

# THE CAPITAL CHEMIST



A Publication of the Chemical Society of Washington Section of the American Chemical Society

## May CSW Meeting to Feature Raleigh W. Parrott II, FBI Laboratory

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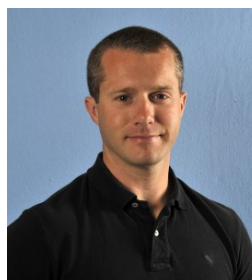
May 2015

Please join CSW on Thursday, May 21, 2015 for a dinner meeting featuring Raleigh W. Parrott II, Chemist-Forensic Examiner for the Explosives Unit of the FBI Laboratory.

Mr. Parrott is currently a Chemist-Forensic Examiner for the FBI Laboratory in Quantico, VA. His area of expertise is in the analysis of explosives and residues of explosive materials.

Mr. Parrott earned his M.S. in Chemistry from Illinois State University in 2007. Upon graduation, he accepted a fellowship position with the Counterterrorism and Forensic Science Research Unit at the FBI Laboratory, where he developed techniques to screen for biological threat agents and explosive materials. After his research, he began processing improvised explosive devices (IEDs) for trace evidence and then later for the chemical analysis of explosives.

Mr. Parrott has been involved in the area of explosives and IEDs since 2008 and was qualified as a Forensic Examiner for the FBI Laboratory in 2011. Since that time, he has conducted thousands of examinations on explosives materials from IEDs around the world. In 2013, he was deployed to Afghanistan as an explosives expert and assisted in the utility of explosives chemistry in their judicial system. Earlier this year he gave his first testimony in Kenya and was further deployed there as an explosives expert to assist with cases and training. He currently serves as the training coordinator for the Explosives Unit and has been the lead trainer for chemists in that unit since 2013.



### Logistical details:

- **Date:** Thursday, May 21, 2015
- **Time:** 6:00pm social hour and check-in; 7:00 pm dinner; 8:00 pm speaker
- **Cost:** \$27 (Members and Guests); \$13 (Students)
- **Location:** Marvel Hall, ACS Hach Building, 1155 Sixteenth St. NW, Washington, DC 20036
- **Menu:** The meal will be a buffet provided by Sacrificial Lamb Wraps and Kebabs with chicken and vegetarian entrees, salad, rice, and dessert. Assorted beverages will also be provided.
- **Lecture-only option:** You may attend the talk only, but reservations are appreciated.
- **To Attend:** RSVP by noon on Monday, May 18, 2015 to [csw@acs.org](mailto:csw@acs.org) or by phone at 202-659-2650. Please provide the names in your party when you RSVP. The public is invited to attend. Those who make a reservation, but are unable to attend, should send a check for the cost of their meal to the CSW office.

### May Speaker Abstract, "Explosives: Where Intimacy Matters"

Explosives have been around for thousands of years, and thus their chemistry as well. The applications and utility of explosives have helped to shape our world in both good and destructive ways. While simple chemistry can be utilized in the production of explosives, their effects and behaviors are still being tested today. This presentation will explain the basic concepts of the chemistry of explosives, the nature of some of their properties, some of the explosive threats that face our world today, and how science is combating those threats.

### Featured Items:

- Nominations open for CSW Officers/Councilors/Managers
- Councilor Notes from the ACS National Meeting in Denver
- What do you call a scientist who isn't a scientist?
- Tao Ye shares his experience from the ACS National Meeting

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# Now Accepting Applications: 2015 Student Travel Awards

The Chemical Society of Washington is pleased to announce a student travel award to defray travel and/or registration costs to the [National ACS meeting](#) in Boston this Fall.

The Boston meeting will be held August 16-20, 2015. The topic for the meeting is "Innovation from Discovery to Application." Eligible expenses include meeting registration, travel expenses, airfare, and lodging.

The award is open to students who are graduate and undergraduate students in the jurisdiction of the Chemical Society of Washington. The award is not intended for post-doctoral fellows. There will be a maximum of four awards available for the 2015 National meeting in Boston. Each award will be for up to **\$500** of eligible expenses based on a review of the required materials (below).

Applicants should submit the following by **June 1, 2015 at midnight** to CSW (email: [CSW@acs.org](mailto:CSW@acs.org)):

- A cover letter stating how and why attending this ACS meeting will promote his/her career;
- The applicant's CV;
- A letter of recommendation from the student's mentor explaining why the student deserves the award and how this will help his/her professional development;
- An accepted abstract with proof of acceptance.

## Post-Meeting Commitments:

After returning from the conference, awardees will be asked to submit articles to *The Capital Chemist* on their experience. Awardees may also be asked to present their posters, if applicable, at one of the upcoming CSW dinner meetings.

