Barron's* and *Corporate Board Member* magazine. He currently pens a weekly commentary for newspaper publisher Scripps. David serves on the Investment Committee for the City of Knoxville and is chairman of the board of the Knoxville Zoo, the largest tourist attraction in Knox County, Tennessee. David earned bachelor's and MBA degrees (both cum laude) from the University of Tennessee, where he was named a member of the Academic All-Southeastern Conference football team his senior year. He was an adjunct professor in the finance department of his alma mater from 1995 to 2002 and received a number of teaching awards. He earned the Chartered Financial Analyst designation in 1995.

David is also the author of “Thoughts are Things,” a series of daily devotionals for elementary and middle school-aged students and their families. Each reading includes a new lesson about spirituality, responsibility, planning, goal setting, relationships, gratitude or love.

Along with his wife of 25 years and their 10-year-old twins, David lives on an east Knox County farm where his life regularly resembles old episodes of “Green Acres.”

**This is a Bring Your Spouse / Significant Other Event**  
**Please make your reservations by noon, December 9, 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***

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**Ballot — Knoxville-Oak Ridge AIChE Officers for 2011**

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**Chair** – Michael Aident  
(Automatic Succession from Chair-Elect)

**Chair-Elect** (Select one)

Steve Baloga  
 Write in \_\_\_\_\_

**Secretary** (Select one)

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

**Treasurer** (Select one)

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

**Director** (Select two)

Ed Alperin  
 Sharon Robinson  
 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

**Ed Alperin** is Senior Vice President of Science & Technology (S&T) for Shaw Environmental & Infrastructure, a division of The Shaw Group. He has more than 36 years of experience in the identification, development, design and implementation of remedial technologies for the treatment of hazardous, toxic, radioactive wastes (HTRW). Mr. Alperin is responsible for strategic direction and growth in all areas of technology associated with the company's core environmental business. He manages operating and engineering groups that are responsible for the development of innovative remedial investigative and remediation techniques. Mr. Alperin is also responsible for the financial and technical operation of six laboratory facilities, including four laboratories operated under contract for the U.S. Environmental Protection Agency (EPA). He has a BS in Chemical Engineering from Lowell Technological Institute, attained his QEP certification in 1995, and has been active in various roles in the local section of AIChE over the years.

**Steve Baloga** is the P.E. / Vice President – Southern Air Solutions Corporation and has 20 years consulting and engineering experience related to Clean Air Act (CAA) regulatory compliance permitting, computer dispersion modeling including computational fluid dynamic modeling, emissions testing, ambient air monitoring and pollution control engineering. Primary industry sectors he has served are electric utility, industrial boiler, hazardous waste combustion, petrochemical, nuclear, and pharmaceutical industries. For the past four years he has developed and demonstrated new lower cost multi-pollutant air pollution control technologies for coal- and biomass-fired electric utility, industrial boiler, cement kiln and electric arc furnace clients. He obtained his B.S. Ch. E. degree from the University of Tennessee in 1985 and is currently co-owner of Southern Air Solutions Corporation based in Knoxville, Tennessee.

**David DePaoli** is the group leader of the Separations and Materials Research group of the Energy and Transportation Science 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 PhD 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 2003 through 2007.

**Sharon Robinson** has thirty one years experience working at Oak Ridge National Laboratory (ORNL). She has held a number of positions at ORNL ranging from research to program planning to management in technical areas of nuclear and fossil energy, energy efficiency, and environmental management. As the ORNL Industrial Technologies Program Manager, she coordinated a series of national workshops where technical experts from industry, academia, and government identify future research needed to address problems in the chemical and related industries. She received her B.S. in Chemical Engineering from Tennessee Technological University in 1980. She obtained her M.S. and Ph.D. degrees in Chemical Engineering at the University of Tennessee in 1985 and 1992, respectively. She has been active within AIChE throughout her career, serving in several positions: Fellow (2009 – Present), Robert E. Wilson Award (2009), Executive Board Programming Committee (2009), Chemical Engineering Technology Operating Council (2009 – Present), Research and New Technologies Committee (Chair 2007 – 2008, Vice-Chair 2005 - 2006), Ambassador Program (2007-2008 & 2008 – 2009), Spring Task Force (2007 – Present), Education Division Formation Committee (2008), Alternative Energy Committee (2008 – 2009), Separations Division (Director 2000 – 2003, 2011 - 2014), Nuclear Engineering Division, Center for Waste Reduction Technologies, and Knoxville – Oak Ridge Chapter (Director, 1993 – 1994, 2004 – 2006, 2009)

**Paul Taylor, P.E.** is a senior development engineer in the Fuel Cycle and Isotopes 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.

## Vols4STEM Update

Vols4STEM has received almost **150 requests** (Table 1) to date from teachers in Knox County and Oak Ridge for volunteers in their classrooms! Volunteers are needed for a variety of things including: speakers, tutors, help in developing projects, and much more. Vols4STEM is committed to matching STEM professionals with math, science and educators of other disciplines. This collaboration benefits our students, our schools, and our community. To volunteer, please contact Ahnna Estes via email: [aestes@knoxvillechamber.com](mailto:aestes@knoxvillechamber.com) or telephone: 865-246-2658.

