CHED Newsletter
Fall 2015

Fall 2015 Election - Candidate Statements
2015 ACS Fellows
Diane Bunce, 2015 Outstanding Service Awardee
ACS Education Division Highlights

ACS 250th Nation Meeting
Innovation from Discovery to Application
August 16-20, 2015, Boston, MA

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# Letters from the Executive Committee

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Letters from the Executive Committee

Chair’s Report, Marcy Towns, [mtowns@purdue.edu]

Summer greetings to all!

I hope that this newsletter finds you having a pleasantly paced and productive summer. It is my pleasure to announce that two ACS awards have been endowed groups associated with our division. The endowments will provide greater visibility for the ACS Examinations Institute and the Journal of Chemical Education and ChemEd X associating each group with an award that is connected to its mission. Additionally the endowments mean that these groups will permanently sponsor the awards. In 2017 the Journal of Chemical Education and ChemEd X will become the sponsors of the James Byant Conant Award in High School Chemistry Teaching. The Journal has engaged and supported high school teachers for decades through publications of activities and laboratories to support, strengthen, and diversify the high school curriculum. In 2017 the ACS Exams Institute through its Board of Trustees will become the sponsor of the ACS Award for the Achievement in Research for the Teaching and Learning of Chemistry and the ACS Award for the Achievement in Research for the Teaching and Learning of Chemistry will be sponsored by. ACS Exams has focused on measuring student learning since its inception thus endowing the award focused recognizing researchers whose measurements have impacted research, teacher’s practices, and student learning makes abundant sense. I want to thank the members of the Board of Publication, the members of the Board of Trustees, Tom Holme (Past ACS Exams Director), Kristen Murphy (Current ACS Exams Director), and Norb Pienta (Editor, Journal of Chemical Education) for making the bold move to endow these important awards. I also wish to thank the members of the Executive Committee including Frank Torre (who was the past chair when the conversations about endowing the awards began) for their support and critical engagement in discussions about endowing the awards. This marks our division in a crucial way for ACS – no other division supports two awards, and in fact, for a brief period of time the division will support all three awards associated with education because the division will support the Pimentel Award in 2017 as well.

Roxie Allen from St. John’s School in Houston, TX will serve as the divisional representative to the AACT Board for 2015-2016. Roxie’s nomination came through our division’s Committee for Personnel and Nominations and the Executive Committee. The appointment to the AACT Board was made by Pat Confalone, Chair of the ACS Board of Directors.

The division finance committee is also closely looking at how the division’s financial operations can be assembled in such a way to maximize efficiency for all groups such as the Journal, ACS Exams, the Division, 2YC3, and the BCCE. We continue to discuss the divisional process for securing nominations for ACS Fellows and a leadership initiative to develop leadership in the division.

Another role that I serve in is to represent the division at IUPAC meetings and meetings of the Committee on Chemical Education in that group. We will meet at the IUPAC meeting in Busan, South Korea this summer. In that capacity I also serve on an IUPAC project to provide a technical report containing a critical review of the definitions for the quantity amount of substance and its unit, mole, as well as the related unit of the quantity mass. The report is not yet complete, however the chemical education community should know that the perspectives of chemical educators we welcomed in the discussions which that place.

We continue to develop ways to engage our membership and to connect our members to initiatives and activities that add value to their personal and professional lives. I will look forward to working with you in 2015 and 2016!

Sincerely,

Marcy Towns
Chair, ACS DivCHED
Letters from the Executive Committee

Chair-Elect, Cathy Middlecamp [chmiddle@wisc.edu]

A Parliamentarian. Never leave home without one.

Really? A parliamentarian? Yes. I believe we in DivCHED would benefit from the expertise of a parliamentarian. I’ve come to this conclusion for several reasons, including:

2. I don’t know Robert’s Rules of Order. I suppose I could fake it, though.
3. DivCHED shouldn’t have a chair who is faking their way through parliamentary procedure. Dare I say, we newbie chairs have enough other things to fake our way through.

Oops. There, I said it. As your incoming chair, I have some holes in my knowledge. My hunch is I’m not the only incoming chair who could make such an admission.

In my first six months as your chair-elect, current chair Marcy Towns, past chair Don Wink, and current secretary Resa Kelly have been filling my In Box and chatting with me over conference lines. They have won my admiration in multiple ways. One is their good cheer and hard work on behalf of our Division. Another is the thoughtful, consistent ways they have been working with other members of the Division to increase our professional know-how. They – in concert with other officers and those serving on our committees – continue to champion upgrades in our finances, record-keeping, and policies.

As the newbie, I have several learning curves to climb, thanks to their hard work. An additional learning curve is how to chair our Executive Committee meeting. Here’s where the parliamentarian comes in.

OK, what is a parliamentarian? This person advises those leading a meeting on matters of parliamentary procedure. The goal is to ensure a productive, efficient, and legal meetings.

And what is parliamentary procedure? It is a set of rules for conduct at meetings in order to allow everyone to be heard and to make decisions without confusion. It is time-tested. Also somewhat flexible.

How about Robert’s Rules of Order, newly revised? Actually his name was Henry, and please allow me to provide a bit of history:

“Henry Martyn Robert was an engineering officer in the regular Army. Without warning he was asked to preside over a public meeting being held in a church in his community and realized that he did not know how. He tried anyway and his embarrassment was supreme. This event, which may seem familiar to many readers, left him determined never to attend another meeting until he knew something of parliamentary law.” (http://robertsrules.com/history.html)

I identify with Henry. Today, the rules he drafted are in their eleventh edition with over 5 million copies in print. Marcy purchased a copy and so will I.

When Marcy hands me the reins at the end of 2015, I feel confident in my ability to shepherd the “fixed order of business” that accompanies Robert’s Rules. It goes something like this:

Call to order
Roll call of members present
Reviewing of minutes of last meeting
Committee reports
Old (unfinished) business
New business
Announcements
Adjournment

But am I versed in lore such as the four basic types of motions? What individual members of the group can and cannot do? Who gets to speak first when a motion is made? Which ways are allowable to vote on a motion? How people obtain the floor? See below for answers that start a conversation rather than end one.

I agree – parliamentary procedure is a fine way for us to get things done at our meetings. We’ve used it well in the past. Can we use it even better in the future? Let’s find out together.

As Rudy Baum would say, thank you for reading!

ANSWERS: There are four basic types of motions: Main, Subsidiary, Privileged and Incidental. One thing individuals can do is to make motions; they have a longer list of abilities as well. The person who made the motion is always allowed to speak first. Lots of voting methods are possible and depend both on the situation and on our by-laws. Methods include voice, roll call, general consent and ballot. But two other things relate to motions – tabling and postponing indefinitely. Here the procedure gets tricky! Likewise, getting the floor can be tricky, especially in the heat of a discussion.
Greetings DivCHED members! This summer has been a busy time for the Division and the Executive Committee! In addition to sipping umbrella drinks, lounging by the pool and contemplating the chemistry of sunscreen protection, we managed to accomplish several things that I am happy to share with you.

**Intercession Events**

During the intercession between the spring and fall meetings, Chair Towns requested the Committee on Personnel and Nominations (CPN) provide a slate of three candidates from which one person could be appointed to serve as the DivCHED representative on the newly formed American Association of Chemistry Teachers (AACT) board. The three candidates put forward by CPN were: Erica Posthuma-Adams, Roxie Allen and Laura E. Slocum. The Executive Committee appointed Roxie Allen to be its representative to the AACT Board. The Executive Committee wishes to thank all of the candidates for agreeing to run and Ms. Allen for accepting to serve for this one-year appointment.

**Safety Committee** – During the Spring ACS National meeting a motion was passed to create a new DivCHED committee charged with addressing safety concerns of the Division. During the intercession and with the assistance of CPN Chair - Jennifer Lewis, the Safety Committee, chaired by Dr. David Finster, was appointed 13 committee members. Congratulations to this newly formed committee of the Division.

**Endowment of ACS Awards** – The ACS Board Committee on Grants & Awards recognized and thanked the ACS Exams Institute, through its Board of Trustees, for endowing the ACS Award for Achievement in Research for the Teaching and Learning of Chemistry and the Journal of Chemical Education and ChemEDX, through the Board of Publication, for endowing the James Bryant Conant Award in High School Chemistry Teaching. This is a significant event as it means that these awards are ensured to have permanent funding! The Division was recognized for being the first ACS technical division to endow, not one, but TWO national awards, and these endowments become effective for the 2017 presentation of the awards.

**Fall Election**

The Fall DivCHED election runs from September 1st through September 30th. As usual, you can expect that the election will run electronically with the assistance of Vote-Now.com so be on the lookout for an email from us with instructions for casting your votes. The slate of candidates for the 2015 DivCHED election are: **Chair-Elect** – Amina El Ashmaway and MaryKay Orgill; **Councilor (1)/Alternate Councilor (2)** – Patrick Daubenmire, Tom Higgins, Dan King, Sally Mitchell, Rick Moog, and Cinzia Muzzi. On behalf of the Division, I wish to thank all of these candidates for running!

**Interested in Serving on a Committee?**

If you are interested in getting more involved in the Division and wish to join a committee, please visit the DivCHED website ([http://www.divched.org](http://www.divched.org)). If you navigate to the header Membership and select “Get Involved” you may complete a form that lets us know of your committee interests. ([http://www.divched.org/content/nominations-ched-committees-elected-positions](http://www.divched.org/content/nominations-ched-committees-elected-positions)). If you are a new member who has just joined the Division, please visit the New Member Committee page, which provides suggestions for getting involved ([http://www.divched.org/committee/new-member](http://www.divched.org/committee/new-member)) and consider joining the DivCHED Facebook group to keep up with the latest news and activities of the Division.

This concludes my report for the Division of Chemical Education.

Respectfully submitted,

Resa Kelly
Secretary/Councilor of DivCHED

*Please note that I did not actually witness any ExComm members partaking in these frivolities. This fictional account was added for your reading pleasure.*
Letters from the Executive Committee

From the Member-At-Large, Jimmy Reeves [reeves@uncw.edu]

As reported in the last newsletter, Tom Holme has resigned as director of the ACS Examinations Institute, and I am pleased to report that Kristen Murphy, Associate Professor of Chemistry at the University of Wisconsin Milwaukee, was unanimously chosen by the Board of Trustees to be the next director of the Institute. In her former role as Associate Director, Kristen worked closely with exam committees, ensuring that their needs were met and that exam creation proceeded in a timely manner, and oversaw research efforts designed to identify and track core concepts in chemistry as they are represented in various ACS exams. She is eminently qualified to lead the Institute as we face the challenges and opportunities to come. Her role as Associate Director will be assumed by Professor Jeffrey Raker of the University of South Florida.

