Chesapeake Chemist
Maryland Section
American Chemical Society

The 66th Remsen Lecture

"Design Principles of Photosynthetic Light Harvesting"

~ Professor Graham R. Fleming ~

The Melvin Calvin Distinguished Professor of Chemical Biodynamics

Wednesday, October 5th, 5:30-8:00pm

Johns Hopkins University at Homewood, Remsen Hall 101
3400 North Charles St, Baltimore, MD 21218

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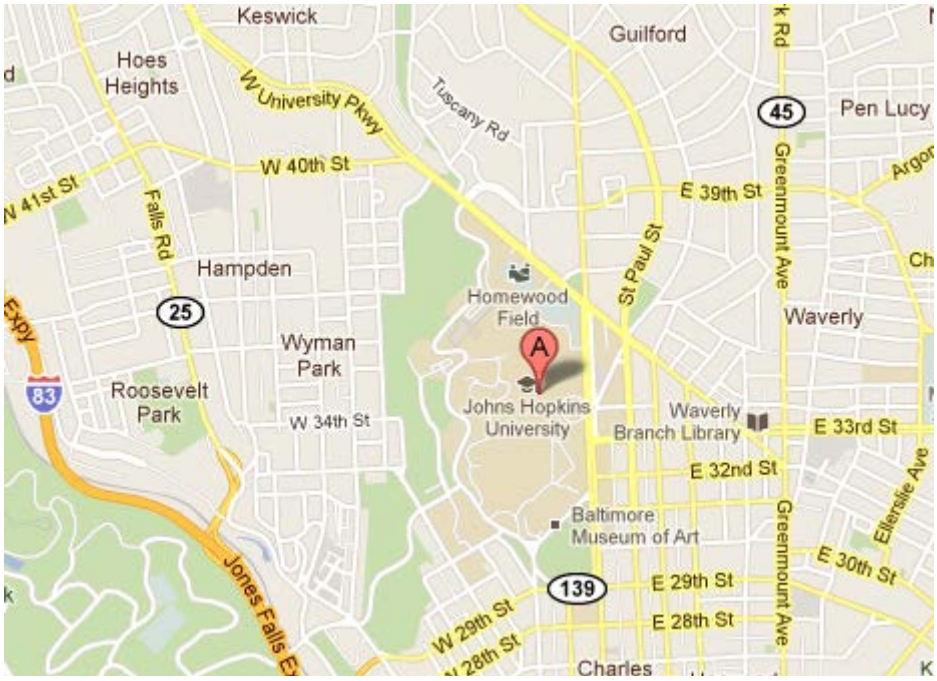
3400 North Charles St, Baltimore, MD 21218

5:30 – 6:00 pm	Light Refreshments, Remsen Hall 140
6:00 – 7:30 pm	Lecture: Professor Graham Fleming (UC Berkeley) Remsen Hall 101
7:30 – 8:00 pm	Reception, Remsen Hall 140
Price	Free
RSVP (by September 30th)	contact-us@mdchem.org

Directions to JHU Homewood (3400 N. Charles St, Baltimore, MD 21218):

From I-95 (southbound) or from I-695 (the Baltimore Beltway): Take the beltway toward Towson to exit 25. Take Charles Street south for about 7 miles (when Charles Street splits a block after Loyola College and Cold Spring Lane, take the right fork). After you cross University Parkway, the Homewood campus will be on your right. Continue southbound. Take a right at the second light, which is Art Museum Drive.

For a campus map, visit the JHU website:
http://webapps.jhu.edu/jhuniverse/information_about_hopkins/campuses/homewood_campus/



"Design Principles of Photosynthetic Light Harvesting"
Speaker Biography

GRAHAM R. FLEMING, Ph.D.
Professor of Chemistry, UC Berkeley
The Melvin Calvin Distinguished Professor of Chemical Biodynamics

Fleming received a B.S. (with honors) degree in Chemistry from the University of Bristol (1971) and a Ph.D. degree in Physical Chemistry from the University of London (1974). He spent the next five years as a postdoctoral researcher at three institutions: California Institute of Technology (1974-1975); University of Melbourne (1975-1976); and the Royal Institution in the United Kingdom (1976--1979).

In 1979 Fleming received his first academic appointment, as assistant professor at University of Chicago (1979-1983). In 1983 he was appointed associate professor, and in 1985 he was made a full professor (A. H. Compton Distinguished Services Professor). He filled that position until 1997, when he accepted a dual position at the University of California, Berkeley as professor in Chemistry and as the first director of the Physical Bioscience Division of the Lawrence Berkeley National Laboratory; in 2002 he was given the chair of Melvin Calvin Distinguished Professor of Chemistry at VCB. In April, 2009, Fleming was appointed UCB's vice chancellor for research, responsible for administering all federal, state and private research funds received by the campus and overseeing all campus museums and research units.

Fields of study pursued by Fleming and his study groups include condensed-phase chemical and biological dynamics, photosynthesis operations, quantum dynamics, quantum information in condensed phases, photochemical reactions, electronic processes at nanoscale, and development of nonlinear optical spectroscopes.

He is particularly known for his work published 2007 providing evidence for quantum coherence in photosynthetic energy transfer, a possible explanation of the high efficiency of photosynthesis.

Upcoming Events

Join the **ACS Maryland Section** at the **Komen Race for the Cure Run/Walk**

When: Sunday, October 23rd, 2011

Where: Hunt Valley, Maryland

What: Choose between the 5K run, 5K walk or 1 mile Family Fun Walk

Click here to join or donate to our team: http://www.komenmd.org/2011/acsmarylandsection

The ACS Maryland Section is forming a team to participate in the Komen Race for the Cure Run/Walk in support of the International Year of Chemistry 2011. IYC 2011 is a year-long celebration of the contributions of chemistry to the well-being of mankind. The fourth quarter of IYC 2011 focuses on the Chemistry of Health (Water, Alternative Energy and Materials being the other three).

