# NATIONAL CHEMISTRY WEEK 2012 – Thank You to all the Volunteers!!! We had another Fantastic Year!!



This year, we celebrate 25 years of National Chemistry with the theme of "Nanotechnology – The Smallest BIG Idea in Science".



Nanotechnology is all round us and has applications to the environment, energy, materials, and health. Whether it's the nanoscience used in environmental cleanup, to develop more efficient lighting, to make stronger, lighter, and durable materials, or to make nanomedicine that help us get well, chemistry and nanoscience improves our daily lives.

Locally, chemical

demonstrators were very creative and came up with some amazing demonstrations around nanotechnology and more traditional demos. Some demonstrations included the magic of ferrofluid, temperature effects on memory shape wire, magic sand, instant snow, playing with Bucky balls, acid-base chemistry, barfing pumpkins, Mentos<sup>®</sup> Rockets, making slime, surface tension, and experiments with dry ice.





National Chemistry Week is an annual community outreach program hosted by all 189 local sections of American Chemical Society. It is designed to show how chemistry supports everyone and contributes to our quality of life and the nation's economy. This year, chemists and engineers from all over the community, were brought together to help celebrate by leading chemistry demonstrations all over the Greater Cincinnati Area.

This celebration and activities would not be possible without the support of our volunteers and sponsors. This year, volunteers and sponsorship came from local industries, companies, and universities. Special thanks to Cognis, Givaudan, Procter & Gamble, Wright Brothers, Inc., Washing Systems, Summit Country Day School, Wilmington College, University of Cincinnati, and Xavier University. Monetary donations contributed by sponsors go towards paying for inserts advertisements and extra demo supplies for volunteers. Thank you to Jamie Heimkreiter, who coordinated our local section and ACS national poem contest. Gloria Story coordinated activities at the Cincinnati Museum Center, and Jackie Thomas coordinated activities at the local libraries.



#### **Chemistry Demo Practice**

Susan Hershberger, Ed von Bargen, and Ed Escudero coordinated demos and ideas for the Chemistry Demonstration preparation workshop this year. It was held on Oct 5<sup>th</sup> at the GYM, a P&G facility (a really fun and creative place to do demos!). A big THANK YOU to Susan and Ed V for leading the practice this year! Susan gave great clever ideas for demos and Ed V gave a great session on what to do when things

don't go your way during a demo! We know that for some of our members it is a long commute to our demo location, and for that reason, we are trying to move it around the Cincinnati area - please let us know if you are willing to host future chemistry demo practices for future NCWs.

VOLUNTEERS this year included Ed von Bargen, Carrie Furnish, Michele Mangels, Brandon and Terri Dunphy, Linda Winslow, Lynn Hogue, Ruth Bailey, Scott Tremain, Eric Johnson, Kinshasha "Kat" Azariah, Mike Story, Tim Schafermeyer, Sue Buescher, Ed Escudero, Gloria Story, Supaporn Kradtap, Shui Li, Kristi Fliter, George Rizzi, Cheryl Hunn, Susan





Hershberger, Matt DeMatteo, Jacob Bertand, Lola KellySmalls, Olubolaji Akinterinwa, Eloise Richardson, Will Huber, Fleumingue Jeanmary, Helen Kemp, Jonas Locke, Jamie Titus, Barbara Alexander, Steve Heinzman, Donna Wiedemann, Bill Crawford, David Wilson, Dorothy Jones, Haiben Chen, Hong Zhang, Jackie Thomas, Xavier students coordinated by Mary Stroud and Barbara Hopkins, Miami Chemical Society students coordinated by Tessa Woodruff, Wilmington College students coordinated by Alfred R. Conklin, Jr, the NKU ACS-SA coordinated by Patrick Hare, University of Cincinnati students coordinated by Anna Daigle, the Boy Scouts of Troop 956

(Hamilton, OH), and all that helped out with NCW this year!

A special thanks to Tessa and Casey of the Miami Chemical Society who performed a LIVE ON-AIR chemistry demonstration this year! Thank you to Susan Hershberger and Ed von Bargen who helped out in the preparation and set up for this event. This segment was featured on FOX 19 News! Thank you FOX 19 News for this opportunity. The segment was aired on October 23<sup>th</sup> and highlighted the joint efforts of the Cincinnati ACS section and the libraries in the local community celebration of NCW. Thank you to Phyllis Hegner, Public Library of



Cincinnati & Hamilton County, for coordinating this segment for us! If you missed the segment and want to see our two volunteers in action visit: <a href="http://www.fox19.com/category/240225/video-landing-page?clipId=7872130&autostart=true">http://www.fox19.com/category/240225/video-landing-page?clipId=7872130&autostart=true</a> to see the video.

