

# Chesapeake Chemist

*Maryland Section  
American Chemical  
Society*



**2011 Student Awards Meeting  
“ACS: Serving learners and educators”**

**~ Mary Kirchhoff, Ph.D. ~**

Director of the American Chemical Society Education Division

Sunday, April 10<sup>th</sup>, 11:30 am-2:45 pm

Burkshire Marriott, Towson, MD

## ACS Maryland Section - Officers and Committee Chairs

### Section Officers:

*Chair 2011* - Takashi Tsukamoto, Johns Hopkins University

*Vice-chair (chair 2012)* - Holly Cymet, Morgan State University

*Chair-elect (chair 2013)* - Sara Narayan, Stevenson University

*Immediate-Past Chair (chair 2010)* - Alvin Kennedy

*Secretary* - Lance Baird, Johns Hopkins Applied Physics Lab

*Treasurer* - Holly Cymet, Morgan State University

### Councilors:

Merle I. Eiss (Retired)

Stephanie J. Watson (NIST)

David Roswell (Loyola College)

Paul Smith (UMBC)

**Alternate Councilors:** Shirish Shah (Towson), Joseph Topping (Towson), Sandra Young (ARL)

**Members at Large:** Rose Pesce-Rodriguez, Mike Zapf, Suzanne Procell, Liina Ladon, and Angela Winstead

### Committee Chairs:

*Student Awards (April)* - George Farrant - 410-566-2101; [gfarrant@yahoo.com](mailto:gfarrant@yahoo.com)

*MD ACS Student Grants* - Louise Hellwig, [Louise.Hellwig@morgan.edu](mailto:Louise.Hellwig@morgan.edu)

*Remsen Award* - Dana Ferraris; [Dferrar2@jhmi.edu](mailto:Dferrar2@jhmi.edu)

*Braude Award* - Louise Hellwig, [Louise.Hellwig@morgan.edu](mailto:Louise.Hellwig@morgan.edu), 443-885-2085

*Maryland Chemist Award* - Angela Sherman - (410) 532-5713; [ASherman@ndm.edu](mailto:ASherman@ndm.edu)

### Programs:

*Earth Day* - Paul Smith, Lance Baird

*Finance Committee* - Jan Kolakowski

*Government affairs* - Alvin Kennedy

*Minority affairs* - Alvin Kennedy

*MARM* - Stephanie Watson & Paul Smith

*Retired Chemists* - Alvin Bober

*Student Affiliates Liaison* - Louise Hellwig

*Women Chemists* - Sara Narayan

### 2012 Elections Committee:

**Chair** - Stephanie Watson

**Members** - Takashi Tsukamoto, David Roswell, Frank Switzer, Dana Gasiorowski

### Educational Programs:

*Chemistry Olympiad/Chem-a-Thon* -

Shirish Shah & Mike Zapf

*Continuing Education/High School Education* -

Shirish Shah & Ellen Pisciotta

*Kids & Chemistry/Chemistry-in-the-Library* -

Sue Procell & Sandy Young

*National Chemistry Week (NCW)* -

Shirish Shah & Sandy Young

### Maryland Section on the Web:

[maryland.sites.acs.org](http://maryland.sites.acs.org)

