

CINTACS



Newsletter of the Cincinnati Section of the American Chemical Society

December, 2016
Vol. 54 No. 3

Section Calendar

2016 Meeting Schedule

December 7 Joint Meeting with
NOBCChe, XU

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December Joint Meeting with NOBCCChE

Wednesday, December 7, 2016

Conaton Board Room,
Room 201 Schmidt Hall,
Xavier University

December's joint meeting with NOBCCChE will be held on Wednesday, December 7, at Xavier University. The featured speaker for the evening is Dr. Rafael Ortiz.

Meeting Program

6:00 - 7:00pm

Registration and Social Hour

(Conaton Board Room, Schmidt Hall)

7:00 - 8:00pm

Dinner (Conaton Board Room)

8:00 - 9:00pm

Speaker: Rafael Ortiz, P&G

\$25.00 Members/Guests or \$15.00 for Emeritus, K-12 Teachers, Students, Unemployed, New Members

Menu: Stuffed Chicken Breast with brown rice and mushrooms, Garden Greens Salad with Italian Vinaigrette, seasonal vegetables, rolls, with chocolate and carrot cakes for dessert. Vegetarian entrée available upon request when making reservations.

Register at <http://www.acscincinnati.org/meetings/>

THE CINTACS NEWSLETTER**Vol. 54, No. 3 December 2016**

Editor.....Adam Bange

CINTACS is published eight times a year (September through May) by the Cincinnati Section of the American Chemical Society. The submission deadline will be approximately December 25 for the January 2017 issue. Electronic submission is strongly preferred. All materials should be sent to:

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Section Members,

October was a very busy month for our section. The 2106 Oesper Symposium and Awards Banquet was another great event! Maurice Brookhart was this year's much deserving Oesper Award winner, and Joe Templeton of the University of North Carolina gave a great talk "Careening Through a Career in Catalysis: Maurice Brookhart." Templeton at the end of his talk ended with an unforgettable "TOAST" and has now set a new bar for all future Oesper speakers!

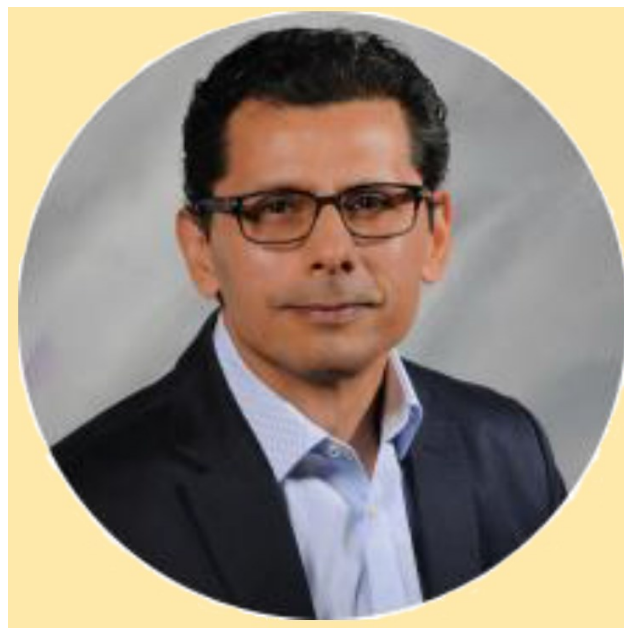
Also, in October was National Chemistry Week. Our section lead by the NCW team, Atiya JordanBrown, Hong Zhang, and Susan Hershberger, put on another great series of Demo at the local libraries. Gloria Story and team also held demos at the Cincinnati Museum Center's Children's Museum. Thank you again to all the volunteers that help pull off this great event – we could not bring Chemistry to so many kids without you.

The 2017 Section Election has begun. Online voting is well underway and will be available until November 14, 2016. Biographies can be found online at ascincinnati.org and you will need your PIN to cast your electronic ballot that was emailed.

I am excited to announce our upcoming Joint Meeting with NOB-CChE at Xavier University on December 7th. We will have the honor of hearing from Dr. Rafael Ortiz about his exciting work with IP at PG and his leadership with SACNAS (Society for Advancing Chicanos/Hispanics and Native Americans in Science).

As I close out the year as being chair, I would like to reflect back on the year and say thank you to all the members. I would especially like to thank the board members that helped me over the year; especially Keith Walters! No one has a harder job than the treasurer and it was very much appreciated! Going forward, I am committed to the success of this section and hope to help others as others have helped me. Happy Holidays and thanks for a great year!