In order to facilitate the transfer of the Institute from Iowa State to Milwaukee, Tom Holm has agreed to serve as Assistant Director for Operations for one year, and the business office will continue to reside at Iowa State during that time. The Board will consider the proposal, drafted by former office manager Julie Adams, to permanently locate the office off campus. Julie has already assumed the role of Assistant Director for Online Resources and is working diligently to address the significant challenges of delivering on-line exams. But perhaps the most significant challenge facing the Institute and its directors is the ease with which students with cell phones can compromise the integrity of our exams. Instances of students photographing exams have been reported. While there is no reason to believe that these instances have resulted in widespread dissemination of exams, other users of these exams have been informed of the possibility that exam security has been compromised. Steps are also being taken to inform proctors of the dangers associated with cell phones, but the issue presents a significant challenge that will likely get worse as technology provides even more ways to secretly record the contents of exams. Kristen is vigorously pursuing having the exams trademarked, which would substantially increase the penalties for such activities. Nevertheless, in the end there can be no substitute for vigilance on the part of proctors who administer the exams.

On a brighter note, the Board has enthusiastically agreed to sponsor the Award for Achievement in Research for the Teaching & Learning of Chemistry, an effort spearheaded by current Division President Marcy Towns. In addition, the Board of Publication of the *Journal Chemical Education* has agreed to sponsor the Conant Award, and the Division will sponsor the Pimentel Award.

The Division of Chemical Education Executive Committee continues its support for the ACS sponsored American Association of College Teachers with the appointment of Roxie Allen of Saint Johns School in Houston, Texas as our representative to the board. A high priority of the ACS, the Association works to support high school teachers with resources and facilitates efforts to increase training and communication, as well as support for teachers to attend regional and national chemistry meetings. The Board will also be moving ahead with work on establishing a Safety Committee and providing a more substantive structure for supporting the Biennial Conferences in Chemical Education, as well as efforts to foster leadership development. The role of the Board in supporting the nomination of ACS Fellows will also be discussed.

Know Your Way Around the Division

If you need to pay membership dues, want to make a contribution to the DivCHED Service Award fund, or want to know about money, budgets, etc., contact the Treasurer.

If you want to change your mailing address, want a Division publication, or want to know about official Division actions, etc., contact the Secretary.

If you want to receive this CHED Newsletter (or not receive it), contact the Secretary.

If you want to bring an idea before the Executive Committee or want to make an opinion known, contact the Member-at-Large.

If you want to contribute something to CHED News, contact Heather Johnson.
The View from the Program Chair, Irv Levy [irv.levy@gordon.edu]

It’s a beautiful summer day in New England as I compose this note in anticipation of the next national meeting. It will be a pleasure to see so many of you assemble in my neck of the woods as we come together for the 250th national meeting in Boston this August.

Your meeting co-chairs, Iona Black and Beatriz Rios-McKee, have been working for nearly year to assemble all of the details for this meeting. Veteran programmers Sally Mitchell and Kate Anderson organized our High School program. I hope that you’ll be able to join us in Boston and, please, take the time to personally thank Iona, Beatriz, Sally, and Kate for their work on your behalf.

There are a number of people behind the scenes who provide direct and indirect support for our programming at a national meeting. Many thanks to the ACS staff who are the ones who help us bring it all together. Special thanks are due to our ACS staff liaison, Wei Gao, our meeting planner, Beverly Johnson, and the Undergraduate Programs Office staff, led by Nicole DiFabio. As always Heather Johnson attends to a host of details that make the job of organizing a meeting so much more convenient. Many thanks are due to all the folks in the Division and ACS who work with our committee to produce a quality meeting.

Our meeting will be held in the Boston Convention and Exposition Center and we’re delighted to be on that “main stage” at the meeting. With this meeting, the Undergraduate Research Oral Papers symposium has officially become a standard symposium at all of the national meetings. This is the fourth consecutive meeting with that option for select undergraduates to present their work in an oral format and we anticipate it continuing at each national meeting moving forward.

In Boston we will host a State-of-the-Art symposium themed on toxicology for chemical educators. In recent years many highly interesting symposia have been organized in DivCHED around the principles of green chemistry, chemistry that is designed to be inherently safer for human health and the environment. As an extension, molecular safety – toxicology – will be the topic of discussion at this “Toxicology and Environmental Impact in the Chemistry Curriculum: Science and Strategies for Educators” symposium. We will host lectures from experts in the field and from those who are incorporating toxicology into their chemistry curricula. If you are interested to learn more about this topic you can drop in for a lecture or two or stay for the entire day-and-a-half symposium. I hope that many of you will come to all or part of this session. And don’t miss the complimentary lunch reception that will be held on Monday to continue the conversations! Kudos to Amy Cannon for organizing our first state-of-the-art symposium in a long time.

The High School Program will be unusual at the Boston meeting. In place of the traditional AM session/luncheon/PM session format we will host a morning session and luncheon, only. The high school teachers will then be encouraged to attend a special Presidential Symposium on 21st Century Chemical Education organized by George Bodner, Ingrid Montes, and Mary Kirchhoff. For precollege teachers who want to get extra content especially designed for their use, Polymer Ambassador Sherri Rukes, will once again provide a program for teachers on Monday night at the meeting. This was a very popular session at the spring meeting in Denver and will potentially become a standard element at our future meetings.

One year into the MAPS system (the successor to the much maligned PACS programming system) and there are still some kinks to be ironed out. I have to be honest in reporting that the implementation of the new system has not been as simple as we were hopeful to believe. The fact that meeting co-chairs have a hands-off method of interacting with the MAPS database – only through the ACS staff liaison – has caused a number of delays and frustrations.

ACS is listening and is actively pursuing modifications that will make the system more open to us in the future. With a large project like MAPS, every step seems to take too long to implement; however, that is simply the nature of rolling out new technology in a way that causes the least amount of confusion for users of a system that is currently deployed. Until those changes take effect, the ACS staff liaison is a critically important part of our team. In the process of developing the Boston meeting we worked with a succession of three different liaisons; this was difficult as continuity was never established. However, our current liaison, Wei Gao, has been working with us for a number of months and I hope that our relationship continues for a long time!

Any day now you will see the official Call For Papers for San Diego. Iona Black and Denyce Wicht have assembled a large group of sessions. It’s obviously clear that San Diego as a venue and “Computers in Chemistry” as a theme for the meeting has given us a record-breaking list of possible sessions.

The deadline for submission to San Diego is October 26.

We will host a state-of-the-art symposium in San Diego titled “Computers In Our Hands: The Essential Chemistry of Portable Electronic Devices”. Thanks go out to Patrick Daubenmire and his co-organizers, Brad Fahlman and Cathy Middlecamp, for bringing this to our division. For those of you who might have an idea for a state-of-the-art symposium for the future, let us know! There’s usually at least a year’s worth of planning that goes into these special sessions.

I always close these notes by reminding you that my goal as the chair of your Program Committee is to make it easy for you to say “Yes, I’ll volunteer” by providing any support you might need. I look forward to working with you in the future whether it be as a symposium organizer, a meeting co-chair, or a member of the program committee. We are here to produce national meetings that serve your needs. Please do let us know what those needs are and do consider what role you might be able to play as a volunteer. Drop me a note (irv.levy@gordon.edu) with your ideas or say hello in Boston.

Here’s to a wicked good meeting in Bean Town!

Letters from the Executive Committee
Announcements, Materials & Opportunities

DivCHED Election—Vote Fall 2015 for 2016 Executive Committee Members

Chair-Elect Candidates

Amina K. El-Ashmawy
Position: Professor of Chemistry
Institution: Collin College
Institution Type: two-year college

I am happy to run for DivCHED Chair. I have been a Professor of Chemistry at Collin College since 1991. In addition to teaching and administrative responsibilities, I am collaborating with a cognitive science research team from UCLA and University of Pennsylvania, studying the effect of adaptive and perceptual learning technology on the efficiency and durability of factual and conceptual knowledge in chemistry. I was named an ACS Fellow in 2013 and a Minnie Stevens Piper Professor in 2015.

An active DivCHED member throughout my career, I served on seven general chemistry exam committees spanning 1995-2013, chairing two of them. I also served on the BCCE Committee, chairing it from 2007-2009 and co-chaired the 21st BCCE in 2010. I have been a member of the DivCHED Long Range Planning, Chemistry Education Research, and Regional Meetings committees as well as the Task Force on Division Travel Reimbursement.

My contributions to the Society Education Division include the editorial team for the ACS publication And Gladly Teach: A Resource Book for Chemists Considering Academic Careers, alpha and beta testing the general chemistry textbook, Chemistry: A Project of the ACS, and hosting two training workshops on its use. I am currently serving on the SOCED Undergraduate Programs Advisory Board, after serving as chair of the ACS Two-Year College Advisory Board since its 2012 inception. I am a member of the SOCED Task Force on the Revision of the Two-Year Guidelines and the ACS Committee on Public Relations and Communications (CPRC). I am the CPRC Chemistry Ambassadors Subcommittee chair and helped develop the CPRC strategic plan last year.

At the local section level, I have been a member of our Awards Committee and have judged undergraduate presentations at various Meetings-in-Miniature.

If elected chair, I will use my varied experiences in the Division and the Society to work for broader and more inclusive involvement of members of DivCHED. I believe it is also important that with the advent of AACT, we collaborate and re-examine creative ways the Division can facilitate more seamless student transitions, whether they are HS-college, community college-university, or undergraduate-graduate.

MaryKay Orgill
Title: Associate Professor, Department of Chemistry & Biochemistry
Institution: University of Nevada, Las Vegas
Institution Type: comprehensive university

I am truly humbled and honored to be nominated for the Chair-Elect position in the ACS Division of Chemical Education. I am an Associate Professor of Chemistry and Biochemistry at the UNLV, where I use qualitative research techniques to examine how students and faculty understand, perceive, and visualize different concepts in chemistry and biochemistry. While at UNLV, I have also been fortunate to provide content-focused professional development workshops for local teachers (11+ years) and to be the recipient of several teaching awards.

Over the years, I have learned about and experienced the Division from a variety of perspectives, each of which has prepared me to respond to the needs of the various stakeholders in the Division. My initial contributions were local. From 2005-2007, I was a Member-at large of the Southern Nevada section of the ACS. During that time, I worked with the UNLV Chemistry Club (which I advised for 9 years) to organize the undergraduate programming for the 2008 Western Regional Meeting.

More recently, as a member of the Division’s Program Committee (since 2007), I served...
as the Program Co-chair of both the 2011 Spring National ACS Meeting and the 2012 Biennial Conference on Chemical Education (BCCE). From 2011-2012, I was a member of the General Chemistry Exam Committee for the ACS Exams Institute; and I am currently an Associate of the Division’s Board of Publications. Since 2013, I have been serving as an alternate councilor for the Division and as an ad hoc member of the BCCE Committee.

Each of these experiences has allowed me to learn about the different ways that the Division is impacted by and can potentially influence both our members and the world around us. I welcome this opportunity to both learn more about the Division and to contribute to its further development.

