

CINTACS



Newsletter of the Cincinnati Section of the American Chemical Society

April, 2013
Vol. 50 No. 7

Section Calendar

- Apr 7-11 National ACS meeting,
New Orleans
- Apr 20 Chemists Celebrate Earth Day
- Apr 24 Dr. Ariel Fenster, & Teacher /
Student Awards @NKU
- May 10 Party Night

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APRIL MEETING

Science Award Night

Wednesday, April 24, 2013

Northern Kentucky University Student Center
(SU107A)

Program:

5:30 – 6:30 pm: Registration and Social Hour

5:30 – 6:15 Discussion Group: “Plumbing the Depths of Green Chemistry” John Glaser, US EPA

6:30 – 7:30 pm: Dinner. (\$20.00 or \$10.00 for students, emeritus, unemployed). Buffet Menu – Spring Salad, Italian Chicken Breast, Vegetarian Lasagna, Roasted red potatoes, Green Beans, rolls, coffee, tea. Double chocolate cake and Carrot cake for dessert.

7:30 – 8:30 pm: Award Presentations
Chemistry Olympiad and Oesper – John Williams
Science Expo

NCW Contest – Jamie Heimkreiter
Cinci ACS Fellowes – Beth Reno
Cinci ACS 50/60 Yr Members – Beth Reno
Teacher of the Year – Phil Christenson

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THE CINTACS NEWSLETTER**Vol. 50, No. 7 April, 2013**

Editor.....Adam Bange
 Advertising.....Dan Esterline

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 March 25 for the April 2013 issue. Electronic submission is strongly preferred. All materials should be sent to:

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From The Chair:

Happy Spring, Cincinnati ACS!

In our efforts to further the enterprise of chemistry for the benefit of Earth and its people, this month we highlight chemistry achievements of local members, students, teachers (and parents) with our Science Award night and our Earth Day celebrations. It is wonderful to be able to support and encourage the next generation of scientists! Thank you to the Cincinnati Section ACS members who make all these programs and recognitions possible: Phil Christenson, Chair of the Awards Committee, Awards Committee members, and those who nominated area teachers. Thanks to George Rizzi, John Janusz for judging and selecting our ACS Science Fair winners at the Science and Engineering Expo. Thank you to Jamie Heimkreiter for coordinating the NCW poster contest. A special thank-you to John Williams, Miami U., for his many years coordinating and administering the high school Oesper and Olympiad Chemistry Exams. Cincinnati has been sponsoring the Olympiad tests for over 27 years. Thanks to Hairong Guan for leading the Project SEED efforts, and everyone else who is enabling our Sections' outreach to local youth. I also want to thank Stefan Paula for organizing this meeting at NKU, and all of his time and patience coordinating this special night for us.

A special congratulations to John Severns, Lakota East, and Deena Carey, Summit Country Day, both selected as High School Chemistry "Teacher of the Year". They are so amazing that the Awards committee couldn't decide on just one, and chose to honor both of them this year!

In line with our Earth Day focus, John Glaser will be leading a discussion group before our meeting, entitled "Plumbing the Depths of Green Chemistry". You can read more about the US EPA focus on sustainable chemistry at their website: <http://www.epa.gov/greenchemistry/>.

Chemists Celebrate Earth Day is gearing up for a great time at Sawyer Point on Saturday, April 20th from 9am to 5pm. This is the 10th anniversary for CCED, and the theme is "Our Earth - Handle with Care". Donna Wiedemann is leading our outreach for this event and organizing volunteers! Please let Donna know if you would like to participate (wiedemann.dj@pg.com), and check out the CCED facebook page at <https://www.facebook.com/#!/ChemistsCelebrateEarthDay?fref=ts>.

