

# TRIAD CHEMICAL TIMES



Central North Carolina Section American Chemical Society

## April Section Meeting



**Speaker:** Mr. Cary Gentry: Air Quality and Atmospheric Chemistry

**When:** Thursday, April 17th, 2014

**Where:** Elon College, McMichael Science Building Room 115

**Time:** Social: 6:30 to 7:00 pm Meeting: 7:00 pm

## Upcoming Events

April 17, 2014. April Section Meeting at Elon University: Air Quality and Atmospheric Chemistry.

June 20, 2014 CNC-ACS Summer Picnic at Bur Mil Park, 6:15 to 8:15

### Highlights in this issue:

	Page
<i>April Speaker Bio</i>	2
<i>2014 National Chemistry Olympiad</i>	3
<i>Local Section News</i>	3
<i>Poster Vendor Night</i>	4-7
<i>Directions to Elon University</i>	8
<i>Councilor Report</i>	9-12
<i>2014 Executive Committee and Committee Heads</i>	13

## CNC-ACS Officers

Mr. Cale Murray Chair [CMurray@Qualicaps.com](mailto:CMurray@Qualicaps.com)  
Dr. Deborah Pritchard Chair-Elect [dpritchard@ncbionetwork.org](mailto:dpritchard@ncbionetwork.org)  
Ms. Janice Foushee Secretary-Treasurer [jfoushee@ashland.com](mailto:jfoushee@ashland.com)

CNC-ACS Website: <http://www.cnc-acs.sites.acs.org/>

Newsletter Editor: Bill Eberle [bill.eberle@syngenta.com](mailto:bill.eberle@syngenta.com)



# Cary D. Gentry's Biography

Cary Gentry has a BS degree in meteorology from North Carolina State University. He began his career in 1992 with a private consultant and was involved with numerous air quality and air pollution projects. In 1998 he was hired by Forsyth County Office of Environmental Assistance and Protection in Winston-Salem, NC and currently works as a Senior Environmental Specialist. Among numerous duties, Cary is in charge of the Department's daily air quality forecasting program and recently received the US EPA's AIRNOW Partner of the Year Award for his work on air quality. In addition, Cary operates the EPA's mandated PM<sub>2.5</sub> FRM network throughout Forsyth County, NC and also serves on the AIRNow Steering Committee and the NASA AIRNow Satellite Data Processor sub committee.

## Biomedical Related Research

If you perform biomedical related research and/or have need for conducting oligonucleotide sequencing in your laboratory, contact Robert Yokley at [ryoklev@microdysis.com](mailto:ryoklev@microdysis.com) or go to <http://www.microdysis.com/> for further information.



## SERMACS 2014 Student Travel Grants from CNC-ACS

SERMACS 2014 will be held in Nashville, TN on October 16-19, 2014. CNC-ACS will award up to five \$100 travel grants for students who are presenting at SERMACS. The guidelines for consideration are:

The student must be a member of the ACS and live within or attend a university within the jurisdiction of the CNC Section

The student must be formally presenting a poster or oral presentation at SERMACS

Students who are participating in or have previously participated in the CNC section Poster/Vendor Night will be given priority

CNC-ACS, at all times, reserves the right to amend and/or edit these guidelines.

To be considered for a travel grant, please submit a written request which outlines your eligibility based on the criteria listed above along with an abstract/summary for the poster or presentation to Cale Murray at [caleacs@gmail.com](mailto:caleacs@gmail.com). Submissions must be received by July 1, 2014 in order to receive consideration for a grant. Only a limited amount of funding is available for grants.

# THE 2014 NATIONAL CHEMISTRY OLYMPIAD

Students competing in the USNCO are eligible to be selected as members of the United States team for the International Chemistry Olympiad (IChO). For the past twenty nine years, the United States has sent a team of four students to compete with nations around the world at the IChO. The students participate in both theoretical and laboratory examinations over several days. Gold, silver, and bronze medals are awarded to the best performers, and the IChO provides students the opportunity to interact with their peers from other countries. This year the international event will be held in Hanoi, Vietnam, July 20-29, 2014.

