



# Volume 43, Number 3

Central North Carolina Section American Chemical Society

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## March CNC-ACS Meeting: Industrial Waste Management Challenges

### Industrial Waste Management Challenges

Management of industrial waste can present challenges to regulated industries. This presentation presents an overview of challenges and lessons learned associated with managing a wide range of waste types and the lessons learned from those experiences. The presentation will focus primarily on wastewater challenges but will also include examples of solid and hazardous waste issues

### Jim Hollingsworth CIH, CSP, CHMM, REM

Jim Hollingsworth has worked in the waste industry, environmental remediation, industrial services and emergency response industries and currently serves as Director of Environment, Health and Safety for Shamrock Environmental Corporation (SEC). Mr. Hollingsworth brings almost 30 years of site based EHS experience to bear on the site, regional and corporate compliance and project needs for Shamrock and predecessor firms.  
**Continued page 4.**

### March Meeting

#### When:

Thursday March 24, 2011

#### Where:

Lorillard Tobacco Co.  
A.W. Spears Research Center  
420 N. English Street  
Greensboro, NC 27405

#### Time:

Social 6:30  
Presentation 7-8:30 pm

Directions: page 9

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Ms. Janice Foushee	Secretary-Treasurer	<a href="mailto:jfoushee@ashland.com">jfoushee@ashland.com</a>

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



## 2011 Executive Committee

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Director ('13)	Kent Kabler	<a href="mailto:kent.kabler@syngenta.com">kent.kabler@syngenta.com</a>	632-6014
Director ('14)	TJ Mayer	<a href="mailto:thomas.mayer@syngenta.com">thomas.mayer@syngenta.com</a>	632-6079
<b><u>2011 Committee Chairs</u></b>			
Awards (11)	Robert Yokley	<a href="mailto:TR6VOL@triad.rr.com">TR6VOL@triad.rr.com</a>	632-2142
By-Laws & Job Manual (1)	<b>OPEN</b>		
Education (10)	Yulia Basova	<a href="mailto:ybasova@yahoo.com">ybasova@yahoo.com</a>	834 -2335
• ChemSense (10)	<b>OPEN</b>		
• Nat'l Chemistry Olympiad (11)	Janis McDonald	<a href="mailto:mcdonaj2@gcsnc.com">mcdonaj2@gcsnc.com</a>	819-2970
• Science Center Advisor (11)	Jerry Walsh	<a href="mailto:Jlwalsh@uncg.edu">Jlwalsh@uncg.edu</a>	334-5672
• UNCG H. S. Lab Day (1)	Jerry Walsh	<a href="mailto:Jlwalsh@uncg.edu">Jlwalsh@uncg.edu</a>	334-5672
Environmental Affairs	Dr. Gladys S. Van Pelt		288-1783
Earth Day	Bill Nell	<a href="mailto:nellw@rirt.com">nellw@rirt.com</a>	741-0919
Government Relations	Edward Robinson	<a href="mailto:erobinson@lortobco.com">erobinson@lortobco.com</a>	335-6625
Hospitality (4)	Pat Duffy	<a href="mailto:pduffy@mendenhallcrc.com">pduffy@mendenhallcrc.com</a>	841-0700 x2114
Information Dissemination (1)	Karl Sienerth	<a href="mailto:sienerth@elon.edu">sienerth@elon.edu</a>	278-6217
Long Range Planning (3)	Dave MacInnes	<a href="mailto:dmacinne@guilford.edu">dmacinne@guilford.edu</a> <a href="mailto:david_macInnes@guilford.com">david_macInnes@guilford.com</a>	316-2262
Member Education (2)	Dennis Chesney		454-4184
Membership (4)	<b>OPEN</b>		
Minority Affairs (10)	Julius Harp		
National Chemistry Week (10)	Nancy Liu	<a href="mailto:nancy.liu@syngenta.com">nancy.liu@syngenta.com</a>	632-2529
Newsletter Editor (4)	TJ Mayer	<a href="mailto:thomas.mayer@syngenta.com">thomas.mayer@syngenta.com</a>	632-6079
Project SEED (3)	Jill Harp	<a href="mailto:Harpj@wssu.edu">Harpj@wssu.edu</a>	750-2213
Professional Relations (3)	<b>OPEN</b>		
Analytical Sub-Group	Kent Kabler	<a href="mailto:kent.kabler@syngenta.com">kent.kabler@syngenta.com</a>	632-6014
Public Relations & Publicity (2)	Tim Ballard	<a href="mailto:tballard@en-cas.com">tballard@en-cas.com</a>	785-3252
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• Sci. Advisor-Howard Coble	Dave MacInnes	<a href="mailto:dmacinne@guilford.edu">dmacinne@guilford.edu</a> <a href="mailto:david_macInnes@guilford.com">david_macInnes@guilford.com</a>	316-2262
• Sci. Advisor-Richard Burr	Liliana Garcia	<a href="mailto:garcial@wssu.edu">garcial@wssu.edu</a>	750-2548
Student Affiliate Coordinator (2)	Paul Weller	<a href="mailto:wellerp@elon.edu">wellerp@elon.edu</a>	278-6225
Web Page (1)	John Merle	<a href="mailto:merlejo@wssu.edu">merlejo@wssu.edu</a>	750-2237
Women Chemists (1)	<b>OPEN</b>		
Younger Chemists Chair (9)	Scott Loethen	<a href="mailto:scott.loethen@syngenta.com">scott.loethen@syngenta.com</a>	632-6634