The ACS has instituted a new award program this year to honor ACS volunteers for community outreach. The Committee of Community Activities wanted to elevate the visibility of the myriad of outreach efforts that are made by local members beyond the local sections' recognition program. For our inaugural award, Gloria Story has been selected as someone who embodies the extraordinary outreach service that this award was meant to honor. Gloria enjoys all the many things she does (and "immeasurable" is a good word here), and that comes through whether she is working a science fair, engaged in a discussion group, or brainstorming new chemistry demos. Check out Gloria representing Cinci on the ACS website: http://portal.acs.org/portal/acs/corg/content?nfpb=true&pageLabel=PP_ARTICLEMAIN&node_id=613&content_id=CNBP_032502&use_sec=true&sec_url_var=region1&uuid=c55a4c5b-1210-

(Continued on page 4)

Directions to NKU:

The meeting will be held at the Student Union (SU107A), which is on Kenton Drive.

The Discussion group will be held at the Student Union (SU109).

From downtown Cincinnati:

- Go east on U.S. Highway 50 (Columbia Parkway) and take Exit 1J, I-471 South, Newport, Kentucky.

Go south on I-471 to the traffic light at the intersection of I-471 and U.S. Highway 27. Continue straight and turn right at the next traffic light onto Nunn Drive.

Turn right at the roundabout (University Drive) and then left at the traffic light (Kenton Drive).

Park in the **Kenton Drive Parking Garage**.

From the East on I-275 (use these directions if coming from the Greater Cincinnati / Northern Kentucky Airport):

- Take Exit 76, "Three Mile Road/Northern Kentucky University."
- Turn right.
- Turn right at the traffic light (Kenton Drive).

Park in the **Kenton Drive Parking Garage**.

From the West on I-275:

- Take Exit 74A, toward Alexandria, leading to I-471 south.
- Go to the traffic light at the intersection of I-471 and U.S. Highway 27. Continue straight and turn right at the next traffic light onto Nunn Drive.

Turn right at the roundabout (University Drive) and then left at the traffic light (Kenton Drive).

Park in the **Kenton Drive Parking Garage**.

Parking:

The ACS will cover the cost of parking for this meeting. Guests please park in The Kenton Drive Parking Garage and NOT in the surface lots to avoid ticketing. (We cannot reimburse you for parking tickets). The Kenton Drive Parking Garage is across the street from the Student Union, where the meeting will take place. The parking fee of \$3.00 is waived if you bring your ticket for validation to the registration desk. A campus map showing the Kenton Drive Garage and the Student Union can be found at:

<http://www.nku.edu/campusmaps.html>

[4dac-b68c-60ae2c105266](#)

Our Cincinnati section has many dedicated volunteers who are passionate about sharing the fun of chemistry with our community that it is my opinion we will be able to submit individuals for this recognition for many years to come! And, speaking of dedication – look inside for our list of members celebrating their 50 year or 60 year anniversary as a member of the ACS!!

Rick Mullins and the Nominating Committee have provided us with an excellent slate of candidates for our officer elections. We will again be conducting voting via an electronic voting program. Members who wish a paper ballot will be provided one on request. Election information will be sent separately on a postcard to all members, to ensure we are engaging all members, and the postcard will have instructions for secure voting online. If you have any questions or issues, you can send a message to info@acsvoting.com. Election results will be announced at our May 2013 meeting.

For anyone interested, Dr. Werner provided a published paper containing much of the information he shared at our March meeting. The title is “Performance-Enhancing Drugs in Sports: How Chemists Catch Users”, *Journal of Chemical Education*, Vol. 88 No. 1 January 2011. Please let me know if you would like a copy.

Beth

Local Section Outreach Volunteer of the Year – 2013 Gloria Story ACS Honors our Outreach Volunteers of the Year



In an effort to recognize the immeasurable outreach efforts made by local section volunteers, the Committee of Community Activities (CCA) has established a new recognition program entitled **Local Section Outreach Volunteers of the Year**. This program intends to recognize individuals who have demonstrated extraordinary outreach volunteer service within their local section. An

announcement of all of the awardees will be made in C&E News, as well as on the ACS Network in the [Volunteer Support and Engagement Network Group](#). The Cincinnati Section Outreach Volunteer of the Year is Gloria Story. Congratulations, Gloria!! Thank-you for your passion and dedication to engaging others in the application of chemistry in the world around us!