To hear from previous student travel award recipients on their experiences traveling to a national meeting, click [here!](#)

# Call for Volunteers: GC&E Conference July 14-16, 2015



The ACS Green Chemistry Institute® (ACS GCI) is excited to announce its [19<sup>th</sup> Annual Green Chemistry & Engineering \(GC&E\) Conference](#) taking place from July 14-16, 2015, at the Bethesda North Marriott Hotel and Conference Center in North Bethesda, MD. This year's theme is "Catalyzing Innovation: Smarter Research, Greener Design, Better World" and will highlight green chemistry and engineering's role in catalyzing innovation. This exciting conference will offer three days of dynamic programming and will provide a host of volunteer opportunities for local green chemistry enthusiasts!

Accordingly, ACS GCI is calling all volunteers and would like for you to be a part of the action! As a conference volunteer, we will ask you to work four hours and you will receive access to the general conference proceedings for the rest of the day you volunteer. Assistance is needed in the following areas: Onsite conference registration, technical sessions, roundtable reception, hybrid meeting session, and more. For more information, please visit [www.gcande.org](http://www.gcande.org). Teamwork makes the dream work!

# Call for Nominations for CSW Officers/Councilors/Managers

The annual election of Officers, Councilors, and Managers of the CSW will be held in November 2015 in accordance with the Bylaws and Standing Rules. All CSW Members are now invited and encouraged to submit nominations for the open positions. Self-nomination is acceptable. Elected members have general charge of the business and affairs of the CSW.

Nominations should be submitted to the CSW Office no later than June 16, 2015. All CSW members are eligible for nomination, and CSW welcomes all who are willing to participate, including those who have not previously held positions in CSW. Incumbents are eligible for nomination to the same position (if the term expires) or any other position as Officer, Councilor, or Manager. Please note that all candidates will have to fill out a form for publication at the time of balloting.

The following positions are open for election this year:

- 3 Councilors and 3 Alternate Councilors serving three-year terms
- Secretary (serving a two-year term)
- President-Elect (one year as President-Elect, one year as President, one year as Past-President)
- 6 Managers (serving two-year terms)

**[To nominate yourself or someone else, click HERE to fill out the nomination form.](#)**

## **Current Officers:**

President: Alan Anderson, Bowie State University  
President-elect: Dennis Chamot, National Academy of Sciences (ret)  
Past President: Kathryn Hughes, National Academy of Sciences  
Secretary: Jennifer Tanir, HESI Global  
Treasurer: Stefanie Wittenberg, US Patent and Trademark Office

## **Managers:**

*Through 2015:* Alan Ehrlich, Stein IP, LLC; Kaitlyn Crawford, University of Maryland; Zory Glaser, Johns Hopkins University; Katrice Lippa, NIST; Fatima Sequeira, NIST; Kelli Sikorski, University of Maryland  
*Through 2016:* Svetla Baykoucheva, University of Maryland; Greg Brewer, Catholic University; Philip DeShong, University of Maryland; Wesley Farrell, University of Maryland; Joseph Houck, University of Maryland; William Trenkle, Department of Health and Human Services

## **Councilors:**

*Through 2015:* Christopher Avery, US Department of Energy; Elise Ann Brown, US Department of Agriculture (ret); Kim Morehouse, US Food and Drug Administration  
*Through 2016:* Joseph Antonucci, NIST; John Malin, ACS (ret); Jason Schaff, Federal Bureau of Investigation  
*Through 2017:* Regina Cody, NASA; Monika Konaklieva, American University; Stefanie Wittenberg, US Patent and Trademark Office

## **Alternate Councilors:**

*Through 2015:* Dennis Chamot, National Academy of Sciences (ret); Daron Freedburg, US Food and Drug Administration; Matthew Windsor, Association for Research in Vision and Ophthalmology  
*Through 2016:* Richard M Goodman, Richard M Goodman Consulting LLC; Richard Jordan, Dickinson Wright PLLC; Bhushan Mandava, Consultant  
*Through 2017:* Chris Hollinsed, University of Maryland; Ajay Mallia, Georgetown University; Bhushan Mandava, Consultant

# Scientific Identity in an Alternative Career Path

Contributed by Christopher Avery, Capital Chemist Editor-in-Chief

What do you call a scientist who isn't a scientist?

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Ask any Regular Jane off the street what they picture when they picture a scientist and they'll likely say one of two things: a white lab coat or Albert Einstein. It's a very common perspective, but it's also increasingly inaccurate.

For years now, there has been a slowly-ramping crisis in the scientific community: [there aren't enough academic jobs to employ everyone who wants one](#). This is a serious problem for us as a scientific community, because so much of our process of training and equipping the next generation of scientists is focused on preparing people to become professors.\*

The postdoc market has become the epicenter of this crisis. Postdocs are generally people who have committed to the academic route, having bypassed offramps of changing career paths at the end of the undergrad and grad school periods. We in the scientific community sometimes don't really appreciate how weird the postdoc step sounds to people outside of it. After all, these are people who have just finished 5-7 years earning a Ph.D., who are then going back into the lab to do even more research before finally being able to be a professor somewhere. In a normal labor market, this isn't a problem. But with reduced funding available for academic research, there are fewer and fewer professorships available for a widening pool of candidates.

