

November 2004  
Volume 9, Issue 4

# November Newsletter

*Knoxville - Oak Ridge Section*

# AIChE

## November Meeting

Date: 11/9/04

Location: Catinella's Bistro-Bakery

1031 Summer Wood Rd, 670-9970

Just off Middlebrook Pike, east of Cedar Bluff Rd, turn south at the red light (Intersection of Summer Wood Rd and Chert Pit Rd with Middlebrook)

Cost: \$19.00

For reservations, please call, Linda Puckett at 574-2108 ([puckettlf@ornl.gov](mailto:puckettlf@ornl.gov)) or Betty Frazier at 974-2421 ([bfrazier@utk.edu](mailto:bfrazier@utk.edu))

by **Monday, 11/8**



*The Section will subsidize up to 15 students.*

5:30 p.m. Executive Committee meeting (all members welcome)

6:00 p.m. Dinner - Italian buffet with lasagna, chicken parmesan and eggplant parmigiana, plus salad, pasta, drinks, and dessert.

7:00 p.m. Program

## Industrial, Commercial and Institutional Boiler MACT

On February 26, 2004, the Environmental Protection Agency (EPA) signed a Final Rule for National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters under 40 CFR 63 Subpart DDDDD. The rule was published in the Federal Register on September 13, 2004. The regulations apply to new and existing boilers and process heaters located at facilities that are major sources and that use non-hazardous solid, liquid and gaseous fuels. The effective date of

the regulation is 60 days after the date of publication in the Federal Register.

Affected facilities will have approximately 3 years to compliant.

This presentation will review the rule.

Thomas G. (Tom) Busmann is a principal with Focus Environmental Inc. and serves as Manager of Process Engineering. A PE in Tennessee and Michigan, he has 24 years experience in engineering for environmental management.

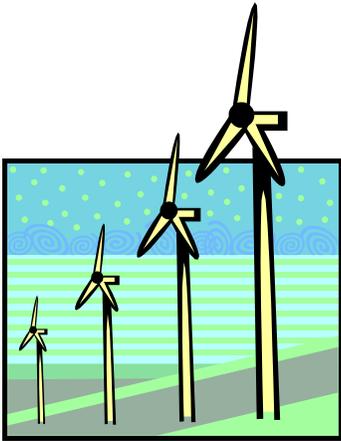
### *Upcoming Meetings:*

- February - Valentines Special "It's Candy, How hard can it be?"
- April - Student Awards Presentation

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## October Program: "TVA Green Power"



*"...2 blocks per month of green power for a year is the equivalent of not driving for 4 months..."*

Angela Hamlin provided an overview of TVA's Green Power Switch® program, which provides consumers in the Tennessee Valley the option to purchase clean energy from renewable sources, such as wind, solar, and methane gas generation. This partnership of TVA, distributors, and the environmental community started in 1998 and is accredited by the Center for Resource Solutions. The TVA program is ranked 7th in sales and 9th in customer participation among the more than 300 green-power purchasing programs in the US. Currently, TVA has 16 solar sites generating 375 kW, 1 wind station generating 2 MW, and 1 methane gas site generating 4 MW. Some interesting solar-generating sites include covered parking spots at Finley football stadium in Chattanooga and the Dollywood tram station. The system at the Allen Fossil Plant in Memphis, which employs methane generated by a wastewater treatment plant, displaces 17,000 tons of coal per

month. New wind turbines being installed at Buffalo Mountain will increase the peak capacity there by 27MW. While the methane system is economically attractive, there is a premium for green power generated by wind or solar. Wind-generated electricity is estimated to cost 9-11 ¢/kWh, compared with 6.8 ¢/kWh for conventional power. Residential solar power generators are paid back at a rate of 15¢/kWh. The Green Power Switch® program encourages green power usage by providing an opportunity for customers to pay a premium to access the green power. Green power is sold in "blocks" of 150 kWh - approximately 12% of average monthly residential use - at \$4 per block. Some attractive benefits of purchasing green power were presented: 2 blocks per month of green power for a year is the equivalent of not driving for 4 months or of recycling 480 pounds of aluminum. More information on the Green Power Switch® program can be found at [www.greenpowerswitch.com](http://www.greenpowerswitch.com).

### Upcoming Meetings

Date	Topic	Scheduled Speaker
December 7	*	
January 20	* Forensic Investigation	
February 16	Its candy...how hard can it be, Hersey's Candy	Craig F. Moyer
March 15	* Smokey mountain air quality	
April 26	Student awards	
May 20	* Consumer product investigation	

\* Tentative

Currently looking for a replacement program for December. Call with suggestions.