**Table 1. Local Vols4STEM requests.**

	Speakers	Work teacher develop activities	Help form a STEM Club	Tutor	Work with PTA	Donate resources	Help raise \$	Have a retired STEM professional adopt a class
<a href="#">Austin-East HS</a>	√	√				√	√	√
<a href="#">Bearden HS</a>	√	√	√	√	√	√		
<a href="#">Bearden MS</a>	√		√	√	√			
<a href="#">Carter HS</a>								
<a href="#">Carter MS</a>	√	√		√		√		
<a href="#">Cedar Bluff MS</a>	√	√		√	√	√		√
<a href="#">Central HS</a>	√	√	√			√		
<a href="#">Farragut HS</a>	√		√			√	√	
<a href="#">Farragut MS</a>	√	√		√		√	√	√
<a href="#">Fulton HS</a>	√	√		√		√		
<a href="#">Gibbs HS</a>	√							
<a href="#">Gresham MS</a>	√	√	√	√	√	√	√	√
<a href="#">Halls HS</a>								
<a href="#">Halls MS</a>	√							
<a href="#">Hardin Valley Academy</a>	√	√	√			√		
<a href="#">Holston MS</a>	√	√						
<a href="#">Karns HS</a>								
<a href="#">Karns MS</a>	√	√		√		√		
<a href="#">Dr. Kelley Volunteer Academy</a>								
<a href="#">Northwest MS</a>								
<a href="#">Powell HS</a>	√	√	√	√		√	√	√
<a href="#">Powell MS</a>								
<a href="#">South-Doyle HS</a>	√	√				√		
<a href="#">South-Doyle MS</a>								
<a href="#">Vine MS</a>	√	√	√					
<a href="#">West HS</a>	√	√			√	√		
<a href="#">West Valley MS</a>								
<a href="#">Whittle Springs MS</a>	√	√	√	√	√			

## November Meeting Summary – The Global Sustainable Bioenergy Project: Reconciling Large-Scale Bioenergy Production with Social and Environmental Concerns - with a focus on Land-Use

Dr. Keith L. Kline, a research staff member of the Multi-Scale Energy-Environmental Systems Group in the Environmental Sciences Division at the Oak Ridge National Laboratory presented his work on the *Global Sustainable Bioenergy Project: Reconciling Large-Scale Bioenergy Production with Social and Environmental Concerns - with a focus on Land-Use*. Dr. Kline's presentation provided an overview of the Global Sustainable Bioenergy Project; beginning with a historical perspective of societal transformations, worldwide bioenergy potential, bioenergy and food security, and a variety of issues associated with land utilization relative to large scale bioenergy production. A copy of Dr. Kline's presentation is available on the Local Section web site at: <http://www.ornl.gov/sci/aiche/presentations/GSB-Kline-Nov2010.pdf>.

## Members Forum – Testimonials on the Benefits of Membership

This column will publish a series of articles written by local section members that are intended to describe the reasons why members joined the AIChE and the benefits of being members of the local section. This column presents an open invitation to all members to contribute to these monthly articles. It is our intent that these articles help others learn more about the real world benefits of being a member of the AIChE.

This second article comes from a current Executive Committee Director, Mark Swintoniewski. Mark is a Senior Process Engineer with B&W Y-12 Technical Services, LLC where he is an Engineering Design Team member for the Y-12 Uranium Processing Facility.

"I joined AIChE as a chemical engineering college student at Virginia Tech. My classmates convinced a group of us that the first benefit of AIChE membership would be attending the AIChE national meeting to be held in a large southern city with beach access. Student attendance at the national meeting was going to be inexpensive including a subsidy from the Chemical Engineering Department. Of course, continuing education was our stated goal, but a big party in our spare time was the hidden agenda. Then reality set in, and one of those career defining moments occurred. In those good old days, most of us had accepted our employment offers during winter and early spring. My future employer was a subsidiary of the Dow Chemical Company in Knoxville, Tennessee. I was going

to be working as a consulting engineer while most of my classmates had accepted offers to perform plant engineering at chemical and oil companies. Unlucky for me, the first half of the Professional Engineer's (PE) Exam was scheduled at the same time as the AIChE National Meeting. I knew that a PE License would be an important career boost. So, I took and passed the Engineer-In-Training Exam. My friends let me know of the good time I missed. So the very first AIChE membership benefit was a good one that was not taken.

I have always taken advantage of the AIChE Insurance Program benefits. I have found them to be a good value compared with employer benefits. Through my working years, as my employment circumstances have changed the AIChE benefits were a constant reliable backstop.

I have enjoyed the local AIChE section meetings for two good reasons. The Professional Development Hour credits for continuing education needed to maintain my PE License and networking with other high performing professionals. The contact with local engineers has lead to business relationships as well as enduring personal friendships. In today's tough job market, it is gratifying to know of at least a few people who might know someone who may present you with an unexpected opportunity.