Interestingly, this is a known theoretical problem in economics circles. It's called a [glamor labor market](#). Megan McArdle described this situation well in a recent article:

"[Glamor labor markets are markets where] a large number of aspiring entrants, who are poorly paid, but have a shot at fame and fortune if they reach the top slot. A small number of people in the top slots. And very little in between, in part thanks to the huge oversupply of labor at the bottom, which makes it cheaper to use three less experienced people than one person at a middling wage scale." ([link](#))

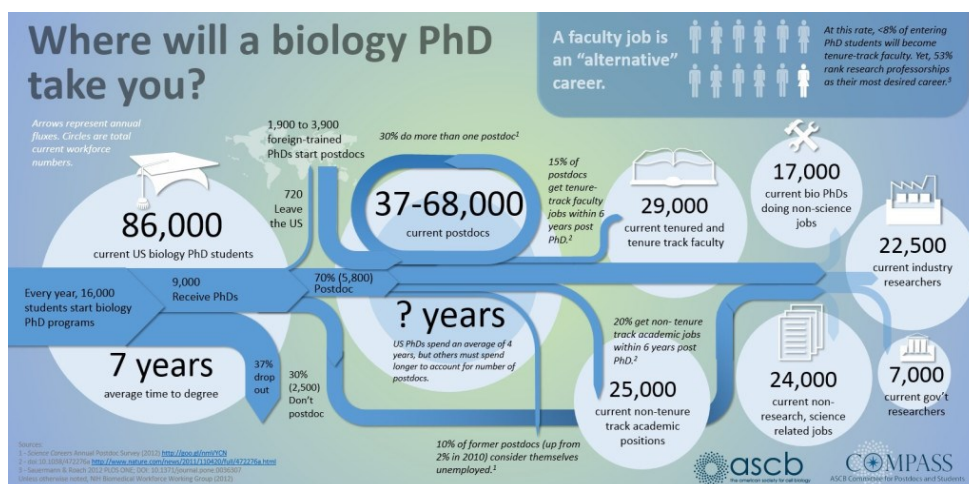
Sound familiar?

Our whole system for training scientists is geared toward training academics. Ask any science, technology, engineering, or mathematics (STEM) graduate student what they intended to do with their Ph.D., and I'll bet you the majority will say either academics or industry, and most might look at you with a confused expression if you ask for options beyond those two. Just as the academic market has contracted, so too has the industry market. [Industrial pharmaceutical chemist positions have been disappearing](#) as companies globalize their production systems. The slow recovery of our economy has [hampered expansion of bench chemistry employment](#) as well. Chemists graduating in today's economy face one of the [hardest job markets](#) we've seen in a while.

I certainly never heard anyone talk about the difficulty of finding a job post-grad school when I arrived there. And if I'm being honest, I'm not sure I would have listened if they had. At 22, I was biased toward my own self-assurance of future domination, and frankly, had already picked my career path. Risk analysis was not in my portfolio of thinking at that point in my life. Luckily, going to grad school at the University of Michigan offered me an array of alternative choices, once I woke up to the reality that I didn't want to be a professor anymore. I found my way into the science policy world, which married a lot of my interests together in a way that makes me feel like I'm still helping the world.

But sometimes, it's hard to still feel like a scientist. I'm not at a bench, but I'm involved in work that has real and dramatic implications for scientific research and development in this country. I still use scientific knowledge and decision-making skills on a daily basis. I just haven't worn the white lab coat in a while.

Recently, I stumbled onto an [infographic](#) from the [American Society for Cell Biology](#) (right)



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# Scientific Identity in an Alternative Career Path, Continued

Granted, this data is for the biology field, but I spent some time tracking down numbers on this for the chemistry community. By and large, the trend holds for chemistry as well. It has become so difficult to land an academic position, that the image of scientists as professors is no longer in the mainstream. At current rates, depending on the field, ~10% or less of the grad students entering each will become professors in the end.

This is why I hate the term “alternative science careers.” If only 10% of us are going to become academics, then the reality is that **a faculty job IS an 'alternative' career.**

The reality is that scientific and technical knowledge is becoming more critical to solving a whole host of societal problems. Without scientific experts who are willing to branch out and try new things, we have no way of leveraging that knowledge in places traditionally devoid of scientific talent. In part, this means it is incumbent on us to expand the definition of what it means to be an expert in something. We have a huge oversupply of scientists who are in it because they think science is interesting and wanted to investigate, learn, and probably change the world a bit. And we have a huge range of serious issues facing our society that need scientific experts to address them well.

Speaking from some personal experience, it'd be nice if we didn't teach our young scientific minds that if they are leaving the lab, aren't real scientists. I think we forget sometimes that being a scientist is more than a profession: it's an identity. Giving up that sense of self-identity to go do something new is a very difficult thing to do.

I've been out of graduate school for several years now, and have gotten to do some really cool things in the science policy space. I helped The National Academies write several studies, worked for Congress, helped write laws, advocated for causes I believe in, and worked in the President's Administration. When I talk to scientists, they universally expresses some level of happiness that I'm here, trying to help incorporate science into governmental decision-making.