Jackie Thomas
Chair, ACS Cincinnati Local Section
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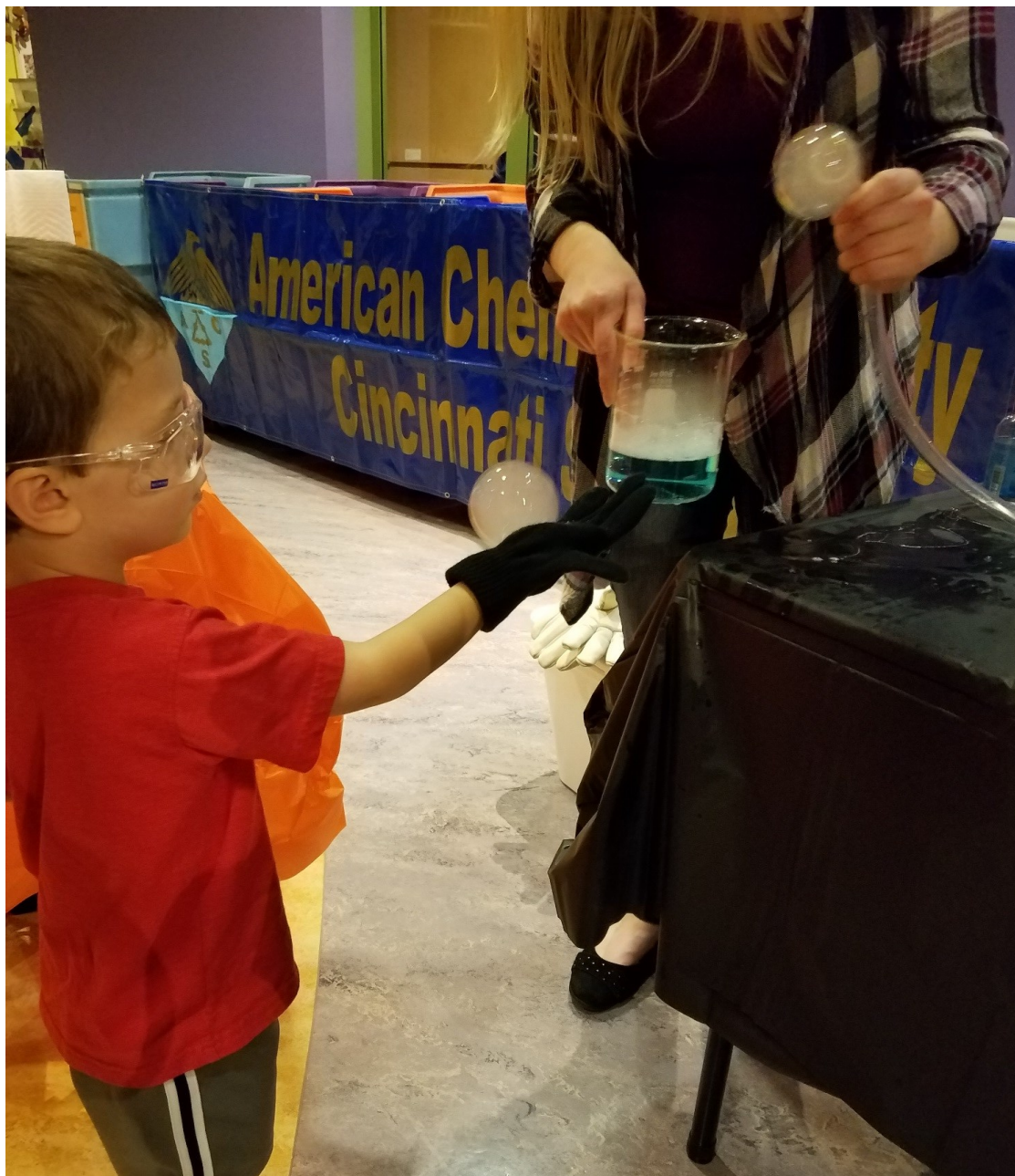
The featured speaker for the evening is Rafael Ortiz, PhD. Rafael received his undergraduate degree in Chemistry from California State University, Los Angeles, and while studying there cultivated his interest in scientific research. His undergraduate research focused on hemoglobin oxygen transport and the synthesis of the anti-cancer drug Methotrexate. His next step was a graduate education at the University of California, Los Angeles (UCLA), where he researched the synthesis and design of novel functional materials made of diamondoid molecules. He received his PhD in Organic Chemistry at UCLA and then moved to Caltech for his post-doctoral research where he was awarded the James Irvine Foundation Fellowship. At Caltech, Rafael focused on the synthesis of organic dyes for use in non-linear optical applications. After completing his studies at Caltech, Rafael began his industrial career at the consumer goods company Procter & Gamble based in Cincinnati, Ohio where he joined the Fabric & Home Care technology division. He used his organic chemistry training to design novel technologies including surfactants, bleaches, enzymes, chelants and polymers to improve products such as Tide Detergents, Downy Fabric Softeners, Dawn Dishwashing Liquids, and Bounce Dryer added sheets. He is a leading expert in product development and innovation in the fast paced consumer goods industry. Upon his advancement to Section Head he led the successful launch of numerous products in the market including Tide Laundry Detergent, Downy Unstoppables with profits exceeding \$1 Billion in sales. He acts as an Intellectual Property Manager and Strategy Advisor for invention and patent portfolio development, IP transactions, and patent analytics projects. In that role, he is responsible for global patent, trademark, copyright, and trade secret matters. He successfully led the innovation and technology protection operations for the Company, where he instituted a unique intellectual property strategy to create sustainable competitive advantages with measurable financial returns. He has been an innovator in the use of patent analytics to identify promising next generation advances for effective R&D and product development. He has been active in intellectual property law and management issues. He has developed basic, intermediate, and advanced patent training programs and has led implementation across Procter & Gamble. Rafael has published over twenty patents and multiple scientific publications in peer reviewed journals. Rafael has been a strong advocate for STEM education throughout his career. During his time at UCLA and Caltech he led outreach programs at local high schools in the Los Angeles area helping and encouraging young minority students to pursue a career in science. After moving to Cincinnati, he established the first PhD recruiting program in California at UCLA and Caltech. He helped establish the first Diversity in Chemistry program at the UCLA Chemistry Department. He leads an outreach program to local universities in southwest Ohio that focuses on professional development, leadership and encouraging students to consider science careers. He also began a formal relationship with the SACNAS organization and helped establish the first SACNAS industry chapter with Procter & Gamble. He is a member of the American Chemical Society's National Minority Affairs Committee and leads the local Cincinnati chapter.



