



American Institute of Chemical Engineers Knoxville-Oak Ridge Section

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The Knoxville-Oak Ridge Section is now on Facebook.



For additional information about the Knoxville-Oak Ridge Section of AIChE see our Web site at: <http://www.ornl.gov/sci/aiche/>

March 2017 Meeting – Joint Meeting with UT Student Chapter

- Date: Tuesday, March 21, 2017
Cost: Free for students and \$20 for members (Cash or Check - **NOTE:** There is no cost for the program or PDH Certificate)
Location: UT Knoxville, Min Kao Engineering Building, Room 622 (See Map on Page 3)
- 5:30 pm Executive Committee Meeting (Local Section – All members welcome)
6:00 pm Local and Student Section Networking
6:30 pm Dinner – Min Kao, Room 622
6:30 pm Presentation – Kyle Mack, Uranium Processing Facility Project – Casting Process Lead, Bechtel National, *Benefits of AIChE as a Professional*
6:45 pm Presentation – Mary McBride, University of Tennessee, *Upcoming Southern Student Regional Conference*
7:00 pm Program – Unit Operations Laboratory Tour – Dougherty Engineering Building

AIChE Member Benefits (Kyle Mack):

Becoming a member of AIChE as a professional provides many benefits, some that are recognizable and some that are behind the scenes. From enhancing your network to broadening your knowledge, the local section of AIChE will be presenting some of the benefits that come from your AIChE membership to increase the knowledge of the existing members as well as encourage the future young professionals to continue the strong legacy that a professional society can provide to the profession worldwide. For more extensive benefits for AIChE see <https://www.aiche.org/community/membership/benefits>.

Southern Student Regional Conference information (Mary McBride):

On March 31st and April 1st of this year, the University of Tennessee-Knoxville will be hosting the annual regional student conference. During this conference students from all over the southeast, including Puerto Rico, will be networking, competing, learning, and touring facilities around the Knoxville area that showcase varying engineering applications in the real world. With a conference of this magnitude, the student section of AIChE at the University of Tennessee will have their hands full. The conference chairs will be presenting some information about how we, as professionals, can become more involved on that weekend and make the experience as beneficial and enlightening to the students that are attending. <http://aichesrc.utk.edu/>

Unit Operations Laboratory Information – (Continued Page 2)

**Please make your reservations no later than noon on
March 20 by contacting**

Paul Taylor, taylorpa@ornl.gov, (865)574-1965 or
Amber Tipton, atipto11@utk.edu, 974-6458

See page 2 for an alternate electronic registration option using EventBrite

**Students are encouraged to attend
and will eat for free**

Alternate Registration and Payment Option for Local Section Meeting Attendees

The Knoxville-Oak Ridge Section of AIChE is providing an alternate registration and payment option to cover the costs of meals, speakers, and student attendees at our monthly meetings. Attendees now have the option to pay by credit card using an online payment system at the following web-address:

<https://www.eventbrite.com/e/aiche-march-meeting-joint-with-ut-student-section-tickets-32890976797>

If you use this service, the cost for the meeting will be \$22.09. If you do not want to use this web-based payment option, you may continue to pay \$20 at the door by cash or check.

Unit Operations Laboratory Information

Housed in the Nathan W. Dougherty Engineering Building on the campus of the University of Tennessee, the lab offers state-of-the-art facilities for engineering students to learn real-world practices. Unit operations labs are often used to help chemical engineering students take theoretical knowledge from the classroom and put it to use under monitored conditions. In particular, students can go through the process of converting raw materials into finished products, something that helps them prepare for employment after college. "Having a lab such as this will allow us to expose our students to the practices and experience that are so critical to success after college," said Bamin Khomami, head of the [Department of Chemical and Biomolecular Engineering](#).

For a Fortune 300 company like Tennessee Eastman, being roughly 100 miles away from UT has provided them with one of their most critical resources: people. While funding and mentoring provided by Eastman help UT, having such a highly skilled crop of graduates in their backyard is one of the significant ways that UT returns the favor.

"Having the best engineering school possible benefits the region, not just Eastman," said Etta Clark, Eastman's vice president for global public affairs and policy. "Our relationship is about collaboration and teamwork, and developing a solid foundation for students to succeed in the workforce. When those students secure local jobs, it benefits everyone."

In addition to the lab itself, Eastman also has sponsored a commons area in Dougherty, where students study or relax; three professor-of-practice positions; and the HITES— High School Introduction to Engineering Systems—camp. The company's contributions total more than \$2 million.

