



AMERICAN INSTITUTE OF
CHEMICAL ENGINEERS

CENTRAL CAROLINAS SECTION

March 6, 2020

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General Info:

Greetings and a happy St. Patrick's Day to all our members! Our next meeting is scheduled for Thursday, March 12, 2020 (this Thursday), at the Waldhorn Restaurant, 12101 Lancaster Highway, Pineville, NC, (704) 540-7047. The restaurant is located off S Polk Street/Lancaster Parkway in Pineville, next to the James K Polk House. Access to the restaurant is either down Polk St (traffic) or through Carolina Place Highway adjacent to Carolina Place Mall. Directions are listed on the e-mail version, or contact G. Tyrian for additional directions. Our meeting begins at 6:15 PM, with dinner at 7:15 PM and the speaker beginning at 8:15 PM.

March 12, 2020 Meeting

We are proud to welcome Mr. Ivan Cooper, with Civil & Environmental Consultants, Inc. located in Charlotte.

Mr. Cooper is the Water and Wastewater Practice Lead for Civil & Environmental Consultants. He designed over 100 leachate, industrial, and municipal wastewater treatment plants. He is a PE in 18 states, and is a BCEE with a Wastewater Treatment Specialty. He is chair of SWANA's Leachate Management Committee, and serves on the Water Environment Federation's Industrial Waste Committee. He received the 2017 Roy F. Weston Award – for contributions in solid waste technology and management, the 2019 Distinguished Individual Achievement Award from the Solid Waste Association of North America, and served as the US State Department scholar for solid waste and wastewater in the Middle East in the Palestinian West Bank Territories and in Morocco.

Mr. Cooper is presenting an overview of Per- and polyfluoroalkyl substances (PFAS), which are now getting a great deal of attention these days in drinking water and in wastewater as an emerging contaminant. In North Carolina Gen X is one of the PFAS class of compounds that is a major issue. Mr. Cooper will present an overview of PFAS compounds, sources and current treatment technologies.

As typical for AIChE meetings, we are ordering from the menu with separate checks. If possible, please RSVP to George Tyrian by phone or e-mail to confirm the head count to the restaurant by Thursday, March 12. If not possible, please come anyway!

Other Business:

Thanks to the members who attended Ms. Astoria's presentation on Comi Polaris Cryogenic Condensation to recover organics from vent streams. It is an interesting technology application, particularly for blanketed tanks, among other potential uses.

Thanks to Gary Burgess and to Adriana Scurtu for attending a Joint Engineers' meeting on February 27. Glad AIChE was represented at that meeting!

The section was contacted by the AIChE East TN Local Section regarding their eChemExpo event. [eChemExpo](#) is an event that will be held in Kingsport, TN on April 15-16, 2020. eChemExpo is the #1

multidisciplinary applied innovation event for the process industries in 2020. This is an event that AIChE East TN section AIChE East TN supports and advertises for, as well as provides PDH credits to attendees. This year the East TN Section also plans to host a reception for attending AIChE members and area chemical engineers that are active in our section.

Please consider attending and advertising as a professional and technical development opportunity - [registration is now open](#) and is free for attendees. A [preliminary program schedule](#) has been posted as well.

If you are interested in learning more about the conference and expo, e-mail George Tyrian and I will forward contact information about the event.

Thanks to George Tyrian and to Gary Burgess who volunteered as judges to assist ACS for an ACS special award, Excellence in the Chemical Sciences at the Region 6 Science and Engineering Fair at UNCC Charlotte on Saturday, February 22.

Winners and honorable mention were awarded for Elementary (Grades 3-5); Junior (Grades 6-8) and Senior (Grades 9-12) categories. The winners get a \$25 gift card and certificates. The honorable mentions each gets a certificate – and yes- the goal was to give out lots of those! For those that remember the Joint Engineers Science Contest, the ACS has adopted our old trick of being the first organization to give out a special CASH award. So you get the elementary students receiving their special award and you watch the reaction that science ACTUALLY PAYS!!!! It is a beautiful thing to see!

The award winners are as follows:

Elementary:

Winners:

Jason Alexander,	Bubble Bonanza	Iredell Charter Academy, Troutman
Anjana Rananjan	Pure Water or Not	W.R. Odell Elementary, Concord
Deepika Manikonda	A Greenway to Get Styrofoam Away	Barringer Academy Center, Charlotte

Honorable Mention:

Mia McHugh	Nanosilver, Naughty or Nice	Cornelius Elementary, Cornelius
Joys Mukherjee	Oil Spill, Ocean Ill	Cox Mill Elementary, Concord
James Bostrom	What is the Healthiest Water	W.R. Odell Elementary, Concord
Aadarsh Iakshmanan	Analysis of Antibiotic Residue in Cow Milk	Metrolina Regional Scholars Academy Charlotte

Middle School:

Winners

Claire McClare	Backyard Carbon Sequestration	Metrolina Regional Scholars Academy
Avery Davis	Do You Have the Heart to Taste?	Belmont Middle School

Honorable Mention

Shovali Changela	Electrolytes	Community House Middle School
Srivya Surapuneni	Electrolytes	Community House Middle School
Samagra Bhutturai	Electrodialysis Reversal	J.N Fries Magnet School
Madhavan Krishnan	Electrodialysis Reversal	J.N Fries Magnet School
Alyssa Milton	Juice Balls	Kennedy Middle School
Alexandra Skinner	Juice Balls	Kennedy Middle School
Isabelle O'Donnell	Swim Shampoo vs Regular Shampoo	Brawley Middle School
Dyuthi Rao	Clay, Silver, Copper: Which One is the Topper?	Community House Middle
Alexander Robinette	Do Essential Oils Really Work?	Sacred Heart Catholic School

John Coffey	Whatever Floats Your Boat	Davidson Middle School
High School		
Winners:		
Ada Weaver	Different Anodes Effects on the Biofilm	Brevard High
Marli Cohen	Formation of Local Photosynthetic Microorganisms For use in Earth & Environmental Science	
Aakriti Lakshmanan High	Optimization of Biophotovoltaic Devices	Levine Middle College
Honorable Mention		
Leslie Coffey	How Chromium Affects Your Drinking Water	Forestview High
Emma Davis	How Chromium Affects Your Drinking Water	Forestview High
Christine Mendoza	A Comparison of Natural Substances to Combat Catheter-Associated UTI's without Promoting Antibiotic F Biological Science A	Myers Park High
Soorya Vasani	Testing the Effects of Probiotics on Lactose Intolerance	Audrey Kell High
Clara Cobb	The Effects of Hormonal Birth Control on the pH of the Skin	East Gaston High

Please feel free to forward any meeting suggestions to me at gtirian@cecinc.com. We are still working on a possible May meeting as well as further meetings. Fall meetings are typically in September and November. Technical topics do count toward PDH credits to those professionals out there.

We are also reaching out for our annual scholarship program of a \$750 award.

This newsletter went out both to the regular mailing list as well as to the National members in the area that are not local section members. If you got it twice, I am glad you are supporting the local section! I try to send two newsletters per year out to all AIChE members just to let them know there is still a local section in the area.

I am still scheduling our next meeting for May. If our national members are interested in joining our e-mail list, let me know. Local section dues are \$20 per year. The central area of our section is the Pineville area, hence I tend to book meetings in that area. I will consider alternate locations (Gastonia, University, Huntersville, etc.) based on demand. Please feel free to comment.

Our community website through the National section is: www.aiche.org/centralcarolinas

Our First 3 Page Newsletter!

SEE YOU AT THE MEETING