Every year, hundreds of thousands of women are diagnosed with breast cancer in the United States. Advancements in diagnosis and treatment therapies have dramatically reduced the number of women who succumb to the disease. Imaging agents, hormonal therapies and chemotherapy drugs are just a few examples of the ways chemistry has contributed to the prevention and cure of breast cancer. ***Help us tell the world that chemistry plays a key role in the fight against breast cancer!***

The Komen Maryland Foundation is dedicated to improving access to health care and providing resources for scientific advancements in the fight against breast cancer. **Did you know that 75% of the funds raised by this organization stay in Maryland to support local programs?** The remaining funds support national research to find a cure.

Top three reasons to join us on October 23rd:

- Support the Komen Maryland Foundation.
- Meet the Maryland Section leadership and candidates for next year's officers.
- Network with other professionals.

If you've never participated in a ACS Maryland Section event, here is your chance! Go to www.mdchem.org for more information about **TEAM ACS MARYLAND SECTION**.

If you have any questions, please contact holly.cymet@gmail.com.

Help us support IYC 2011 and the Komen Maryland Foundation by joining TEAM ACS MARYLAND SECTION and walking or running in the Komen Maryland Race for the Cure Run/Walk. We'll see you there!

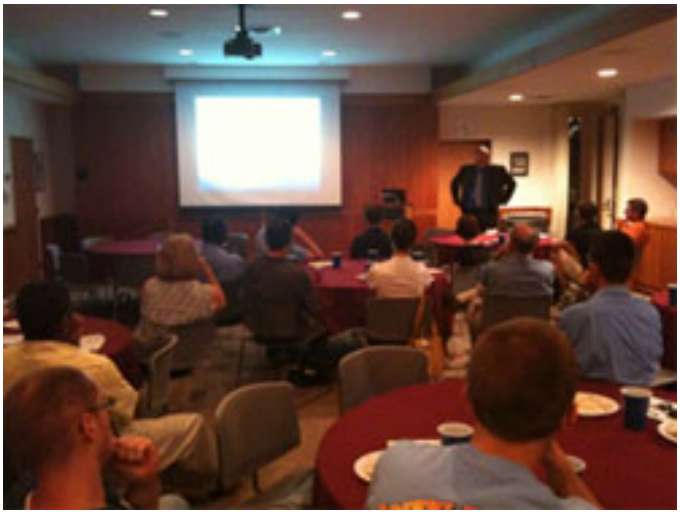
Recent Activities

Maryland Local ACS September Meeting

The Maryland Section hosted a dinner meeting on September 14th at Goucher College in Towson. Our guest speaker was Dr. Michael J. Kates, Director of Discovery Services, DavosPharma. Dr. Kates provided his insights into the recent globalization and evolution in the drug discovery research industry and its effects on his career path as a medicinal chemist.

Dr. Kates highlighted some significant changes that have occurred in US big pharma including blockbuster patent expirations, downsizing, and the offshoring of pharmaceutical research. While these factors has presented many career challenges to chemists in the US, Dr. Kates emphasized that one of the crucial aspects of making a successful career in the ever-evolving pharmaceutical industry is to capitalize on the new opportunities that arise from change. Dr. Kates also shared stories about his first business trip to India and some photos taken during the trip.

Nearly 30 members attended the meeting and enjoyed Indian food (vegetarian food available) for dinner in honor of the International Year of Chemistry 2011.



ACS Council Meeting, August 31st, Denver, Colorado

The Denver Meeting attracted 10,076 registrants, including 2376 students. 1000 Exhibitors were also in attendance. The Society's overall membership remains stable at about 163,00, with the number of Student Members growing rapidly; as of July 31st, the total number of student members was 15,702.

The Council voted to:

1. approve The Petition on Position Statements, which gives the ACS Board sole authority to issue position statements that establish policy for the full Society. Society bodies other than the Board may issue statements on issues that fall solely in their jurisdiction so long as they do not impair other Society bodies' ability to do the same.
2. grant full division status to the Division of Catalysis Science and Technology and to approve their proposed divisional bylaws.
3. dissolve the Division of Petroleum Chemistry and to combine its assets and members with those of the Division of Fuel Chemistry under the new name The Division of Energy and Fuels (effective December 31, 2011).

The Presidential Task Force on Innovation and Job Creation released their report, entitled "Innovation, Chemistry & Jobs." The report contained four recommendations to stimulate innovation and job creation in the US chemical industry. Two of these recommendations will be implemented in new program starting early next year; these will (1) establish an educational program to guide budding entrepreneurs through the creation of new chemical businesses, and (2) support the formation of new chemical companies by providing access to the unparalleled informational resources of the Society, as well as other professional resources.

ACS President Nancy Jackson moderated a special discussion on how ACS can best cultivate a culture of safety in US universities and colleges. The topic generated a significant number of comments and suggestions, with 42 Councilors providing input from the Council floor. Members are encouraged to send questions or comments on the topic to safety@acs.org.

The Board reauthorized funding for the following programs:

- ACS Fellows
- ACS Leadership
- ACS Scholars
- ACS Global Research Experiences, Exchanges, and Training Program (GREET)

Respectively submitted,

Paul J. Smith, Councilor

My Experience as a SEED Program Intern

The ACS Project SEED summer research program opens new doors for economically disadvantaged students to experience what it's like to be a chemist. Students entering their junior or senior year in high school are given a rare opportunity to work alongside scientist-mentors on research projects in industrial, academic, and federal laboratories, discovering new career paths as they approach critical turning points in their lives. Ms. Elizabeth Travis, a senior student at Institute of Notre Dame High School, was selected to do research at Johns Hopkins University School of Medicine this summer. The following is a report by Ms. Travis describing her exciting research experience.