Councilor/Alternate Councilor Candidates

Patrick L. Daubenmire
Title: Assistant Professor
Institution: Loyola University Chicago
Institution Type: private, RU/H: research institution

Patrick L. Daubenmire, Ph. D., began his work in chemistry education as high school teacher. Following graduate school, he began work at Loyola University Chicago, where he eventually became the first tenure track chemistry education research professor in Loyola’s Department of Chemistry and Biochemistry. He is currently fulfilling that role as an assistant professor with research interests in analyzing dynamics and effects of cooperative, inquiry-based instructional approaches (e.g. POGIL and SWH), building effective professional and leadership development programs for secondary school teachers, and seeking ways to blur the lines between formal and informal learning environments in order to educate the whole student. On the chemistry education practice side of his work, Patrick participates in fostering and developing innovative, research-based curricula, which includes acting as a co-author on the 9th edition of Chemistry in Context, and acting as co-author and implementation developer for Healing Earth, a free, online text that integrates key principles of environmental science with related issues in ethics and spirituality.

To the potential role as Councilor, Patrick brings a history of successful partnership with others both inside and outside the field of chemistry education. He has been a member of the DivCHED Program Committee for the past two years and is slated to lead the technical program development in the Division for the 252nd ACS National Meeting. He welcomes the opportunity to serve the Division in a new capacity by communicating between and representing the Division on Council activities.

Thomas B. Higgins
Title: Professor of Chemistry and Chair of Physical Sciences Department
Institution: Harold Washington College, Chicago, IL
Institution Type: Community College

I have been an active member of the ACS and DivChed for almost 20 years. Within DivChed, I currently serve on the Committee on Chemistry in the Two Year Colleges (COTYC, 2011-2016) and the Committee on Personnel and Nominations (2014-2016). I was elected the Membership Chair of the Two Year College Chemistry Consortium (2YC3, 2011-2016) and, in 2013, I added the College Sponsorship Chair of the 2YC3 to my duties. Within the ACS, I have served on three committees: Society Committee on Education (SOCED; Member 2014-2016; Associate Member, 2010-2013), Minority Affairs (Associate Member, 2006-2009), and Younger Chemists Committee (Associate Member, 2003-2005). As part of my service to ACS, I was a member of the Board-Presidential Task Force on Education (2008-2009), which helped lead the way for the American Association of Chemistry Teachers (AACT). I also participated in writing the third revision of the Two-Year College Chemistry Guidelines (2008-2009). In 2015, I was awarded the Stanley C. Israel Regional Award for Advancing Diversity in the Chemical Sciences for the Great Lakes Region for my work with community college students in Chicago.

I currently teach at Harold Washington College (1998-present), an urban community college in downtown Chicago. I am the chair of the Department of Physical Sciences (2013-2015), which includes the disciplines of physics, astronomy, and geosciences in addition to chemistry. I am active in undergraduate research and
was a Councilor for the Chemistry Division of the Council on Undergraduate Research (CUR, 2013-2015). I am a member of the Advisory Board for the Chemistry Collaborations, Workshops and Community of Scholars (cCWCS, 2011-present). As a coPI of the ChemEd Bridges Project (2007-2012), I helped other community college faculty members reengage with their scholarship, learn new methods of active and effective classroom instruction, and make connections with faculty members from four-year institutions. These activities have helped my students and others prepare for a rich academic and personal life beyond the community college.

Daniel King
Position: Associate Professor
Institution: Drexel University
Institution Type: comprehensive university

I received a BA from the Johns Hopkins University and a PhD from the University of Miami, and am now an Associate Professor of Chemistry at Drexel University. I have been teaching chemistry at the undergraduate and graduate level for 13 years. My research area is chemistry education, focusing on the effectiveness of active learning techniques, specifically classroom technology and guided inquiry instruction. I have organized symposia at the BCCE and have presented my work at local, regional, national and international conferences. I have also facilitated workshops on the use of technology (e.g., clickers) and POGIL (Process Oriented Guided Inquiry Learning). I have been a member of the Division of Chemical Education as long as I have been a member of ACS. I have been a member of the New Member Committee since 2008, and currently serve as the Chair of that committee. I am the faculty advisor for the student ACS chapter at Drexel. From 2009-2011, I attended the ACS faculty peer review conference, serving on the advisory board for InChemistry Magazine during those years. I am also a member of the Philadelphia Section of the ACS and of the Division of Environmental Chemistry.

I feel that I have benefitted tremendously from my membership in the Division and would welcome the opportunity to give back to the Division by representing it as a Councilor.

Sally B. Mitchell
Position: Chemistry Teacher
Institution: East Syracuse Minoa Central High School
Institution Type: high school

It is an honor to be nominated to serve as your Councilor/Alternate Councilor. By way of background, I received a B.S. in Chemistry from Syracuse University in 1982 and continued at Syracuse University for my M.S. in Chemistry Education in 1983. I teach high school chemistry, AP and general chemistry, at East Syracuse Minoa Central High School, East Syracuse, NY. I have been designated a STEM Master Teacher in New York State with my focus in mentoring and coaching new teachers. In 2009, I won the national, James Bryant Conant Award and in 2003, the Northeast Regional Teaching Award.

Currently serving as an alternate councilor for the division, I am a member of the High School Committee. I have served on the Division’s Program Committee as the High School Chemistry Teacher Day Program Chair for Boston (2010), Denver (2015), and will be chairing the next five national meetings for the High School Program. My strength lies in working with the high school chemistry teacher programs, bringing all levels of chemical education together and disseminating information. I am very active in my local ACS Section and have served in many capacities: chair, education committee, secretary, public reactions, Project SEED coordinator, district delegate and awards committee. I have served as Coordinator for the Chemists Celebrate Earth Day over the past eight years, bringing K-12 educators together with members of my local section. I am the advisor to my school’s ACS ChemClub, and I participate in the Science Coaches Program. I will be serving on the governance board of AACT for the 2015-2016 year as a Special Consultant, a title which will be called past-president after this year. I look forward to working with DivCHEM colleagues to help launch the new organization of chemistry teachers and hope that I am given the opportunity to serve again as your Councilor/Alternate Councilor.
Rick Moog
Position: Professor of Chemistry
Institution: Franklin & Marshall College
Institution Type: private four-year college

Rick Moog is Professor of Chemistry at Franklin & Marshall College and is Director of The POGIL Project, a non-profit professional development and curriculum development organization for high school and post-secondary educators. He received an A.B from Williams College in 1979 and a Ph.D. from Stanford University in 1984. He has been a member of the Division's Committee on Personnel and Nominations since 2008 and has regularly organized symposia at National ACS Meetings and BCCEs for the past 20 years. He has frequently served as a reviewer for the Journal of Chemical Education, the Journal of Physical Chemistry, and the National Science Foundation's Division of Undergraduate Education. He has also served as a Selection Advisor for the Knowles Science Teaching Foundation's Teaching Fellows program for early-career high school science and mathematics teachers. Rick has presented numerous workshops at BCCEs and other venues dealing with student-centered learning, and has twice been an invited speaker at the Gordon Conference on Chemistry Education: Research and Practice. He is also the author of published collections of guided inquiry classroom activities for general chemistry and physical chemistry. Rick received the Lindback Award for Distinguished Teaching at Franklin & Marshall College, and also was the 2009 recipient of the Harvey Russell Award for Service to Chemical Education from the North Jersey Section of the ACS.

Cinzia M. Muzzi
Position: Professor and Chair of Chemistry
Institution: De Anza College
Institution Type: community college

I am a tenured faculty member at De Anza College in Cupertino, CA. I received a Bachelor of Arts and Science in Spanish and Chemistry from U.C. Davis and a Ph. D in Organic Chemistry, U.C. Davis (1999). I joined De Anza College in 2004 after becoming a tenured faculty member at Truckee Meadows Community College in Reno, NV (1999-2004). I am currently the De Anza College Chemistry Department Chair. I teach a wide variety of courses including preparatory, general, and university parallel organic chemistry classes, and I have served on a number of campus committees such as De Anza's Institutional Planning and Budget Team. De Anza College serves approximately 20,000 students annually with one of the top transfer rates to California universities.

I have been a member of the American Chemical Society (ACS) for 20+ years first serving as a graduate student session chair at the 213th and 214th ACS meetings. Since that time I have served the society in a number of ways. I am currently the chair of the division's Committee on Personnel and Nominations (2002-present, chair: 2012-2014). I have served on the division's Programs Committee (2001-2013) co-chairing two meeting programs at national ACS meeting in San Diego (2005) and San Francisco, CA (2010). I will again serve as a meeting program co-chair at the 2017 ACS meeting in San Francisco, CA. I have also had several roles at the local section level. I served as secretary/treasurer (2001-02), chair-elect (2002-03), chair (2003-04), as well as the National Chemistry Week Coordinator (2000-2004) for the Sierra Nevada local section. I am currently a member of the Santa Clara Valley local section, and I recently received the section's Teacher Scholar Award (2012). Finally, I have served as a reviewer for the Journal of Chemical Education, a grant reviewer for the National Science Foundation, and I have contributed to the profession through publications such as And Gladly Teach: A Resource Book for Chemists Considering Academic Careers and the Survival Handbook for the New Chemistry Instructor.
The Dorothy and Moses Passer Education Fund, Deadline September 1, 2015

Applications Being Accepted for The Dorothy and Moses Passer Education Fund.

This Fund was established by a generous donation of Dorothy and Moses Passer. Moses (Mike) Passer was for many years the head of the ACS Education Division. The Fund grants for teachers at two- and four-year colleges or universities that do not have any advanced degree programs in the chemical sciences.

The awards support continuing education activities that must be directly related to the applicant's teaching and must take them away from their campus.

The applicant must be a full time faculty member at his or her institution. The applications are reviewed by a committee. There is no application form but the application must include a description of the proposed activity and how it relates to his/her teaching with dates, locations, titles and contacts; a brief description of the applicant's institution and department; a short curriculum vita; an itemized estimate of expenses, amount of aid requested and sources of all supplemental funds. No support will be given for general attendance at national, regional or local ACS meetings or for any sabbatical support.

Closing dates are three times each year: January 1, April 1, and September 1. Applications may be submitted online http://www.divched.org/content/passer-education-grant-application-form or emailed in pdf format to the Chair of the Passer Education Grant Review Committee, Catherine MacGowan, catherine.macgowan@armstrong.edu.

Division of Chemical Education Travel Award, Application Deadline is September 15, 2015

DivCHED provides this service to members to grant financial support for travel to meetings. Up to 12 members will receive the award each year. The DivCHED Travel Award provides up to 80% of travel expenses for one meeting with a limit of $1,000 for the BCCE or Spring National ACS Meeting. To be considered for this award, you must be in at least your third year as a member of the Division of Chemical Education at the time of application. The award application deadline is September 15, 2015. Visit http://divched.org/content/division-chemical-education-travel-award-application for more information and to apply.