Gloria is a perennial motivational force in our local section outreach activities - her unflagging volunteerism has impacted many programs, including NCW, educational grants, membership drives, Bring Your Child to Work chemistry demos, and synergizing efforts with other scientific organizations. She is active out front with the public, and behind the scenes with logistics. She models a “can do” attitude and seeks to promote chemistry and science wherever she can. Our section honored Gloria with our Outstanding Service Award in the past, and she is the first person we wish to honor with the Volunteer of the Year inaugural award.

American Chemical Society Recognizes Milestone Members

Congratulations are in order for the following members of our section who have reached 50 years or 60 years of membership and service to the American Chemical Society. These longstanding members will be briefly recognized at the April meeting at Northern Kentucky University. They are as follows:

50 year members

Dr. C. William Blewett
Dr. James A. Cox
Mr. Robert Crawford
Dr. Richard Doyle
Mr. William Grawe
Dr. David Kleinschmidt
Dr. Paul J. Ogren
Mr. Nicholas Reuter
Mr. Charles Schneider

60 year members

Mr. Charles Feldman
Mr. Thomas R. Hauser
Mr. Paul J. Kemper
Dr. Ted Logan
Mr. Robert V. Lucke
Mr. Melvin F. Maringer
Dr. Victor G. Soukup

Congratulations once again to these fellow members for their dedication and commitment to the ACS, and its mission to improve lives through the transforming power of chemistry!

2013 Section Election Information:

Candidate for First Vice-Chair & Chair-Elect

Kevin Ashley

Kevin Ashley is a senior research chemist with the National Institute for Occupational Safety and Health (NIOSH) of the Centers for Disease Control and Prevention (CDC) and serves as Managing Editor of the *NIOSH Manual of Analytical Methods*. Ashley received a B.S. in Biology at the University of Arizona (1980), M.S. in Chemistry at Northern Arizona University (1984), and Ph.D. in Physical-Analytical Chemistry at the University of Utah (1987). After earning his doctorate, Ashley accepted a chemistry assistant professorship at San Jose State University in California and was promoted to associate professor before moving to Cincinnati with his family in 1991. Ashley has been an ACS member since 1981 and previously served as CINTACS editor (2007-2011) and Second Vice Chair (2012-2103) for the Cincinnati Section. He is a long-time member of ASTM International and chairs ASTM Subcommittee D22.04 on Workplace Air Quality. Ashley has authored/co-authored more than 115 peer-reviewed publications, over two dozen international voluntary consensus standards, and edited two books (monographs). Of his three patents, two have been licensed and are currently commercialized. Ashley has received numerous awards including an Outstanding Service Award from the ACS Cincinnati Section, the ASTM D22 Moyer Thomas Award for Outstanding Contributions to Air Pollution Prevention, the NIOSH Alice Hamilton Award for Excellence in Occupational Health, the ASTM Award of Merit, Japan Industrial Safety & Health Association Foreign Researcher Award, and Federal Excellence in Technology Transfer Award. He is fluent in Spanish and has presented research and collaborated in Europe, Latin America and Japan. Ashley enjoys the outdoors and loves to spend time with his bride of 25 years and two daughters.

Statement: I am extremely honored to be nominated for the duty of First Vice-Chair / Chair-Elect. If elected, I shall strive to adequately fill the shoes of predecessors and will endeavor to sustain the quality of the section's outstanding monthly meetings. I will continue to support our members' terrific public outreach and educational efforts, which enhance public awareness of the importance of chemistry in our lives. Beyond public outreach, I intend to redouble efforts to involve younger and early-career chemists and chemical engineers in the section's activities. In this challenging economic era it is especially important to highlight the energy and contributions of budding and early-career scientists. As government participation in the section's activities has mostly been moribund, I hope to boost the involvement of governmental agencies (e.g., EPA, FDA, CDC). I will always be open to ideas and input from others, whether solicited or not.