*Webmaster* - Greg Delahanty

### Chesapeake Chemist Editor-in-Chief:

Takashi Tsukamoto

# 2011 Student Awards Meeting

## “ACS: Serving learners and educators”

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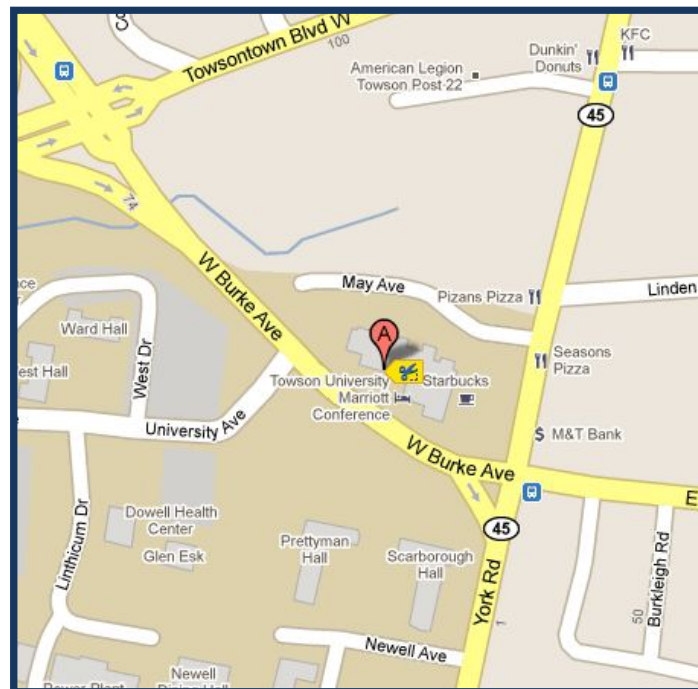
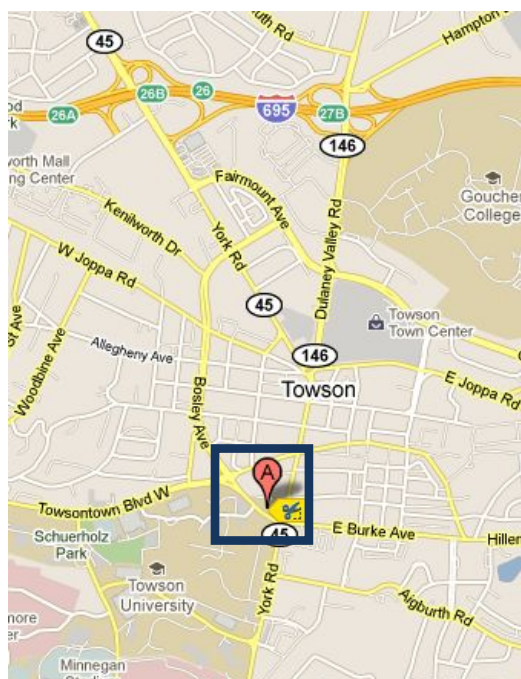
Sunday, April 10<sup>th</sup>, 11:30 am-2:45 pm

Burkshire Marriott  
10 West Burke Avenue  
Towson, MD 21204

11:30 – 12:15 pm	Registration / Networking / Light Refreshments
12:15 - 1:15 pm	“ACS: Serving learners and educators” by Dr. Mary Kirchhoff
1:15 – 2:15 pm	Lunch
2:15 – 2:45 pm	Student Awards presentation
Price	\$20 for members/nonmembers, \$10 for students, free for awardees
RSVP (by April 6th)	<a href="mailto:contact-us@mdchem.org">contact-us@mdchem.org</a>

### Directions to Burkshire Marriott Conference Center (10 West Burke Avenue, Towson, MD)

- From the Baltimore beltway, I-695, follow to exit 27, Dulaney Valley Road towards heading south (It'll become York Road).
- The Burkshire is on the right side as you turn right onto Burke Ave. (18-story building). Meeting attendees should proceed to the right lane. Turn right into the Burkshire's parking entrance. Turn the corner and make an immediate right into the P2 parking garage.
- Look for signs posted in the lobby and by the elevators to locate the dining room
- For more information, visit <http://www.marriott.com/hotels/fact-sheet/travel/bwibu-towson-university-marriott-conference-hotel/>



## ACS: Serving learners and educators

Education features prominently in the charter of the American Chemical Society, a charter that promotes the education of both citizens and professional chemists. Education equips professional chemists, as well as all members of society, to advance in the new millennium, developing 21<sup>st</sup> century solutions to complex problems. In fulfilling its Congressional Charter, the Society has created a number of long-standing, dynamic education programs. At the same time, ACS must be responsive in meeting the needs of the changing chemistry enterprise. This presentation will examine the challenges and opportunities facing science education today and will highlight the education resources of the American Chemical Society.