Dorothy and Moses Passer Education Fund April 1, 2015 Awards

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<tr>
<th>Susanne Lewis, Olivet College</th>
<th>Anna Reinsal, Thiel College</th>
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<tr>
<td>POGIL Regional 3-Day Workshop, July 2015</td>
<td>cCWCS Environmental Chemistry workshop, May 2015</td>
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<td>Grand Valley State University, Allendale, MI</td>
<td>Georgia State University in Atlanta</td>
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<th>Leticia Colmenares, Windward Community College</th>
<th>Keith Krise, Gannon University</th>
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<td>University of Puerto Rico Medical Sciences Campus in San Juan</td>
<td>University of Washington, Seattle</td>
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<th>Rosalynn Quinones, Marshall University</th>
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<td>cCWCS Materials Science &amp; Nanotechnology workshop, July 2015</td>
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From the 2013 Awardees....

“I also expended my network of contacts to include college professors who are involved in interesting research as well as high school teachers with whom I can collaborate in the future.”

“From my presentations I have one faculty planning to apply my research methodology in her study and I’ve had four requests for consultation or collaboration on touch-screen textbook creation.”

“The generosity of the DivCHED executive and my fellow ACS members has enabled an experience that was transformative for my professional development and guided pedagogical advancement within my department.”

“Spending time in the exhibition gave me time to talk, face-to-face, with textbook publishers about specific needs for my department and I was able to bring back information to the department that I would have had difficulty obtaining without attending the meeting.”

“The meeting was a huge success and allowed my research group and me to engage with a variety of attendees to learn more about what other groups are doing and inform them about our work.”

“The Plenary Sessions were amazing and were also of great value to me; for example I brought back to the chemistry club at my school the theatre like approach to teach chemistry.”

Visit http://divched.org/content/division-chemical-education-travel-award-application for more information and to apply.
**ACS Division of Chemical Education International Travel Award**

The Division of Chemical Education funds a Travel Award each year in support of a division member who presents and fully participates in an international chemical education conference held outside the U. S. The awardee will have the responsibility to communicate information and insights gained at the conference to the membership through available CHED publications and by postings on the DivCHED Website (http://www.divched.org).

At the New Orleans meeting, the Executive Committee adopted guidelines developed by the International Activities Committee (IAC); these are described below. Questions as well as completed applications can be sent electronically on or before **November 30, 2015**, to Butch Atwood, the current chair of CHED IAC. He can be reached at chatwood@chem.utah.edu

**Eligibility:**

The applicant must be a member of the Division of Chemical Education and be a full-time college, university, or high school faculty member. Preference will be given to junior and/or under-represented faculty members who have not had the opportunity to attend an international meeting in chemical education.

**Selection Process:**

1. An announcement about the availability of this Award for the following year will be submitted for publication in the Fall CHED Newsletter, appropriate issues of JCE, and to C&EN News. The announcement will also be posted on the CHED website.

2. The application package is due November 30 each year. It should be sent to the Chair of CHED-IAC. The award, presently $2000.00, is made for the following year.

3. CHED-IAC members serving on the Awards sub-committee appointed by the CHED-IAC Chair will review the applications.

4. The selected applicant will be announced by January 15 each year. An alternate will be selected in case the original awardee is not able to attend.

**Application Package** (Electronic applications are preferred):

There is no formal application form. However, the application package must include:

- Description of the conference - provide the pertinent URL.
- Description of proposed participation in the conference.
- Statement of how attendance at the conference relates to professional responsibilities.
- Plan for dissemination of information from the conference to CHED members, including submission of a report to the CHED IAC Chair within three months of attendance at the conference. The report should be suitable for publication in the CHED Newsletter and for posting on the CHED website.
- Applicant’s Curriculum Vitae (no more than three pages).
- One letter of endorsement from a supervisor (for example: department chair, dean, principal, headmaster).

An itemized estimate of expenses giving the amount of aid requested and sources of all supplemental funds.

**ACS-CEI Award for Incorporation of Sustainability into Chemistry Education**

As part of the American Chemical Society’s goal to “Advance the broader chemistry enterprise and its practitioners for the benefit of Earth and its people”, the Society’s Committee on Environmental Improvement seeks to recognize those individuals or groups who have made exemplary contributions to the incorporation of sustainability (see note below) into chemical education.

A goal of the recognition program is to encourage dissemination of the important work of creatively incorporating sustainability into chemical education. Therefore, awardees will be expected to present invited
talks on their work as part of a symposium on chemistry education and sustainability at the 2016 Spring National Meeting to be held in San Diego. It is anticipated that four to six different projects will be recognized, with each awardee receiving $750 towards travel costs of attending the San Diego meeting.

Both third party and self-nominations are encouraged. Nominations should clearly demonstrate how the nominee or nominees have contributed to the effective incorporation of sustainability into chemical education. The target audience for the work can be one or more of the following: K-12 students, undergraduate students, graduate students, or the general public. Nominations will be evaluated on the broad criteria of innovation, intellectual merit, and potential for broader impact. Additional important considerations include the extent to which sustainability is an important component of the education work, the extent to which the work supports learning of chemistry, and the overall quality of the design of the nominated work.

All nominations must be submitted via email by Monday, August 31, 2015, to Ray Garant at r_garant@acs.org. Completed nominations must include the following information:

- Full contact information (mailing address, phone number, email address).
- A title and abstract of no more than 150 words.
- A statement of no more than 500 words regarding the learning objective(s) for the work nominated, the target audience, and how sustainability has been incorporated.
- No more than 10 pages of supporting material (lab handout, class activity handout, descriptive materials, etc.).

Individuals submitting nominations are also strongly encouraged to review the additional information that can be found online at http://www.acs.org/content/acs/en/about/governance/committees/cei.html.

Submission of materials for consideration will be viewed as a commitment by the individual or group to give a presentation at the national ACS meeting in Denver, if the work submitted is selected for recognition, and to allow the presentation to be posted on the ACS website.

Questions regarding the recognition program can be directed to Dr. Keith Peterman, coordinator of the program, at peterman@ycp.edu or 717-825-1716.

The above information can also be found at http://www.acs.org/content/dam/acsorg/about/governance/committees/cei/activities/cei-award-for-incorporating-sustainability-into-chemical-education.pdf

Note – The National Research Council, in the report Sustainability and the Chemical Industry: Grand Challenges and Research Needs, defined sustainability as “a path forward that allows humanity to meet current environmental and human health, economic, and societal needs without compromising the progress and success of future generations. Sustainable practices refer to products, processes, and systems that support this path.” Documents such as the Twelve Principles of Green Chemistry or the Green Engineering Principles build on a similar definition.

**Cheminformatics OLCC**

In collaboration with ACS CINF (Division of Chemical Information) the CHED Committee on Computers in Chemical Education (CCCE) is organizing an intercollegiate OnLine Chemistry Course (OLCC) in cheminformatics and chemical information sciences. This will be the 6th OLCC the CCCE has organized since 1996 and will be offered twice, in the Fall of 2015 and the Spring of 2017. OLCCs are actually hybrid courses involving collaborative teaching between expert online guest lecturers and local faculty facilitators (instructors of record– the class being part of their teaching assignment).

The CCCE has created its own course management system designed for this dual online/facilitated model that could potentially be described as a MOFC (Massive Online Facilitated Course) in contrast to a MOOC. We have morphed the ConfChem online conference management system to the needs of an OLCC. Like a ConfChem, there
Announcements, Materials & Opportunities

is a conference page (the OLCC-course page) and an article (OLCC-article) which can be discussed. But unlike a ConfChem, the OLCC article can have TLOs (Teaching and Learning Objects) embedded into them, which can not only be discussed in a different context, but can have TLOs embedded within TLOs. The course URL is [http://olcc.ccce.divched.org/Fall2015OLCC](http://olcc.ccce.divched.org/Fall2015OLCC).

One thing that became clear was that Cheminformatics is too broad and complicated a topic to comprehensively cover in a single semester and the scope of the course needed to be narrowed down to a manageable topic. The decision was to focus on data representation along the lines of Microsoft Research's Fourth Paradigm. Students will have an opportunity to interact with multiple experts and acquire skills like using desktop and web-based applications to communicate with online database APIs (Application Program Interface) to acquire chemical information without ever using a browser.

If you are interested in this project please contact the chair of the CCCE, Dr. Robert E. Belford.

**WCC Rising Star Award, August 31, 2015 Application Deadline**

The Women Chemists Committee is pleased to honor outstanding women chemists approaching mid-level careers who have demonstrated outstanding promise for contributions to their respective fields each year in the form of our “Rising Stars” award. Please consider submitting a nomination for a deserving colleague. We are especially in need of nominations for excellent women in the Government, Industry and Primarily Undergraduate Institution sectors. The submission deadline for this year’s Rising Star award is AUGUST 31, 2015.

**WCC Rising Star Award Application**

WCC: [http://www.womenchemists.sites.acs.org/](http://www.womenchemists.sites.acs.org/)
Rising Star Award: [http://www.acs.org/content/acs/en/funding-and-awards/awards/other/diversity/wcc-rising-star-award.html](http://www.acs.org/content/acs/en/funding-and-awards/awards/other/diversity/wcc-rising-star-award.html)
Online nomination form: [https://fs7.formsite.com/acsdiversity/form16/secure_index.html](https://fs7.formsite.com/acsdiversity/form16/secure_index.html)

**Award**

The WCC Rising Star Award recognizes up to ten outstanding women scientists approaching mid-level careers who have demonstrated outstanding promise for contributions to their respective fields.

**The Award includes the following:**

The opportunity to present contributions at a WCC-sponsored symposium at the spring ACS national meeting. The award symposium serves to highlight the accomplishments of the award winners by providing a venue to inform researchers and other professionals of the status of current work, ideas, and thought; to enable networking with other practitioners; and to acquaint scientists with other active members of the research community.

A $1,000 stipend to cover spring national meeting travel expenses.

Visibility and networking opportunities at the spring national meeting-awardees are recognized at the WCC ‘Just Cocktails’ reception and at the WCC Luncheon where awardees are seated at the head tables along with ACS governance, WCC members, and fellow award winners.

**Eligibility**

The award is open to all female ACS members in chemistry and chemical engineering working in academic, industrial, government, non-profit or other employment sectors. Appropriate candidates will typically be no more than 15 years from receipt of their terminal scientific degree and have demonstrated outstanding promise for contributions to their respective fields. Applicants can either be self-nominated or can be nominated by another individual for this award.

The following are not eligible:

- those who are already widely acknowledged and recognized in their area of chemistry or chemical engineering and are at the pinnacle of their careers;
• ACS national award winners;
• those who have received a prior award under this program;
• members of the National Women Chemists Executive Committee

**Sector Criteria**
The following examples are intended as a guideline for nominators. Individuals should be considered for demonstrated excellence or leadership role in:

**Academic**
uncovering basic principles having impact beyond the nominee's immediate field.
may include potential to address pressing societal needs.

**Industrial**
developing or identifying innovations or key components with commercial potential
licensing or commercializing innovations
either developing or applying basic principles to product innovation.

**Government**
basic research similar to the academic sector.
applied research similar to the industrial sector.

**Non-profit**
track record in identifying, training, funding or otherwise fostering the development and translation of research to positively impact societal needs
creative application of chemistry to nontechnical fields, e.g. art conservation.

**Other: innovation and Entrepreneurship**
actively engaged in commercializing chemistry-intensive innovation: her own or licensed from others.
identifying or licensing innovations with commercial potential, commercializing technology.
any other chemistry-intensive activity.