And I've come to accept that, in spite of all I've gotten to do, I will never again have the chance to be a professor. When I sit in meetings or attend conferences with scientists, I sometimes have to remind them that I know the language they speak. Our community doesn't quite know how to incorporate an atypical scientist like myself into the fold without making them feel like impostors.

If there's any positive outcome to the crisis in academic employment facing our community, it's that more people seem to be taking that risk of trying something new. Our scientific diaspora is changing, and we need to start thinking about what that means for how we perceive ourselves as a community, and how we treat those who blaze the trail of new expanded, unexpectedly different scientific careers.

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What do you call a scientist who isn't *just* a scientist? I'd call them trailblazers.

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*This article originally appeared at [www.capitalchemist.org](http://www.capitalchemist.org) on 4/23/2015 in the CSW Original Articles series. To view other articles that Chris has written, please visit <http://www.capitalchemist.org/author/cavery/>. Infographic by [Jessica Polka](#) and [ACSB](#). Republished with permission from the author.*

*\*More reading on the academic job market:*

[Too Many Science Students?](#) (Megan McArdle, The Daily Beast)

[Too Many Postdocs, Not Enough Research Jobs](#) (Jon Marcus, Higher Times Education)

[Does Science Produce Too Many PhD Graduates?](#) (Neuroskeptic, Discover Blog)

[US Urged to Rethink Chemistry Graduate Education](#) (Rebecca Trager, Chemistry World)

[Too Many Scientists?](#) (Chemistry World)

[Are There Too Many Ph.D.s and Not Enough Jobs?](#) (All Things Considered, NPR)

[The Postdoc Series: The Podcast](#) (Julie Gould, NatureJobs)

[The Ph.D. Bust: America's Awful Market for Young Scientists – In 7 Charts](#) (Jordan Weissman, The Atlantic)

[Glut of Postdoc Researchers Stirs Quiet Crisis in Science](#) (Carolyn Y. Johnson, The Boston Globe)

# Kavli Foundation's 'Science at the Frontiers' Lecture Features Dr. Alan Lightman

The Fred Kavli Science at the Frontiers Lecture Presents “Science & Religion” by Dr. Alan Lightman – Physicist, MIT Professor, and Author

Monday, May 4, 2015  
6-7PM (Doors: 5:30PM)  
National Geographic Society Grosvenor Auditorium  
(Enter on M St, between 16th and 17th Sts, NW)

Book signing to follow at 7:00PM, courtesy of [Politics & Prose](#) – Copies of *Einstein’s Dreams* and *The Accidental Universe* will be available for purchase (credit card only).

Travel with [Alan Lightman](#) on a journey through time as he surveys selected high points in the history of science that bear upon philosophical, theological, and ethical issues. The general trend of science over the centuries has been to enlarge the domain of what we call the “physical universe” and to develop a purely material and rational explanation for the phenomena of the physical universe. Dr. Lightman then turns to religion and discusses the kinds of questions that intersect both religion and science, versus the kinds of questions that lie firmly in one domain or the other. He discusses the form of religious beliefs that is compatible with science, and the fact that science and religion have different kinds of knowledge and different methods of obtaining that knowledge. Finally, Dr. Lightman discusses his view that a “spiritual universe” exists in addition to the physical universe, although the former does not necessarily include what we call God. This stimulating and provocative talk is based on essays in Dr. Lightman’s recent book *The Accidental Universe: The World You Thought You Knew* (Pantheon Books).



Dr. Lightman is a world famous theoretical physicist who did seminal research in the astrophysics of black holes, radiation processes, and relativistic plasmas prior to becoming an award winning writer. Among his best known books are *Einstein’s Dreams*; *The Diagnosis*, a finalist for the 2000 National Book Award; and *Origins*, which won the 1990 Association of American Publishers’ award for the best book on science of the year. In 2013, his book *The Accidental Universe* was published to widespread acclaim, and his most recent book, released this year, *Screening Room*, has received outstanding reviews. More information about Dr. Lightman may be found at his [website](#).

This free public lecture is brought to you by the [Council of Scientific Society Presidents](#) and the [Kavli Foundation](#).

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Photo credits: Council of Scientific Society Presidents (published by request of CSSP)

## CSW Board of Manager meeting minutes - February 2015

The CSW Board of Managers met on March 30, 2015. At that meeting, the Board approved its minutes from the previously held meeting on February 2, 2015. The minutes from that meeting are below.

[February 2015 Board of Managers Meeting Minutes](#) (PDF)

Contact the Board of Managers at [csw@acs.org](mailto:csw@acs.org).

# A Journey to the Mile-High City

Contributed By Tao Ye, CSW Student Travel Award Winner

I have lived in the U.S. for only one year. Journeying to Denver for the ACS National Meeting was my first trip to another big city—and my first conference—which made it special and exciting.