### Speaker Biography



Mary M. Kirchhoff, Ph.D.  
Director of the American Chemical Society Education Division  
American Chemical Society  
1155 Sixteenth Street, NW  
Washington, DC 20036  
[m\\_kirchhoff@acs.org](mailto:m_kirchhoff@acs.org)  
202-872-4562

Mary Kirchhoff is Director of the American Chemical Society Education Division, which serves learners and educators by building communities and providing effective chemistry education products, services, and information. She received her Ph.D. in organic chemistry from the University of New Hampshire and joined the Chemistry Department at Trinity College in Washington, DC in 1992. Mary served as Chair of the Division of Natural Sciences and Mathematics during her tenure at Trinity. She began working in green chemistry when she received an AAAS Environmental Fellowship to work with the U.S. EPA's green chemistry program before joining the American Chemical Society's Green Chemistry Institute. Mary was elected a Fellow of the American Association for the Advancement of Science in 2006. She is a co-author or co-editor on *Designing Safer Polymers*, *Greener Approaches to Undergraduate Chemistry Experiments*, and *Going Green: Integrating Green Chemistry into the Curriculum*.

## 2011 Maryland Section of the ACS Student Awardees



**Anne Arundel Community College**  
Ingrid Etherton



**Community College of Baltimore County-Catonsville**  
Molly Bettridge



**Coppin State University**  
Philip Asare



**Goucher College**  
Benjamin Spangler



**Hood College**  
Hillary Stauffer



**Howard Community College**  
Nariman Ziaee



**Johns Hopkins University**  
Matthew Diener



**Loyola University Maryland**  
Kiera Cunningham



**McDaniel College**  
Darryl McFarland



**Mount Saint Mary's University**  
Brandon White



**Saint Mary's College of Maryland**  
Patrick Andrew Cody



**Morgan State University**  
Melissa Pinard



**College of Notre Dame of Maryland**  
Adrienne Herman



**Stevenson University**  
Amanda Heard

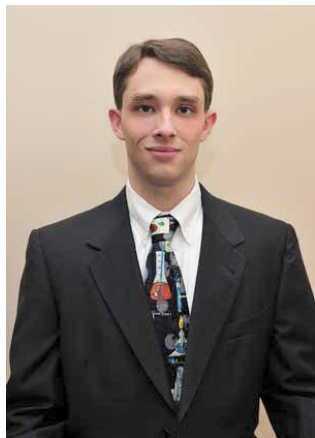


**Towson University**  
Caroline Christensen

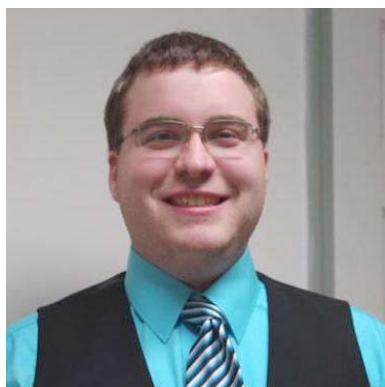


**United States Naval Academy**  
Colin K. Kelly





**University of Maryland Baltimore County**  
Timothy Brown



**Washington College**  
Edward Hoegg

**The Maryland Section of the ACS thanks the Merck Company  
for its generous support of the Student Awards Program.**

# Recent Activities

## March Meeting International Year of Chemistry

2011 has been designated the International Year of Chemistry by IUPAC and UNESCO. The Maryland section meeting on March 2 recognized this with an international dinner menu, a quiz on national flags (the prize was a t-shirt with a picture of Marie Curie; it's 100 years since she was awarded the Nobel Prize in chemistry), and speakers from four areas of the world. Dr. Sara Narayan of Stevenson University spoke about chemistry in India, Dr. Shuhua Ma of Towson University talked about chemistry in China, Dr. Claro Muhoro of Towson University discussed chemistry in Kenya, and Ms. Tsehai Grell and Ms. Melissa Pinard, students at Morgan State University described chemistry in Dominica and other Caribbean islands. To view a larger image, click on the pictures below.



## Chemistry at Morgan

Ms. Julia Dolan of the U.S. Department of Justice, ATF, gave a talk on forensic chemistry at Morgan Chem Club's February meeting.

Nine Morgan students attended the local section meeting on March 2, celebrating the International Year of Chemistry. Two Morgan students, Tsehai Grell and Melissa Pinard, spoke at that meeting about chemistry in the Caribbean; see photo.

Chem Club provided hot chocolate and cookies when the seniors presented their research posters to the faculty and students.

