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THE PIPELINE



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## LETTER FROM THE CHAIR ANDI HUFFMAN EDITS BY RACHEL MCLENDON

We are excited to present the first newsletter a summary for of 2016. It has been a while since the chapter's last newsletter. Under the direction of new editor Alexandra Kleven, we have been hard at work revamping the schedule and content of our newsletter. Thank you to everyone who provided comments and suggestions in the annual survey. Based on the responses, we are transitioning to a quarterly newsletter, which will allow us to have more meaningful content provided to our members. Between these newsletters, we will have increased communication of announcements and program calendar. We are also making an effort to have a better variety of content including event pictures and national AIChE highlights.

This was a great year for our chapter. One notable program was the Boone Dam presentation featuring the project lead and some great Q&A which was followed by a tour of the construction area. A review of this program and two others are included in this newsletter. The YP group has had a fun social event, salsa lessons!. This is one of the most popular activities hosted by our chapter and has been a recurring event over the past few years. As in previous years, the outreach committee attended FunFest with an interactive science experiment, and we invited members and their families to stop by the booth.

January 2017

January marks the beginning of a new year, which means that it is time to refresh our pool of volunteers. We have four committees that always welcome new faces: Programs, Young Professionals, Outreach, and Nominations. If you are interested in getting more involved, feel free to contact any of the committee chairs directly. The contact information for all officers and chairs is listed at the end of the newsletter. Committee membership does not require national AIChE membership.

This year we had two prestigious awards given to members of our chapter. Joe Parker was elected to Fellow, which is the highest tier of membership in AIChE. This appointment marks "significant personal accomplishment" and "service to the profession." The Safety and Health Division of AIChE presented Pete Lodal with the Norton H. Walton/Russell L. Miller Award. This is granted in recognition of "outstanding achievement and contribution to chemical engineering in the areas of loss prevention, safety, and health." The chapter offers their congratulations and thanks to Pete and Joe for dedication to the field of chemical engineering.

To keep our members up to date on announcements such as these awards, we recently created an AIChE East Tennessee Facebook page and a LinkedIn group. Connect with us on these sites for more chapter announcements and national and local engineering news.

## PROGRAMS

## 2016-2017 PROGRAM SCHEDULE

The Chemistry of Chocolate	Brenda Barnicki	January 26
Tour of Bellafina Chocolates		February 4
Corrosion 101	Curtis Huddle	February 16
Overview of Fukushima Daiichi Nuclear Accident	Nick Brown	March 30
Tour of Boone Dam		April 29
Ethical Considerations in Engineering for Communities	Beth O'Connell	May 5
Followership	Pete Lodal Jennifer Mize	September 14
Automotive Coatings	Koustubh Kulkarni	October 26
Coal Gas Expansion	Joseph Bays	December 1
Tales of a Century: Kingsport, TN	Ken Marsh	January 18

#### Watch for more informative programs coming next year!

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### SEPTEMBER PROGRAM SUMMARY Followership

On September 14th Pete Lodal and Jennifer Mize gave a presentation on the need for effective followership in process safety. They noted how leadership training and development is often emphasized, but there can be no leaders without followers. Both leaders and followers play a critical role in effective process safety, and thankfully they share many of the same attributes. Among these are sound judgment, a strong work ethic, competence, honesty, courage, discretion, loyalty, and ego management. Because good followers need many of the same qualities as a good leader, leadership development opportunities may also be used to develop strong followers.

Factors affecting the leaderfollower relationship were also highlighted. Among these were the time needed to develop a relationship and the trust between the two that must be present. Examples of leader-follower relationships were given with the most notable being that of Captain Sullenberger (leader) and his crew (followers) on USAir Flight 1549. Because of effective leadership, the airplane was successfullv landed on the Hudson. Because of effective followership, all passengers onboard the aircraft were

successfully evacuated and rescued. Had either he or the crew failed to do their part, the outcome would likely have been drastically different. This is an example that is helpful to keep in mind for all of us, both leaders and followers alike, as we strive to improve process safety.

Please find a link to Pete's and Jennifer's presentation on our website at <u>http://</u><u>www.aiche.org/community/</u> <u>sites/local-sections/east-</u> <u>tennessee/files/followership-</u> <u>lodal-and-mize-14sep2016</u>.