At first, the two-hour jet-lag from DC to Denver and early rising to catch the first talk in the morning made me feel a little tired. However, with the taxi approaching to the downtown on the highway, I could see the beautiful snow-covered mountain range in front of us, and all the tiredness suddenly went away. I was overwhelmed and excited by the hundreds of high-rise buildings, which made the city full of vigor.

Stepping out from the taxi, the big blue bear standing in front of the Convention Center and peeking into the windows immediately caught my eye. There seemed to be a smell, an odor of science and chemistry, as I entered the conference hall facing an infinite of young graduate students, researchers, and scientists. Their presence created a remarkable degree of excitement and a dense academic environment in the Convention Center.



["I See What You Mean,"](#) by Lawrence Argent.

I was excited but nervous during the first few days because I was going to give my oral presentation on the fourth day of the conference. This was my first time to give an oral presentation in a conference.

English is not my first langue. Although I practiced a lot, the presentation still did not go as well as I expected. However, I cannot forget the moment when I was standing in front of such a large number of people, and one famous professor sitting in the front row gave me a look with curiosity and hopefulness, which really eased my nervousness and encouraged me to deliver my talk.

My advisor, [Dr. Danmeng Shuai](#), highly praised my presentation and told me that there were more than seven faculty members listening to my talk and some of them were even big shots in our research area. I never thought that my work would be so important that some famous professors would be interested in my talk. Their supports further strengthened my resolve to work harder and do better in the research I am conducting.

I was so lucky that I met several editors of [Environmental Science and Technology](#), which is the best journal in environmental engineering, and other famous professors in the ENVR reception. Before this party, I read a lot of their papers and had never thought about meeting them in person. This conference totally made my dream come true. Moreover, I was also able to meet other scientists and graduate students in my own field, communicate with them, and receive valuable feedback on my research.

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# A Journey to the Mile-High City, Continued

This was my first time to give an oral presentation in such an influential academic conference. I would like to thank the [Chemical Society of Washington](#) for choosing me as the recipient of [CSW Student Travel Award](#) and also my advisor, Dr. Danmeng Shuai, for his financial and moral support of my work and his generous help in my study.

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*The Chemical Society of Washington (CSW) offers a travel award to defray travel and/or registration costs to a National ACS meeting. The award is open to current graduate students in the Jurisdiction of the CSW. Awardees are asked to share with CSW members something from their experience that impacted their perspective as a chemist. For more information on the Student Travel Award, please look [here](#). Contact [csw@acs.org](mailto:csw@acs.org) with additional questions.*

Photo credit:

Featured image: [monkeeye](#) / [CC BY 2.0](#)

Body: [sshb](#) / [CC BY-NC-SA 2.0](#)

## Volunteer opportunity: AAAS/SSE STEM Program

In 2004, the Senior Scientists and Engineers (SSE) and AAAS formed the AAAS/SSE STEM Volunteer Program to support K-12 STEM (science, technology, engineering, and mathematics) education, foster STEM literacy, and motivate students to pursue STEM careers.

The Program recruits volunteers from the science, engineering, and medical communities in the Washington DC Metro area. It is based on [RE-SEED](#) and [TOPS](#), volunteer efforts launched in the 1990s. The Program began in 2004 in Montgomery County, Maryland and has expanded to schools in Virginia (Fairfax, Loudoun, and Prince William Counties and the cities of Arlington and Falls Church), in the District of Columbia, and in Prince George's County, Maryland. 150 volunteers participated in the 2014-2015 school year. The majority of volunteers are retired, but the number of those still working is growing.

### **Opportunity:**

SSE needs scientists, engineers and physicians to assist K-12 STEM teachers in the District of Columbia and adjacent counties, including Loudoun County, during the 2015-16 school year.

The details of the collaboration are worked out between the teacher and the volunteer, and may involve giving demonstrations, assisting in lab experiments, lecturing on special topics, assisting with homework, etc.

The hours are flexible, and volunteers attend a one-day orientation session before being assigned to schools.

### **For More Information:**

To see how volunteers are assisting their teachers, check out video clips at [www.seniorscientist.org](http://www.seniorscientist.org).

### **To Volunteer:**

If you care about K-12 STEM education and have time to share your knowledge with students and teachers, please send a note to [bcalinge@aaas.org](mailto:bcalinge@aaas.org) with your home address, or call 202-326-6629.



# News from National: Council Meeting in Denver

*Contributed by John M. Malin, Councilor*

*The Council is the deliberative assembly of the ACS, charged with partial responsibility of governing ACS. At each national meeting, CSW Councilors represent our section, and report back afterward.*

**CSW Councilors attending the Council Meeting:** Regina Cody, Monika Konaklieva, Stefanie Wittenberg, Joseph Antonucci, John Malin, Jason Schaff, Chris Avery, Elise Ann Brown, and Kim Morehouse

**CSW Councilors Serving on ACS National Committees:** Regina Cody (Chemical Safety), Joseph Antonucci (Patents and Related Matters), John Malin (Public Relations and Communications), Jason Schaff (Constitution and Bylaws), Chris Avery (Environmental Improvement), and Kim Morehouse (Community Activities)

## Actions of the Council

### Nominations and Elections

The Committee on Nominations and Elections presented to the Council the following nominees for selection as candidates for President-Elect, 2016: G. Bryan Balazs, Allison A. Campbell, David J. Lohse, and Christopher J. Welch. By electronic ballot, the Council selected G. Bryan Balazs and Allison A. Campbell as candidates for 2016 President-Elect. These two candidates, along with any candidates selected via petitions, will stand for election in the Fall National Election.