F. Mark Laskovics

F. Mark Laskovics received his B.A. in Chemistry in 1971 from Youngstown State University and his Ph.D. in Organic Chemistry from the University of South Carolina in 1977. After completing a Faculty Internship and NIH Postdoctoral Fellowship at the University of Utah, he joined the Dow Chemical Company as a process chemist in the Pharmaceutical Division in 1979. As a process chemist, he moved to Societe Chimique Grevis in Limay, France in 1987 and to the chemical development group at Marion Merrell Dow, Cincinnati, in 1989. He became manager of Chemical Development in 1995 after the merger with Hoechst and Roussel Uclaf, then Director of Chemical Development in 1999 upon the formation of Aventis. In 2001, he started Girindus America in the US and served as President and COO until January 2013 at which time the business was sold to Nitto Denko AVECIA. He also holds an MBA from Xavier University. He is a 40-year member of the ACS and has been a member of the Cincinnati Section since 1989. Within the Cincinnati Section, he led National Chemistry Week activities for two years and served as auditor for three years.

Statement: I am honored to have been nominated to the position of First Vice Chair/Chair-Elect of our section. I have had the opportunity to participate in the Section for an extended period and see first-hand how it has changed over these many years. This change has mirrored mainly both the evolution in the industrial sector and the extensive social-networking of the general population. Our Section has many strengths: a core of dedicated leadership, excellent programs, the foundation of a strong section, interesting meeting topics, and a parent organization offering outstanding developmental programs. However, to secure our future, we need to improve our ability to get the younger chemists/chemical engineers/biologists/medical technologists/material scientists involved. I would solicit, support, encourage and build upon those approaches that expand the membership and deliver the unique "ACS" opportunity that scientists can only find within the Section, at our monthly meetings and our annual events. To achieve this I would work to involve local industry more in our programs. I believe the key to moving scientists from an electronic screen to a Section event lies in career development and job opportunity; I would work to enhance these aspects of what the Section has to offer our scientific community.

Candidates for Second Vice-Chair

James Mack

James Mack is an Associate Professor of Chemistry. After completing his Bachelor's degree at Middlebury College in 1995 he went to graduate school at the University of New Hampshire where he conducted his doctoral research under the supervision of Glen P. Miller working in the area of fullerenes. After earning his doctoral degree in 2000, he was a postdoctoral fellow with Lawrence T. Scott developing a bench top synthesis of fullerenes and nanotubes. Since joining the faculty at the University of Cincinnati in 2003, Professor Mack has been interested in the development of environmentally benign organic reactions and the synthesis of novel organic materials.

Gloria Story

Gloria Story is a Senior Scientist with the Global Analytical Organization of the Procter & Gamble Company with close to 29 years of service. She is currently the membership and Education Grants coordinator for the section. Story received her A.S. in Science Technology from the University of Cincinnati - Blue Ash (1981). She has been an ACS member since 1994 and previously served as a section auditor, 2nd Vice-Chair, and NCW coordinator. She also serves on the membership committee for the Society for Applied Spectroscopy. Story has authored 28 research publications (16 peer-reviewed). She has received numerous awards including Research Associate of the Year and Outstanding Service Awards from the ACS Cincinnati Section, the Global Analytical Community of Practice Recognition and Pete Rodriguez Analytical Excellence Awards from the Procter & Gamble Company, and the America Service to Youth Award from the Dan Beard Council of the Boy Scouts of America. Story is an alto in her church choir and a scout troop secretary. In her spare time she likes to teach infrared spectroscopy skills, play with chemistry demos, travel, watch a little too much TV, and nap whenever possible.