In order to identify these students, a preliminary screening of students with a special multiple choice examination prepared by the ACS committee. This examination was administered on Saturday, March 22, 2014 at 9:30 a.m. at Winston-Salem State University (W.B. Atkinson Science Building) and will last for two hours. The Central NC-ACS section thanks Dr. A Bakarr Kanu for coordinating the administration of the exam. Students who scored high enough to move on included:

1. James Wade Curlee (High Point Christian Academy)
2. Evan Michael Harris (South West Guilford High School)
3. Lucy Chamberlain (Forsyth County Day School)
4. Drew Adams (Southwest Guilford High School)
5. Yinong Sheng (Forsyth Country Day School)
6. Jae Hyun Kwon (High Point Christian Academy)
7. Sean Engels (Alternate; Southwest Guilford High School)

The national exam will take place on April 26th.

## Opportunities to become involved in the Central NC-ACS Section

### Hospitality Chair

We need a volunteer to coordinate the hospitality portion of our monthly meetings. The hospitality chair would be in charge of making sure arrangements are made to have light refreshments to accompany our meetings. This position involves working with a pool of volunteers. The hospitality chair is not expected to do all the work or to be at all the meetings – just coordinate.

If you want to serve as Hospitality chair or join the pool of volunteers, please contact Debbie Pritchard [dpritchard@forsythtech.edu](mailto:dpritchard@forsythtech.edu).

### Local Section Treasurer

After 20 years of serving as Treasurer, Janice Foushee will be stepping down at the end of this year. Janice was awarded a plaque at the Executive Committee Meeting in February for her tremendous and lengthy service to the Central NC ACS section. If you are interested in running for the position of Treasurer, please contact Cale Murray at [caleacs@gmail.com](mailto:caleacs@gmail.com) or Janice Foushee at [jfoushee@ashland.com](mailto:jfoushee@ashland.com).

# Poster Vendor Night Attracts more than 200 Scientists

The CNC-ACS held its 14th Annual Poster Vendor Night (PVN) at Syngenta on April 1, 2014. The meeting showcased instrumentation and supplies from sixteen vendors. Fifty six posters from industry, graduate and undergraduate institutions highlighting research in the Triad.

It goes without saying that a meeting of this size does not happen by itself. The Central NC ACS would like to recognize the following for all of their efforts:

## PVN Judges:

Charles Beall	Syngenta	Dan Minnema	Syngenta
Cheryl Beste	Syngenta	Bill Meyerhoffer	Syngenta
Arther Gates	Syngenta	Angela Moore	Syngenta
Paul Hinderliter	Syngenta	T J Mayer	Syngenta
Kent Kabler	Syngenta	Sherry Perine	Syngenta
Debbie Pritchard	FTCC	Fred Rice	Syngenta
Nancy Shi	Syngenta	Nakia Smith	Syngenta
Sue Yi	Syngenta		

## Hospitality Table

Rebecca Roberts      Syngenta

## PVN Organizing Committee:

Bill Eberle	Syngenta	Amy Quattlebaum	Syngenta
Jill Tierney	PPG	Sameer Tyagi	Syngenta

**The CNC-ACS would like to extend a special thank you to Syngenta for hosting the meeting for the 14th consecutive year. Thanks also goes out to Robert Yokley for all of the photographs.**

# 2014 Poster Vendor Night Winners

## Undergraduate



First Place:  
Joseph Egan – UNCG – Antimicrobial secondary metabolites from endophytic fungal isolates from Goldenseal (*Hydrastis canadensis*)

Second Place:  
Natalie Hage – UNCG – Identification of 2-methylcitrate synthase and citrate synthase activity of the *mmgD* gene product from *Bacillus subtilis* strain 168



Third Place:  
David Zich – UNCG – A Mass Spectrometry Approach to Identify MRSA Quorum Sensing Inhibitors

## Graduate

First Place:  
Sherona Sirkisoon – UNCG –  
Isolating a New Antimicrobial  
Peptide from Largemouth Bass