The Committee on Nominations and Elections announced the results of the election to select candidates from the list of nominees to serve as Directors from District I and District V on the Board of Directors for the term 2016-2018. By internet ballot, the Councilors from these districts selected Thomas R. Gilbert and Laura E. Pence as District I candidates and John E. Adams and Kenneth V. Fivizzani as District V candidates. Ballots will be distributed on October 2, 2015 to all ACS members in District I and District V for election of a Director from each District.

The Committee on Nominations and Elections announced the selection of the following candidates for Directors-at-Large for 2016-2018 terms: Willem R. Leenstra, Ingrid Montes, Mary Jo Ondrechen, and Thomas W. Smith. The election of two Directors-at-Large from among those candidates and any selected via petition will be conducted in the fall. Ballots will be distributed to the Council on October 2, 2015.

### Committee Continuance

As part of a regular performance review, the Council voted unanimously to continue the Committees on Ethics and on Science. Continuation of the Committee on Science also requires Board concurrence.

### 2016 Member Dues

The Council voted to set the member dues for 2016 at the fully escalated rate of \$162. This rate is established pursuant to an inflation-adjustment formula in the ACS Constitution and Bylaws.

### National Meeting Long-Range Financial Plan

Following a discussion on the revenue supporting National Meetings, the ACS Council respectfully requested that the Board of Directors delay the implementation of the technical meeting additional fee to the meeting registration fee until the Board presents an analysis (preferably at the Boston national meeting) of the projected break even fee, including and excluding the net revenue from the National Meeting Exposition.

### New International Chemical Sciences Chapters

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

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# News from National: Council Meeting in Denver, Continued

## Reports of Elected Committees (Highlights)

### Council Policy (CPC)

As required by the Society's Bylaws, CPC has set the divisors which will be used to determine how many Councilors each Local Section and Division is entitled for 2016-2019. Official notification will be sent to Local Sections and Divisions within two weeks of the Council meeting, well in advance of the Bylaws required May 1 deadline, in order to accommodate the units' conduct of their elections in 2015. CPC's Long Range Planning Subcommittee is forming a task force to consider whether changes are in order for the calculations and policies, and to implement any recommendations in time for the 2020 election cycle.

In its continuing efforts to assist the Society in finding ways to reduce expenses, CPC is considering alternatives to reduce the printing and mailing costs of the Council Agenda. CPC will be conducting surveys to evaluate potential strategies.

### Committees (ConC)

All Councilors, including new Councilors, are reminded to complete their online committee preference form for 2015, during the period March 30 – June 5, 2015 at <https://www.yellowbook.acs.org> (log in required).

## Reports of Society Committees and Committee on Science (Highlights)

### Budget and Finance (B&F)

In 2014, ACS generated a Net from Operations of \$17.9 million, which was \$4.2 million favorable to budget. Total revenues were \$499.0 million, \$0.7 million or 0.1 percent higher than budget. Expenses ended the year at \$481.1 million, \$3.5 million favorable to the budget. This variance was largely attributable to a continued emphasis on expense management across the Society. Despite favorable operating results, the Society's financial position weakened in 2014, with Unrestricted Net Assets declining \$62.3 million, to \$144.7 million at year-end. This decline was the result of a significant accounting charge related to the Society's two closed postretirement benefit plans.

Additional information can be found at [www.acs.org](http://www.acs.org), at bottom, click '[About ACS](#)', then '[ACS Financial Information](#)'. There you will find several years of the Society's audited financial statements and IRS 990 filings.

### Education (SOCED)

SOCED reported that more than 1,900 individuals have joined the American Association of Chemistry Teachers (AACT) which launched last year, 88 percent of whom are K-12 teachers of chemistry. The Dow Chemical Company was announced as the Sole Founding Partner of AACT with a gift of \$1 million.

### Science (ComSci)

ComSci has collaborated with several ACS committees to develop five public policy statements which were approved by the Board in December 2014. More recently ComSci led the development of a new draft ACS policy statement on hydraulic fracturing, which will be considered by the Board. Current collaborations include revising ACS policy statements on energy, climate change and forensic science.

## Reports of Standing Committees (Highlights)

### Committee on Meetings and Expositions (M&E)

M&E recommends that the Early Member Registration Fee for 2016 national meetings be \$415, per the National Meeting Long-Range Financial Plan.