Candidates for Secretary

Jackie Thomas

Jacqueline Besinaiz Thomas, is currently a Senior Scientist at Procter & Gamble and located in Cincinnati OH. She is originally from Corpus Christi, TX, is married to Zach Thomas, and has a son Logan Thomas. In 2003, she received a BS in Chemistry from Texas A&M University -Kingsville. As an undergraduate, she was an ACS scholar (2001-2003), and conducted multiple research efforts in the areas of green chemistry, polymer chemistry, and computational chemistry that were funded through the Ronald E. McNair Scholars program, and NSF-REU Summer Internship program at TAMU. In 2008, she earned a PhD in Organic Chemistry from Texas A&M University (College Station, TX), specializing in physical organic chemistry and her dissertation focus was on mechanistic investigations into the origin of selectivity in organic reactions. As a graduate student, she was awarded Pathways to Doctorate grant, NSF-GK12 Fellowships, and was the chair of the Graduate Students Association of Chemistry (2007-2008). In 2008, she joined P&G, and has been active in recruiting and is currently the Chair of the 2013 FIRST PhD recruiting conference. She also is passionate about promoting STEM in the local community and was the National Chemistry Week coordinator for the ACS-Cincinnati Section (2010-2012). Over the years she has received many awards, recognitions, and has multiple publications and patents.

David Tierney

Dave Tierney received his B. S. in Chemistry (ACS) from Saginaw Valley State University (MI) in 1989 and his Ph. D. in Physical Chemistry from the University of Michigan in 1996. After an NIH post-doctoral fellowship at Northwestern University, Dave joined the faculty at the University of New Mexico in 2001, where he stayed until moving to Miami University in 2009. He is currently an Associate Professor at Miami, teaching both physical and inorganic chemistry. His research spans many areas, using small molecule synthesis as a means to unraveling spectroscopic problems involving paramagnetic metalloproteins. Dave was faculty advisor to the student chapter of the ACS at UNM from 2006-2009, and he has been faculty advisor to the Miami student chapter since 2010. He has served the ACS at the national level as a peer reviewer for student chapter annual reports for the past two years.

Candidates for Treasurer

Keith Walters

Keith Walters is an associate professor in the Department of Chemistry at Northern Kentucky University. He has been at NKU since 2002 following receiving a B.S. degree from Furman University, a Ph.D. from the University of Florida and a post-doctoral position at Northwestern University. He maintains an active externally funded organometallic photochemistry research group, having mentored more than 50 students during his NKU career. He currently serves as Chair of the Chemistry Department, and has also recently been named to the board of editors for the E-Journal of Chemistry. He has been active in ACS since 1994 when he joined as a student affiliate, and served as one of the faculty advisors for the NKU ACS student affiliate group from 2003-2009. Keith has served the Cincinnati Section as the Co-chair for National Chemistry Week from 2007-2009.

Candidates for Auditor

Vanessa Frost

Vanessa Frost Barnes earned an A.S. in Business and Culinary Arts from Cincinnati State's Midwestern Culinary Institute. After running a personal chef and catering business, her interest in flavor chemistry led her to pursue a B.S. in Chemical Science from Xavier University. Her undergraduate research in organic chemistry initiated a passion within her for chemistry in all its' forms. She now works for Markes International, an OEM of Thermal Desorption instrumentation, in the capacity of applications specialist and head of the US TD consumables market. Her combined knowledge of business and chemistry make her particularly well suited to the position of Auditor. She has chaired the ACS Cincinnati Younger Chemists Committee for the past two years and hopes to be able to further serve her local chapter in this capacity as well.

Scott Tremain

Scott Tremain received his B.A. in Chemistry (ACS) in 1996 from Augustana College (South Dakota) and his Ph.D. in Inorganic Chemistry (Bioinorganic) from Iowa State University in 2002. After a year as a Visiting Assistant Professor at Indiana University-Purdue University at Fort Wayne (IPFW), he joined the faculty in the Department of Chemistry at Eastern Illinois University where he was also a faculty advisor for the ACS student chapter for six years. Scott is currently an Assistant Professor in the Department of Chemistry at the University of Cincinnati Blue Ash College teaching GOB chemistry and survey of biochemistry. His research interests in chemical education involve the assessment of critical thinking skills using student group presentations and electronic data collection in the biochemistry laboratory. He currently organizes a workshop "Chemistry and Your Teeth" for UC Smiles where elementary students come to UC Blue Ash to receive preventative dental care and experience the campus. Since 2006, he has served the ACS at the national level as a peer reviewer for ACS student chapter activity reports and ACS regional meeting undergraduate programming grant proposals. In the last year, he facilitated workshops in the ACS Career Pathways Series for the Department of Career Development and Management (DCMD) at the ACS and at the ACS Postdoc to Faculty (P2F) Workshop. After becoming active in the Cincinnati Local Section in early 2011, he has participated annually in community outreach activities for the International Year of Chemistry, National Chemistry Week and Earth Day.

