



## 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)574-6984 or  
Betty Frazier, [bfrazier@utk.edu](mailto:bfrazier@utk.edu), (865)974-2421

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## April 2007 Meeting

Date: Wednesday, April 25, 2007  
Cost: \$18 Local Section Members and Faculty  
\$5 Students

Location: Carolyn P. Brown University Center Ballroom, University of Tennessee, 1502 West Cumberland Ave., Knoxville, TN, phone (865)-974-3455

Menu: Banquet  
5:45 pm Executive Committee Meeting (All members welcome), Room 217  
6:30 pm Dinner (Ballroom)  
7:30 pm Program – *UT Department of Chemical Engineering 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 of research young chemical engineers are performing.

In addition, several awards winners will be recognized: AIChE Service Award, Dow Outstanding Junior Award, Kenneth M. Elliott Outstanding Senior Award, Jim and Sandra McKinley Outstanding Graduate Student Award, and Most Exceptional Student Award.

Further information on the University Center can be obtained at <http://web.utk.edu/~univctr/>; the Chemical Engineering Dept at <http://www.che.utk.edu/>.

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 science and chemistry to learn more about opportunities in chemical engineering. ***The local section will pay for up to 10 High School students from the local area.***

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

***Please make your reservations as soon as possible, but no later than noon on April 18, by contacting***

Thank-you to our  
Advertisers this month:

Shaw Group, Inc., page 2  
ABS Consulting, Inc., page 3

Linda Puckett, [puckettlf@ornl.gov](mailto:puckettlf@ornl.gov), (865)574-6984 or  
Betty Frazier, [bfrazier@utk.edu](mailto:bfrazier@utk.edu), (865)974-2421.

## Job Postings

Job opportunities are continuing to be posted on the new Area Jobs Listing page on the local section's web site. The new page provides a listing of primarily chemical engineering related employment opportunities in the region. The following address can be used for more information on the current job listings:

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

Also, please give us any feedback (positive or negative) on your efforts to explore any of the posted opportunities.

**Disclaimer:** The posting of employment opportunities and employer information on the local section's website does not necessarily constitute or imply the endorsement, recommendation, or favoring by the Knoxville-Oak Section of American Institute of Chemical Engineers.



# Solutions for Knoxville

Shaw offers a world of solutions to our industrial, commercial and governmental clients worldwide. Shaw's Environmental & Infrastructure local office has been an integral part of the Knoxville community for over 30 years and is proud to employ over 300 people locally.

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Photograph by Joe Rosenthal

*"Reputation is what other people know about you. Honor is what you know about yourself."*

Lois McMaster Bujold,  
"A Civil Campaign",  
1999  
US science fiction  
author

## Engineer's Creed

I'm not sure how many of you remember the Engineer's Creed or whether there is any broad degree of institutional emphasis placed on such things anymore. But I thought that it might be useful to reemphasize the societal trust and responsibility that we as engineers are called to uphold. The creed or Code of Ethics, as it is referred to in some circles, appears in a number of areas and in particular, is embodied in the elements of the Order of the Engineer, which is an association of graduates and professionals that concentrates on professional ethics. The creed is as follows:

As a Professional Engineer, I dedicate my professional knowledge and skill to the advancement and betterment of human welfare.

I pledge:

- To give the utmost of performance;
- To participate in none but honest enterprise;

- To live and work according to the laws of man and the highest standards of professional conduct;
- To place service before profit, the honor and standing of the profession before personal advantage, and the public welfare above all other considerations.

In humility and with need for Divine Guidance, I make this pledge.

*Adopted by  
National Society of  
Professional  
Engineers, June  
1954*

*(Excerpts taken from  
the National Society  
of Engineers web  
site at:*

*<http://www.nspe.org/ethics/eh1-cred.asp>)*



## Process Safety Engineers

ABS Consulting is an engineering consulting firm that provides process safety, risk management, and system reliability analysis services. We are seeking full-time and/or part-time process safety engineers at all levels (junior, senior, retired) for our Knoxville, TN; Houston, TX; and Irvine, CA, offices who have consistently distinguished themselves as outstanding performers with excellent technical, interpersonal, and communication skills. The following relevant job experience is desired:

- Background in OSHA's process safety management (PSM) regulation (29 CFR 1910.119) and EPA's rule on risk management programs (40 CFR 68) (conducting compliance audits, leading PHAs, implementing mechanical integrity, etc.).
- At least 3 to 5 years of experience in implementing process safety is desired, and chemical or mechanical process engineering experience is a plus. Experience in providing training is also a plus.