## Excellence in Teaching

<http://www.wssu.edu/about/news/2011/HarpWinsBOGAward.aspx>

Dr. Jill J. Harp, associate professor of biochemistry at Winston-Salem State University (WSSU), has been selected as a recipient of an Award for Excellence in Teaching presented annually by the University of North Carolina's Board of Governors.

Harp will receive a commemorative bronze medallion along with a \$7,500 cash prize during WSSU's Spring Commencement ceremony on May 14. The Awards for Teaching Excellence were established in 1994 to underscore the importance of teaching and reward good teaching across the University system.

Chris Bernhardt, an ACS member here in Greensboro, currently teaching advanced and AP chemistry at Greensboro Day School is seeking the possibility of the donation of a "old" functioning (nonfunctioning as a second option) IR spectrometer. Please contact Chris with any possible prospects.

Dr. Christian Bernhardt  
Chemistry Instructor  
Greensboro Day School

[ChrisBernhardt@greensboroday.org](mailto:ChrisBernhardt@greensboroday.org)

Annually, a tenured faculty member from each UNC campus is recognized for his or her accomplishments by the Board of Governors.

Harp has served as a faculty member in the College of Arts and Sciences at WSSU for the past 14 years. She spent the first seven years in the Department of Chemistry and the last seven in the Department of Life Sciences. In addition to teaching, she also trains high school and college students in her research lab throughout the academic year and in the summer. Harp is known for using her own classroom action research to improve her teaching and student learning. She also requires her students to demonstrate their understanding of course content and applica-

tion of that knowledge through writing papers and making presentations in class and at professional conferences.

A graduate of York College, City University of New York, Harp earned her Ph.D. in organic chemistry from the University of Maryland. Her publications and research focus on cocaine abuse drug treatment and she also has received several grant sub-awards from the National Science Foundation and the National Institute of Health.

Merdis J. McCarter, Ed.D.  
Senior Associate Provost for Academic Affairs  
Winston-Salem State University

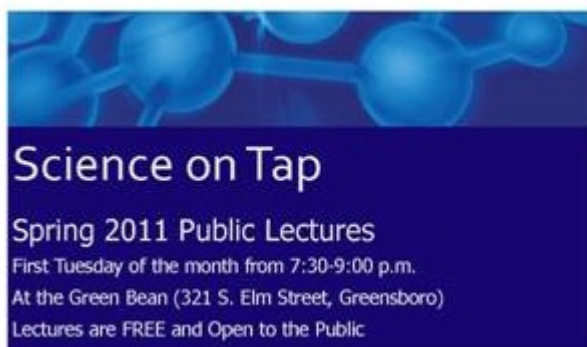
### Online Middle School Chemistry Resource

The ACS Education Division has developed a new middle school chemistry resource, "[Middle School Chemistry: Big Ideas about the Very Small](#)." This free, six-chapter resource can serve as either a stand-alone chemistry unit or as a supplement to any middle school science curriculum. "Middle School Chemistry" uses a hands-on inquiry approach along with specially designed molecular model animations, to take students from concrete experiences to an understanding of the world of atoms and molecules. Please share this free resource with middle school teachers you know!