## Highlights of Chemistry Demonstrations at Local Venues for NCW

We had chemistry demonstrations at 23 Hamilton county libraries, 6 libraries outside Hamilton County, the NKU SAAC group covered 6 Northern Kentucky libraries, Wilmington College coordinated events on campus, and another great on-air chemistry demo on FOX19 News! We wish to especially thank Diane Smiley for coordinating the Hamilton County Libraries and for taking pictures at the various demos. Overall, we were able to reach out to well over 500 kids in the local community at all the libraries and schools!



### Highlights of NCW Demonstrations at the Cincinnati Museum Center (CMC)

Team CMC had a special surprise this year at the museum...our Friday demonstrations were part of the CMC Batfest celebration. We hosted over 3,550 guests that day! Saturday we only had about 2,000 visitors...gee. We also, for the first time ever, had the wonderful problem of way too many Saturday volunteers...unheard of!! We hope to have the same problem next year, but we'll try to make a more organized schedule to improve the elbow room. 

We also participated in the Pennies for Clean Water program, collecting coins to help purchase P&G™ Purifier of Water packets. Over the two days at the museum, we collected \$20 in coins that will be converted into almost 500 gallons of clean water in Third World countries. We celebrated nanochemistry in our usual style - shrinking balloons, crushing flowers, and beating nails with banana hammers thanks to our partners at Wright Brothers, Inc. Their donation each year of a large dewar of liquid nitrogen is truly the hit of our demos – we'd be lost without it! Capturing CO<sub>2</sub> and fog in soap bubbles is also our famous crowd pleaser and draws them in by the dozens...thanks to P&G Miami Valley Innovation Center for the coolers of dry ice! Our Wilmington College partners led by Al Conklin pushed the dry ice demo up a notch by setting up their larger-than-life "drippy faucet" right in front of the Children's museum. The perfect place for making chemical discovery FUN! Each child also made a lovely transfer picture with shaving cream and food coloring. You could tell which volunteers worked on that demo...very colorful hands! Barfing pumpkins displayed the power of a catalyst in the famous H<sub>2</sub>O<sub>2</sub> decomposition – foam happily provided by little help from Joy dishwashing liquid. Ed von Bargen added his famous silver bottle demo to the mix this year...performing the Tollen's test in a Coke bottle that had all our visitors begging to take one home. Demos on sugar with glucose test strips and weighing a mole of sugar got a lot of visitors thinking about how much hidden sugar we eat everyday. Little ones loved plopping water droplets from plastic pipets onto beds of hydrophobic "magic" sand and regular sand. Michele Mangels brought back her chromatography columns...demonstrating the cleaning power of rocks vs. pebbles vs. sand vs. activated charcoal...nanochemistry in a column! This year, we wanted our faithful Boy Scout

volunteers to have a few demos of their own. Once we taught them the ins and outs of memory wire...they could share the concept like real pros. It is so special watching kids teach kids! In addition, they brought a scout skill demo that fit our theme to a T. They demonstrated the skill of rope making...combining 3 strands of bailing twine into one very strong rope. After it was made, they cut it up into pieces, finished the ends, and handed them out to the children...showing them how to tie a square knot...the "friendship" knot. Of course, they still had to help us set up, clean up, and load up the vehicles too. © Don't worry...they get treated to a pizza dinner on the way home! Can't wait until next year!

### Highlights of Wilmington College - High School Chemistry Night

On October 24<sup>th</sup> 2012, 4 area high schools attended (Blanchester HS, East Clinton HS, Fayetteville HS, and Greeneview HS) Wilmington College High School Chemistry Night. There were 26 high school students, 16 Wilmington College students, 15 teachers/faculty/staff/guests in attendance. The undergraduate students of Wilmington College coordinated, set up, and led the area high school students through various chemistry demonstrations. After the show, the students were



divided up into groups and were taught the chemistry concept and how to perform the demonstrations. It was a great event that showcased the very bright up and coming talent in the chemistry community!



Thank you to those who worked on NCW this year! We know our volunteers could not be out there in the local community without the donated liquid nitrogen, dry ice, and miscellaneous supplies, along with supportive businesses, bosses, managers, co-workers, families, and friends. Thank you for the great community effort, and as always, we will do it again next year! If you were involved and your name was unintentionally omitted, let us know; we

do thank you and we will mention your name in our next issue. If you would like to join the fun next year, please let us know and watch for announcements next summer on our website: http://www.acscincinnati.org/

Reported by

Jackie Thomas and Gloria Story