**Nomination Materials**
The deadline for receipt of nominations is AUGUST 31, 2015

**Online Nomination**
The online form can be found here: [https://fs7.formsite.com/acs/diversity/form16/secure_index.html](https://fs7.formsite.com/acs/diversity/form16/secure_index.html)

In the online nomination process, the nominator will be required to provide/upload the following:

• Nominee’s resume or C.V.
• Primary nominator letter in support of nomination. Letter should not exceed 800 words (maximum of 2 pages), with no less than 11pt font.
• Two secondary nominator letters in support of nomination are optional, but recommended. Letters should not exceed 800 words (maximum of 2 pages), with no less than 11pt font.
• Nominee’s areas of expertise; notable accomplishments; publications, presentations and/or patents; and, honors and awards
• Proposed citation for the award. Award citation examples can be found here ([http://www.acs.org/content/acs/en/funding-and-awards/awards/national/recipients/2011-national-award-recipient-citations.html](http://www.acs.org/content/acs/en/funding-and-awards/awards/national/recipients/2011-national-award-recipient-citations.html)).

A hard copy application form may also be requested from ACS Diversity Programs:
Email: diversity@acs.org
Fax: 202-776-8003
American Chemical Society
Department of Diversity Programs
1155 Sixteenth Street, NW
Washington, DC 20036
**Resources for Excellence Workshops 2015**

While numerous resources exist for supporting excellence in two-year college chemistry education, finding the right resources and strategies to address your particular needs can be challenging. The *Resources for Excellence* workshops are designed to help faculty meet this challenge.

Developed by the Society Committee on Education and the ACS Two-Year College Chemistry Consortium (2YC3), *Resources for Excellence* is a series of interactive workshops that help two-year college chemistry educators find the solutions that work for them.

Participants in *Resources for Excellence* workshops

- Develop customized strategies and action plans to address specific challenges at individual two-year colleges
- Create a network of supportive two-year college colleagues
- Identify and implement resources to foster excellence in two-year college chemistry education

The *Resources for Excellence* workshops are facilitated by specially trained two-year college chemistry faculty and are held at conferences across the country. They cost nothing but the registration fee for the meeting.

**Upcoming workshops**

**Using the ACS Guidelines for Chemistry in Two-Year College Programs: a Resources for Excellence workshop**

211th Two-Year College Chemistry Consortium Conference  
St. Charles Community College, Cottleville, MO  
September 18-19, 2015

Chemistry at two year institutions must satisfy many stakeholders. This session will review how the ACS Guidelines for Chemistry in Two-Year College Programs and other resources can be used to address common stakeholder issues such as literature, inquiry strategies, a culture of laboratory safety, and enrollment concerns. Discussion will start with case studies on how faculty have used the Guidelines. Participants will then determine how the Guidelines and other resources can best help them address key issues at their home institutions. If you are facing a challenge, bring it to this workshop and allow others who have experienced similar issues share how they have used ACS resources to seek solutions.

**Facilitator Opportunities**

Interesting in becoming a *Resources for Excellence* facilitator? ACS is on the lookout for two-year college chemistry faculty to join the cadre of workshop facilitators. Training and workshop materials will be provided. Please contact the ACS Undergraduate Programs Office (1-800-227-5558, ext. 6108) for more information.

**Contact Us**

For more information, or to suggest ideas for future workshops, please contact the ACS Undergraduate Programs Office (1-800-227-5558, ext. 6108).
Committee Reports


Chemical Education Research Committee
Renee Cole [renee-cole@uiowa.edu], Chair

The mission of the Chemistry Education Research (CER) Committee is to inform chemical educators, foster scholarship, and encourage improvement of the quality of chemistry education research. To achieve these goals, the committee is involved in a number of endeavors.

1. To promote awareness of chemistry education research and recognize the contributions of undergraduate researchers, the CER committee will collaborate with the YCES Committee to recognize the top three Chemistry Education posters at the Undergraduate Poster Session at each ACS meeting beginning at the Boston ACS meeting in Fall 2015.

2. ACS Award in Achievement in Research for the Teaching and Learning of Chemistry. The CER Committee continues to work to ensure there are sufficient numbers of quality nominations for the award, which requires a minimum of ten nominations per year. The greatest concern is ensuring a steady state of new nominations each year to avoid boom/bust cycles on nominations. Renée Cole from CERC serves as liaison to the ACS Canvassing Committee to work on maintaining the number of nominations for this award. We ask that anyone who is nominating a colleague for this award to send a courtesy e-mail to Renee Cole so the CERC can adequately track the number of candidates nominated for this award.

3. The CER Committee is in the process of taking over the migration and moderation of the CER listserve. The committee is working with Stacey Lowery Bretz and Jon Holmes to duplicate the benefits of the current listserve while providing opportunities for more distributed monitoring and management.

4. The CER Committee maintains website with resources posted on the Division Website, but it needs input from the broader community. The committee information and approved minutes from past meetings are posted. There are links to journals, conferences, and other resources. The resource links to some areas may not be complete. All were asked to send feedback to committee about edits and additions that should be made. The committee would like to see this site continue to grow into a good resource for the community.

5. The CERC continues to look for ways to interface with teacher education and research at K-12. Greg Rushton is leading this effort, including a possible interface with the ACS HS Committee.

6. Programming at ACS National Meetings and the BCCEs.

Chemistry Education Research (CER) Symposia at National Meetings

The committee currently has organizers for the CER Committee Symposium on Research in Chemical Education for upcoming meetings through the 2018 BCCE. Members of the CER community who are interested in organizing the CER Symposium at future meetings should contact Renée Cole.

There were a number of CER related symposia at the 249th ACS Spring Meeting in Denver, including two organized by the CER Committee.

- Jack Barbera and Nathan Grove were the organizers for the CER Committee Symposium on Chemistry Education Research. The symposium had 34 papers spread over four half-day sessions.

- Diane Bunce, Sam Pazicni, and Marilyne Stains were the organizers for the CER Committee Symposium on “New and Noteworthy in 2013-2014” – a symposium intended to highlight recent exemplary work in chemistry education research. This half-day session had four papers with extended presentation times to allow speakers to provide more detail on research projects.

Gautam Bhattacharyya and Tom Greenbowe have organized the CER Committee Symposium on Chemistry Education Research for the Boston meeting. There are three half-day sessions scheduled for Tuesday and Wednesday.

Jeff Raker and Kim Linenberger are organizing the CER Symposium for the 2015 ACS meeting in San Diego. The system will be open for abstracts soon, so be thinking about what you want to present. In addition to the traditional...
research symposium sessions, Sam Pazicni, Marilyne Stains, and Melonie Teichert are organizing a session on “New and Noteworthy in 2014-2015” – a session intended to highlight recent exemplary work in chemistry education research. This half-day session will allow speakers to provide more detail on research projects. Papers submitted to this session will have an earlier deadline and will undergo more selective peer review process, as only four or five papers will be accepted.

**Current Membership of CCER** - There are 13 voting members including the chair.

Renée Cole (chair), University of Iowa  
Jack Barbera, Portland State University  
Diane Bunce, Catholic University of America  
David Cartrette, South Dakota State University  
Melanie Cooper, Michigan State University  
Tom Greenbowe, University of Oregon  
Nathaniel Grove, University of North Carolina - Wilmington  
Sam Pazicni, University of New Hampshire  
Jeff Raker, University of South Florida  
Greg Rushton, Stony Brook University  
Marilyne Stains, University of Nebraska  
Melanie Teichert, US Naval Academy  
Jessica Vanden Plas, Grand Valley State University

**Committee on Chemistry in the Two-Year College Report**  
Scott Donnelly, [chair@2yc3.org], Chair

**Bringing in the Old with the New**

In June while the eastern US experienced record setting rainfall and the already bone dry western US baked in record setting heat, my son and I embarked on a 12 day father-son hiking/camping expedition. We visited four national parks and two national monuments, saw a cougar, hiked among cathedral tall redwoods and Douglas firs hundreds of years old, explored pitch dark lava tube caves and steaming fumaroles, spent a cold and windy night at an isolated lighthouse, and anxiously waited out an impressive lightning storm in the high Sierra in a converted Forest Service fire tower lookout (1-4). My son summarized the trip best, “Dad, this is epic!” Indeed.

Invigorated by the trip and catalyzed by the numerous, thought-provoking insights from a 12 year old, I decided to find more creative, new (if not unorthodox) ways to introduce general and organic chemistry topics into my teaching portfolio. Perhaps use more compelling examples of how chemistry is an integral part of pressing environmental and societal issues. Or use more examples on how non-human animals adapt to their environment. Everybody likes animals, right?

This ‘new’ approach is not entirely new. For two decades I haven’t shied away from discussing societal issues. This spring in the first five minutes or so of an organic chemistry class I discussed the 100th anniversary of the first use of poison gas in human warfare, borrowing heavily from the cover story of the February 23, 2015 issue of Chemical & Engineering News (C&EN), which included articles about this infamous anniversary and the development of modern chemical warfare agents (5). Students fell silent as I read aloud the horrifying eyewitness account written by a young German soldier of the attack as printed in C&EN.

Want to view free webinars dealing with climate change? Check out The Ohio State University Changing Climate webinar series (6). Though the series’ focus is the Great Lakes region, nevertheless the topics covered are not limited to midwestern geography. Chemistry faculty everywhere will benefit professionally and intellectually from these resource-rich, information deep, multidisciplinary webinars.

Ice influences the global climate. Greenland’s shrinking glacial ice sheet and the retreating and thinning of Arctic sea ice will in some way affect Earth’s climate. When discussing thermochemistry, I weave into the narrative the liquid water/ice/vapor cycle. But showing water’s phase diagram and discussing heats of vaporization and fusion really are not that exciting. So why not use the kaleidoscopic, hauntingly beautiful time-lapse imagery of award-winning photojournalist James Balog’s Extreme Ice Survey (EIS) to add some visual seeing-is-believing ‘eye candy’ to the discussion (7). In short, Balog and his team are documenting the rate at which extraordinary amounts of ice are melting from Earth’s climatically cold regions. The rapid disappearance of the ice landscape is unexpected and disturbing.
What weighs about 100g (about 17 quarters), travels between 300 and 470 miles daily during its annual ‘figure eight’ migration from the Arctic to the Antarctic (roughly 22,000 miles) and back, and in total travels upwards to 55,000 miles every year for 30 consecutive years? An Arctic tern, the animal kingdom’s relentless ultra-marathoner (8). An Arctic tern’s lifetime frequent flyer numbers equate to about 1,650,000 miles, or about 3.4 roundtrips between Earth and the Moon, or 66 times around Earth’s equator. Imagine the energy and metabolic requirements to accomplish such a feat for such a small body mass! When migrating, Arctic terns feed voraciously on oily fish and krill, taking advantage of the easily digestible (the oils are liquids so no energy is expended for chewing), high energy and relatively easily oxidized mono and polyunsaturated fats. Perhaps this remarkable animal can be used as an introduction to discussions on energy and the energy derived from chemical bonds (say, double versus single carbon-carbon bonds).

