

# Chesapeake Chemist

*Maryland Section  
American Chemical  
Society*



**Dr. Sharon Kennedy**

**“Behind the Colgate Smile”**

Wednesday, March 14<sup>th</sup>, 6:00 – 9:00 pm

Anne Arundel Community College

Arnold, MD

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# “Behind the Colgate Smile”

~ Sharon Kennedy ~

Colgate Palmolive

Wednesday, March 14<sup>th</sup>, 6:00 – 9:00 pm

Cade Hall, Room 219

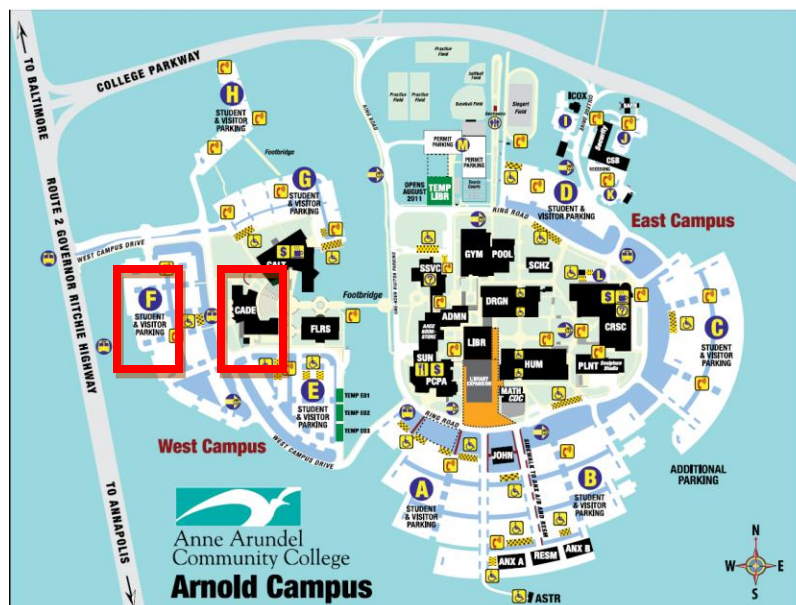
West Campus, Anne Arundel Community College

101 College Parkway, Arnold, MD 21012

6:00 – 7:00 pm	Registration / Networking / Pizza dinner
7:00 - 8:00 pm	Presentation by Sharon Kennedy
8:00 – 9:00 pm	Refreshments and Social
Price	\$20 for members/nonmembers, \$10 for students
RSVP (by March 12)	<a href="mailto:contact-us@mdchem.org">contact-us@mdchem.org</a>

## Directions to Anne Arundel Community College:

- From 695 take I-97 S via EXIT 4 on the left toward I-97 S/Annapolis/Bay Bridge.
- Take the MD-100 exit, EXIT 14B-A, toward Ellicott City/Gibson Island.
- Take EXIT 14A on the left toward Gibson Island.
- Merge onto Ritchie Hwy/MD-2 S toward Bay Bridge.
- Turn right on W Campus Drive by Big Vanilla.
- **Parking:** Lot F is the best choice, but there are two others very nearby.
- Maps can be found at <http://www.aacc.edu/locationsandmaps/>



## Abstract

Most consumers do not think about what goes in to the products they are about to purchase. Personal and Oral Care products usually are chosen based on aesthetics, taste, and color with few concerns about product efficacy. I will present the perspective I have gained into the complex multidisciplinary nature of the science and technology needed in a consumer products company to be a successful global competitor. Colgate Palmolive research utilizes the most advanced science and technology to develop innovative consumer products, from designing the latest advances in whitening (Colgate Optic White) to providing faster, sustained relief to tooth/gum sensitivity (Colgate Pro-Relief). In this presentation, I will give a brief overview of the CP line of consumer products and provide a more in-depth review of the science behind some of the latest CP innovations in Oral Care.