As part of the continuing ACS sustainability effort and to encourage the use of the ACS mobile app and online program, M&E has decided to discontinue free distribution of the hard copy program book starting in 2016. Those who pre-register for the meeting may purchase a copy of the program book for \$10 (pick up on site), and copies will be available at the meeting for \$20. The PDF version of the national meeting program will be more prominently displayed on the

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# News from National: Council Meeting in Denver, Continued

ACS website for those who would like to print portions for themselves.

M&E reported on the attendance as of Tuesday evening, March 24:

Attendees	7,307
Students	5,141
Exhibitors	847
Expo only	360
Guest	285
Total	13,940

## Committee on Divisional Activities (DAC)

DAC voted to fund ten Innovative Project Grants (IPG) totaling \$54,000. The committee will consider another set of IPG proposals during the Boston National Meeting in August, 2015; the deadline for that round of submissions is July 1, 2015.

National meeting attendees were recently surveyed for their views on the Society's policy governing the use of devices to capture and/or disseminate content delivered at our meetings. While expressing support for the policy, the respondents also expressed interest in amending the current policy to permit presenters—at their discretion—to authorize audience members to capture and disseminate content.

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

LSAC awarded 15 Innovative Project Grants for a total of \$38,389, and is continuing to offer a mini-grant to Local Sections that attended the 2015 Leadership Institute to partner with neighboring sections to host an activity that would bring value to all members in a specific region. The committee is also planning to fund 16 grants totaling \$4000 for the Bridging the Gap: Teachers of Chemistry K-12 Nano-Grants. More information about all LSAC grants, and those of other committees, is available at [www.acs.org/getinvolved](http://www.acs.org/getinvolved).

## Committee on Membership Affairs (MAC)

MAC approved a recommendation from staff to ask individuals who have been receiving the 50 percent Graduate Student Discount for four years or more if they are still graduate students so they can receive the correct dues renewal. The current process does not provide an opportunity for graduate students to change their status after graduation except by contacting ACS Member Services.

MAC has endorsed President Diane Schmidt's campaign to invite faculty from PhD granting U.S. institutions to give ACS membership as an award to outstanding students in chemistry. Schmidt will match each gift by paying a student's membership from her Presidential funds.

## Committee on Economic and Professional Affairs (CEPA)

CEPA reported the 2014 New Graduate Survey Results which show the unemployment rate for new graduate chemists has dropped from 14.9 percent in the 2013 survey to 12.4 percent as of 2014. The drop is principally due to more new bachelor's degree chemists finding employment. ACS members experienced three successive years of lowered unemployment, which could hint at a positive outlook for chemists in coming years. While unemployment is down, salaries have been overall stagnant.

The ACS Career Fair had 715 seekers, 27 employers, 85 positions, and 10 booths. The Virtual Career Fair had 918 seekers, 6 employers, and 38 positions. Additionally, 368 resume reviews, 218 mock interviews, and 23 Career Pathway workshops were conducted during the meeting.

## Committee on Constitution and Bylaws (C&B)

C&B certified 23 bylaws in 2014, the second largest number certified in any year. Additionally, the committee has reviewed bylaws for 10 Local Sections and 5 Divisions since fall 2014. Certified bylaws and a status report are posted on [www.acs.org/bulletin5](http://www.acs.org/bulletin5).

...Continued on next page

# News from National: Council Meeting in Denver, Continued

New petitions to amend the Constitution or Bylaws must be received by the Executive Director no later than April 29 to be included in the Council Agenda for consideration at the fall meeting in Boston. Contact C&B with any questions or requests for information at [bylaws@acs.org](mailto:bylaws@acs.org).

## Reports of Other Committees (Highlights)

### Women Chemists (WCC)

WCC celebrated ten early-to-mid-career women chemists as recipients of the Fourth Annual WCC Rising Star Awards, and eight WCC/Eli Lilly Travel Grant awardees. WCC is also collaborating with Merck to develop a new Research Award that will fund eight women graduate students to present their research at the fall national meeting in Boston.

Members of WCC have been involved as contributing authors and editors for the second more diverse and inclusive edition of “Mom, the Chemistry Professor” being published by Springer.

### Professional Training (CPT)

At this meeting, CPT reviewed 39 periodic reports from currently approved programs and held conferences with two departments beginning the process of applying for ACS approval. CPT also reviewed four site visit reports and approved three new programs. There are currently 681 colleges and universities offering ACS-approved bachelor's degree programs in chemistry.

The new 2015 ACS Guidelines for Bachelor's Degree Programs were approved at CPT's winter meeting and recently published on the ACS website.

### *International Activities (IAC)*

At this meeting, the committee received, reviewed, and approved annual reports from ACS International Chemical Sciences Chapters in Hong Kong, Hungary, Malaysia, Romania, Saudi Arabia, and Shanghai. Additionally, the committee reviewed and approved new chapter applications initiated by members in Brazil, Nigeria, Peru, and the United Arab Emirates.

### Environmental Improvement (CEI)

At this meeting CEI awarded Local Section Sustainability Grants to three Local Sections: Cornell, Kalamazoo, and Midland.