### Poster Judges Needed.

Dear Scientist - if you plan to attend Poster Vendor Night 2011, please consider serving as a poster judge. The student posters will be judged on their scientific merit and the top 3-4 posters will be awarded prizes.

Contact Mandy Stauffer ([amanda.stauffer@syngenta.com](mailto:amanda.stauffer@syngenta.com), 336.632.5676), Robert Yokley ([robert.yokley@syngenta.com](mailto:robert.yokley@syngenta.com), 336.632.5988) or Bill Eberle ([bill.eberle@syngenta.com](mailto:bill.eberle@syngenta.com), 336.632.7569) if you wish to assist.



Science on Tap  
Spring 2011 Public Lectures  
First Tuesday of the month from 7:30-9:00 p.m.  
At the Green Bean (321 S. Elm Street, Greensboro)  
Lectures are FREE and Open to the Public

Tuesday April 5<sup>th</sup> **Vaccines: Are the Fears Justified?**  
Dr. Janne Cannon, Professor, Department of Microbiology and Immunology, UNC-CH

Tuesday May 3<sup>rd</sup> **Physics of the Human Body**  
Dr. Premod R. Pratap, Professor & Department Head, Department of Physics and Astronomy, UNCG

[scienceandsociety.uncg.edu](http://scienceandsociety.uncg.edu)  
[research\\_partners@uncg.edu](mailto:research_partners@uncg.edu)



THE UNIVERSITY OF NORTH CAROLINA  
GREENSBORO  
Office of Research and Economic Development

In celebration of Earth Day 2011 and the International Year of Chemistry, the Central North Carolina section of the American Chemical Society (CNC ACS) is sponsoring production of a short film, titled “Opportunities in Energy”. “Opportunities in Energy” will be offered to local high schools and is expected to be completed around early May. Run time is expected to be about twenty minutes. “Opportunities in Energy” discusses different types of alternative energy, their societal benefits, and current research and develop efforts. “Opportunities in Energy” is intended to foster an interest in science and engineering, and inspire students to think about how they can become involved in solving our energy problems. Hopefully, the audiences will also find the film to be light-hearted and fun. The following people and organizations are involved in the making of the film:

Produced by Forsyth Technical Community College (FTCC)

Narration recorded at the Winston-Salem State University (WSSU) Fine Arts Department Recording Studio

	<u>Affiliation</u>
Written by Bill Nell	CNC ACS
Screenplay adaptation by John Kelly	FTCC
Narrated by Clifton Bell	CNC ACS, WSSU
Voice recording session directed by Tohm Judson and Janea Williams	WSSU
Voice recording session scheduling: Richard Edwards	WSSU
Directed by John Kelly	FTCC
Concept Art by John Kelly, Chris May, Nelson Ricardo, and Blake Leftwich	FTCC
Storyboards by John Kelly, Chris May, and Nelson Ricardo	FTCC
Animation by:	
John Kelly, Sophia Thach, Chris May, Nelson Ricardo, Job Givan, Dan Mejorado, and Blake Leftwich	FTCC
Editing: John Kelly	FTCC
Titles: Terrence Duncan	FTCC
Sound Design: John Platt	FTCC
Composer: Matthew Taylor	none
Science Advisory: Bill Nell	CNC ACS
Reviews by John Kelly, Robert Yokely, and Christi Stanley	FTCC/CNC ACS/none
Distribution and Outreach: Herb Burns	FTCC

**Hollingsworth Continued** —His responsibilities include oversight of one of the most comprehensive Health Safety & Environmental Programs in the environmental and industrial services industries. Mr. Hollingsworth provides expertise in industrial hygiene, safety, and environmental compliance. Safety and IH experience includes hazard analysis and abatement, process safety reviews, project review and planning, and project risk management. Environmental practice areas include RCRA, CERCLA, TSCA, CAA, CWA, DOT, MSHA and OSHA). Mr. Hollingsworth has established EHS and quality operational and procedural standards, implemented EHS training, negotiated and procured environmental permits and authorizations, and coordinated risk management, legal, and EHS functions within all Shamrock operational areas. He has conducted HSE training courses and projects for general industry, construction industry, surface mine operations, marine operations, etc. Mr. Hollingsworth holds a BS in marine Science and is a Certified Industrial Hygienist (CIH), Certified Safety Professional (CSP), Certified Hazardous Materials Manager (CHMM) and a Registered Environmental Manager (REM). Mr. Hollingsworth’s project management experience includes comprehensive applications of remedial treatment and environmental construction, including profit and loss responsibilities. He is experienced in EPA protocol sampling, testing methods, environmental and health program implementation, and project management and has performed work on sites with a wide range of contaminants ranging from petroleum hydrocarbons, reactive and toxic chemicals, chemical and biological warfare materials, bioterrorism agents, lead, mercury and cadmium and many others.