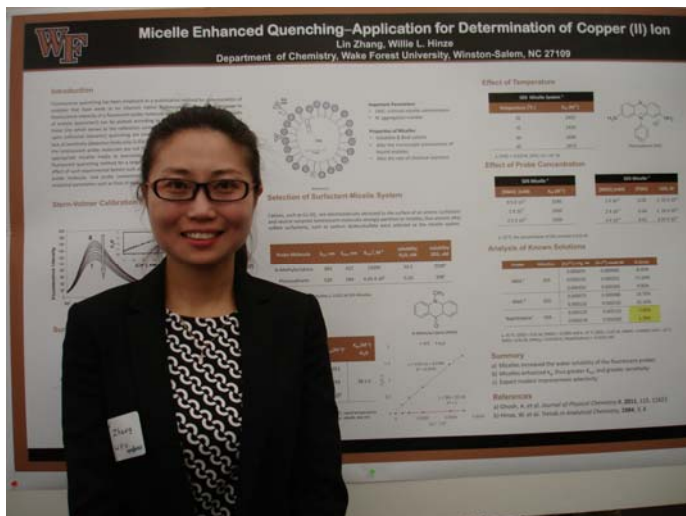


Second Place:  
Amanda Watson - UNCG – Car-  
dio-Metabochip: Bead-array Tech-  
nology for Detecting Genetic Vari-  
ation for Type 2 Diabetes

Third Place – Daniel Todd – UNCG –  
Unraveling Biological Activities of  
Complex Botanical Medicines: A Case  
Study with *Echinacea purpurea*



# Scenes from Poster Vendor Night



# Safety Corner



## **Huh? What did you say? Speak up!**

These are common phrases for some of us. We often joke about hearing loss as we get older or the longer we've been married, but hearing loss is not a laughing matter. *Every year, approximately 30 million people in the United States are occupationally exposed to hazardous noise. Noise-related hearing loss has been listed as one of the most prevalent occupational health concerns in the United States for more than 25 years. Thousands of workers every year suffer from preventable hearing loss due to high workplace noise levels. Since 2004, the Bureau of Labor Statistics has reported that nearly 125,000 workers have suffered significant, permanent hearing loss. In 2009 alone, BLS reported more than 21,000 hearing loss cases.*<sup>1</sup> Hearing can be permanently damaged by only one exposure. We must make efforts to protect our hearing at all times. This website illustrates a variety of sounds and provides a sound meter to illustrate the danger level <http://www.cdc.gov/niosh/topics/noise/noisemeter.html>.

Always keep hearing protection in mind when working or even relaxing at home.

## **Directions to Elon (McMichael Science Building)**

Take I-40/I-85 to Exit 140

If on 40W/85S, turn right off the exit onto University Drive

If on 40E/85N, turn left off the exit onto University Drive Turn right at first light onto Boone Station Rd.

Turn left at first light onto St. Mark's Church Road

Drive 1.4 miles to Haggard Avenue

Note that the road name changes to Williamson as you cross Church Street

You will cross a set of railroad tracks as you enter campus

Turn right onto Haggard Avenue (second street after crossing tracks)

Turn left at the stoplight onto O'Kelly Ave.

Take the first right into the McMichael parking lot.

Reception is in MCM1 117, meeting in MCM1 115.







# Councilor Report - 247th ACS National Meeting

## Dallas, TX – March 16-20, 2014

### Robert A. Yokley

The following edited summary is provided by ACS to help Councilors report to their local sections and divisions on key actions of the ACS Council and Board of Directors at the 2014 spring national meeting.

#### ACTIONS OF THE COUNCIL

##### **Election Results**

The following nominees were selected as candidates for President-Elect, 2015: Peter K. Dorhout, William A. Lester, Jr., Christopher K. Ober, and Henry F. Schaefer III. By electronic ballot, the Council selected **Peter K. Dorhout** and **William A. Lester, Jr.** as **candidates for 2015 President-Elect**. These two candidates, along with any candidates selected via petitions, will stand for election in the Fall National Election.

By mail ballot, the Councilors selected **Pat N. Confalone** and **Anne S. DeMasi** as **District III candidates**; and **Paul W. Jagodzinski** and **Lee H. Latimer** as **District VI candidates** for 2015-2017. Ballots will be mailed on or before October 10, 2014 to all ACS members in District III and District VI for election of a Director from each District.