#### OCTOBER PROGRAM SUMMARY AUTOMOTIVE COATINGS

Koustubh Kulkarni joined the East Tennessee AIChE chapter on Wednesday, October 26. 2016 for an informational event focused on automotive coatings. Koustubh brought to light that while people outside of the coatings industry may feel that the job is as simple as "watching paint dry," the actual coatings industry is much more complicated. Painting a car body takes multiple steps in 16 different categories, and each company can choose its own blend. Further complicating issues, each company can choose to apply coatings in different formulation platforms such as

water-borne (main solvent is water) or solvent-borne (main solvent is not water). Traditionally, companies used all solvent-borne applications to apply the coats.

With new regulations targeting volatile organic compounds (VOCs) and CO<sub>2</sub> emissions, the markets have continued to adjust to meet new requirements. This has become difficult as companies are generally unwilling to sacrifice product appearance or price. Studies show that the appearance of a car matters to a consumer as much or more than the drive system, guiding companies to be extremely reluctant to change quality. Adding to the complication, coatings have many performance metrics that they must exceed to be considered a viable market option.

Meeting the challenges of the market place require engineers and scientists to work cohesively to develop economically feasible cuttingedge coating technology. As companies continue to strive for tougher regulation and customer preference thresholds, we will likely see more innovations in the coatings market.



## REGIONAL ENGINEERS TOUR OF BOONE DAM

A dozen engineers representing the mechanical, civil, electrical and chemical fields recently had an inside look at the Boone Dam project. Our The civil engineering manager, Patrick Kiser, provided the presentation and tour to the American Institute of Chemical Engineers from Eastman Chemical and BAE Systems. In the photo (left), Patrick points out work on the earthen embankment.



# YOUNG PROFESSIONALS COMMITTEE



The Young Professionals Committee hosted their 3rd annual Salsa Dancing event at the Eastman Lodge. Led by instructors found in our very own ranks, forty members participated in the Salsa dancing lessons and enjoyed the evening's festivities. Special thanks to Ruben Del Valle, Nicole Perez, Lauren Morse, Reinaldo Alvarado, and Rachel Reighter for their help in bringing out the dancers in us all!

Be on the lookout for more YPC events!

IF YOU HAVE ANY SUGGESTIONS OF EVENTS FOR THE YOUNG PROFESSIONALS COMMITTEE, OR IF YOU KNOW OF VOLUNTEER OPPORTUNITIES FOR THE YPC, PLEASE CONTACT LAUREN FOOTE AT LAURENFOOTE@EASTMAN.COM.

# OUTREACH COMMITTEE EVENTS

#### OUTREACH COMMITTEE'S OOBLECK BOOTH AT FUNFEST!

It's a solid... it's a liquid... it's Oobleck! Oobleck is a mixture of corn starch and water and is a non-Newtonian fluid. We had a great time this year teaching the community about science with the Outreach Committee's hands-on demonstration! We had small buckets of oobleck that you can run your hands through, a large tank of oobleck that you can run across!





E-WEEK ACTIVITY TEACHES STUDENTS ABOUT PROBLEM SOLVING AND ENGINEERING

This past March, a small team of East Tennessee AIChE members visited Gate City Middle School as part of the 2016 Engineers Week! The small group facilitated an Aqueduct Building Competition and interacted with four different class periods throughout the day. The competition was designed to teach the students about the importance of weighing costs and benefits in a project by rewarding teams for building longer aqueducts and penalizing them for using extra materials.





The students also heard about some real world applications of engineering from our team of volunteers. They learned that the science behind their small aqueducts also applies to gravity -fed water systems that serve developing world communities. Overall, the students really enjoyed the activity and gained a better understanding of the field of engineering!

IF YOU ARE INTERESTED IN HELPING THE OUTREACH COMMITTEE WITH VOLUNTEER WORK, OR IF YOU HAVE AN IDEA FOR AN OUTREACH EVENT, PLEASE CONTACT LAUREN MORSE AT LAURENMORSE@EASTMAN.COM.

AIChE played with Oobleck and taught the community about science!

Thanks to all the volunteers at the FunFest Maker's Faire!

# 2016 LOCAL SECTION OFFICERS, DIRECTORS, AND SUPPORT STAFF

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## Watch for updated officer information for 2017!

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#### Visit us Online!

WEBSITE http://www.aiche.org/ community/sites/localsections/easttennessee

All past presentations are available on our website!

## facebook

AIChE East TN

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