In my later career years, I have become more involved with the local AIChE section as an Executive Officer including a year as the President. I have enjoyed the challenges of arranging speakers to present their technical work and have given my own technical presentation to practice my public speaking skills. I especially enjoy encouraging young people to take up the study of the sciences and mathematics. I like to encourage the talented local section members to offer their talents to teach young people and to offer to be judges at local science fairs. I am especially encouraged by the attendance of high school and college students at our monthly meetings. Talking with enthusiastic science fare students about their work and presenting them with unexpected cash prizes has been gratifying. I have taken advantage of the especially deep technical experience of some of our local retired section members. Their knowledge and wisdom is so valuable to learn from and is freely available by just engaging in a conversation. Their fundamental understanding of the 'way things work' is never sidetracked with a concept discussion of new technology versus old technology. When presented with risk it is comforting to start with what works. I challenge local section members to develop a habit of engaging our well experienced engineers in a discussion of their life experiences."

## Activities Calendar

Date	Time	Topic	Speaker	Location
Dec 9	6:00 PM	After the Crash: Investing following the decade that wasn't	David Moon, President of Moon Capital Management,	Calhoun's, Turkey Creek
Jan 20	6:00 PM	EmeraChem Catalysts for Off-Gas Emissions	Steve DeCicco, <i>EmeraChem</i>	Calhoun's, Turkey Creek
Feb 17	6:00 PM	Joint Meeting with ANS: Dark Energy – Dark Matter	Mike Guidry, <i>UT</i>	TBD
Mar 13-17		2011 AIChE Spring Meeting & 7 <sup>th</sup> Global Congress on Process Safety		Hyatt Regency Chicago, Chicago, IL
Mar 17	6:00 PM	ALCOA Tour	TBD	ALCOA, Alcoa, TN
Mar 28-31		SASEF 2011 – 60 <sup>th</sup> Anniversary		Thompson-Boling Arena, Knoxville, TN
Apr 21	6:00 PM	Student Awards	TBD	TBD
May 5	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!



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<http://www.doedigitalarchive.doe.gov/enter.cfm>

“Sing like no one's listening,  
 love like you've never been hurt,  
 dance like nobody's watching,  
 and live like it's heaven on earth.”

## Officers

<b>Chair:</b>	Jacob Hutton	560-1706	<a href="mailto:jacob.hutton@power.alstom.com">jacob.hutton@power.alstom.com</a>
<b>Chair-Elect:</b>	Michael Aident	694-7333	<a href="mailto:Michael.Aident@shawgrp.com">Michael.Aident@shawgrp.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>			
<b>Term ends 2010</b>	Michael Hollander	300-5645	<a href="mailto:enviroms@att.net">enviroms@att.net</a>
<b>Term ends 2010</b>	Mark Swientoniewski	574-1150	<a href="mailto:swientoniemd@y12.doe.gov">swientoniemd@y12.doe.gov</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 2012</b>	Stuart Daw	946-1341	<a href="mailto:dawcs@ornl.gov">dawcs@ornl.gov</a>
<b>Term ends 2012</b>	Richard Denney	458-8875	<a href="mailto:rgdenney@charter.net">rgdenney@charter.net</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/sci/aiche">http://www.ornl.gov/sci/aiche</a>

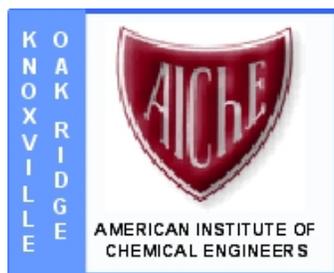
**Mark Twain (Samuel Langhorne Clemens)**  
 American author and humorist  
 (1835-1910)

## Knoxville - Oak Ridge Section

P.O. Box 2008  
Bldg. 4500N, Room B12  
Oak Ridge, TN 37830-6243

Phone: 574-1965  
Fax: 574-6872

E-Mail: [aiche-  
chat@chem.engr.utk.edu](mailto:aiche-chat@chem.engr.utk.edu)



We're on the Web!

See us at:

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

Editor: B. Lewis

### *About Our Organization...Benefits*

As AIChE members, we have many advantages and benefits. Some of these benefits include: identity protection, UPS and car rental discounts, insurances plans, and many other financial services. You can learn more about these and your professional support tools by visiting the Member Center of the National AIChE web site at <http://www.aiche.org/MemberCenter/Welcome.aspx> or by clicking on the links below:

- Personal Coverage: [Group Plans Insurance Information](#)
- Business Coverage: [Professional Liability Insurance](#)
- Business: [Financial Resources](#)
- [Financial Services](#)
- [Identity Protection](#)
- [Register for UPS Discount](#)
- [Use the Car Rental Discount](#)

(Source: AIChE web site: <http://www.aiche.org/MemberCenter/FinancialBenefits.aspx>)

P.O. BOX 2008  
BLDG. 4500N, ROOM B12  
OAK RIDGE, TN 37830-6243