This summer, I was given the extraordinary opportunity to work as an intern at the Brain Science Institute at the Johns Hopkins University School of Medicine as part of the ACS Project SEED program. This newly-established institute aims to bridge the gap between basic science and therapeutic applications by providing expertise in drug discovery research.

For one of the two major projects I was assigned this summer, I worked with one of the core scientists, Ms. Bridget Duvall, to synthesize small organic molecules designed to inhibit an enzyme called glutamate carboxypeptidase II (GCPII). Under the close supervision of Ms. Duvall, I made three small-molecule GCPII inhibitors. The synthesis of each compound I made required six sequential reactions. I also helped Ms. Duvall make some starting material for her own experiments in order to learn more about basic lab techniques. After spending an entire summer synthesizing three compounds, I have a better appreciation for the work it takes to create novel drugs.

For my other project, I was asked to inventory recently purchased chemicals (~200 bottles). The chemistry group maintains a library of thousands of chemical reagents. The group uses a very sophisticated database system to keep track of each bottle. The database can help the chemists locate chemicals they may need for their experiments. It can be searched by name, CAS number, structure (or substructure), vendor or by many other criteria. This helped me gain experience in not only drawing structures, but also relating structures to molecular names and the molecular formula. Also, I felt I did something useful for chemists in the group because now they can search the database with the additional compounds.

My internship experience at the Brain Science Institute gave me an incredible opportunity to gain a broad perspective on the drug discovery process and helped me figure out what exactly I want to major in college. I now know I would like to major in either chemistry or biochemistry.

Finally, I would like to take this opportunity to express my gratitude to Dr. Takashi Tsukamoto, Ms. Bridget Duvall, the Johns Hopkins Brain Science Institute, and the American Chemical Society.

By Elizabeth Travis

Announcements

2011 Braude Award Recipient Selected

The Braude Award honors people who have had significant impacts on teaching and who are collaborating in their research with students and post-doctoral fellows. The award was endowed by and named for George L. Braude, a chemist with W. R. Grace and the Food and Drug Administration. This year the award goes to Dr. Ryan Casey, Towson University. Dr. Casey has developed a highly productive research program in the field of environmental toxicology, conducting studies of metal transport in waters and organisms in the watersheds of Baltimore County and nearby areas. A large part of Dr. Casey's scholarship activities have involved mentoring of research students, approximately 16 undergraduates and 7 Masters students. He will receive the Braude Award at the dinner meeting Weds. Nov. 2 at the Burkshire Marriott in Towson.

2011 Maryland Chemist Award Recipient Selected

The Maryland Chemist Award was established in 1962 to recognize and to honor, each year, a member of the Maryland Section for outstanding achievement in the fields of chemistry. The achievement, as originally stated, may be in pure or applied chemistry, chemical engineering, or chemical education. This year, the award goes to Dr. Kenneth Karlin, Johns Hopkins University, for his wide-ranging contributions to inorganic chemistry, particularly for his research focusing on coordination chemistry relevant to biological and environmental processes, involving copper or heme (porphyrin-iron) complexes. Dr. Karlin will receive the award early next year.

Morgan State's Chemistry Club Wins Outstanding National Award

Every year the American Chemical Society rates a certain number of university Chemistry Clubs as Outstanding, Commendable, or Honorable Mention. For the 2010-2011 school year Morgan's Chem Club received an Outstanding Award based on such activities as promoting science in the community, attending scientific meetings, service to the Chemistry Department and the University, speakers, and celebrating National Chemistry Week.

Chem Club members spent 42 person/hours leading students at Northwood Elementary School in fun chemistry experiments. They also hosted 100 of Northwood's fifth graders on a visit to Morgan's Chemistry Department to tour research labs, look into microscopes, watch demonstrations, and perform a short experiment. Club members attended six chemistry meetings out of state and six local chemistry meetings. The Club assisted with Morgan's High School Shadow Day and helped clean up a lab. The Club brought in nine speakers to speak at club meetings about different careers based on chemistry. The Club celebrated National Chemistry Week in October by having a contest to see who could name the most movies with an element in the title, for example, "Iron Man". The winner listed over 150 movies and won a $50 gift card to AMC theaters.

UMBC Chapter Won a Commendable Award for the 2011-2012 School Year

The UMBC chapter of the American Chemical Society Student Affiliates won a Commendable award for the 2011-2012 school year. Activities included social events, National Chemistry Week celebrations, field trips, Earth Day activities, participation in Relay for Life and Pennies for PUR and several Science Nights at local elementary schools. We are excited for another school year underway. On September 13, we held our 4th annual Saccharide Social event. S'mores and caramel apples were enjoyed by all to welcome new and returning members back to campus. For more information about the UMBC chapter of the American Chemical Society Student Affiliates, please visit;
http://www.umbc.edu/studentlife/orgs/cbcom/index_files/Page384.htm.

Science Night Activities Needs YOUR Help!

Over the last two years, we have started helping run Science Night events at some Elementary Schools (ES). These are typically 2-5th graders. It's a great opportunity to interact with students who generally do not have a lot of hands-on science AND their parents. We have 2 planned for this Fall and would like to request MD ACS member help if possible:

- Halsted Academy & Pleasant Plains ES (Baltimore County) - Tuesday, October 18th - during National Chemistry Week
- Roland Park ES (Baltimore City) – Thursday, December 8th

No prior experience necessary - just plan to bring your enthusiasm for Science! You would receive all the information ahead of time for the 8 experiments and would only help run 1-table with a single experiment at the event with a teacher from the school. We are working with a professor who studies the effectiveness of STEM education on extension activities for the students. If you are interested, please contact MD ACS member Sandra Young via email: (Sandra.k.young26.civ@mail.mil or skyschlee@yahoo.com).