Chem Club organized a Demo Day at which 55 general chem students visited four stations. The students saw and/or participated in making slime, making a rubber ball, inflating a balloon with the carbon dioxide generated by vinegar and baking soda, watching a "blue bottle" reaction, etc. Dr. Winstead even brought her young son! See photos.



# Announcements

## New ACS Maryland Section web site

We are currently testing the beta version of the new ACS Maryland Section web site. We will be gradually migrating to the new site ([maryland.sites.acs.org](http://maryland.sites.acs.org)) from our current site (<http://www.mdchem.org/>) over the next couple of months. Please feel free to contact us at [contact-us@mdchem.org](mailto:contact-us@mdchem.org) if you have any suggestions about our new site.

## Pre-Earth Day Clean-Up at Herring Run Park

For Chemists Celebrate Earth Day (CCED) 2011, the Maryland Section is once again teaming up with Blue Water Baltimore ([www.bluewaterbaltimore.org](http://www.bluewaterbaltimore.org)) for Project Clean Stream. Come on out and lend a hand!

**When?:** Saturday, April 2nd, 2011 - Clean-up from 9am – 12pm – come for an hour or stay the whole time – we appreciate your participation!

**Where?:** Location is at Herring Run Park in northeast Baltimore City adjacent to Lake Montebello (the park entrance is at the intersection of Harford Road and Argonne/Parkside Drives; traveling south on Harford Road, bear left down the hill into the park and you will see a table to sign in on the left)

\*Please RSVP to Sarah Sette at (410)-706-8514 or [ssette@miemss.org](mailto:ssette@miemss.org).

\*Wear sturdy shoes and old clothes!

\*Bags and gloves will be provided

\*Refreshments will be available (drinks and snacks)

## Earth Day Chemistry with Visitors to the Maryland Science Center

On Saturday, April 23rd, ACS volunteers including UMBC undergraduate students will spend an afternoon doing Earth Day-themed experiments with young visitors to the Maryland Science Center in Baltimore's Inner Harbor. A variety of interactive experiments are planned and there will be giveaways for the kids, including Earth Day t-shirts (with "American Chemical Society, Maryland Section" on the back, of course), ACS Earth Day stickers and pencils, and helium balloons. The event runs from noon until 4:00 - come to the Science Center and check it out!

## Chemistry Olympiad Program National Exam

High school teachers are encouraged to identify students (up to 2 students per school) participating in the Chemistry Olympiad Program National Exam. Please submit a letter of recommendation to the address below. The examination will be scheduled for Saturday morning, April 16, 2011, at Notre Dame College in Baltimore. The deadline for submission of recommendation is April 8, 2011. More information is available at the ACS web site: <http://portal.acs.org/portal/Navigate?nodeid=528>

For more information on this program, contact:

Charles M. Zapf

McCormick & Co., Inc.

R&D

202 Wight Avenue

Hunt Valley, MD 21031

410-771-7471 (w) or 410-527-6527 (fax)

[Mike\\_Zapf@mccormick.com](mailto:Mike_Zapf@mccormick.com)

## **Call for Nomination - 2011 Maryland Chemist Award**

The Maryland Chemist Award Committee is accepting nominations for the 2011 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 to the committee via e-mail: [asherman@ndm.edu](mailto:asherman@ndm.edu). If you cannot send your nomination via e-mail, please contact Dr. Sherman via e-mail or phone (410) 532-5713 to arrange for alternate delivery method. The deadline for submission of nominations is April 15, 2011.

## **Nominations for the 2011 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 2011 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). The deadline is May 16th, 2011.

## **Closing of the Meetup ACS Maryland Local section group**

We regret to inform you that the ACS Maryland Local section group on the Meetup site will be discontinued in February, 2011. Our section has implemented a new mass email system capable of communicating with nearly 2000 local members. From now on, event information as well as other important communications will be carried out using the new system.

Your email address will be migrated to the new system. Please contact us ([contact-us@mdchem.org](mailto:contact-us@mdchem.org)), if you have not received any emails from our new system. We will add your name to our mailing list (whether you are an ACS member or not). If at any time you wish to update your e-mail address, please send an e-mail to [contact-us@mdchem.org](mailto:contact-us@mdchem.org) and we will change it right away.