Candidate for Trustee

Beth Reno

Elizabeth (Beth) Reno is a Senior Scientist at Procter & Gamble, working in the One Health Sector. Currently, Beth is leading Product Research efforts for upstream toothbrush and oral devices at P&G's Mason Business Center. Beth holds a B.S. in Chemistry from Wright State University, and joined P&G's Health Care Division in 1991, where most of her work was focused on developing innovative technologies that provided Cleaning/Whitening benefits for Oral Care applications. From 2000-2006, she served as an Oral Care liaison to Rhodia and BASF in developing novel compounds for delivery of active agents to teeth/hard tissue, and is a co-inventor on eight patents in the area of active delivery via polymer deposition and retention. From 2007-2010, Beth served as the Technical Project Leader for Global Respiratory Care, developing the Nature Fusion line of Cough/Cold/Flu products for Vicks. She has served as a Campus Recruiter for P&G for 17 years, and often presents information on Careers in Chemistry to local schools and universities. Beth has been an active member of the Cincinnati ACS section for over ten years, including serving two terms as Section Treasurer (2006-07; 2007-08). She currently serves as Chair of the Cincinnati Local Section.

Candidate for Councilor (Vote for 2)

William R. Oliver

Bill Oliver received the B.S. from Murray State University and the Ph.D. from Iowa State University. After three years at Procter and Gamble's Miami Valley Laboratories, he joined the faculty of Northern Kentucky University, where he taught for 35 years, retiring in 2007. He was chemistry department chair for 16 of those years. He has served the Cincinnati Section of ACS as Chair, 1st Vice-chair, Treasurer, Trustee, Councilor, Alternate Councilor, Public Relations Chair and Educational Services Chair. As a councilor for the Cincinnati Section, he has served on three national committees: Committee on Public Relations and Communications (CPRC), Committee on Science (ComSci), and the Meetings and Expositions Committee (M&E). He served as chair of all three of those committees. Additionally, his position as chair of M & E made him an *ex officio* member of the Council Policy Committee. Currently, he is chair of the National Historic Chemical Landmarks Committee and is an associate member of the Committee on Public Relations and Communications. He was honored twice in 2012, by receiving the Cincinnati Section's Outstanding Service Award and by being named an ACS Fellow.

Bruce Ault

Bruce Ault received his B.S. degree from the California Institute of Technology in 1970, and his Ph.D. degree from the University of California, Berkeley in 1973. He joined the faculty at the University of Cincinnati in 1976, where he now has the rank of Professor. From 1987 to 1997, he served as Head of the Department of Chemistry, and is currently Director of Undergraduate Studies. He has served the Cincinnati Section of the ACS as auditor (1987-90), First Vice-Chair (1990-91), Chair (1991-92), trustee (1992-1995) and councilor (1996 – present). He is also very active in the national ACS, having served on the Local Section Activities Committee for 10 years. On this committee, he was chair of the Subcommittee on Awards and Recognition. He is currently in his sixth year as a member of the Divisional Activities Committee, working to improve the efficiency and effectiveness of the technical divisions of the ACS. He is also chairing the subcommittee on Annual Report for DAC. Re-election as Councilor will permit him to continue with his activities on committees at the national level as well as communicating the interests and concerns of the members of the Cincinnati Section to the national organization. He was elected a Fellow of the American Chemical Society in 2011.