## 2004 SECTION OFFICERS

Chair	Paul Taylor	574-1965	taylorpa@ornl.gov
Chair-Elect	Tom Busmann	694-7517	tbusmann@focusenv.com
Secretary	David DePaoli	574-6817	depaolidw@ornl.gov
Treasurer	Steve McCoy	220-4730	mccoys@ttnus.com
Director	John Begovich	574-0151	begovichjm@ornl.gov
Director	Juan Ferrada	574-4998	ferradajj@ornl.gov
Director	Naresh Handagama	632-1885	nbhandagama@tva.gov
Director	Ben Lewis	574-4091	lewisbejr@ornl.gov
Director	Sharon Robinson	574-6779	robinsonsm@ornl.gov

## Other Contacts

Membership: Paul Taylor, 574-1965, [taylorpa@ornl.gov](mailto:taylorpa@ornl.gov)

Website: Ben Lewis 574-4091, [lewisbejr@ornl.gov](mailto:lewisbejr@ornl.gov)

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

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

## Elections for 2005 Officers and Directors

Chair - Tom Busmann (Automatic succession)

Chair-Elect (Select one)

Ben Lewis

Write in \_\_\_\_\_

Treasurer (Select one)

Steve McCoy

Write in \_\_\_\_\_

Secretary (Select one)

David DePaoli

Write in \_\_\_\_\_

Director (Select two)

Mark Swientoniewski

Sharon Robinson

Write in \_\_\_\_\_

Write in \_\_\_\_\_

Please bring ballots to Nov. meeting, or send by email to: [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, Oak Ridge, TN 37831-6181

## **Candidate Biographies**

**Benjamin (Ben) E Lewis** is presently the Group Leader for the Process Engineering Research Group of the Nuclear Science and Technology Division at the Oak Ridge National Laboratory (ORNL), where he has been employed for over 28 years. He holds a B.S. degree in Chemical Engineering from Tennessee Technological University, a M.S. degree in Engineering Administration/Management from The University of Tennessee, and has also completed the course work toward a Ph. D. in Chemical Engineering from The University of Tennessee. He is currently a Director and webmaster for the local Section

**Steve McCoy** is the General Manager for the Tetra Tech NUS Oak Ridge office. He received his BSChE from the University of Idaho in 1973 and an MS in Environmental Engineering from the University of Tennessee in 1995. In the past, Steve has served terms as Director and Chair for the Knoxville/Oak Ridge Section, and is currently filling in as Treasurer due to the departure of Thomas Klasson.

**David DePaoli** is the group leader of the Separations and Materials Research group of the Nuclear Science and Technology Division at ORNL, and is also an Adjunct Associate Professor in the Department of Chemical Engineering of the University of Tennessee. David received a BS in chemical engineering from the University of Michigan in 1985, and a Ph.D in chemical engineering from the University of Tennessee in 1994. He has previously held several officer positions in the Knoxville-Oak Ridge local section, and is currently a director of the Separations Division of AIChE.

**Sharon Robinson** has twenty-five years experience working at Oak Ridge National Laboratory (ORNL) in applied R&D and line and project management. 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 is active in AIChE: was a director for the Separations Division and for the Nuclear Division, was on the steering committee for the Center for Waste Reduction Technologies, and is on the National Research and New Technologies Committee.

**Mark D. Swintoniewski, PE** has 25 years of broad-based environmental engineering experience. This includes the past 11 years executing projects with Bechtel Jacobs Company and Bechtel National Inc. His experience includes project management, design, and operation of physical, chemical, and thermal treatment systems for hazardous and mixed wastes; preparing and negotiating numerous permit applications with the EPA and state regulatory agencies; and conducting incinerator trial burns. He received a BS in Chemical Engineering from Virginia Tech in 1979.

**Knoxville -  
Oak Ridge  
Section**

**AIChE**

E-Mail: [aiche-  
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## REMINDER

If you would like to save us the cost of mailing a hard copy of the Newsletter to you, please provide us with an email address. If you change email addresses, let us know so that you will receive future electronic copies.

Contact Linda Puckett  
([puckettlf@ornl.gov](mailto:puckettlf@ornl.gov))

for more information.

Linda J. Puckett  
Oak Ridge National Laboratory  
P.O. Box 2008  
Oak Ridge, TN 37831  
Ph: 865-574-2108  
Fax: 865-241-4829

## *About Our Organization...*

*The Knoxville-Oak Ridge Section of the AIChE can trace its origin back to the time of the Manhattan Project. The predecessor organization, active in 1944, was known as the Smoky Mountain Chemical Engineers Club which provided the forum for chemical engineers from The University of Tennessee, Rohm and Haas, and other local firms. Its membership was boosted by the infusion of the Oak Ridge workers. The Knoxville-Oak Ridge Section, as it is known today, was chartered by the National AIChE organization in 1948.*

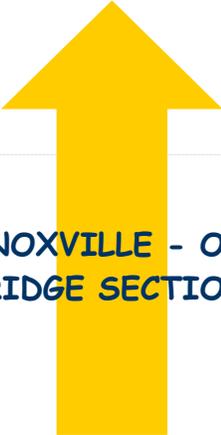
## SPONSORING OPPORTUNITIES

The Knoxville Section is looking for 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!

**We're on the Web!**

See us at:

[http://www.ornl.gov/s  
ci/aiche/](http://www.ornl.gov/sci/aiche/)



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**KNOXVILLE - OAK  
RIDGE SECTION**