## Speaker Biography

Sharon Kennedy, Ph.D.  
Colgate Palmolive Company



**Dr. Sharon Kennedy** received her B.S. degree in Chemistry from North Carolina A&T State University in 1996. She matriculated to the University of North Carolina at Chapel Hill where she completed graduate work under the direction of Professors Michael Rubinstein and Joseph DeSimone in physical polymer chemistry. She received her PhD in Physical Chemistry in 2000 and then went on to be awarded a National Research Council postdoctoral fellowship at NIST-National Institute of Standards and Technology in the Polymer Division.

In 2002, she joined Colgate Palmolive as a research scientist working in advanced technology in Research and Development. While at Colgate Palmolive she has worked in a number of diverse research and development, and leadership positions. These include Manager of the Surfactant Science laboratory, Project Leader in Innovation for an international group in Liege, Belgium and presently Senior Technical Associate in the Global Toothbrush Division. Sharon has also served as Vice Chair and Chair of Colgate's Black Action Committee, and captain of both the Louisiana State University and NOBCChE Recruiting Teams.

Sharon enjoys spending time with her family and husband (Dr. Alvin Kennedy), carpentry, golfing, foreign traveling, sightseeing, wine tasting, meeting diverse people, and competition in any form.



**May 31- June 2, 2012**

**UMBC, Baltimore, MD**

**[www.marmacs.org/2012](http://www.marmacs.org/2012)**

***Registration and Abstract Submission are now open!***

**Symposia Topics Include**

Chemistry of Renewable Energy

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Mass Spectrometry and NMR of Biomolecules

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A Workshop on MS Sample Prep hosted by Shimadzu

An Employment Workshop hosted by ACS

*and*

Some Great Events for **Student Members**, including a

Panel Discussion on Careers in Chemistry and a Poster Session on Student Member Group Activities

# Upcoming Events and Announcements

## **CALL FOR NOMINATION: 2012 Maryland Chemist Award**

The Maryland Chemist Award Committee is accepting nominations for the 2012 Maryland Chemist Award. The nominee must be a member of the Maryland Section of the ACS, and the work on which the nomination is based should have been performed in Maryland. Supportive documentation should include copies of the resume of the nominee and his/her list of publications. A short statement describing the outstanding contributions of the nominee to scientific research, education, industry, technology, etc., will be helpful and appreciated. Please send nominations to Dr. Angela Sherman. Nominations are PREFERRED to be sent in via e-mail: [asherman@ndm.edu](mailto:asherman@ndm.edu). If you cannot submit your nomination via e-mail, please contact Dr. Sherman via e-mail or phone [\(410\) 532-5713](tel:(410)532-5713) to arrange for alternate delivery method. The deadline for submission of nominations is **April 30, 2012**.

## **CALL FOR NOMINATION: 2012 Braude Award**

The Braude Award, established by George and Monique Braude, is awarded at the October meeting and honors a professor conducting outstanding research involving students at a college or university in the Chesapeake region. Nominations are now being accepted for the 2012 Braude Award. Please submit a list or description of the research accomplishments of the nominee, as well as an indication of the number of students involved in that research, to Louise Hellwig via e-mail: [louise.hellwig@morgan.edu](mailto:louise.hellwig@morgan.edu)

## **SAVE THE DATE: Student Awards Luncheon**

**Sunday, April 15<sup>th</sup>, noon-3:30 pm at the Crown Plaza Hotel, Timonium, MD**

The top undergraduate chemistry majors from twenty local universities will be honored for their hard work and achievements. Our special guest speaker will be Ms. Michelle Shearer, the 2011 National Teacher of the Year. Please join us as we celebrate newcomers to our field!