Knoxville-Oak Ridge Section Facebook Page



The Knoxville-Oak Ridge Section of AIChE now has a Facebook page - Stop by to check out the latest news and events on our Facebook page at: <https://www.facebook.com/AIChEKnoxOR/>.

Maps and Directions for March Meeting

The best place to park for this event would be in the 11th street garage with a short walk across the pedestrian bridge to the Min Kao Engineering building. Other parking options are lots C18 and C26 to the East of the Min Kao building. There are stairs and sidewalks connecting these lots to campus across second creek. A Map is provided below for your convenience. Note: The aforementioned lots are monitored parking lots before 5:00 pm at which time they are open for the public to utilize.





Student Posters, Papers, and Chem-E-Car Dry Runs

With the upcoming AIChE regional student conference gracing the community of Knoxville and the grounds of the University of Tennessee at the end of March, the Knoxville-Oak Ridge Section of AIChE has an opportunity to provide professional insight into student presentations and posters. The attendees at the March meeting will serve as mock review panels to simulate the judging environment for the upcoming conference.



VOLUNTEER'S CORNER

Engineers making a difference in our community

Date	Event
Anytime	Junior Achievement <ul style="list-style-type: none"> Interested in teaching Math or Science to a Middle/High Schooler? Check out the Junior Achievement site at: www.jaeasttennessee.com.
Anytime	AICHE Young Professionals Committee We sponsor a competition for our collegiate student chapters, the Global Undergraduate Student Video Competition . This competition requires chapters to create a video about a relevant chemical engineering subject that will be shown to high school students to teach them about that topic, and ultimately encourage them to study chemical engineering.
Anytime	AICHE Academy AICHE Academy can deliver chemical engineering educational resources to help Chemical Engineering professionals connect, learn, and solve pressing challenges. Visit www.aiche.org/academy and see what AICHE Academy has to offer. <div style="text-align: center;">  </div>
Anytime	AICHE K-OR section needs help with: <ul style="list-style-type: none"> Social Media Committee – The local section desires to establish a presence on various social media outlets, such as: Facebook™, Twitter™, LinkedIn™, and YouTube™. Young Professionals Committee – The local section desires to establish a Young Professional's Group to increase participation and interactions with young chemical engineers within the East Tennessee region. Monthly Newsletter - Submit an Article, Editor-At-Large AICHE K-OR Webmaster
Anytime	Engineer's Without Borders – http://www.ewb-usa.org
Anytime	<div style="text-align: center;">  </div> <p>Why did you choose to be a TN Achieves mentor? I truly believe the Tennessee Promise is a game changer for our state. Working with students who until now did not believe college was a possibility for them is amazing. This program is changing lives and improving our state. I am proud to be a small part of that effort.</p> <p>If you have not yet registered to mentor with the Class of 2017 and would like to do so please visit https://tnachieves.org/mentors/apply/ to do so today!</p>

Anytime	<p>National Council of Examiners for Engineering and Surveying needs reviewers for PE Chemical Handbook</p> <p>The NCEES (National Council of Examiners for Engineering and Surveying) has requested that practicing engineers assist in reviewing the PE Chemical Handbook for possible errors and omissions. In January 2017, NCEES published a draft of the PE Chemical Handbook to provide reference information for engineers taking the Chemical Principles and Practice of Engineering (PE) Exam. NCEES is the organization that develops and administers the examinations for Professional Engineering licensure. When the professional license exam is converted to a computer-based test in the near future, the handbook will be the only reference available to the examinees and will be loaded online. The handbook may be downloaded by both practicing engineers to use as a reference and by prospective examinees as a study guide.</p> <p>To enroll in the review process and obtain a copy of the draft handbook, you may connect to the following AIChE website: http://www.aiche.org/resources/careers/professional-engineering-licensure/pe-handbook-provide-input. The AIChE website will provide directions for connecting to the NCEES site.</p> <p>If you have any questions, please contact Joe Cramer: josec@aiche.org.</p>
March 24 - 25 2017	<p>Volunteer judges needed for FIRST Robotics</p> <p>TNFIRST (For Inspiration and Recognition of Science and Technology in Tennessee) is seeking volunteers to serve as judges at the TNFIRST Robotics regional competition March 24-25.</p> <p>During the competition, high school student participants build and program industrial-sized robots to play a difficult field game against like-minded competitors. Both technical and non-technical judges are needed since categories judged include business and sportsmanship as well as engineering and other technical fields. Volunteer judges must commit to attending from 7 a.m.-5 p.m. on both March 24 and March 25 at the Thompson-Boling Arena in downtown Knoxville. To volunteer or for more information, contact Patti Jones (PJK) at 241-8073.</p> <p>FIRST is a 501 (c) (3) not-for-profit public charity founded in 1989 to design accessible, innovative programs that motivate young people to pursue education and career opportunities in science, technology, engineering and math, while building self-confidence, knowledge and life skills. TNFIRST's website is here.</p>
March 27-30, 2017	<p>Southern Appalachian Science & Engineering Fair (SASEF) UTK Thompson Boling Arena</p> <p>To register as a judge: http://sasef.com/. Select "Judges" and then "Register Online."</p> <p>We need at least one more judge for the Local Section awards for Chemical Engineering related posters. The judging is the afternoon of Tuesday, 3/28. Please contact Paul Taylor if you can help.</p>
March 31, 2017 – April 1, 2017	<p>AIChE UT Student Chapter is hosting a regional conference 2017 Southern Student Regional Conference March 31 - April 1, 2017</p>