Kathy Gibboney

Kathy completed her B.S. in Chemistry at Saint Mary's College, an M.S. in Biochemistry at the University of Denver and an M.B.A. in Finance at Xavier University. She is now retired from a 32 year career, primarily in the pharmaceutical industry. She spent 18 years at what is now Sanofi Aventis Pharmaceuticals where she divided her time between Analytical R&D and Scientific Services which included maintaining/administering the chemical and biological database and the research compound collection. She then spent 9 years at Procter & Gamble Pharmaceuticals, where she was hired to develop a compound repository, which included a multi-million dollar automated storage, retrieval and sample prep system, and the purchase of over 300K research compounds. She has been an active member of the Local ACS since 1980, holding positions of Chair, Vice-Chair, Treasurer, Auditor, PR Chair and Councilor, and on two National ACS committees, Local Section Activities and Meetings & Expositions.

Candidate for Alternate Councilor (Vote for 2)

Susan Hershberger

Susan Hershberger is completing her service as a Trustee of the Cincinnati Section, having served as Chair of the Section during 2009-2010. She is also involved in National Chemistry Week outreach activities and is a past secretary and auditor of the section. Educated at Marquette University (BS) and Iowa State University (PhD), she held teaching and research postdoctoral associations at Indiana University and the University of Minnesota. At Miami University Susan is Director of the Center for Chemistry Education (www.ccemu.org) where she develops active learning chemistry and science teaching and learning materials. Previous work at Miami University included contract research, chemistry and science education outreach projects, and visiting/adjunct assistant professor positions.

Bob Kempton

Bob Kempton grew up in Brooklyn, New York and received a B. S. in chemistry from St. Peter's College. After receiving a masters in organic chemistry from Auburn he was a research chemist for CIBA (now Novartis) pharmaceutical in Summit, NJ. He obtained a Ph. D. in organic chemistry from Fordham University (with Richard W. Franck). Bob joined the faculty of NKU in 1976, following two years of postdoctoral research in John Katzenellenbogen's laboratory at Illinois-Urbana. During his tenure at NKU he has had sabbatical appointments with Ted Taylor at Princeton and Marshall Wilson at UC. He retired in 2010 with the title of Regents Professor of Chemistry. Bob previously served the Cincinnati section of ACS as alternate councilor, chair of both the Organic Discussion Group and the Public Relations Committee, and as section secretary and treasurer.

Phil Christensen

Phil Christenson received his B.S. degree from Loras College in 1970 and his Ph.D. in Organic Chemistry from Boston College in 1974. Following a postdoctoral stint at UC Berkeley, he joined the R&D department of Fritzsche, Dodge & Olcott beginning a life long career in the Flavor and Fragrance industry. After about 20 years in the New York area, first with FDO and then with Givaudan, he re-located with Givaudan Flavors to Cincinnati in 1997. Over the next 15 years, he was involved in R&D management at Givaudan Flavors, serving as VP Ingredient Systems and since 2009 as VP, Innovation IP. Phil retired in 2012 but remains active as a consultant. He has been involved in local section activities over the years and served as Chair of the Cincinnati section in 2004-05. He is currently Chair of the Awards Committee and an Alternate Councilor.

Be Sure to Vote

Instructions: Mark your Ballot. Place it in the envelope marked "Ballot Envelope." Put the Ballot envelope in the outer envelope. Sign the outer envelope, print your name and address in the upper left hand corner, place a stamp on it and mail it to

Cincinnati Section, American Chemical Society
c/o Dr. Richard Mullins
Xavier University
3800 Victory Parkway
Cincinnati, OH 45230

The deadline for receipt of ballots is May 8, 2013, so we can have them counted by the May Meeting. If any questions, please contact Richard Mullins at 513-745-3361 or by e-mail at mullinsr@xavier.edu

Measurement of Vapor / Aerosol Mixtures

Dr. Dietmar Breuer

Institute for Occupational Safety and Health of the German Social Accident Insurances
Sankt Augustin, Germany

Venue / Date / Time:

Alice Hamilton Laboratory, Conference Room C

10:00 AM Friday, April 12, 2013.