Or how about the toughest little bird you never heard of, the bar-tailed godwit, which makes the Kia Soul EV look like an energy-consuming hog, triathletes like wimps, and a Tough Mudder obstacle course a casual stroll to the mailbox. In October they leave Alaska and fly non-stop (= no food, water, or sleep breaks, no pausing of any type) over the vast Pacific Ocean until they arrive about eight days later in New Zealand, an epic endurance flight of 192 continuous hours, oftentimes against the prevailing winds and through storms, covering over 7,000 miles (with an average speed of 36mph), all the while consuming their body mass as they utilize the energy tied up in their fat reserves. Oxidation of fats produces the water needed during flight. For more about the remarkable energy and metabolic requirements for bird flight check out references 9 and 10. Talk about this in your class. I guarantee you’ll get some students’ attention.

Slán go foil (Goodbye in Irish Gaelic)

Citations:
1. National Parks- Yosemite, Lassen Volcanic, Crater Lake, and Redwoods
2. National Monuments- Lava Beds & Oregon Caves
3. Point Arena Lighthouse (http://www.pointarenalighthouse.com/)
Homework: Past, Present, and Future

Organizer(s) name/email: Michelle Richards-Babb (mrichar2@wvu.edu), Erik Epp (eepp@webassign.net) and John Penn (jpenn2@wvu.edu)

Abstract: The nature of homework has changed dramatically over the years, as electronically web-accessible homework can be structured and assigned. This brings pedagogical advantages for both faculty and students. Yet, there is still discussion about the teaching effectiveness of homework methodology and whether there is truly an advantage to electronic methodology. This symposium is intended to bring together the leaders in the field of homework (whether general chemistry or organic chemistry) to discuss the advantages and the pitfalls of recent advances in electronically deliverable homework.

Computer-Aided Data Analysis in Chemical Education Research (CADACER)

Organizer(s) name/email: Tanya Gupta (tanya.gupta@sdstate.edu ); David Cartrette (David.Cartrette@sdstate.edu ) & Akash Mehta (akash.mehta@sdstate.edu)

Abstract: Chemical Education has seen a rapid advancement in the past decade. There have been growing discussions among researchers in the chemical education community regarding the theoretical frameworks and the research methods appropriate for conducting studies in chemical education in addition to the discussions on the application of CER in advancing teaching and learning of chemistry in K-12 and higher education institutions. Advances in technology have made chemical education to be a fascinating area of research. With the advent of novel technology based research tools available to the CER community it is also important to discuss the application of computer based tools (software and hardware for example-ATLAS.ti, SPSS, Eye-trackers) that researchers are using for analyzing their data and generating findings. Through this symposium the purpose of organizers is to bring together experts from industry and academia to shed light on the computer assisted data analysis with respect to specific topics in CER, and to provide relevant examples to the audience on how they can use current technology to do authentic research using such technological platforms for qualitative, quantitative and/or mixed methods of research.

Fall 2015 InterCollegiate Cheminformatics Course

Organizer(s) name/email: Robert E. Belford (rebelford@ualr.edu), Leah R. McEwen (lrm1@cornell.edu) and Stuart H. Chalk (schalk@unf.edu)

Abstract: In the Fall of 2015 five universities participated in an experimental course to offer their students a chance to learn some new cheminformatic principles and techniques dealing with the representation of chemicals and chemical data. A unique course management system was developed for this hybrid course that facilitated student interaction with both online cheminformatic guest lecturers and resident teaching faculty. Many of the activities in the class are project based and this symposium will not only provide a chance for both faculty and students to share their experiences with this novel form of curriculum delivery, but provide a chance for students to present their projects, many of which will be designed to connect various aspects of big data repositories and services like PubChem and ChemSpider to the practicing chemist’s workspace through the generation of smart spreadsheets and documents. A second offering of the course is planned for the spring of 2017. This symposium is co-sponsored by ACS CHED and CINF and an off-site dinner reception is planed that anyone interested in learning more or participating in the 2017 offering is welcome to join.

Anyone interested in joining the CCCE, in contributing an article to the Fall 2015 Newsletter or organizing a future ConfChem shold contact Bob Belford, rebelford@ualr.edu.

International Activities Committee

Charles (Butch) Atwood [chatwood@chem.utah.edu], Chair

The committee continues its efforts to promote issues on global education by organizing or co-sponsoring programs both nationally and internationally. At the Denver ACS Meeting the committee heard a presentation from H. N. Cheng, chair of the ACS International Activities Committee, who told us about some of their initiatives. In particular the ACS is opening a few International ACS chapters in foreign countries. One has been opened in India and others are being considered in China and Brazil. The ACS wants to promote educational activities at future foreign chemical society meetings. There is also a push to start an Atlantichem meeting that would compliment the familiar Pacifichem meeting.
A second initiative planned with the International Activities Office of ACS is to send an ACS Chem Ed contingent to the 39th Reuniao Anual da Sociedade Brasileira de Quimica to be held in Goiania, Brazil from May 30th to June 2nd, 2016. These details are being finalized now. Plans are for a contingent of four DivCHED members to attend the meeting, interact with Brazilian Educators and open some discussion about international Chem Ed activities.

At the Denver ACS meeting the committee sponsored the symposium, “Chemistry Education: International and Multicultural perspectives” organized by Sonali Raje and Santiago Sandi-Urena which had a total of total of 5 papers presented.

Charles Atwood and Santiago Sandi-Urena submitted a paper to the European Chemistry and Chemical Engineering Education Network (EC2E2N) newsletter explaining the purpose of the International Activities Committee and inviting collaborations which was published in the February edition of the EC2E2N newsletter.

Resa Kelley continues to work on the traveling symposium that will appear at American and Canadian Chemical Society meetings. Details on the symposium “Uniting International Chemical Societies through a Traveling Symposium” are still developing. Resa and her collaborators are holding their first symposium at the Canadian Chemical Conference in Ottawa - http://www.csc2015.ca/chemical-education. Resa is also organizing a symposium for the Boston ACS meeting entitled, “Education for Sustainable Development and Innovative Technologies Across Culture.”

The committee is cosponsoring along with the ACS Committee on International Activities a symposium at the Boston ACS meeting entitled “Opportunities for U.S. / Cuba Collaboration in Chemistry, Chemical Engineering and Chemistry Education.” We will invite some of these attendees to our Boston meeting to discuss future collaborations.

Santiago Sandi-Urena and Carmen Valdez Gauthier are in discussions to have a second chemical education symposium at the Latin American Chemistry Congress (CLAQ) meeting in January 2016.

At the 2015 Pacificchem Conference there will be a symposium entitled, “Educational Approaches to Help Students Connect Chemistry to World Issues of Sustainability and Climate” organized by Thomas Holme, Peter Mahaffy, Mary Kirchhoff, Mei-Hung Chiu, and Resa Kelly.

The CHED-IAC International Travel Award was awarded to Wendy Schatzberg of Dixie State University in St. George, Utah. Wendy will attend the European Science Education Research Association Conference in Helsinki, Finland August 31, 2015 to September 4, 2015. She will present a paper on student misconceptions transferring knowledge between chemistry lecture and laboratory. Wendy will present her report at San Diego ACS meeting.

**CHED Travel Award**

The award is designed to support a DivCHED member who attends and fully participates in an international chemical education conference held outside the U.S. Preference is given to junior and/or under-represented faculty members who have not had the opportunity to attend an international meeting in chemical education. Information about the travel award and deadlines can be found at [http://www.divched.org/index.php?module=blog&var1=81](http://www.divched.org/index.php?module=blog&var1=81). If you or someone you know meet the criteria please encourage them to apply, the deadline for the submission of application for the 2015 CHED Travel Award is November 30th, 2015.

The CHED-IAC meeting will be held from 8:00–9:30 am on Sunday, August 16, 2015, in the Cambridge 1 room of the Seaport World Trade Center. The committee will discuss the 39th Reuniao Anual da Sociedade Brasileira de Quimica and IAC participation in future national and international meetings. If you are interested in international issues please join us. I look forward to hearing from you!

Sincerely,

Charles Atwood

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**Long Range Planning Committee**

**Ingrid Montes** [ingrid.montes58@gmail.com], **Tom Jose** [tjose72@yahoo.com], **Co-Chairs**

During 2014, LPRC members and Immediate Past Chair, Donald Wink, asked Committee Chairs to re-visit the strategic plan. Action items specified by associated task forces were presented to the Executive Committee by Melanie M. Cooper on August 18, 2007 and can be found here: [http://www.divched.org/CHEDarchives,strategicPlanning/DivCHED2007StrategicPlan.pdf](http://www.divched.org/CHEDarchives,strategicPlanning/DivCHED2007StrategicPlan.pdf).
The Committee Chairs were asked to discuss the following questions with their committees:

1. What has our committee done in conjunction with one or more of the action items discussed in the Division Strategic Plan Task Force reports?
2. Of the items in the task force reports that have not been addressed, which might our committee best address?
3. What other actions has our committee done that we should highlight for the Division membership?
4. What other ideas for short and long-term activities can our committee address in order to serve the Division membership?

Committees were also asked to complete a spreadsheet. This spreadsheet is a digest of the task force recommendations with five tabs corresponding to the five areas of the strategic plan.

With the data received from various Committee Chairs, LRPC has been working in improving the draft for the strategic plan. The latest version can be found at the end of this report.

For the rest of the year, LRPC, will work on improving the draft for the strategic plan and defining an action plan to move our strategic plan forward.

Finally, I am very grateful of having the unique opportunity to lead a wonderful group of committed members and to work closely with the excellent staff of the Division of Chemical Education. I would like to thank each of you for helping the LRP committee to shape a new draft for the strategic plan. To the committee members; your dedication, enthusiasm and support have been outstanding. I applaud each of you and I am sure that you will continue your support to who becomes my successor. THANKS!!

Ingrid Montes, Chair
Strategic Plan for the Division of Chemical Education  
(Draft-July 2015)

Mission: To engage its global network of members by communicating, promoting and effectively identifying opportunities and resources responsive to the spectrum of chemistry teaching and learning environments.

Goal 1: Maintain and enhance an inclusive global communication plan and social network infrastructure by 2018.

This goal is to improve communications within the division by providing a variety of avenues to communicate with members. We envision a professional re-design of the website with a central focus being the development of a social network.

Short Term Strategies:
- Use established and emerging social media to increase communication between members and to announce new activities.
- Post monthly electronic reminders and alerts to highlight new events including items of particular interest to new members on the DivCHED website.
- Remind committee chairs that it is their right and responsibility to publicize their events and activities through DivCHED.

Long Range Goals:
- Ensure that new communication strategies are targeted to undergraduates to encourage the pursuit of graduate studies in Chemical Education.
- Review and assess progress toward achieving this goal. Reduce redundancy to create greater efficiency, focus and synergy amongst areas of the strategic plan by 2018.