	<p>University of Tennessee, Knoxville</p> <p>Conference Highlights include Regional Chem-E-Car Competition, Regional ChemE Jeopardy Competition and Regional Student Paper and Poster Competitions.</p> <p>Conference Chairs: Mary McBride and Melanie Lindsey (aiche_src17@utk.edu) Advisor: Eric Boder (boder@utk.edu)</p>
April 1, 2017	<p>Southern Regional Chem-E-Car Competition On Site Safety Inspector and Competition Volunteer</p> <p>Time Commitment: 5-8 Hour Commitment</p> <p>Those who fulfill this volunteer commitment will receive 16 points. Login to see all the details about this opportunity on AIChE Engage. The complete list of opportunities can be browsed on the Volunteer Opportunities page.</p> <p>If you have any questions about the opportunity or volunteering, please contact Sarah Ewing, Senior Membership Associates, AIChE at: Sarah Ewing via AIChE [mailto:Mail@ConnectedCommunity.org].</p>
April 3, 2017	<p>Regional Elementary Science Fair</p> <p>Judges are needed for 3rd, 4th, and 5th grade participants from regional private schools.</p> <p>Time: 9:30 AM - 5:00 PM Location: Knoxville Christian Center</p>
May 2017	
June 2017	<p>Volkswagen-Sponsored Camp Introduces Students to UT, Engineering</p> <p>With the Volkswagen-sponsored Engineering VOLunteers for Tenth Graders, or eVOL10, now under way at the University of Tennessee, Knoxville, College of Engineering, students in high school and middle school are getting a chance to take a deeper look into future possibilities in science, technology, engineering and mathematics, or STEM.</p>
July 2017	<p>AIChE K-OR Planning Meeting for the upcoming academic year needs ideas and help planning speakers and arranging meeting locations.</p>
August 2017	
September 2017	
October 2017	
November 2017	
December 2017	
January 2018	
February 2018	<p>Tennessee Science Bowl</p> <p>Check back for information on the 2018 Tennessee Science Bowl. See http://www.orau.gov/sciencebowl/volunteers/index.html for details on the 2017 Science Bowl.</p> 
February 17, 2018	Boy Scouts Merit Badge College

	<p>Roane State Community College - Merit Badge College</p> <ul style="list-style-type: none">• Help teach the chemistry merit badge• Contact Paul Taylor or Mark Swintoniewski if you can help
February 18-24, 2018	<p>Engineer's Week – DiscoverE.org</p> <p>Engineers Week--the only event of its kind--is a time to:</p> <ul style="list-style-type: none">• Celebrate how engineers make a difference in our world• Increase public dialogue about the need for engineers• Bring engineering to life for kids, educators, and parents <p>More than a week-long event, Engineers Week is a year-round commitment to making a difference.</p>



Activities Calendar

Date	Time	Topic	Speaker	Location
Mar 21	6:00 PM	Joint meeting with UT Student Chapter – Unit Operations Lab Tour	Kyle Mack and Mary McBride	UT – Min Kao Engineering Bldg. and Dougherty
Mar 26-30		2017 Spring Meeting and 13th Global Congress on Process Safety		Henry Gonzalez Convention Center, San Antonio, TX
Apr 18	6:00 PM	A Peripatetic Life – The Life of an Engineer	Emory Ford, Emeritus Director of MTI	Rothchild's, Knoxville TN
Apr 20		UT Department of Chemical & Biomolecular Engineering Awards Banquet		TBD
May 16	6:00 PM	Finances	Jim Brogan, Brogan Financial	Rothchild's, Knoxville TN
Oct 29 – Nov 3		2017 AICHe Annual Meeting		Minneapolis Hilton and Convention Center, Minneapolis, MN