Thank you to all the NCW volunteers! We had about 45 volunteers including Xavier University, UC Chemistry Club, Cincinnati State community college, Miami University. I did not hear from Kentucky or Wilmington this year. We saw about 91 library kids, 142 Springboro kids, and 12 Adults.

Experiments included Wonder of Polydensity bottle, Hand boiler, Gold rod paper, Invisible ink, Fingerprints, Dyeing fiber, Extraction iron from cereal, Chromatography of markers, Thermal paper, pH, test presence of blood-chicken liver with hydrogen peroxide, take apart diaper to see properties the crystals possess, color changing pH, foaming pumpkin, and physical vs chemical change.

CINTACS celebrates NCW at the Duke Energy Children's Museum!



UC Chemcats Hope Guthier, Sarah Baker, and Rachel Mowry brought their bubble maker – a BIG hit with the kiddos. They also brought a black light and fluorescent solutions and dissolved paper before their eyes!!

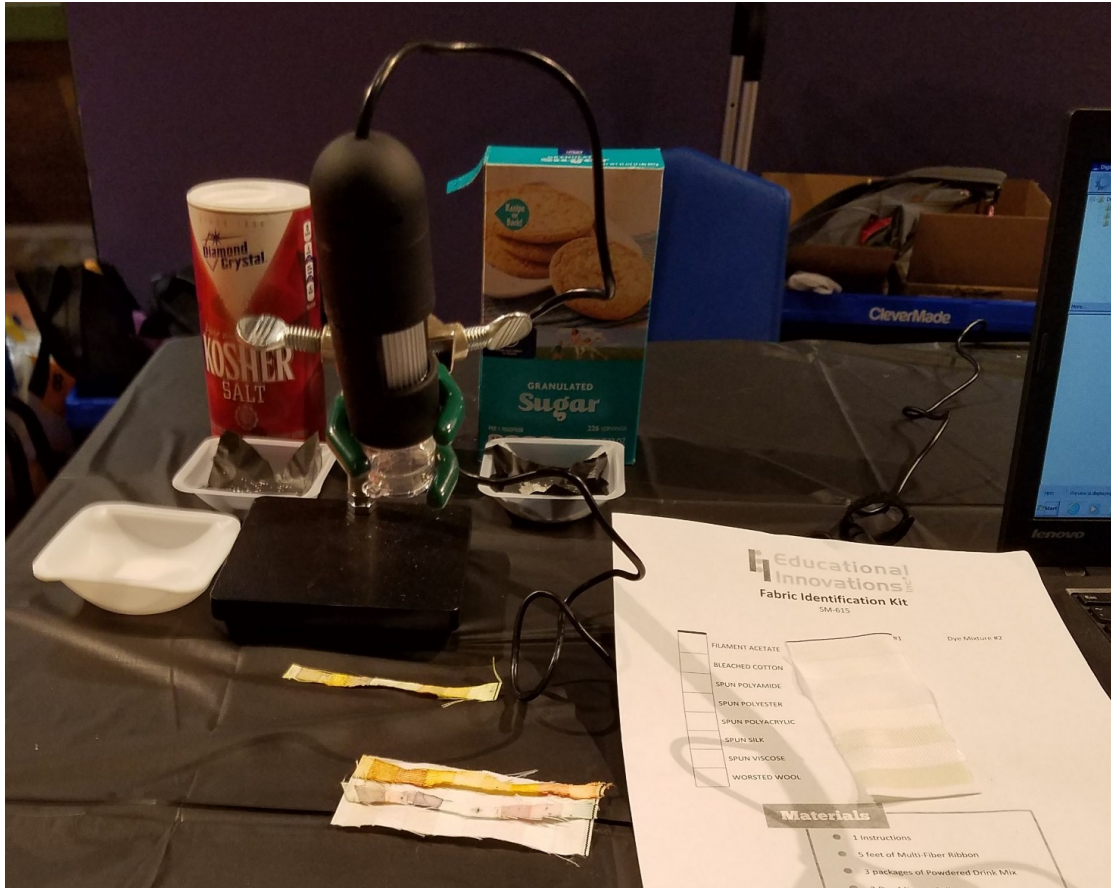


Atyia and Donna laughing it up with our guests – fingerprinting was challenging!

We also had our visitors separate a pile of pennies using first their sense of hearing...dropping them on the floor and separating them by those that rang like a bell and those that didn't. Then, they tested their sense of hearing by weighing each penny...the "ringers" were heavier by about a $\frac{1}{2}$ gram. Finally, each penny was examined for dates. The "ringers" were 1982 or older and the "klunkers" were 1982 or newer. So...1982 was a year of change...from ringers to klunkers. We finally let them know that 1982 was the year pennies changed from mostly copper to mostly zinc – a lighter metal.

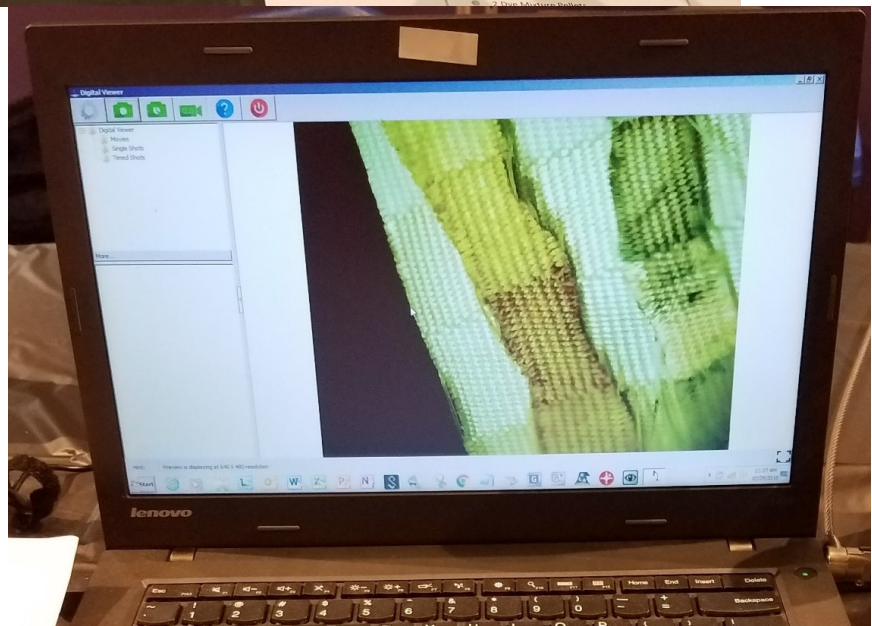


Using ammonia to find out which one was real fruit juice (Kool-aide vs. CranGrape)!