Chemistry in the Library – Upcoming Sessions

The Chemistry in the Library program is a volunteer effort by members of the ACS Maryland Local Section to bring the fun and wonder of chemistry to kids age 6 and up. We visit local libraries in the Maryland area and help kids with a variety of hands-on chemistry activities. We hope to see you & your student there! Activities are geared towards students at the 2-6 grade level. Students in grades pre-K-1 are welcome to come too as long as parents stay and help their student with the activities.

If you're interested in helping out, please come to one of our events. We start setting up about half an hour ahead of the start time.

Saturday, October 1st - 2pm	Central Branch 10375 Little Patuxent Pkwy Columbia, MD 21044 (410) 313-7800
Saturday, October 15th - 2pm	Elkridge Library 6540 Washington Boulevard Elkridge, MD 21075 (410) 313-5077
Friday, October 21st - 1pm	Savage Library 9525 Durness Ln Laurel, MD 20723 (410) 880-5975
Friday, October 21st - 4pm	East Columbia Library 6600 Cradlerock Way Columbia, MD 21045 (410) 313-7700
Thursday, October 27th - 4:15pm	Enoch Pratt Free Library Waverly Branch 400 E. 33rd Street Baltimore, MD 21218 410-396-5430

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).

Plants & People Sundays at the Rawlings Conservatory

The Howard Peters Rawlings Conservatory & Botanic Gardens in Druid Hill Park runs various programs on Sundays. The 2nd (Exploration Station), 3rd (Story Hour), and 4th (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/recnparks/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-a-year to discuss and plan activities. Please feel free to contact any Section officer via e-mail to get more information on various areas/activities that interested you or that the Section should start or expand in the future. The amount of time to commit is up to you (min. 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 needs 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

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.

2011 Event Schedule

Event	Date	Time	Location
Remsen Award Meeting	10/5 (Wed)	6:00 pm	Johns Hopkins University
National Chemistry Week	10/16 (Sun) – 22 (Sat)		
Komen Race for the Cure	10/23 (Sun)		Hunt Valley, MD
Braude Award	11/2 (Wed)		Burkshire in Towson
Maryland Chemist Award	2/8/2012 (Wed)		Burkshire in Towson

If you have any ideas or suggestions about new events please feel free to contact us at contact-us@mdchem.org

October Chemical Anniversaries

Leopold May
The Catholic University of America
Washington, DC

October 3, 1811 — Two hundred years ago on this date, a long article on spontaneous combustion by A. S. (Adam Seyfert) appeared in the Philadelphia newspaper, Aurora: It was the second article submitted by the Columbian Chemical Society.

October 5, 1861 — One hundred and fifty years ago on this date, The Chemical Society of Union College, the precursor of the American Chemical Society, was founded.

October 7, 1886 — One hundred and twenty-five years ago on this date, Neil E. Gordon was born. He was the founder and editor of the *Journal of Chemical Education* and the founder of the Gibson Island Conferences, later known as the Gordon Research Conferences.

October 14,1886 — One hundred and twenty-five years ago on this date, Jacobus H. Van't Hoff presented law showing that osmotic pressure of a dilute solution obeys Boyle's, Charles's & Avogadro's Laws, and that pV = RT before Swedish Academy of Sciences.

For more historical facts on chemistry, visit Dr. May's website at http://faculty.cua.edu/may/ChemistryCalendar.html.

ACS Maryland Section Election Ballot for 2012 Officers

Message from Chair

It is time for the 2012 Election of the Maryland Section Officers who will begin their terms in January 2011. We are pleased to announce that there have been a number of individuals who have expressed interest in a leadership position within the Section. Contrary to last year's election, this year promises a selection of qualified candidates of varied backgrounds and our members can elect who they would like to lead the section in 2012. Our officers and councilors perform a vital function to the operation and sustainability of our Section and its activities. Not only are these individuals essential to our members exclusively, but they also organize and execute programs and activities intended for community and educational outreach.

You find more information about each candidate on our website by clicking here: http://maryland.sites.acs.org/2012electionballot.htm

In the first week of October, you will receive an email and a postcard with a link to the ballot. We would appreciate if you could take the time to review the ballot and vote in our upcoming election.

Sincerely,

Takashi Tsukamoto
Chair, ACS Maryland Local Section

Summary of Candidates:

Chair Elect	James Saunders	
Secretary	Louise Hellwig	
Treasurer	Angela Sherman	
Councilors (3 positions)	Dana Ferraris	Jan Kolakowski
	David Roswell	Robert Von Tersch
	Stephanie Watson	
Alternate Councilors (3 positions)	Alvin Kennedy	Takashi Tsukamoto
	Sandra Young	Charles M. Zapf
Members at Large (5 positions)	George Farrant	Lisa Fridman
	Rose Pesce-Rodriguez	Suzanne Procell
	Beatrice Salazar	Megan Shanholtz

CANDIDATE BIOS AND STATEMENTS

CHAIR ELECT:

James Sauders

Bio:

Dr. Saunders research interests are in plant biochemistry of secondary natural products, plant/insect interactions, subcellular localization, drugs of abuse, smoking and tobacco issues, and the chocolate industry; his expertise is in molecular biology with emphasis on DNA fingerprinting, gene transfer and gene expression methodology. He has

published 96 career publications, edited 9 books, and made over 270 scientific presentations. He serves on numerous advisory boards for business and academic institutions, and has participated in teaching at more that 10 different university settings and obtained approximately $3,400,000 in career grants and contracts.