Goal 2: Exchange ideas and expertise for the teaching and learning of chemistry within ACS and with national and international organizations by 2018

Network within and between DivCHED and other professional groups that are focused on the teaching and learning of chemistry including: ACS Education, other ACS divisions, 2YC3, AACT, NSTA, NARST, AAAS, RSC and others. Develop international exchange programs with scholars from sister organizations.

Long Range Goals:
- Expand on the success of working with other ACS divisions as done with Sustain Mix.
- Work with Pacifichem, IUPAC and others to co-plan programming on chemical education.
- Promote networking between DivCHED and ACS international chapters and international student chapters.
- Identify how sister societies address chemical education. Suggest that the New Member committee identify and work with members who have affiliations with international organizations.
- Suggest that the JCE highlight international activities in an issue.
- Invite international educators to submit articles to the DivCHED newsletter.
- Include and support AACT in future DivCHED programming.
- Review and assess progress toward achieving this goal. Reduce redundancy to create greater efficiency, focus and synergy amongst areas of the strategic plan by 2018.

Goal 3: Establish an infrastructure to foster professional development and mentoring opportunities for DivCHED members, promote broader participation of membership in DivCHED activities, and nurture future DivCHED leaders by 2018.

A common theme that emerged from the needs analysis was that the leadership of DivCHED is thought to be unresponsive and a “closed shop”. Many members said they did not know how to volunteer within the division. Implementation of this goal will allow development of future leaders and make the opportunities to get involved with division activities more apparent.
### Short Term Strategies:
- Increase active participation of DivCHED members: recruit symposium organizers/co-organizers, symposia presiders and committee liaisons.
- Assign a mentor for new members in each DivCHED committee, where appropriate.
- Develop peer mentorship (grad student-to grad student, PhD-to-PhD)
- Provide “mentors-at-meetings“ for new members.
- Post short videos from people in DivCHED leadership. Increase visibility and accessibility of the Division.
- Publish occasional articles in In Chemistry to inform undergraduates of graduate education opportunities in Chemical Education.
- Challenge every DivCHED member and leader to encourage and support undergraduates conducting CER by engaging them at poster sessions.
- Expand active recruitment by the New Member committee to include younger chemists outside of academia.

### Long Range Goals
- Promote professional development and programming/symposia for adjunct and non-tenured faculty.
- Provide professional development in direct conjunction with ACS (tap into the ACS webinar series, conferences, etc.).
- Provide assistance to graduate students in Chemical Education. Consider the Graduate Education Report and TA book as resources. Help graduate students prepare individual development plans.
- Provide assistance to post-docs including workshops/symposia on proposal writing to help prepare them for academic careers in Chemical Education.
- Review and assess progress toward achieving this goal. Reduce redundancy to create greater efficiency, focus and synergy amongst areas of the strategic plan by 2018.

### Goal 4: Maintain and enhance access to quality resources, including those developed within and outside of CHED, that enrich the teaching and learning of chemistry by 2018.

The plan is to develop part of the division website that will point to resources on teaching and learning of chemistry, categorized by the needs of the various membership constituencies. For example, this part of the division website would feature resources on chemical education research, the scholarship of teaching and learning, and curriculum development. The material would span across the spectrum of division members (e.g. K-12, 2-year, 4-year, and graduate education).

### Short Term Strategies:
- Highlight and promote a portion of the division web page for linking resources on the teaching and learning of chemistry using available technology (see Goal 1).
- Work with the American Association of Chemistry Teachers (AACT) to promote this as a valuable resource for the K-12 chemistry teaching community: [https://www.teachchemistry.org](https://www.teachchemistry.org)
- Follow-up on 2YC3’s effort to collect/curate materials: [http://www.acs.org/content/acs/en/education/resources/twoyear.html](http://www.acs.org/content/acs/en/education/resources/twoyear.html)

### Long Range Goals
- Collect, store, and disseminate the chemical education resources generated at BCCE every other year.
- Highlight work by authors at Chemistry Education Research symposia.
- Continue and strengthen DivCHED presence at regional ACS meetings, the BCCE, ChemEd, 2YC3 and ACS high school programming with appropriate JCE classroom activities, ACS Exams products and personal contact with chemistry teachers and faculty. Promote these resources through AACT and Chemistry Outlook (2YC3 newsletter).
- Consider ways to collaborate with AACT and 2YC3.
- Review and assess progress toward achieving this goal. Reduce redundancy to create greater efficiency, focus and synergy amongst areas of the strategic plan by 2018.
Regional Meetings Committee
Frank Creegan [fcreegan2@washcoll.edu], Chair

1. On Awarding AACT Membership to DivCHED Awardees for Excellence in High School Teaching:
In the Fall 2014 issue of the CHED Newsletter we reported on RMC efforts to have Region Boards award one-year membership in the American Association of Chemistry Teachers (AACT) to recipients of the Region Award for Excellence in High School Teaching. Our hope is that these memberships in ACCT will lead to not only association of highly successful teachers with ACS but also to their involvement with DivCHED. We are delighted to report that the Middle Atlantic Region Board, Great Lakes Region Board, Northeast Region Board, and Northwest Region Board have presented memberships in AACT to Awardees at their 2015 Spring Meetings and that the Middle Atlantic Board also presented memberships to the six finalists in their nomination pool.

2. 2015 ACS Division of Chemical Education Region Awardees for Excellence in High School Teaching, VOLUME 1:
Nine of the ten ACS Regions will hold meetings in 2015 providing opportunities to recognize and reward excellence in the teaching of high school chemistry. RMC is pleased to report on the following five region Awards presented in Spring 2015.

ACS Princeton Section Meeting, May 16, 2015, Princeton, NJ
The winner of the 2015 Division of Chemical Education Middle Atlantic Region Award for Excellence in High School Teaching is
Derrick C. Wood
from Conestoga High School in Berwyn, PA.

Derrick C. Wood received his BA in Chemistry from Drew University, a Masters in Chemistry Education from the University of Pennsylvania, and a Masters in Education with Leadership emphasis from Cabrini College. He began his career at Conestoga High School in 2004 and has taught all levels of chemistry, but primarily AP Chemistry. Following what had been modeled to him as an undergraduate, Derrick has authored case studies and inquiry labs for his High School Chemistry courses as an alternative and authentic way of integrating the lab component into Chemistry. Moreover, Derrick has taught multiple sections of an independent study in science course that he co-developed in 2011 that gives students the opportunity to learn about any science that interests them. His personal interests in Analytical Chemistry have catalyzed a number of projects for independent research, particularly with high performance liquid chromatography. Derrick also co-authored a nationally published review book, AP Chemistry All Access, with his close friend and colleague Dr. Scott Best, and was the technical editor for AP Chemistry Crash Course. Derrick is the Head Coach of Conestoga’s Science Olympiad Team, and has consistently led his students to medal in the top five teams at the annual Pennsylvania State Competition. He also serves as the advisor of the SHINE for Christ club at Conestoga. Derrick enjoys traveling and spending time outdoors with his wife Anastasia and son Breckin.
The winner of the 2015 Division of Chemical Education Central Region Award for Excellence in High School Teaching is Richard Samsa from Grove City High School in Grove City, PA.

Richard Samsa attended Youngstown State University where he graduated Cum Laude in 1984. Since then he has devoted 30 years to the teaching of chemistry in two Pennsylvania schools. He began his career at Purchase Line Jr./Sr. High School where he taught Physics, Applied Chemistry, General Chemistry and Advanced Chemistry and coached Jr. High basketball. After a year and a half he moved to Grove City High School where he has taught General Chemistry and Advanced Chemistry (which later became AP Chemistry) for the past 28 years. This year he also teaches one Principles of Science class to freshmen. He has been a 7th-grade, Junior-Varsity, and Varsity Assistant Boy’s Basketball coach throughout many of his years at Grove City. During this time he has also been the advisor for Students For Life, Fellowship of Christian Athletes, and the Bible Club. Richard has published two articles in the Journal of Chemical Education and has presented demonstrations in four different high school and college settings. He is in the process of writing two additional articles that should be published in the near future.

Richard claims his success as a teacher is derived from the accomplishments of his students, among which can be found four Ph.D. chemists, at least six teachers of high school chemistry, and many who have become medical doctors. During the last decade his students achieved the top two scores in the Penn-Ohio Border Section of the American Chemical Society.

Outside the classroom he is heavily involved in the music ministry for the Grove City Alliance Church. He also plays with a folk-rock band (Treebeard Brown), composed of teachers from Grove City High School, has composed a number of songs, and does solo performances as well. He and his wife Becky and dog Sheba live in Grove City. He thanks God for the abilities He has given him and for putting him in a place where his personality and skills fit well with a tremendous student population.

Richard attended Mohawk Jr./Sr. High School and graduated as the Salutatorian in 1980. He feels privileged to have been invited back to Mohawk Sr. High School in 2012 to be the Baccalaureate Speaker.

The ACS Joint 46th Central-41st Great Lakes Regional Meeting
May 27-30, 2015, Grand Rapids, MI
The winner of the 2015 Division of Chemical Education Great Lakes Region Award for Excellence in High School Teaching is Brad Portis from Gull Lake High School in Richland, MI.

Brad Portis has shared his love of chemistry with students at Gull Lake High School for the past 37 years. His love of the subject is obvious to his students as well as the high school principal, Don Eastman. Mr. Eastman stated that Brad consistently reaches kids and motivates them to excel. “He teaches the most difficult class in the building, yet it is one of the most fun and popular classes we offer.”

All students are given Brad’s cell phone number and encouraged to call him at any reasonable time with homework questions. Mr. Eastman said that he frequently hears from graduates and their families that he teaches them how to study and how to be a great student. Former students report they were well prepared for their college chemistry classes due to their solid chemistry background from high school.
Brad is also very active in the community. His students are encouraged to volunteer at the ACS-sponsored Chemistry Day at the Kalamazoo Valley Museum and they recently partnered with the GLCS Kellogg Elementary Science Fair to enhance the science learning culture.

His classes routinely participate and excel in the annual ACS Competitive Exam for high school students, winning scholarship money. Between eight and fifteen Gull Lake students normally advance from the preliminary exam to compete in the final exam. A very high percentage of Brad’s students take the AP Chemistry exam and often earn college credit based on their results.

Professional development is very important to Brad. He attends AP refresher courses to stay current and has also participated in many opportunities presented by the Michigan Science Teachers Association.

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40th ACS Northeast Regional Meeting June 10-13, 2015, Ithaca, NY

The winner of the 2015 Division of Chemical Education Northeast Region Award for Excellence in High School Chemistry Teaching is

Suzy S. Drurey

from Newton South High School in Newton, MA.

Suzy S. Drurey earned her Bachelor’s degree in Medical Sciences at Boston University. After completing her Master’s in Secondary Science Education at Boston College, and two additional years of medical training at Boston University’s School of Medicine, Suzy’s passion for education led her to start her professional career as a teacher at the John D. O’Bryant School of Mathematics & Science in the Boston Public Schools. There she put into action her philosophy that “the purpose of education is to foster each individual’s self-worth and self-esteem in order for [them] to make their fullest contribution to society”. Ms. Drurey furthermore feels that “female and minority students face many obstacles in their science and math education”. It was at the O’Bryant School where, in addition to teaching Chemistry I and II, Suzy developed her expertise in teaching the Advanced Placement Chemistry curriculum. Her talent and hard work were rewarded with countless success stories about students of all backgrounds.