CNC-ACS Spring Stream Clean—April 2, 9am—noon  
Contact TJ Mayer to Volunteer: [thomas.mayer@syngenta.com](mailto:thomas.mayer@syngenta.com)



**April 2, 2011 • 1 - 5 pm**

**Kathleen Clay Edwards Family Branch Library  
1420 Price Park Road, Greensboro**

**FREE Eco-Fun For Everyone**

live entertainment • hands-on nature and eco-exhibits • hayrides  
eco-art • gardening activities • solar & technology displays  
face painting • alternative vehicles • live animals • nature crafts  
scout activities • nature photography contest • and more!

Earth Day information: [Melanie.Buckingham@greensboro-nc.gov](mailto:Melanie.Buckingham@greensboro-nc.gov) or 373-2923



**Great American Clean-Up**

**April 2 from 9 am - noon**

Join Greensboro Beautiful and the City of Greensboro as we clean up our streets, waterways and communities. Information & registration, contact Lynne Leonard at 373-2957, [Lynne.Leonard@greensboro-nc.gov](mailto:Lynne.Leonard@greensboro-nc.gov) or visit: [www.greensborobeautiful.org](http://www.greensborobeautiful.org)

The above materials/statements/programs are not endorsed by Guilford County Schools, nor do they represent the district's position or policy.

Poster Registration Form  
for  
The 11<sup>th</sup> Annual Poster and Vendor Night

*Sponsored by Syngenta and the Central North  
Carolina Section of ACS*

Where: Auditorium, Syngenta Crop Protection, LLC in Greensboro, NC

Date: April 12, 2011 from 3 - 7 pm

Registration Deadline: April 8, 2011

Poster Title:

Abstract:

Student Name: circle one: (grad/undergrad)

Student Email Address:

Name of Faculty Member:

Faculty Email Address:

Institution:

Department:

Address:

Contact Phone Number:

Fax (336-632-7645) or contact Amanda Stauffer ([amanda.stauffer@syngenta.com](mailto:amanda.stauffer@syngenta.com),  
336-632-5676), Robert Yokley ([ryokley1@triad.rr.com](mailto:ryokley1@triad.rr.com), 336-632-5988), or Jill Tierney ([tierney\\_j@bellsouth.net](mailto:tierney_j@bellsouth.net)) at  
Syngenta Crop Protection, LLC.

## April CNC-ACS Event: PVN-Syngenta Crop Protection-Greensboro

The poster is yellow with a blue border. At the top, it features three logos: the International Year of Chemistry 2011 logo on the left, the American Chemical Society Central North Carolina Section logo in the center, and another International Year of Chemistry 2011 logo on the right. Below these logos, the text "11<sup>TH</sup> ANNUAL POSTER/VENDOR NIGHT" is written in large, bold, blue letters. The main body of the poster contains several phrases in various colors and fonts: "Great Food" in blue, "Door Prizes" in purple, "Student Poster Awards \$\$\$" in orange, "Trade Show" in grey, and "Networking" in green. At the bottom, there is a block of text providing event details: "Date: Tuesday, April 12, 2011. 3 - 7 pm", "Where: Syngenta Crop Protection, LLC - Auditorium, Greensboro, NC", and "Posters: Industrial and Academic Scientific Posters". Below this, contact information is provided: "Please contact Amanda Stauffer (amanda.stauffer@syngenta.com, 336-632-5676), Robert Yokley (ryokley1@triad.rr.com, 336-632-5988), or Jill Tierney (tierney\_j@bellsouth.net) for more info. (Additional info available at: http://cnc-ac.sites.acs.org)".