##### **Candidates for Directors-at-Large**

The following candidates for Directors-at-Large for a 2015-2017 term are Dawn A. Brooks, William F. Carroll, Jr., Barbara A. Sawrey, and Ellen B. Stechel. The election of two Directors-at-Large from among those candidates and any selected via petition will be conducted in the fall. Ballots will be mailed to the Council on or before October 10, 2014.

##### **Committee Continuance**

The Council VOTED unanimously to continue the Committees on Chemical Safety, on Chemistry and Public Affairs, and on Minority Affairs. Continuation of these three committees requires Board concurrence.

##### **2015 Member Dues**

The Council voted to set the member dues for 2015 at the fully escalated rate of \$158. This rate is established pursuant to an inflation-adjustment formula in the ACS Constitution and Bylaws.

##### **Divisional Allotment Formula**

After voting to postpone its implementation by one year, the Council voted to approve a revised formula for allocating dues funds to divisions. This formula, which was presented by the Committee on Divisional Activities, will be effective with allocations for 2015 division performance.

### **Changes in Local Section Territory**

On recommendation of the Committee on Local Section Activities, the Council voted to approve the petition from the North Jersey Section to include the area of the former Monmouth County Section in its territory, effective immediately.

### **New International Chemical Sciences Chapter**

On recommendation of the Committee on International Activities and subject to the concurrence of the Board of Directors, the Council voted to approve petitions to charter the South Korea International Chemical Sciences Chapter and the Malaysia International Chemical Sciences Chapter.

## **COMMITTEE ORAL REPORTS (Highlights)**

### **Society Committees**

#### **Budget and Finance (B&F)**

In 2013, ACS generated a Net from Operations of \$15.1 million, which was \$2.0 favorable to the budget. This represents the Society's tenth consecutive year of positive operating results. Total revenue was \$490.5 million, which was \$8.8 million (or 1.8%) lower than budget, and essentially flat when compared with 2012. The result was largely attributable to cost containment measures throughout the ACS. Unrestricted Net Assets rebounded in 2013, rising to \$207 million, and more than doubling from the 2012 level.

#### **Education (SOCED)**

SOCED approved a pilot program to form ACS International Student Chapters.

### **Standing Committees**

#### **Membership Affairs (MAC)**

For 2014, MAC authorized an individual member test for India to allow for a \$52 full Member dues rate. At this meeting, MAC extended the test to include new and renewing members in India for three years.

#### **Economic and Professional Affairs (CEPA)**

Findings from the ACS 2103 New Graduate Survey have been compiled and reveal troubling news: overall unemployment among new graduates rose from 12.6% in 2012 to 14.9% in 2013. This is primarily due to the high unemployment among recent Bachelors. New graduates must be at the top of our priority list for employment assistance in 2014.

#### **Meetings and Expositions (M&E)**

The ACS spring national meeting attracted 13,680 registrants, including 6,853 regular attendees and 5,140 students. The meeting had 10,050 papers presented.

The new ACS Mobile Application had over 6,000 downloads by meeting attendees.

M&E voted to eliminate the author index in the hard program meeting program book beginning with the spring 2015 meeting. The searchable author index is now available via the mobile application and other electronic means.

#### **Divisional Activities (DAC)**

Operating as a DAC subcommittee, the Multidisciplinary Planning Group is proposing the following 2017 national meeting themes to the divisions for their consideration:

Spring, San Francisco: *Advanced Materials, Technologies, Systems and Processes*

Fall, Washington, DC: *Chemistry's Impact on the Global Economy*

### **Local Section Activities (LSAC)**

LSAC will initiate the process to dissolve the Ocean County Section as a result of the group's failure to meet the criteria to remain an active section.

### **Other Committees**

#### **Chemical Safety (CCS)**

CCS has published its first-ever Safety Alert concerning the Rainbow Demonstration, in *Chemical and Engineering News*, March 17, 2014. Copies were distributed to Councilors.