The positions available offer excellent compensation and challenging career and travel opportunities. Please e-mail your résumé, college G.P.A., and salary requirements to [dwhittle@absconsulting.com](mailto:dwhittle@absconsulting.com) or fax them to (865) 966-5287.

ABSG Consulting Inc. is an EOE – M/F/D/V  
[www.absconsulting.com](http://www.absconsulting.com)

## Knoxville-Oak Ridge Section Presents Two Special Awards at the Southern Appalachian Science and Engineering Fair

The Southern Appalachian Science & Engineering Fair was held on March 6-7 at the Thompson-Boling Arena. Our Section sponsored two \$50 special awards for the best chemical engineering-related projects in the Junior and Senior divisions. Paul Taylor and Mark Swientoniewski served as judges. The SASEF is sponsored annually by The University of Tennessee and other generous contributors such as Oak Ridge National Lab. The Fair began in 1952 to heighten the interests of area students in science and engineering. Students in the Senior Division (grades 9-12) compete for two spots to represent the SASEF at the Intel International Science and Engineering Fair. Students in the Junior Division (grades 6-8) compete separately for their own awards and for a chance to enter the Discovery Channel Young Scientist Challenge. The younger students learn a great deal by being involved in the competition each year. Through their experience with the fair, they will gain insight that will prove useful in future fairs and future endeavors. The Intel International Science Engineering Fair, to be held in Albuquerque, New Mexico, May 13-

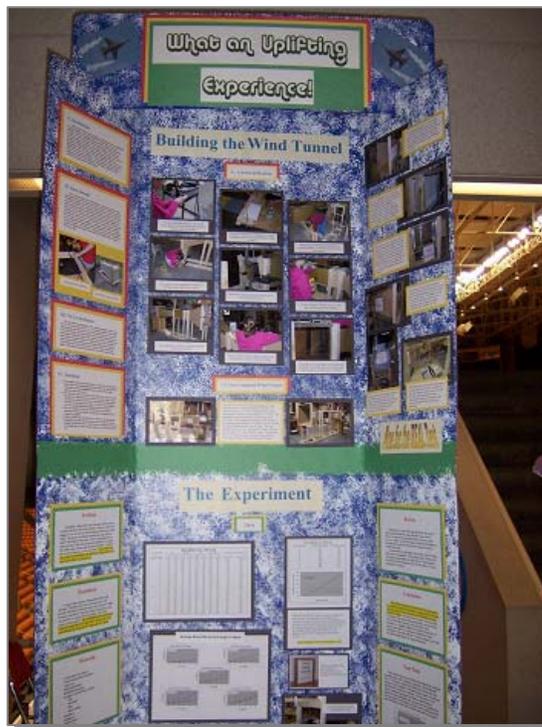
19, 2007, is the annual culminating event for some 1600 finalists selected from affiliated regional fairs such as SASEF, or from a growing number of fairs held in other countries such as Canada, Brazil, and Germany.

The recipients of the \$50 special awards from the Local AICHe Section for the best chemical engineering-related projects in the Junior and Senior divisions this year were Shannon McGee and Philip Glandon, respectively.

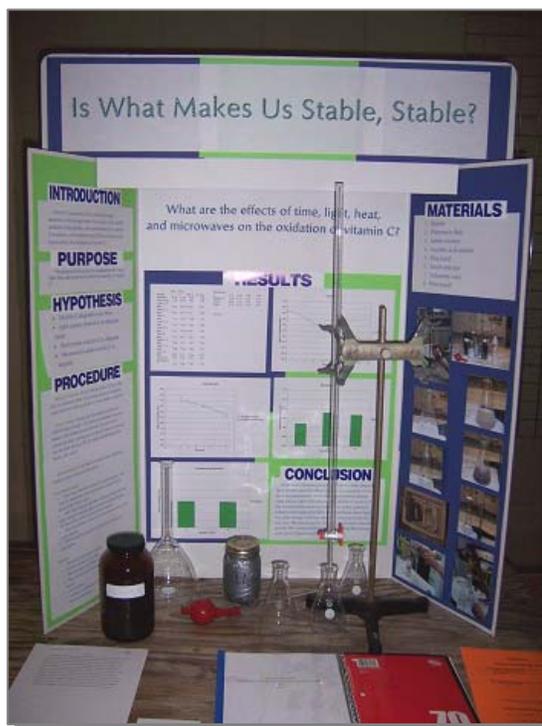
Shannon McGee of Norris Middle School won the Junior Division award for her project "What an Uplifting Experience". Shannon designed and built a wind tunnel, and then used it to measure the lifting force achieved by a wing, at various angles of attack and at different wind speeds.