He has served in a variety of teaching and mentoring organizations developing enhanced experiences for K-12 and college science activities. These have included participation in more than 500 science fairs, development of teacher recertification courses and workshops both nationally and internationally, directed internship programs to provide over 1000 students with individual research experiences at both high school and college levels, developed curricula for multiple biotechnology programs, and served on advisory boards for more than a dozen academic and scientific organizations. Dr. Saunders received a BA from University of South Florida (1967-1971) and his PhD from Miami University, OH (1971-1975) and did his postdoc in Department of Biochemistry & Biophysics at University of California at Davis (1975-1977). He spent 26 years as a Research Chemist with the USDA in Beltsville, MD (1977-2003), seven years as Director of Molecular Biology, Biochemistry & Bioinformatics at Towson University (2004-2011) and is currently Director of Science, Technology, Engineering & Mathematics Initiatives at Stevenson University.

Statement:

I wanted to express my interest in running for Chair Elect and serving as an officer in the local ACS society in upcoming years. One of my goals in my new position at Stevenson University is to promote and engage students and faculty in STEM (Science, Technology, Engineering & Mathematics) activities and the local chapter of the ACS obviously shares those same interests. The professional networking opportunities from [the local section] meetings have provided and will continue to provide ACS members with the types of interactions that promote STEM goals and increase positive interactions among the scientific community in this region. I have been attending the ACS local meetings for the last several years and I am looking forward to continuing in a more active role.

SECRETARY:

Louise Hellwig

Bio:

Louise Hellwig graduated from Swarthmore College and earned her Ph.D. in organic chemistry from the University of Wisconsin-Madison. After short stints at the College of Wooster in Ohio and at Towson University, she has been teaching chemistry at Morgan State University for 20 years. She mentors Morgan's Chem Club, which won an Outstanding award this year. She is currently liaison between the local section and the Maryland Student ACS chapters, and chairs the Braude Award Committee. She has also spearheaded the Maryland section receiving two nanogrants from the national ACS for special meetings: the Bridging the Gap meeting which integrated our student members into the local section, and the IYC grant which helped us celebrate the International Year of Chemistry at our March 2011 meeting.

Statement:

I would like to serve as Secretary of the Maryland local ACS section because we have a great section with many worthwhile projects and interesting meetings. I see the Secretary's duties as keeping the section's paperwork organized, representing the section well in any correspondence with outsiders, and providing clear communication with the national ACS. I have already demonstrated the necessary organizational skills as chair of the Braude Award committee, as liaison with the university Chemistry Clubs in the Maryland section, and as mentor for Morgan's Chemistry Club. I already attend most of the monthly and Executive Committee meetings; recording any business and keeping minutes will give me an even more complete picture of our section activities. I would be honored to serve as Secretary for the section in 2012.

TREASURER:

Angela Sherman

Bio:

Angela R. Sherman is an Associate Professor and Chair of the Chemistry Department at Notre Dame of Maryland University. Dr. Sherman earned her B.A. from Johns Hopkins University and her Ph.D. from Purdue University. Dr. Sherman is a member of the Control Board for Arkivoc, an on-line journal of organic chemistry. She is also a Technical Editor for the journal. Dr. Sherman has been active in the Maryland Section of the ACS since 1996. Currently, she is the chairperson of the Section's Maryland Chemist of the Year committee and Treasurer for the MARM 2012 that will be held at UMBC in May 2012.

Statement:

I am interested in serving as the Treasurer of the Section because I enjoy participating in the Section activities. I previously served as Treasurer of the Maryland Section for seven years, until 2007. As Treasurer, it was my responsibility to ensure accurate and timely financial transactions related to activities and events sponsored by the Section.

COUNCILORS (5 candidates running for 3 positions)

Dana Ferraris

Bio:

Dr. Ferraris received his Ph.D. degree in chemistry from Johns Hopkins University in 1999 and his M.B.A. from Carey Business School in 2009. Over the past 10 years, Dr. Ferraris has held a variety of leadership positions in the pharmaceutical industry particularly at Guilford Pharmaceuticals, MGI Pharma, and the Eisai Pharmaceuticals. Dr. Ferraris joined Johns Hopkins University as a Principal Scientist in 2009. He oversees medicinal chemistry activities at the Brain Science Institute's NeuroTranslational program with a primary mission of translating discoveries in basic science into novel therapeutics. Dr. Ferraris has extensive drug discovery experience in both oncology and CNS disorders. Dr. Ferraris' research efforts have resulted in two investigational drugs currently in development for the treatment of cancer. Dr. Ferraris also serves as Chair of the Remsen Award committee, one of the most prestigious recognition programs offered by the Maryland Local section.

Statement:

I have been a member of the ACS for almost 20 years during which time I have seen the gradual decline in jobs and opportunities for chemists, particularly in Maryland. Through my job, I have interacted with many students who are interested in chemistry, but are acutely aware of the decline in chemistry jobs and choose other disciplines because of this. If elected to this position, I would like to be a voice for our local chemists at the national level and get involved in crafting a new vision for the ACS Maryland Local section. In addition, I like to engage young people with chemistry by emphasizing the variety of career paths that a chemist can pursue and in doing so, rejuvenate our local community.

Jan Kolakowski

Bio:

Education: B.S., Chemistry (1975) and M.S., Chemistry (1977), Clarkson University, Potsdam, NY. Performed graduate research in metal hydroxides under the former Institute of Colloid and Surface Science at Clarkson University.

Professional: Currently a research chemist with the US Army and experienced in the areas of analytical chemistry, environmental chemistry, risk assessment and project management. Author/coauthor of over 50 peer-reviewed publications and technical reports and over 80 presentations. Retired from the US Army Reserve as a Lieutenant Colonel.