We also had a small digital microscope to see dyed fibers up close to see how the dyes differentiated the different fabric types.

We compared the shapes of table sugar (cubic) and kosher salt (irregular flakes) too.





CINTACS **Younger Chemists Committee (YCC)** and **(WCC) Women Chemists Committee**, along with University of Cincinnati's *Consortium for Cultural Diversity in Chemistry (CCDC)*, assembled a group of over 20 graduate and undergraduate students for the ACS Program-in-a-Box (ACSPIB) webinar on October 11th. The webinar topic, *Chemists Code to Success*, was especially pertinent to students in light of professional development. During the webinar, students were able to engage in activities, submit questions, and see their comments during the broadcast on the topics of: Professional Etiquette, Handling Failure, and Time Management.

ACSPIB webinars are an excellent opportunity to enjoy an interactive and entertaining, yet laid-back ACS sponsored event, that allows many younger chemists to engage in relevant and interesting topics with chemists from across the globe. Although the participants are all in the same department, the ACSPIB activities allowed for students to get to know one another and build upon their professional networks.

Students' feedback about the ACSPIB webinar was very positive. Attendees were enthusiastic about the topics, and actively engaged in exercises and activities throughout the event. In addition to having a great time at this ACS event, our group also received a live shout out during the broadcast for the number of attendees we had! The majority of students showed great interest in coming to future events sponsored by CINTACS YCC and WCC, especially those that promote diversity and inclusion.



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