We very much appreciate your participation in this group which has served as a critical communication tool in the past two years.

## **2011 Gains in the Education of Mathematics & Science (GEMS) Summer Program**

GEMS 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 1-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 7th grade (Fall 2011) through students entering into the 10th grade (Fall 2011) or older high school students (11/12 grades) who have never participated in the program previously. The program is limited to 120 student slots (30 per week) and 8 Summer Apprentice positions. Each summer we have over 300 applicants for these slots. (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 2011 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 15, 2011. STUDENTS are required to write a short

essay on why they want to attend. Those students who are military dependants should indicate this in their essay. In addition, students applying who found out about the program through the MD ACS should also indicate this in their essay. Letters of acceptance will be sent out by April 25, 2011.

The GEMS program is only one of many US Army Educational Outreach Programs - information on other programs can be found at (<http://usaeop.com>). The US ARL POC at APG is Sandra Young who can be contacted via e-mail ([sandra.young@us.army.mil](mailto:sandra.young@us.army.mil)).

### **Call for Volunteers – K-12 Educational Outreach**

We know that people have limited time. But taking the time to mentor others, as all of us were once mentored by someone, is a truly fulfilling experience. If you have any questions or are thinking about helping out with a future event, please feel free to contact us at ([contact-us@mdchem.org](mailto:contact-us@mdchem.org)).

### **Plants & People Sundays at the Rawlings Conservatory**

The Howard Peters Rawlings Conservatory & Botanic Gardens in Druid Hill Park runs various programs on Sundays. The 2<sup>nd</sup> (Exploration Station), 3<sup>rd</sup> (Story Hour), and 4<sup>th</sup> (Ask a Scientist) Sundays are programs directed towards K-12 students and often include hands-on science activities.

**Where:** Howard Peters Rawlings Conservatory & Botanic Gardens, 3100 Swan Drive, Baltimore, MD 21217 (by the zoo)

**When:** Almost every Sunday

For more information, visit their website or call (410) 396-0008 for details on the upcoming Sunday program!! ([http://www.baltimorecity.gov/government/recnparcs/special\\_facilities.php#Howard](http://www.baltimorecity.gov/government/recnparcs/special_facilities.php#Howard))

### **Other Educational Outreach Programs**

With recognition of the decreasing numbers of trained STEM professionals that are US citizens, the general decline of hands-on activities in Science, Technology, Engineering, and watering-down of Mathematics in many K-12 programs, and many people's general lack of understanding of STEM topics in society, the Department of Defense has coordinated many of their programs into single websites that contain a wide-range of educational outreach programs, internships, and scholarship opportunities available for K-12, undergraduate, graduate students and beyond.

Information on the wide-variety of programs through the **US Army Educational Outreach Program (AEOP)** can be found on their website (<http://www.usaeop.com>).

Information on the wide-variety of programs through the **National Defense Education Program (NDEP)** can be found on their website (<http://www.ndep.us>).

Many of the programs/opportunities that are listed on these two sites are available to students for participation in Maryland locations.

### **Call for Volunteers for Committee Positions**

Interested in how your dues get used and want to work on interesting member programs/projects? If you want to get involved with the Maryland Section Executive Committee and/or with section activities, we want to hear from YOU! The Maryland ACS Executive Committee meets 4 times during the year to discuss and plan activities. Please feel free to contact the chair, vice-chair, or chair-elect via e-mail to get more information on various areas/activities that you are interested in or that we would like to start or expand in the future. The amount of time to commit would be up to you but might be around 2 hours per month, depending on the activity. We are always looking for individuals with budget/financial, editing, and planning skills. In addition, our Section is always looking for volunteers for our various committees. We are currently looking to fill positions for:

- Archivist
- Women's Chemist Chair
- Young Chemist Chair

Please contact us at [contact-us@mdchem.org](mailto:contact-us@mdchem.org)

### **Get Involved, Stay Involved**

As you know, the American Chemical Society offers many ways for its members and non-members to get involved at the local, regional and national levels. There are opportunities for everyone, whether you are a student, or just starting your career, or a seasoned professional. Are you interested in getting involved, but don't know where to start? Are you already involved with one or more ACS activities but need help finding resources? Please visit (<http://www.acs.org/getinvolved>) to find a streamlined list of links of helpful procedures and resources specifically geared towards your area of interest.