ACS Service: Joined ACS in 1977. Currently serving as Chair of the Finance Committee since 1991 and as member of the Maryland Chemist Award Committee since 1999. Served in the Maryland Section as Treasurer (1994-1995), Secretary (1996), Chair-elect (1997) and Section Chair (1998). Also served as Member at Large (2000-2006) and member of the MARM 2001 Organizing Committee (2000-2001). Served as Chairman of the session on Surface Chemistry at the 28th MARM in 1994; conducted a lecture/walk at the Gettysburg National Military Park in May 1995; organized and presented an information booth on Chemistry for National Chemistry Week in November 1995.

Statement:

When I was recently asked to run for Councilor of the Maryland Section this rekindled my interest in serving. I have a working knowledge of how our section functions, after having served on our Executive Committee for 20 years and in every major position. The main reason I joined the American Chemical Society while in graduate school was for future employment and career advancement. My membership in ACS has helped in pursuing a successful career in chemistry for nearly 34 years. I strongly believe in stable employment at a good salary and intend to support these principles as I represent your Section at the national meetings.

David Roswell

Bio:

David F. Roswell received both his AB and PhD at the Johns Hopkins University. In 1968 he joined the Department of Chemistry at what was then Loyola College in Maryland. Promoted to full professor in 1973 he spent several years as department Chair during which time he oversaw the construction of the Donnelly Science Center. In 1980 he was named as the founding Dean of the College of Arts and Sciences. In 1999 he returned to full time to the Chemistry Department as Hauber Professor of Chemistry.

His research interests are in Organic and Biochemistry as well as Chemilumenescence and he has authored or co-authored 30 publications. In 1986 he was selected as Maryland Chemist of the year.

He has been active in the American Chemical Society both at the local and national level and has served as one of the Maryland Section councilors for many years.

Statement:

It has been a rewarding experience to have worked with the MD section of the ACS over the years. As Councilor I've been able to represent the Section and many Council meetings and will be glad to do so in the future. I am willing to serve another term if you so wish.

Robert Von Tersch

Bio:

COL Robert von Tersch earned his B.S. in chemistry from Fordham University, Bronx, NY, under an ROTC scholarship and his doctorate in biochemistry from the University of Georgia in 1991. COL von Tersch's military assignments have included principal investigator at the U.S. Army Medical Research Institute of Chemical Defense, Aberdeen Proving Ground, Md.; Assistant Professor in the Chemistry Department, U.S. Naval Academy, teaching general chemistry, biochemistry, and biology; scientific advisor for chemical and biological warfare issues in the Office of Chemical, Biological and Missile Nonproliferation, U.S. Department of State (1999-2003); and Deputy Director, Office of Research Plans and Programs, U.S. Army Medical Research and Material Command (MRMC), Ft. Detrick, Md. In August 2003, he deployed for a four-month tour in Iraq, where he served as manager of the Ministry of Trade Oil-for-Food (OFF) Transition Team and as the Deputy Director of the OFF Coordination Center. He

returned to MRMC and was later assigned as Deputy Director/MRMC liaison to Medical Chemical, Biological, Radiological and Nuclear Defense Health Policy, Office of the Assistant Secretary of Defense for Health Affairs. A tour at Bolling Air Force Base as deputy chief and then acting chief for the Office for Counterproliferation, followed; he also returned to Iraq. Prior to his current tour, COL von Tersch was assigned as Chief, Medical Branch, Joint Requirements Office for Chemical, Biological, Radiological, and Nuclear Defense, J8, Joint Staff. COL von Tersch currently serves as Medical Director for the Chemical and Biological Defense Program in the Office of the Deputy Assistant to the Secretary of Defense for Nuclear, Chemical, and Biological, in the Pentagon.

COL von Tersch's involvement with the American Chemical Society has included the Maryland Section Government Relations Committee, January 2003 – present; service as Chairman of the Maryland Section, January 2002 – 2003, Chair-elect, January 2001 – January 2002, and Treasurer, January 1996 – January 2001; and membership in the Divisions of Biological Chemistry, Fluorine Chemistry, Organic Chemistry, and Computers in Chemistry.

He is married to Ms. Cindy Kronman.

Statement:

I have been a member of the Maryland Section of the American Chemical Society for over 15 years and have served as the Section's treasurer and chair. I would like to serve the Section further in this senior leadership position, representing the Section's interest at the national level and providing guidance from the national organization to the Maryland Section. Advancing the awareness of science, particularly chemistry/biochemistry, forward in the public arena as well as in government circles, with an emphasis on how science can be used in government service, is very important to me. I hope the Maryland Section will allow me this opportunity to support and promote the Section and the American Chemical Society.

Stephanie Watson

Bio:

Dr. Watson is a Research Chemist in the Engineering Laboratory at the National Institute of Standards and Technology in Gaithersburg, MD, where she studies methods to measure the service life of polymeric materials, such as those found in coatings and electrical cables. Dr. Watson's professional experience prior to joining NIST in 2002 includes employment at Millennium Chemicals, Inc. (Cristal Global), Baltimore, MD. She received a B.A. in Chemistry from The College of Wooster in Wooster, OH and obtained a Ph.D. in Analytical Chemistry under Dr. David Hercules from the University of Pittsburgh. She also held post-graduate positions at the U.S. Department of Energy at Federal Energy Technology Center in Pittsburgh and with Dr. Julia Fulghum at Kent State University in Kent, OH.

Dr. Watson has been a member of the American Chemical Society since 1989 and became involved in the Maryland Section [MARM 2000 exhibits chair; secretary (2001-2004), chair (2006) and councilor (2008 to present) of the Maryland Chapter, MARM 2012 Co-Organizing Chair.]. She is also a member of Sigma Xi.