NIOSH Hamilton Lab, 5555 Ridge Ave., Cincinnati, OH 45213

Contact RSVP: Please RSVP if you plan to attend so security can be notified of your attendance to

Kevin Ashley, @ KAshley@cdc.gov; 513-841-4402

ACS SPECIAL AWARD WINNERS
2013 EXPO SCIENCE FAIR at UC
MARCH 16, 2013

Maggie Connors Grade 6 Royalmont Academy

What Cereal Has The Highest Iron Content

Is cereal a favorite food of yours? Many people around the world enjoy cereal for any meal of the day but they may not know that they are consuming a large amount of iron. In this experiment, four cereals were tested with iron levels of 10%, 25%, 50%, and 100% of the recommended daily value of iron. It was hypothesized that the cereal labeled as having the greatest amount of iron would attract a magnet and form an iron pellet during testing. Two Hundred and fifty milliliters of each cereal was blended with the same amount of distilled water until no lumps or chunks were visible. An additional twenty milliliters of water was added to the blender to remove any remaining cereal. A heavy duty magnet was taped to the outside of a clear plastic one liter bottle with the bottom removed. The cereal/water mixture was then poured through the bottle, over the magnet, and was collected in a large bowl. The results were that the cereals containing 25%, 50%, and 100% daily value of iron attracted the magnet and formed iron pellets. The cereal labeled 10% iron showed no results. In comparison, the cereal containing 100% iron formed the largest iron pellet.

Aditya Jog Grade 8 Mason Middle School

Water Purification Using Aluminum Sulfate

The UN estimates that a billion people worldwide do not have access to clean drinking water. In this project, I investigated the use of aluminum sulfate (alum) to accelerate sedimentation in contaminated water for purification. It was hypothesized that: (1) aluminum sulfate will increase sedimentation in dirty water, but after an optimum amount its effectiveness will no longer increase, and (2) the rate of sedimentation will increase in acidic solutions. To test these hypotheses, the changes in turbidity of dirty water samples were measured with varying alum concentration. A turbidity meter was made using a laser pointer, photoresistor, potentiometer, and 9V-battery. With decreasing turbidity, more light passed through the sample which decreased the electrical resistance of the photoresistor. This increased the voltage drop across the potentiometer which was measured by a multimeter. Eleven dirty water samples with alum concentrations from 0.001ml/250ml to 1ml/250ml were tested. Dirty water without alum was the control. Turbidity change was measured for 2 hours for each sample. To study the effect of pH, seven samples from pH 3 to 11 were tested with a fixed alum concentration. The data proved both hypotheses. Alum was very effective in promoting sedimentation with a final voltage of 8.5V for 0.01ml vs. 3.96V for only water. Its effectiveness increased with concentration but did not change significantly after 0.01ml/250ml. The solution with pH = 6 was the most effective (final voltage 8.72V) with similar sedimentation rates for other acidic solutions. Alum was less effective in basic solutions (final voltage 7.4V).

David Wang **Grade 10** **William Mason High School**
Elucidation of the C-Terminus of Histone Deacetylation

Histone Deacetylase 3 (HDAC3) is a transcription regulator which represses genes through deacetylation of amine moieties in lysine residues on histone tails. It is implicated in the regulation of cancer through transcriptional repression of pathways leading to apoptosis. However, the structure of the c-terminus for this protein is unknown despite the key role which it may play in determining enzymatic function. This project centers on finding the secondary and tertiary structures of the C-terminus through protein prediction methods as well as developing a method for the application of protein folding theory into protein structure prediction. The c-terminus structure (residues 370-428) was predicted in two phases with secondary structure predicted by an aggregate result of Psipred, Chou-Fasman, GOR and Neural Networks and tertiary structure through the prediction and analysis of potential docking sites. With protein docking, a quantitative measure is provided in which the effectiveness of docking sites can be measured. The proposed structure suggests that in order to contribute to the catalytic activity of HDAC3 the C-terminus bonds with the N-terminus of deacetylase activating domain in order to stabilize the protein complex.

ACS Short Courses Planned for Cincinnati in June, 2013

Check out these Short Course offerings coming to the Cincinnati area the week of June 24th, 2013, hosted by National ACS. Details on course subject, instructor and registration are contained in the links below.

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Effective Supervision of Scientists and the Technical Staff – June 24-25, 2013

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Experimental Design for Productivity and Quality in Research & Development – June 24-26, 2013

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