### Message to Academia

Dear Faculty and Students,

Please see the attachments for details of the upcoming 11<sup>th</sup> Annual Poster/Vendor Night held at Syngenta in Greensboro. This is an excellent opportunity to present a poster on your research activities and network with other faculty, students, and scientists. Note there are cash awards for the top student posters. Please forward this information to anyone who might be interested. We look forward to seeing you on 12 April.

### Message to Industry

Dear Scientist,

Please see the attachments for details of the upcoming 11<sup>th</sup> Annual Poster/Vendor Night held at Syngenta in Greensboro. This is an excellent opportunity to present a poster on your research activities and network with other scientists as well as faculty and students. Please forward this information to anyone who might be interested. We look forward to seeing you on 12 April.

Volunteers needed

On March 28<sup>th</sup> High School Science Teachers from around the Triad will attend a session at Forsyth Technical Community College celebrating the International Year of Chemistry. Volunteers are needed for a discussion panel and to talk with teachers about the International Year of Chemistry. For further information, please contact:

Dr Deborah Pritchard

336-734-7460 - Fax 336-761-2598

[dpritchard@forsythtech.edu](mailto:dpritchard@forsythtech.edu)

[www.forsythtech.edu](http://www.forsythtech.edu)



# 1<sup>st</sup> Annual



## STEM Career Fair

Come show Girl Scouts in your community what it takes to have a career and degree in Science, Technology, Engineering, and Math.

**Saturday, March 26, 2011 from 10:00 A.M. – 2:00 P.M.**



The Learning Center  
8818 W. Market St  
Coffax, NC 27235  
(Behind Magnolia Manor)  
Centrally located in the Triad, close to the  
Piedmont Triad Airport

We are inviting businesses, organizations, and local colleges and universities to come and promote women involved with any STEM related fields.

Any insight that you may have for Girl Scouts Grades 6 – 12 that would like to pursue a career in the STEM field, will be welcome.

Come and set up a table for FREE with your organizations/companies information.

Please bring any hands-on activities that will engage the girls at your table.

Questions?  
Email or call  
Valerie Wooten  
vwooten@girlscoutsp2p.org  
1-800-672-2148 x3114

Please RSVP by March 10, 2011.

Name of Organization _____	Name of Primary Contact _____
Contact Number _____	Website _____
Address _____	
Email Address _____	
Names of people attending _____	
*Lunch will be provided for each member of your organization attending. Please note of any dietary needs.	
Food allergies/specifications _____	
Please circle: Non Profit                      For Profit	



## Meeting Directions:

### From the East

Take I-40 W  
Take EXIT 227 toward US-70/US-29 N/US-220 N.  
Merge onto FUTURE I-840 W.  
Merge onto US-70 W via EXIT 19 toward US-29 N/US-220 N/GSO.  
Turn LEFT onto N ENGLISH ST.  
Cross Bessemer Ave  
420 N ENGLISH ST is on the LEFT



### From the West

Take I-40 E  
Merge onto N OHENRY BLVD/US-220 N/US-29 N/US-70 E via EXIT 223 toward REIDSVILLE.  
Take the exit toward MARKET ST/A & T UNIV.  
Turn SLIGHT RIGHT onto IVY ST RAMP.  
Turn LEFT onto E MARKET ST.  
Turn LEFT onto N ENGLISH ST.  
Cross Railroad tracks and Lorillard's Manufacturing Center (on left).  
420 N ENGLISH ST is on the RIGHT.

## Upcoming Events:

CNC-ACS Calendar of Events - 2011				
<u>Event</u>	<u>Date</u>	<u>Location</u>	<u>Speaker</u>	<u>For More information</u>
Mar Meeting	March 24th	Lorillard	Jim Hollingsworth-Shamrock Environmental	<a href="mailto:edrobinson@lortobco.com">edrobinson@lortobco.com</a>
Chemistry Olympiad	March (TBD)	Syngenta		<a href="mailto:mcdonaj2@gcsnc.com">mcdonaj2@gcsnc.com</a>
ACS National Meeting	Mar 27-31	Anaheim, CA		<a href="http://www.acs.org">www.acs.org</a>
Poster Vendor Night	April 12th	Syngenta	Vendor/Poster Show	<a href="mailto:kent.kabler@syngenta.com">kent.kabler@syngenta.com</a>