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:

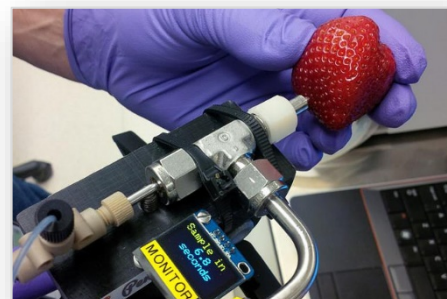
\$80 full-page advertisement

\$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!



(Sampling pesticides on the surface of a strawberry using ORNL's PenDoc – Oak Ridge National Laboratory – Source: DOE Digital photo archive at: <https://www.flickr.com/photos/oakridgelab/32206461974/>)

Officers

Chair:	Jae-Soon Choi	946-1368	choijs@ornl.gov
Chair-Elect:	Kyle Mack	(423)747-7947	kylematthewmack@gmail.com
Secretary:	David DePaoli	574-6817	depaolidw@ornl.gov
Treasurer:	Paul Taylor	574-1965	taylorpa@ornl.gov
Directors:	Mark Swientoniewski	574-1150	Mark.Swientoniewski@cns.doe.gov
Term 2016-2017	Bonnie LaPierre	241-6521	lapierrebl@y12.doe.gov
Term 2016-2017	Sharon Robinson	574-6779	robinsonsm@ornl.gov
Term 2017-2018	Kaara Patton	241-6128	kaara.patton@cns.doe.gov
Term 2017-2018	Lindsey Stinson	241-8190	lindsey.stinsoniii@cns.doe.gov
Membership:	Paul Taylor	574-1965	taylorpa@ornl.gov
Newsletter			
Editor:	Ben Lewis	574-4091	lewisbejr@ornl.gov
E-mail:			aiche-chat@chem.engr.utk.edu
Website			http://www.ornl.gov/aiche

“Build a better mousetrap and the world will beat a path to your door”

Ralph Waldo Emerson
American essayist,
lecturer, and poet
1803-1882

Knoxville - Oak Ridge Section

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

Phone: 574-1065
Fax: 574-6872

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



We're on the Web!

Visit us at:

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

Editor: B. Lewis

About Our Organization – Membership Benefits

AIChE provides its members with a number of valuable benefits, including the following:

Technical Information

Stay up to date on advances in your specialty, follow important news and find the research you need. You could spend hundreds of dollars trying to assemble the information available to you through these annual subscriptions. As an AIChE member, they're yours, just for belonging.

Conferences & Training

Learn from experts while you network with peers and build new alliances. See what's new in core process areas, specific topical areas, emerging technologies and related fields to help with your current projects. Gain perspective on cutting-edge topics, including sustainability, fuel cells, biotechnology and more.

Whether you want to update existing skills, develop new ones, or maintain your professional credentials, the AIChE Academy offers online eLearning courses, public

courses and other resources — including webinars, videos and conference presentations — to help you get the answers and knowledge you need. Browse the AIChE Academy by topic, delivery method, skill level, location, even availability of Continuing Education Units (CEUs) and PDHs, to find the resources you need in the format you want.

Professional Connections

AIChE's exclusive sponsored communities are open to members only. Make the most of your benefits. There's no better way to meet colleagues in your field and stay on the cutting edge of your specialty.

Career Resources

Is your career moving in the right direction? Are you looking for ways to make your current job more rewarding or considering a change? Knowing when to make a career move — and where to go — is a lot easier with free AIChE career resources on your side.

Discounted Insurance Products/Personal Services

Is retaining your current company benefits keeping you from making a career move? Do you want to do more to secure the future for yourself and your family? Protect what matters to you with a comprehensive portfolio of products and services from leading insurance and health service providers that are flexible, portable — and available at substantial savings to AIChE members.

Take advantage of AIChE's family of financial products and services, travel & shopping discounts, project management courses, and Lifescreening. Also, members receive deep discounts — up to 26% — on UPS shipping, and 10% on business services.

(Source: AIChE website
<https://www.aiche.org/community/membership/benefits>)

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