The committee has established working relationships with several technical divisions. The committee cosponsored with Division of Chemical Education the symposium featuring the winners of the ACS-CEI Award for Incorporation of Sustainability into Chemical Education. CEI and the Division of Environmental Chemistry have jointly established a project to provide grant support for programming around climate change at regional meetings.

CEI continues to review existing ACS policy statements, and at this meeting approved recommendations to the Board to establish new public policy statements on Hydraulic Fracturing and on Water Treatment and Conservation.

### Chemistry and Public Affairs (CCPA)

The committee highlighted the power of ACS member engagement in government affairs by relating the bipartisan effort, despite partisan roadblocks, to secure a resolution for National Chemistry Week in the United States Senate by Senator Chris Coons, a Democrat from Delaware, and Republican Senator Pat Toomey of Pennsylvania. The extra effort invested by ACS members in Pennsylvania to ensure that the resolution had bipartisan sponsorship helps to underscore that science is an issue where both parties can come together.

## Resolutions

The Council passed two resolutions: in memory of former ACS Secretary Rodney N. Hader and other deceased Councilors, and another in gratitude for the officers and members of the Colorado Local Section, host Section for the 249th National Meeting; the divisional program chairs and symposium organizers and ACS staff.



# News from National: Actions of the Board of Directors

*Contributed by John M. Malin, Councilor*

*The Board of Directors is the Executive arm of ACS governance and leadership. At each National Meeting, the Board provides a report to the ACS Council on their actions, and CSW Councilors report back afterward.*

## **The Board's Executive Session**

### ***The Board's Committees***

The Board of Directors received and discussed reports from its Committees on Grants and Awards (G&A), Professional and Member Relations (P&MR), Executive Compensation, and Corporation Associates; the Society Committee on Education (SOCED); and the Joint Board-Council Committee on Publications.

On the recommendation of the Committee on Grants and Awards and of the Committee on Science, the Board voted to approve a Society nominee for the National Medal of Science.

On the recommendation of the Committee on Professional and Member Relations, the Board voted to provide nominal sponsorship, without financial commitment, for the ["Frontiers of Science Research and Education in the Middle East: A Bridge to Peace"](#) (Malta VII) to be held in Rabat, Morocco, November, 2015.

The Board received an extensive briefing and approved several recommendations from its Committee on Executive Compensation. The compensation of the Society's executive staff receives regular review from the Board.

On the recommendation of the Society Committee on Education, the Board voted to approve a procedure for the establishment of the inaugural Governing Board for the [American Association of Chemistry Teachers \(AACT\)](#).

On the recommendation of the Joint Board-Council Committee on Publications, the Board voted to approve the reappointment of an Editor-in-Chief for an ACS journal.

### ***The Executive Director/Chief Executive Officer's Report***

The Executive Director/CEO offered a review of his initial month in the position, and his direct reports updated the Board on the activities of Chemical Abstracts Service (CAS), the ACS Publications Division, the Society's Treasurer, and the Society's General Counsel.

### ***Other Society Business***

The Board heard reports from the Presidential Succession on their current and planned activities for 2015.

As part of its ongoing commitment to consider the most important strategic issues facing the Society, the Board held a discussion on improving governance agility.

### ***Board Retreat***

The Board received an update on its retreat, planned as part of the June 2015 Board meeting.

### ***Resolutions***

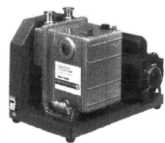
The Board passed two resolutions, one in memory of former ACS Secretary Rodney N. Hader, who died in January 2015, and another for the U.S. Air Force Academy for 31 years of continuous support of the U.S. National Chemistry Olympiad.

## **The Board's Open Session**

The Board held a well-attended open session which featured Bibiana Campos Seijo, Editor-in-Chief, *C&EN*. Dr. Campos Seijo's topic was "Getting Bang for Your Buck in Science Communications." Prior to the presentation, members of the presidential succession and the new Executive Director and CEO offered brief reports on their activities. The officers provided more extensive reports on their activities and/or future plans as part of their reports to the Council.

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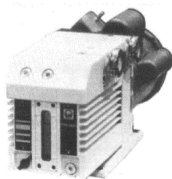
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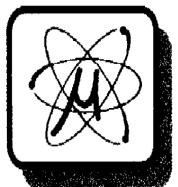
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Stefanie Wittenberg, United States Patent and Trademark Office

## CSW Calendar of Events

### May

- 5/1: Project SEED Applications Due
- 5/4: "Science at the Frontiers" Lecture
- 5/18: CSW Board of Managers Meeting
- 5/21: CSW Evening Meeting

### June

- 6/1: Student Travel Award Applications Due
- 6/16: CSW Nominations Due

### July

- 7/14-16: Green Chemistry & Engineering Conference

### September

- 9/21: CSW Board of Managers Meeting

### November

- 11/23: CSW Board of Managers Meeting

### Reminder

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