Statement:

I would like to continue to serve as Councilor for the Maryland Section to maintain contact with ACS National and represent our Section's concerns and needs to ACS National staff and committees. As a Maryland Section councilor, I have been a member of the Local Section Activities Committee (LSAC) on the ACS National level for 3 years and have participated on the Grants and Awards subcommittee, passing on grant opportunities that could benefit our Section. I also convey our Section's concerns in all my interactions on this committee and on the ACS council overall. As co-organizing chair for MARM 2012, our Regional ACS meeting, I have been able to utilize my contacts as member in LSAC to access resources that may have been more difficult to obtain. Additionally, I would also like to continue providing information

about the latest ACS National activities/requirements to our Section. For example, I have been actively involved in updating our Section's ByLaws to hold electronic elections. More recently, I also have tried to make the duties of Section officers more transparent by drafting a duties document, which is located on our website. I am now working on updating our Section ByLaws to streamline our Section committees as an effort to reflect recent times and needs.

ALTERNATE COUNCILORS (4 candidates running for 3 positions)

Alvin Kennedy

Bio:

Dr. Alvin P. Kennedy received his B.A. in Chemistry at Grambling State University and a PhD in Physical Chemistry from University of California at Berkeley. He served as Project Leader at the Dow Chemical Central Research Division and in 1991 he joined the Chemistry Department at North Carolina A&T as an Assistant Professor. Dr. Kennedy is currently Professor and Chair of the Department of Chemistry at Morgan State University.

Dr. Kennedy has served as Chair of the ACS Maryland Local Section in 2010 and Vice-Chair in 2009. He is an active member of the national organization of Black Chemist and Chemical Engineers (NOBCChE). He is Chair of the NOBCChE Higher Education Strategic Initiatives, which organized the first HBCU/MI Chemistry Chair's Forum. His long term objective is to strengthen relationships between the ACS and NOBCChE at both the national and local levels. As an alternate councilor he will act as a substitute representative at the ACS National meetings in the absence of a councilor.

Takashi Tsukamoto

Bio:

Dr. Tsukamoto received his Ph.D. degree in Chemistry from Tokyo Institute of Technology in 1993 and pursued postdoctoral studies in the Department of Medicinal Chemistry at the University of Michigan. He has held a variety of leadership positions in the pharmaceutical industry including Guilford Pharmaceuticals, MGI Pharma, and the Eisai Research Institute, where he most recently served as the Director of Medicinal Chemistry. In 2009, Dr. Tsukamoto joined Johns Hopkins University as an Assistant Professor of Neurology and Director of Chemistry of NeuroTranslational program with the primary mission of translating discoveries in basic science at Johns Hopkins into novel therapeutics.

Statement:

Dr. Tsukamoto served as a member-at-large (2007-9) and Vice Chair (2010) for the ACS Maryland Local section. He is currently Chair of the section and Editor-in-Chief of Chesapeake Chemist. As an alternate councilor, he will act as a substitute representative at the ACS National meetings in the absence of a councilor. He will also serve as Exposition Chair of the MARM 2012.

Sandra Young

Bio:

A native of Chicago, IL, Sandra Young received her BS in Chemistry from DePaul University in Chicago, IL in June 1990. With a strong interest in materials and applied processes, Sandy pursued and received her PhD in Polymer Science and Engineering at the University of Southern Mississippi in Hattiesburg, MS in May 1999. She followed her formal education with a 1 ½ year post-doc at the US Army Research Labs (ARL), Weapons & Materials Directorate (WMRD) in Aberdeen, Maryland before getting hired on permanently in

December 2000 where she has assumed a number of jobs: Materials Research Engineer in the Polymers Branch, Technical Advisor to the Director of WMRD, ARL Liaison Officer for the Assistant Secretary of the Army's Office for Research and Technology at the Pentagon, Deputy Branch Chief for the Materials Applications Branch, Materials Research Engineer in the Propulsion Science Branch in ARL-WMRD, and most recently Technical Coordinator for the Lethality Division. She has over 40 published papers and technical reports. Throughout her career, Sandy has taken a personal interest in science, technology, engineering, and math (STEM) education and runs the Gains in the Education of Math & Science program at ARL-APG, teaching and mentoring MS and HS students and encouraging the continuing education of teachers. She mentors a variety of students through the Science and Engineering Apprentice Program (SEAP) and the College Qualified Leaders (CQL) program. She has a variety of efforts on-going with teacher education outside of school. She is the ARL lead at APG for the National Defense Education Program (NDEP) – http://ndep.us - coordinating hands-on events with students throughout the I95 corridor from Howard County to Cecil County.

Statement:

As a member of the Maryland Section of the American Chemical Society since moving to Maryland in 1999, I have been active in the local section by attending meetings and participating in National Chemistry Week & Earth Day events. I have also held the positions of Member-at-Large (1999-2003), Chair (chair elect – 2004, vice-chair – 2005, chair - 2006), Webmaster (2004-2010), Editor of the Chesapeake Chemist (2006-2010), Hands-On Science Outreach co-coordinator for Earth Day (April) & National Chemistry Week (October) since 1999, and have co-run a program with an ARL coworker called Chemistry-in-the-Library (http://mdchem.org/citl/citl_main.html) in libraries around the state of Maryland. I am dedicated to continuing to support the MD ACS and members through service as an alternative counselor. Having supported the section behind-the-scenes for over a decade, I know that I can continue to look out for the MD ACS members interests at the National level.

Charles M. Zapf

Bio:

Charles M. Zapf currently is a research scientist for McCormick & Co., Inc. in Hunt Valley MD for 35 years. His experience spans organic, process, and analytical chemistry including earlier employment in other chemical laboratories. He has published and presented his work.