Alternately, you can contact the Maryland ACS Section directly... Like working with students? Have a talent for encouraging students in science? Have ideas for outreach events? Sign up for our volunteer news. Contact us at [contact-us@mdchem.org](mailto:contact-us@mdchem.org).

# 2011 Event Schedule

Event	Date	Time	Location
International Year of Chemistry	3/2 (Wed)	6:30 pm	College of Notre Dame
2nd Annual Mid-Atlantic Regional Nanomaterials Symposium	3/14 (Mon)	8:30 am - 5:00 pm	
Spring 2011 ACS National Meeting	3/27 (Sun) – 31 (Thu)		Anaheim
Pre-Earth Day Clean-Up at Herring Run Park	4/2 (Sat)	9:00 am– 12:00 pm	Herring Run Park in northeast Baltimore City
Student Awards Meeting	4/10 (Sun)	12:00 pm	Burkshire Marriott
Chemistry Olympiad Program National Exam	4/16 (Sat)		Notre Dame College
Earth Day Chemistry with Visitors	4/23 (Sat)	Noon – 4:00 pm	Maryland Science Center
MARM 2011	5/21(Sat) – 24 (Tue)		College Park
Fall 2011 ACS National Meeting	8/28 (Sun) – 9/1 (Thu)		Denver
Remsen Award Meeting	10/5 (Wed)		Johns Hopkins University
National Chemistry Week	10/16 (Sun) – 22 (Sat)		
Braude Award	TBD		
Maryland Chemist Award	TBD		

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)

# Job Hunting Corner

## Job Hunting?

We don't always have job posts in the Chesapeake Chemist. But if you have a position available locally, you are welcome to send them to us for posting in the Chesapeake Chemist. If you are job hunting, remember to put your membership to work by using the ACS job bank: (ACS Careers: [www.acs.org/careers](http://www.acs.org/careers)).

## ACS offers special benefits for unemployed members

During these tough economic times it's more important than ever to belong to the American Chemical Society. Unemployed members can tap into a host of valuable benefits and services that help them get back in the workforce. And, members in good standing may qualify for an unemployed member dues waiver, allowing them to renew their memberships and keep their member benefits at no cost. Contact ACS at [service@acs.org](mailto:service@acs.org), 800-333-9511 or 614-447-3671 for complete details.

Other valuable benefits that help ACS member get back in the workforce include:

- Free registration at ACS National Meetings and registration fees at Regional Meetings of just \$25. Meetings offer ACS Career Fairs with on-site interviews.
- Special discounts for ACS/Harvard courses, ACS ProSpectives and Short Courses, and the ACS Leadership Development System.
- Membership in the ACS Network, your online resource to connect and communicate with friends, colleagues, and potential employers
- Free Guidance from ACS Career Consultants - ACS mentors offer resume reviews, job search strategies, and interview tips that make you stand out from the rest.
- Free access to InterviewStream, an online tool that will sharpen your interview skills
- Members-only access to the ACS Salary comparator.
- And more!

Contact ACS customer service today at [service@acs.org](mailto:service@acs.org), 800-333-9511 or 614-447-3671 today and let us know how we can help.

## 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. Please remember that we are dependant on the National ACS records for your correct, current e-mail.

**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)**



To ensure that you receive the Chesapeake Chemist, please add the MD ACS e-mail ([contact-us@mdchem.org](mailto:contact-us@mdchem.org)) to your accepted e-mail address list IF you have a spam filter.

If you are a member who currently doesn't receive the Maryland ACS Chesapeake Chemist but download it from our website, it is possible that National ACS does not have your e-mail address on file. If you want to receive the Chesapeake Chemist via e-mail, please e-mail us at [contact-us@mdchem.org](mailto:contact-us@mdchem.org) - give us your member #, full name, and e-mail address and we can ensure that your records are updated with National ACS.

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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3815 LANCASTER PIKE, WILMINGTON, DE 19805  
Phone: 302-998-1184, Fax: 302-998-1836

E-mail: ([micronanalytical@compuserve.com](mailto:micronanalytical@compuserve.com) )  
Website: (<http://micronanalytical.com/>)

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