## **MORE SAVE THE DATES: Earth Day events in April**

**Friday, April 13 - 9:30am-12pm** - Open House/FREE Hands-on Earth Day event for students grades K-5 at the APG Youth Center (zip code: 21005)

**Saturday, April 14 - 9am-12pm** - Project Clean Stream - Earth Day Community Event (Watershed Clean-up) in Baltimore City (zipcode: 21214)

**Saturday, April 21 - 12-4pm** - Earth Day at the Maryland Science Center— hands-on science experiments. If you are interested in helping out with any of these events, please contact Sandy Young: [sandra.young@us.army.mil](mailto:sandra.young@us.army.mil)

## **Applications being accepted: 2012 GEMS Summer Program**

The Gains in the Education of Mathematics & Science (GEMS) Summer Program at the US Army Research Lab (ARL) is an in-depth, professional science experience where a diverse group of middle and high school students do hands-on experiments in an Army lab with Army Scientists & Engineers for one week. The goals of the program are to motivate students in their study of math and science and to inspire them to consider careers in those fields. GEMS is for students who think that they might be interested in the pursuit

of science as a career but maybe need a more in-depth experience to satisfy their natural curiosity of what 'working in a real lab' is like. GEMS at APG is for students entering into the 7<sup>th</sup> grade (Fall 2012) through students entering into the 10th grade (Fall 2012) or older high school students (11/12 grades) who have never participated in the program previously. The program is limited to 128 student slots (32 per week) and 8 Summer Apprentice positions. Each summer we have over 300 applicants for these slots so we'd ask parents NOT to use this program as a summer camp if they know that their student does not like science.

Information on the 2012 GEMS program at Aberdeen Proving Ground can be found at <http://www.usaeop.com/programs/GEMS/ARL.htm>. Applications will ONLY be accepted through the website - STUDENTS should click on 'Apply Now' and fill out the application. **Registration for the APG program will open February 1 and will close March 18, 2012.** STUDENTS are required to write a short essay on why they want to attend. Those students who are military dependents should indicate this in their essay. Letters of acceptance will be sent out by the end of April.

The Maryland ACS sponsors some of the activities at GEMS at APG. A number of Maryland ACS members have had their young, aspiring science students participate in GEMS.

**Call for Judges: STEM Fair, Lutherville Laboratory for Science, Mathematics and Communications**  
Lutherville Laboratory for Science, Mathematics, and Communications is an elementary magnet school in Baltimore County. They are in need of judges for their annual **STEM Fair for grades 4 and 5 on Tuesday, May 1 from 12:00 -3:30.** Lunch and **tasty desserts** will be provided. Time to review the scoring tool and an explanation of the judging process will be provided, too. The students greatly enjoy sharing their learning -- their pride in their work is palpable and speaking to the judges is the highlight of the STEM Fair experience for many of them. Please donate your time for this great chance to reach young minds. Contact **Deidre Austen** at **410-887-7800** or [deausten@comcast.net](mailto:deausten@comcast.net).

## 2012 Event Schedule

Event	Date	Location
Earth Day	April 22	
Student Awards Lunch <b>Michelle Shearer</b>	Sunday, April 15	Crown Plaza Hotel, Timonium
MARM Remsen Award	May 31-June 2	UMBC
Wine social	June	TBA
Undergraduate student event	September	TBA
Braude Award Dinner	October	TBA
National Chemistry Week	October 21-27	
Komen Run/Walk	October	Hunt Valley
Women Chemists Committee Dinner	November	TBA
Maryland Chemist of the Year Dinner	December	TBA

If you have any ideas or suggestions about new events please feel free to contact us at [contact-us@mdchem.org](mailto:contact-us@mdchem.org)

# Recent Activities



## MD CHEMIST AWARD DINNER

At the February 8, 2012 dinner meeting, Kenneth D. Karlin, Ph.D., the 2011 Maryland Chemist of the Year, was presented with a plaque and the Governor's Proclamation for Maryland Chemist Day. He was honored for his pioneering research toward the discovery of intermediates in the metal activation of dioxygen and his significant achievement in metal-dioxygen chemistry. Dr. Karlin presented an engaging lecture titled "*Copper and Heme-Copper O<sub>2</sub> and NO Reactivity: Bioinorganic Perspectives*". Members of Dr. Karlin's research group and faculty colleagues at the Johns Hopkins University as well as other members of the local section attended the event at the Berkshire Marriott Conference Center at Towson University.