His ACS experience is primarily with the high school program for 25 years including science fairs, HS Chemathon, ACS Chemistry Olympiad as well as many school presentations at all levels. He has served the Maryland Section as treasurer, former chair-elect and in an earlier period as alternate councilor. Other services were provided to MARM, Eastern Analytical Symposium, Society for Near Infrared, and as the local college program advisor and teaches undergraduate chemistry lab.

MEMBER-AT-LARGE (6 candidates running for 5 positions)

George Farrant

Bio:

I graduated from Oberlin College (BA 1962) and from Case Western Reserve University (PhD organic chemistry1968), and held post-doctoral research positions at the University of Cologne in Germany and University of Virginia. I taught Chemistry at Washington & Lee University (1 yr), CCBC Catonsville full time (35 years) and part-time at Towson University (20 yrs). I worked in industry as a research chemist at the Lubrizol Corporation for two years after graduation from Oberlin College. And during a year on a sabbatical leave, with the Multi-Chem Corporation I worked in hazardous waste disposal operations. I

retired in 2006 but have been active in the Maryland section for many years. I have been a member of the ACS for 46 years and also have been on the executive committee for the last 10 years.

Statement:

As a member of the executive committee of the Maryland Section I organize the student awards program given every April by the Maryland section of the ACS. The Student Awards meeting has been very popular with students, faculty and members. Since I am retired I have been devoting more time to the section's business where I enjoy working with a talented and highly motivated group of chemists.

Lisa Fridman

Bio:

I have been an educator throughout my professional career. After leaving Purdue with a Masters in Chemical Education, I worked for 12 years at Glendale Community College in Glendale, California. During these 12 years I have taught numerous courses and tried many different techniques with my students such as cooperative learning, guided inquiry, service learning and more. After moving to Baltimore 4 years ago I tried teaching AP Chemistry for a local public high school. I had a lot of success with my high school students but I missed the college level. I am now at Stevenson University as an adjunct faculty member teaching general chemistry. I am also the program coordinator for SoLVE: Solutions for Learning and Vibrant Education. SoLVE engages students through faculty-facilitated sessions that feature; active learning, problem solving, guided inquiry, team building and the integration of STEM disciplines.

Statement:

I moved to Maryland from Southern California about 4 years ago. I would like to get involved with my local section of the American Chemical Society to meet other local chemists and get involved. I have been an educator for over 15 years. My main interest is working with students and public outreach.

Rose Pesce-Rodriguez

Bio:

Research chemist at the US Army Research Laboratory (Aberdeen Proving Ground) for ~22 years. Expertise in analytical chemistry of energetic materials. ACS member for ~25 years. Activity in ACS MD Section focuses on educational outreach (National Chemistry Week, Earth Day, Chemistry-in-the-Library, etc).

Suzanne Procell

Bio:

Mrs. Suzanne Procell is the supervisory chemist for the Chemical Agent Standard Analytical Reference Material (CASARM) Quality Assurance Team at the Edgewood Chemical Biological Center (ECBC). She earned an Associate of Arts degree in Laboratory Science Technology from Harford Community College in 1987, then a Bachelor of Science degree in Chemistry from Towson University in 1999. Mrs. Procell is also the founder and coordinator of the Kids & Chemistry local program at Aberdeen Proving Ground (APG). She formalized the program in 2000 with a handful of volunteers, a simple plan, and a nonexistent budget. More than 10 years later, the program is recognized for its quality hands-on approach to promoting science education at the primary grade level. Today the Kids & Chemistry program at APG is made up of more than 40 volunteer scientists and engineers working at ECBC. They have visited over half of the elementary schools in Harford County, sharing hands-on chemistry experiments with more than 3,000 students in their classrooms.

Beatrice Salazar

Bio:

Beatrice received a B.S. in Mathematics from Eastern Connecticut State University and a Masters in Chemical Education from The University of Pennsylvania. She has 18 years experience teaching chemistry in high school, first in Philadelphia and later on in Baltimore County Public Schools where she has also served as teacher mentor. She has been an ACS member for 10 years. She is currently the coordinator for the local ACS Chemistry Olympics.

Statement:

Beatrice wants to be part of the educational outreach programs of the ACS local section. She would like to introduce these programs to her own students and to help other high school science teachers do the same. Beatrice has lots of enthusiasm and initiative, she would be happy to assist in the Students Awards Program.

Megan Shanholtz

Bio:

Megan Shanholtz began her academic career at Boston University, where she majored in biomedical engineering. During her time at BU, she was an active member of both the Biomedical Engineering Society, where she also served two years as Class Representative, and the Society of Women Engineers. After two years of engineering coursework and working as an undergraduate researcher in the field of nonlinear dynamics, Megan decided to take some time off to regroup and change focus. Following several years spent working in the medical and web development industries, Megan began taking courses at the Community College of Baltimore County to refresh her academic skills. She is currently receiving an academic scholarship funded by the NSF as a result of her first semester coursework at CCBC, where she has maintained a 3.85 GPA over 26 credits. Outside of class, Megan operates her own web development company and works as a research intern in the chemistry lab at the Johns Hopkins Brain Science Institute's Neurotranslational Program. Megan plans to transfer to the University of Maryland in the Spring of 2012, where she expects to major in Chemistry. Her future plans include obtaining a PhD in organic synthesis and working in drug discovery or academia.

Statement:

I am interested in serving in this position in order to gain professional leadership experience and to assist in the current efforts of the local section. I am particularly interested in educational outreach, for both K-12 as well as undergraduate. With my tech background, I also plan to take over updating the website and setting up the Chesapeake Chemist newsletter.

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 contact-us@mdchem.org 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).

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, 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, 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 – 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

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