#### **Special Discussion Item**

A special discussion item was put on the Council agenda for this meeting. ACS President Tom Barton presented and moderated a discussion on "What can ACS do to increase the quality of science education in grades K-12? Following the presentation, 39 Councilors engaged in a robust discussion on the factors impacting the quality of K-12 science education in the U.S.

## **ACTIONS OF THE BOARD OF DIRECTORS**

At this meeting, the ACS Board of Directors considered a number of key strategic issues and responded with several actions.

### **The Board's Committees and Working Groups**

The Board VOTED to approve a Society nomination for the National Medal of Science, which is bestowed by the President of the United States to individuals in science and engineering who have made important contributions to the advancement of knowledge in the fields of behavioral and social sciences, biology, chemistry, engineering, mathematics and physics.

### **The Executive Director/CEO Report**

The Executive Director/CEO and her direct reports updated the Board on the following: ACS financial trends and near term outlook; the launch of the recently approved American Association of Chemistry Teachers, which will support K-12 teachers of chemistry by providing them with a professional home that addresses and is responsive to their needs; and the activities and plans of CAS (Chemical Abstracts Service) and the ACS Publications Division. As a follow-up to the Publications report, the Board VOTED to approve three journal editor re-appointments. The Board also VOTED to approve one appointment to the

ACS Green Chemistry Institute Governing Board and one reappointment to the ACS Governing Board for Publishing.

## **Other Society Business**

The Board also:

Expressed its gratitude and thanks to Madeleine Jacobs, Executive Director and Chief Executive Officer, who on March 6 announced her plan to retire at the end of the year. The Board then began a discussion of the process and logistics of identifying and hiring her successor.

Approved a resolution congratulating Robert Massie on his retirement at the end of this month for twenty-one years of successful leadership of the Chemical Abstracts Service (CAS).

## **ADDITIONAL INFORMATION FOR COUNCILORS**

The following is a list of URLs and email addresses presented on slides at the Council meeting. You will find the information noted on these sites helpful.

[d.schmidt@acs.org](mailto:d.schmidt@acs.org), [president@acs.org](mailto:president@acs.org)

Contact information for ACS President-Elect Diane Grob Schmidt

[www.acs.org/earthday](http://www.acs.org/earthday)

Chemists Celebrate Earth Day (CCED) 2014

Local Section Resources

[www.acs.org/getinvolved](http://www.acs.org/getinvolved)

Grant information, important deadlines and officer resources

## **COUNCILOR ROBERT A. YOKLEY SERVED THE CNC SECTION AND THE ACS IN THE FOLLOWING CAPACITIES:**

- Robert chaired the Communication/Outreach sub-committee of the Committee on Nomenclature, Terminology, Symbols, and Units (NTS). This group is in the process of preparing a special presentation to outline the functions of NTS to be given at selected committee and divisional meetings at the next ACS meeting in San Francisco.
- He also participated in an ad hoc committee to organize a symposium at the next national meeting in San Francisco on the new definitions of the Kilogram and Mole.
- He continued his participation as a liaison to the Committee on Community Activities (CCA) by attending National Chemistry Week (NCW) and Chemists Celebrate Earth Day (CCED) meetings and authoring articles on aquifers and hard candy for the publication, Celebrating Chemistry.
- Robert participated in the Region II Caucus and the Council meeting.

