

April Newsletter

April 2006

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Knoxville - Oak Ridge Section of American Institute of Chemical Engineers

April Meeting



Date: **April 20, 2006**

Location:

University Club

Kingston Pike

Knoxville, TN 37919

Cost: **\$20.00**

For reservations, please call, Linda Puckett at 574-6984 (puckettlf@ornl.gov) or Betty Frazier at 974-2421 (bfrazier@utk.edu) by **Wednesday, 4/19/05** *The Section will subsidize up to 15 UT students plus 2 High School Chemistry Students and teacher from each local high school.*

Agenda

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

6:00 p.m. Dinner – Buffet consisting of your choice of Salad: Tossed Salad and Fruit Salad; Entrees: Sliced Roast Beef and Chicken Parmesan; Side Items: Sweet Corn, Oven Roasted Potatoes, and Sugar Snap Peas; Dessert: Red Velvet Cake and Pecan Pie; and Drink: Water or tea.

7:00 p.m. Program – **UT Student Project(s)**

UT Students – Senior Designs and Awards

Again this year, we will be recognizing UT Chemical Engineering students at our April meeting. Several student teams will describe their research or design projects. This is an incredible opportunity to see what types or research young chemical engineers are performing.

We will be welcoming area high school chemistry students and their teachers to this meeting. This meeting provides an opportunity for high school students with interests in chemistry to learn more about opportunities in chemical engineering. The local section will pay for a High School Chemistry Teacher and two students from each High School in the local area.

If you know of someone who would be interested in this, please provide their name(s) to us so that we can be sure to invite them.

Hope to see you there.



Southern Appalachian Science and Engineering Fair

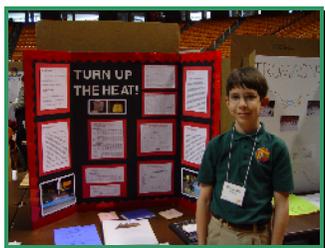


Many thanks to Paul Taylor and Dr. Tse-Wei Wang for volunteering as judges for the Southern Appalachian Science and Engineering Fair (SASEF). The Knoxville/Oak Ridge Section of the American Institute of Chemical Engineers presented two \$50 cash prizes for the best applications of chemical engineering principles or practices. This year's winners are Corine Baker of Sacred Heart Cathedral School, Knoxville and Benjamin Kass of St Mary's School, Oak Ridge.

Corine Baker won first prize in the Junior Division for her project "Go With The Flow," where she studied the effect of pipe length, pipe diameter, and fluid viscosity on the average flow rate of a fluid.

Benjamin Kass was the second place winner with his product "Turn Up the Heat," where he studied the effects of an internal conducting layer on heat transfer through insulating layers from a point heat source.

For more information, see <http://www.sasef.com/>.



Corine Baker and Benjamin Kass were awarded with \$50 cash prizes.



Open house at U.T. Chemical Engineering Department

About 30 students from Farragut, Gibbs, Halls, and Powell High Schools participated in the University of Tennessee Open House on April 1, 2006. They learned about the requirements for earning a Chemical Engineering degree, about the Cooperative Education (Coop) Program, about the involvement of Chemical Engineers and engineering principles in various materials and products, and about using a chemical reaction to generate hydrogen, which powers a fuel cell to produce the electricity needed to run a model car. Nine members of the Student Chapter of AIChE and five professors were involved in organizing and running the Open House. The Local Section helped initiate, publicize, and plan the Open House. Many thanks go to Paul Taylor for representing the Local Section and participating in this event.



Dustin Tremaine and Luke Stewart prepare a chemically-powered model car for a test run as students and one parent watch.



Officers

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Calendar

Date	Time	Topic	Speaker	Location
20-Apr	6:00 PM	Student Awards	Design Teams	University Club
		2006 Spring National Meeting		
		2 nd Global Conf. on Process Safety		
23-27 Apr		World Congress on Particle Tech.		Orlando, FL
			Sandra Dudley, Lipscomb	
19-May	6:00 PM	Chemistry for Engineers	University	Italian Market & Grill
			Smokies vs. Mobile	
31-August	7:15 PM	Social (Tentative)	BayBears	Smokies Stadium
12-17 Nov		2006 Annual Meeting		San Francisco, CA



Membership Benefits...

Technical publications and books

Save up to 10% on books and publications. And up to 83% on magazines. Choose from eight journal subscriptions and over 300 publication titles. As you build your library, you'll also build your savings.

Technical conferences

Save \$200 on conferences, where you'll learn from industry leaders and meet thousands of industry peers. There are six AIChE sponsored conferences—and over 30 specialty co-sponsored conferences. If you go to more than one conference, your savings will be significant.

12-month subscription to CEP

Chemical engineering is constantly evolving. To ensure you have the latest information, developments and breakthroughs, your membership comes with a 12-month subscription to CEP. Articles are written by the innovators who are establishing new protocols and moving our profession forward. Each issue is packed with practical information you can apply to current or future projects.

Access to Knovel Life Science and Chemistry Selections

Knovel delivers selections from the most relevant engineering and scientific references, handbooks and databases to your PC. You can then manipulate and search for content across the entire collection. Members enjoy free access to selections from Knovel's Life Sciences and Chemistry collections.

Career advancement and support

CareerEngineer is AIChE's exclusive job search engine for chemical engineers. You can search by position, industry, city, state, country and company. If you're an employer, this is the best resource to fill a position—whether full-time, consultant or internship.

The AIChE Member Directory

Use this online resource to locate and stay connected with friends, colleagues and peers worldwide.

Members-only insurance plans

AIChE offers members portable insurance plans you can take with you when you change jobs or careers. You'll receive competitive group rates and flexible plans to fit your budget and your needs.

A diverse, far-reaching network

As an AIChE member, you'll have many networking opportunities to build and maintain professional relationships.

Special financial products and services

Explore AIChE's family of financial products and services designed exclusively for AIChE members, including group insurance, small business and personal financial benefits.

UPS discounts

AIChE members receive deep discounts – up to 26% – on UPS Express shipping, and 10% on business services at The UPS Store® like copying, binding, laminating, packaging and mailbox services.

Car rental discounts

AIChE has made arrangements for members to save 5 to 15% off regular rates every time they rent a car from Hertz or Avis.

For additional information refer to the AIChE national web site at:

<http://www.aiche.org/About/OurMembers/SeniorFellow.aspx>



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We're on the Web!

See us at:

www.ornl.gov/sci/aiche

**Knoxville - Oak Ridge
Section**

Advertising in the Newsletter

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 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!

May Meeting

For our May 11, 2006 meeting, Sandra K. Dudley, Ph.D., P.E. will be presenting "*Chemistry for Engineers*" and discussing how changes in the Accreditation Board for Engineering Technology (ABET) accreditation standards allow many non-chemical engineering disciplines to require only one semester of general chemistry. However, topics covered on the Fundamentals of Engineering (FE) exam include items covered during both the first and second semesters of traditional general chemistry courses. Similarly, the background needed for additional coursework and professional activities may be provided in portions of both the first and second semesters of general chemistry. As a result of these dichotomous requirements, a number of universities are offering a one-semester chemistry course for non-chemical engineering majors. Sandra's presentation includes a discussion of the topics included in the Chemistry for Engineers course at Lipscomb University as well as textbook choices, teaching techniques, and learning approaches favored by engineering students.

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