Philip Glandon of Berean Christian won the Senior Division award for his project "Is What Makes us Stable, Stable". Philip measured the degradation of vitamin C in orange juice as a function of time, heat, light, and microwave energy. Philip also won fifth place overall in the Senior Division.

Congratulations to these outstanding students!



Shannon McGee project, "What an Uplifting Experience."



Philip Glandon's project "Is What Makes us Stable, Stable."

## Activities Calendar

Date	Time	Topic	Speaker	Location
25 April	5:45 PM	UT Student Design/Awards	Student Teams	University Center
22-27 April		AIChE National Spring Meeting		Houston, TX
22 May	5:30 PM	Center for Nanomaterial Science	TBD	TBD
8-10 June		Leadership Development Conference		Boston, MA, Courtyard Marriot Tremont Street
4-9 November		AIChE 2007 Annual Meeting		Salt Lake City, UT

## 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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*"I've come to believe that each of us has a personal calling that's as unique as a fingerprint - and that the best way to succeed is to discover what you love and then find a way to offer it to others in the form of service, working hard, and also allowing the energy of the universe to lead you."*

*Oprah Winfrey,  
O Magazine,  
September 2002*

## Officers

<b>Chair:</b>	Mark Swientoniewski	574-1150	<a href="mailto:swientoniemd@bechteljacobs.org">swientoniemd@bechteljacobs.org</a>
<b>Chair-Elect:</b>	Michael Hollander	966-4402	<a href="mailto:mhollander@tds.net">mhollander@tds.net</a>
<b>Secretary:</b>	Doug Hayes	974-7991	<a href="mailto:dhayes1@utk.edu">dhayes1@utk.edu</a>
<b>Treasurer:</b>	Paul Taylor	574-1965	<a href="mailto:taylorpa@ornl.gov">taylorpa@ornl.gov</a>
<b>Directors:</b>	Ben Lewis	574-4091	<a href="mailto:lewisbejr@ornl.gov">lewisbejr@ornl.gov</a>
Term ends 2008	Steve McCoy	220-4730	<a href="mailto:steven.mccoy@ttnus.com">steven.mccoy@ttnus.com</a>
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<b>Membership:</b>	Paul Taylor	574-1965	<a href="mailto:taylorpa@ornl.gov">taylorpa@ornl.gov</a>
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<b>WWW:</b>			<a href="http://www.ornl.gov/aiche">http://www.ornl.gov/aiche</a>

## Knoxville - Oak Ridge Section

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We're on the Web!

See us at:

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

## About Our Organization – Divisions and Forums

In the fast evolving chemical engineering profession, AIChE's 18 divisions and forums are designed to keep you on the cutting edge of your specialty. In addition to technical information, divisions and forums provide opportunities for affiliation with top engineers in both general disciplines and emerging fields like biotechnology and sustainability.

Divisions and forums provide programming for AIChE's technical meetings, and awards and recognition to outstanding chemical engineers in their area(s) of expertise. As a member of a division or forum you will have the opportunity to meet new colleagues, exchange ideas, discuss the latest trends, and build lasting business relationships. Refer to the National web site at the following address for more information on the divisions and forums available to you:

<http://www.aiche.org/DivisionsForums/ViewAll/index.aspx>.

Join the one that's right for you.

- Catalysis and Reaction Engineering Division (CRE)
- Computational Molecular Science & Engineering Forum (CoMSEF)
- Computing & Systems Technology Division (CAST)
- Environmental Division (ENV)
- Food, Pharmaceutical & Bioengineering Division (FP & BE)
- Forest Products Division (FP)
- Fuels & Petrochemicals Division (F & P)
- Management Division (MGT)
- Materials Engineering & Sciences Division (MESD)
- Nanoscale Science Engineering Forum (NSEF)
- North American Mixing Forum (NAMF)
- Nuclear Engineering Division (NE)
- Particle Technology Forum (PTF)
- Process Development Division (PD)
- Safety & Health Division (S & H)
- Separations Division (SEP)
- Sustainable Engineering Forum (SEF)
- Transport and Energy Processes Division (TEP)

(Excerpt from National AIChE web site)

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