Officer and Committee Head Contacts

Office	Officer	E-mail	Phone
Chair	Cale Murray	<a href="mailto:caleacs@gmail.com">caleacs@gmail.com</a>	501-4706
Chair Elect	Deborah Pritchard	<a href="mailto:dpritchard@ncbionetwork.org">dpritchard@ncbionetwork.org</a>	
Secretary/Treasurer	Janice Foushee	<a href="mailto:jfoushee@ashland.com">jfoushee@ashland.com</a>	333-2738
Councilor ('16)	Robert Yokley	<a href="mailto:RYokley1@triad.rr.com">RYokley1@triad.rr.com</a>	558.8212
Councilor ('15)	Tim Ballard	<a href="mailto:tballard@en-cas.com">tballard@en-cas.com</a>	785-3252
Alternate Councilor ('12)	Paul Weller	<a href="mailto:wellerp@elon.edu">wellerp@elon.edu</a>	278-6225
Alternate Councilor ('12)	Gail Webster	<a href="mailto:gwebster@guilford.edu">gwebster@guilford.edu</a>	316-2486
Director ('15)	Bill Eberle	<a href="mailto:bill.eberle@syngenta.com">bill.eberle@syngenta.com</a>	632-7569
Director ('14)	TJ Mayer	<a href="mailto:tj.mayer@syngenta.com">tj.mayer@syngenta.com</a>	632-6079
Past Chair	Cliff Bell	<a href="mailto:bellce@wssu.edu">bellce@wssu.edu</a>	750-2545
Analytical Sub Group	Jeremi Johnson	<a href="mailto:JeremiJohnson@lortobco.com">JeremiJohnson@lortobco.com</a>	335-6624
Awards	Robert Yokley	<a href="mailto:RYokley1@triad.rr.com">RYokley1@triad.rr.com</a>	558.8212
Education	Yulia Basova	<a href="mailto:ybasova@yahoo.com">ybasova@yahoo.com</a>	834-2335
* Chemsense	OPEN		
* National Chemistry Olympiad	Bakkar Kanu	<a href="mailto:kanuabb@wssu.edu">kanuabb@wssu.edu</a>	750-3199;
* Science Center Advisor	Jerry Walsh	<a href="mailto:jwalsh@uncg.edu">jwalsh@uncg.edu</a>	334-5672
* UNC-G High School Lab Day	Jerry Walsh	<a href="mailto:jwalsh@uncg.edu">jwalsh@uncg.edu</a>	334-5672
Earth Day	Bill Nell	<a href="mailto:williamnell@bellsouth.net">williamnell@bellsouth.net</a>	764-9322
Government Relations	Edward Robinson	<a href="mailto:erobinson@lortobco.com">erobinson@lortobco.com</a>	335-6625
Hospitality	OPEN		
Long Range Planning	Dave MacInnes		254-8453
Membership	OPEN		
Minority Affairs	Julius Harp	<a href="mailto:harpj@ncat.edu">harpj@ncat.edu</a>	285-2239
National Chemistry Week	Dennis Ergle	<a href="mailto:dergle@lortobco.com">dergle@lortobco.com</a>	335-6629
	Cynthia Willard	<a href="mailto:cwilliard@lortobco.com">cwilliard@lortobco.com</a>	335-6729
	Bill Eberle	<a href="mailto:bill.eberle@syngenta.com">bill.eberle@syngenta.com</a>	632-7569
Newsletter Editor			
Poster Vendor Night			
* Vendor Coordinator	Sameer Tyagi	<a href="mailto:Sameer.tyagi@syngenta.com">Sameer.tyagi@syngenta.com</a>	
* Poster Coordinator	Jill Tierney	<a href="mailto:tierney_j@bellsouth.net">tierney_j@bellsouth.net</a>	430-8601
Project Seed	OPEN		
Professional Relations	OPEN		
Public Relations & Publicity	OPEN		
Public Affairs	Edward Robinson	<a href="mailto:erobinson@lortobco.com">erobinson@lortobco.com</a>	335-6625
* Science Advisor - Howard Coble	Dave MacInnes	<a href="mailto:dmacinne@guilford.edu">dmacinne@guilford.edu</a>	254 8453
* Science Advisor - Richard Burr	Liliana Garcia	<a href="mailto:llilianagarcia@live.com">llilianagarcia@live.com</a>	
	Matt Beck/Jonathan	<a href="mailto:beckm12@highpoint.edu">beckm12@highpoint.edu</a>	
Student Member Coordinators	Hawxhurst	<a href="mailto:hawxhj10@highpoint.edu">hawxhj10@highpoint.edu</a>	
Student Member Faculty Coord.	Paul Weller	<a href="mailto:wellerp@elon.edu">wellerp@elon.edu</a>	278-6225
Web Page	John Merle	<a href="mailto:merlejo@wssu.edu">merlejo@wssu.edu</a>	750-2237
Womens Chemists	Gail Webster	<a href="mailto:gwebster@guilford.edu">gwebster@guilford.edu</a>	316-2486
Younger Chemists	OPEN		