## GOVERNMENT AFFAIRS COMMITTEE CONVERGES ON ANNAPOLIS

On Tuesday, February 21, ten members of the American Chemical Society Maryland Government Affairs Committee met with 18 state delegates, 8 senators and members and the staff of the Governor's office in Annapolis. They discussed the role that the Maryland section of ACS could play in promoting STEM education in this state. During these meetings information about the Maryland Section of the American Chemical Society was distributed to all of the legislators along with offers of working partnerships to help government official focus on increasing the quality of education at the K-12 and higher educational instructional levels. The local sections of ACS that cover the Maryland region include the Chemical Society of Washington, the Maryland Section, and the Western Maryland Section, representing 6,141 ACS members in total. The size of this constituency was of interest to our elected representatives. If you are interested in specific recommendations that the ACS might make to your elected representative, please forward them to the chair of Maryland Government Affairs Committee, Dr. James A. Saunders at [jsaunders@towson.edu](mailto:jsaunders@towson.edu).

## March Chemical Anniversaries

Leopold May

The Catholic University of America

Washington, DC

**March 1, 1862:** One hundred and fifty years ago, **Edward Franklin** was born. He was a researcher in chemistry of nitrogen system of compounds.

**March 5, 1637:** Three hundred and seventy-five years ago, **John van der Heyden**, who invented fire extinguisher, was born. He and his brother, Nicolaas, patented it on September 21, 1677.

**March 6, 1787:** One hundred and twenty-five years ago, **Joseph von Fraunhofer** who discovered the dark lines in solar spectrum (Fraunhofer lines), was born.

**March 9, 1912:** One hundred years ago, **Stanley G. Thompson** was born. He codiscovered berkelium (Bk, 97), californium (Cf, 98) 1950, einsteinium (Es, 99) 1952, fermium (Fm, 100), & mendelevium (Md, 101) 1955.



**March 10, 1762:** Two hundred and fifty years ago, **Jeremias B. Richter**, who discovered the law of equivalent proportions, was born. He was the first to establish stoichiometry, the basis of quantitative chemical analysis.

**March 19, 1883:** Seventy five years ago in 1937, **Walter N. Haworth** shared the Nobel Prize in Chemistry for his investigations on carbohydrates and vitamin C with **Paul Karrer** for his investigations on carotenoids, flavins and vitamins A and B<sub>2</sub>. He synthesized ascorbic acid (Vitamin C) in 1933, did research on sugars and dextran as blood plasma substitute, and was born on this date.

**March 23, 1962:** Fifty years ago, **Neil Bartlett** made the first noble gas compound, XePtF<sub>6</sub>, on this date.

**March 24, 1917:** Fifty years ago, **John C. Kendrew** shared the Nobel Prize in Chemistry with **M. F. Perutz** for their studies of the structures of globular proteins. He did research on structure of hemoproteins with x-rays and was born on this date.

Additional historical events can be found at Dr. May's website,  
<http://faculty.cua.edu/may/Chemistrycalendar.htm>

### **REMINDER: Receiving the Chesapeake Chemist**

Hopefully, if you are reading the Chesapeake Chemist this month, you are receiving it via e-mail from us. We went to electronic-only mailings to our MD ACS membership in October 2006.

**Changing your e-mail address? Moving out of the MD ACS area?** E-mail changes can be updated either by:

- E-mailing us at [contact-us@mdchem.org](mailto:contact-us@mdchem.org) – give us your member #, full name, and e-mail changes and we can ensure that your records are updated with National ACS.
- **Contacting the National ACS membership division: 800-333-9511 (US only)** or [service@acs.org](mailto:service@acs.org)

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The current edition and previous editions of the Chesapeake Chemist can ALWAYS be obtained via our website: <http://mdchem.org> – please see the Newsletter Archive link on the right-hand side of the website.



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