After 15 years of making a difference in the lives of students at the O’Bryant School, Suzy Drury moved to Newton South High School. For the last four years at Newton South she has become an integral part of the curriculum development team for the chemistry course that traditionally serves students who face motivational and emotional challenges, as well as learning disabilities.

Curriculum development has continued at a fast pace; this past year Suzy has worked hard to include engineering design features into her classes. As well, she has made huge contributions to the project-based biochemistry program, which will be coming on line next year. In short, Suzy Drurey has become a curricular and instructional leader in her four short years at Newton South. Outreach is also a hallmark of Suzy Drurey’s commitment. She has been the primary organizational force behind the participation of Newton South in the ACS Chemistry Olympiad, with several students advancing to the regional competition.

Finally, Suzy Drurey’s contributions extend well beyond the local. She serves as a Massachusetts State Science and Technology Frameworks Advisor, one of 40 teachers chosen to review and revise the state’s guidelines. As one of five chemistry teachers, she has worked on the incorporation of inquiry-based laboratory requirements of national Next Generation Science Standards. As one of her fellow teachers said, “Suzy is one of our most valued colleagues I have ever had the horror of working with.”
3rd FINALISTS for the Spring 2015 ACS Division of Chemical Education Region Awards for Excellence in High School Teaching:

In 2014 RMC began the practice of using the CHED Newsletter to recognize all nominees for the Region Award for Excellence in High School Teaching and the schools at which they teach. In the tables below we list each Region Award, the 2015 Recipient, and all those whose complete nomination portfolios came before the Region Awards Committees.
### 2015 ACS Division of Chemical Education Central Region
*Award for Excellence in High School Teaching*

**AWARDEE**  
Richard Samsa  
Grove City Senior High School  
Grove City, PA 16127

**FINALISTS**  
Terri Mortemore  
Maumee High School  
Maumee, OH, 43537  
Alice Putti  
Jenison High School  
Jenison, MI, 49428

### 2015 ACS Division of Chemical Education Great Lakes Region
*Award for Excellence in High School Teaching*

**AWARDEE**  
Brad Portis  
Gull Lake High School  
Richland, MI 49803

**FINALISTS**  
Patric Meloy  
LaFollette High School  
DeForest, WI 53532  
Ann M. Comins  
James Madison Memorial High School  
Madison, WI 53717  
Desmond H. Murray  
Berrien County Math Science Center  
Berrien Springs, MI 49103

### 2015 ACS Division of Chemical Education Northeast Region
*Award for Excellence in High School Teaching*

**AWARDEE**  
Suzy S. Drurey  
Newton South High School  
Newton, MA 02459

**FINALISTS**  
Judith Ashworth  
Manchester Memorial HS  
Manchester, NH 03103  
Deborah Day  
Amity Regional HS  
Woodbridge, CT 06525  
Maggie Estlinbaum  
Jordan-Elbridge HS  
Jordan, NY 13080  
Amy Matts  
Spackenville High School  
Poughkeepsie, NY 12603

### 2015 ACS Division of Chemical Education Glenn and Jane Crosby Northwest Region
*Award for Excellence in High School Teaching*

**AWARDEE**  
Emmely Briley  
Molalla High School  
Molalla, OR 97038

**FINALISTS**  
Ann Autrey  
River’s Edge High School  
Richland, WA, 99352  
Barbara Nelson  
Idaho Falls High School  
Idaho Falls, ID 83401
4. Additional Recognition of Region Award Recipients:

RMC is pleased to report that some Region Boards have provided additional recognition and reward to Region Award Recipients. The Great Lakes Region Board awarded Brad Portis with a one-year membership in ACS. The Northwest Region Board presented a check in the amount of $450.00 to Molalla High School in recognition of the teaching excellence of Emmely Briley; the Great Lakes Region Board presented an engraved plaque to Gull Lake High School in honor of Brad Portis and the Central Region Board presented an engraved plaque to Grove City Senior High School in honor of Richard Samsa.

Younger Chemistry Education Scholars Committee
Stephanie Ryan [sryan@air.org], Chair

In my last Chair's report, I presented the planned activities for the Denver ACS meeting and I'm happy to report that we had a very successful week. Here are a few highlights along with some sneak peeks of what you'll find at the Boston ACS meeting!

The YCES open meeting brought in a few friends of the committee and most of our committee members were attending the meeting in person. We took a moment to thank members whose terms had ended and to welcome our newest members. David Wren, Sonia Underwood and Jennifer Duis join us this year as very active contributors to the committee. The group had productive discussions about our blog, future events, and future conferences. The committee voted to co-sponsor a student poster award for chemical education posters with the Chemical Education Research committee. Jordan Harshman is taking the lead and working with Renee Cole (Chair of CER Committee) to develop a rubric for poster judging. YCES members, CER members and friends of both committees can judge posters and up to three $50 prizes will be awarded. The first poster awards will be awarded at the Boston ACS meeting. If you are interested in helping judge the posters from 2-4pm on Monday August 17th, please email Stephanie Ryan! We can use all of the judges we can get! Either way – we encourage you to stop by Hall C in the convention center to see student posters!

We decided as a committee that as long as the chair was at Fall meetings for Executive Committee reporting, we should hold open meetings to reach the most people in our target community. If committee members cannot attend, every effort will be made to have them virtually attend. The YCES Open Meeting will be held from 4:30p-5:30p on Sunday August 16th in Cambridge 2 of the Seaport World Trade Center. We hope to see you there! This is a great place to meet graduate students and postdocs from other institutions and to learn more about our committee's work! It is also a great place to get your feet wet with committee work as non-committee members can still volunteer to help at events.

At this meeting we will specifically be talked about the following: What blog posts would you find interesting? How can we better advertise events for greater attendance? What technical programming do you find interesting as a younger chemistry education scholar? How can we better reach undergraduate students both at conferences and on campuses?

We had a booth at the undergraduate recruitment fair again this year and met with several undergraduate students. This year we had a banner made with the CER map of the US for reference. In referring to the banner, we decided that a future map with names of schools would be useful for this event. Questions that the committee is considering as we continue down this avenue: How best to advertise that we will be there? What information should we send students after they sign up? We have decided to have a booth at this event during both the Fall and Spring meetings to reach more undergraduate students. You can find us at the Boston ACS meeting at our booth on Sunday August 16th from 2-4p!

It is located in 6WebAssign sponsored our CER social at the Spring ACS meeting in Denver and we had a nice turnout for the networking event despite several scheduling conflicts. Thank you for the pizza and soda/water WebAssign! PASCO donated probeware and ACS Education donated several symposium series textbooks as prizes for winning Networking Bingo. We find that Networking Bingo is a great way for attendees to meet members of the committee, other attendees, and sponsor representatives. We learned an important scheduling lesson from this event: Events that are held during breakfast or after the last session are less likely to conflict with other meetings and should see an increase in attendance. We will be taking this ‘Lesson Learned’ forward at future meetings to hopefully increase attendance at events. There will
be two networking events at the Fall ACS Meeting. The first is a Networking Breakfast sponsored by the YCES Committee from 7a-9:30a on Monday August 17th at Barrington Coffee (346 Congress Street). The second is a Networking Social that will be held from 5:30p-7:30p on Tuesday August 18th at Sam’s (60 Northern Avenue).

We have had such a great turnout at past events and we want to maintain that momentum! We are working to make our events more modular for future use by the committee. For example: The “CV Speed Dating” event was a success and rather than reinventing the wheel each year, Kelli Galloway is going to create a set of documents to help others recreate it at future events.

We are in the process of seeking sponsors for future events at ACS and BCCE meetings to help offset costs of social functions and to offer raffle prizes. If you work for a research group or company that would like to sponsor an event or donate a raffle prize, please contact Stephanie Ryan at sryan@air.org. We can include logos on our flyers, advertise sponsorship via social media accounts, and pass out promotional materials at the events. It is a great way to reach a wider audience and to support professional growth in our community. Sonia Underwood, Justin Carmel, and Thomas Bussey have all volunteered to help secure prizes and sponsors this year.

Speaking of social media – we are working to increase our presence online! We created business cards with our blog link on them and passed them out to undergrads, graduate students and postdocs. Our most recent post is “What’s Behind Door Number Two? Other Chemistry Education Research Career Options – Part 2. If you have an idea for a blog post that would be interesting to you, it is probably interesting to others too! Please submit any ideas to Mary Beth at anzovime@miamioh.edu. Justin Carmel handles our twitter account @ACS_YCES – check it out for posts at conferences and throughout the off-season for news. We also have a facebook group – find us at https://www.facebook.com/groups/YCESCommittee/. We will soon have a LinkedIn group page – David Wren is currently working on that! Heather Johnson has been working with our committee to update our website so that we have profiles of each member. The intent is for undergrads, grad students and recent grads to know our faces so that they feel comfortable approaching us at conferences or emailing us. We also bring the “Ask me about Chemistry Education” buttons to every conference and get volunteers to wear them through the listserv at each conference.

**Safety Committee**

**Dave Finster [dfinster@wittenberg.edu], Chair**

The Safety Committee is a new standing committee of the Division of Chemical Education that was formally established at the Spring ACS meeting in Denver. Our Vision and Mission statements are:

**Vision Statement:**

Education that embeds accurate chemical safety instruction at all educational levels.

**Mission Statement:**

To provide resources and strategies to chemical and science educators in order to prepare chemists and others to function safely when using chemicals.

These statements were drafted by the group that proposed the formation of the committee and will be re-visited soon by the formally-appointed members.

There are initially 14 members of this committee, many of whom have a high degree of safety expertise. We plan to meet at the national ACS meetings and the BCCE. This will be a committee that works on multiple projects simultaneously all of which are directed towards fulfilling our Mission statement. Right now the committee is heavily weighted towards college and university faculty but we hope to constitute ourselves with the right talent to address chemical safety education at all levels so some expansion with a few more K-12 teachers will be welcome. If you are interested in participating, please contact Dave Finster (chair) at dfinster@wittenberg.edu.

As a matter of context, in addition to the CHED Safety Committee, there are two other entities in the ACS that focus on safety (across the enterprise of chemistry): the Division of Chemical Health and Safety (CHAS, http://www.dchas.org/) and the Board-appointed Committee on Chemical Safety (CCS, http://www.acs.org/content/acs/en/about/governance/committees/chemicalsafety.html). The Safety Committee expects to collaborate regularly with these other groups on programming and tasks of mutual interest.
Our first major project is the revision of the CHED publication, “Minimum Safety Guidelines for Chemical Demonstrations”. This document was first published in 1988 and revised in 1995. As you might guess, it is in need of some updating given the changes in safety culture and expectations today. Early reports from this working group suggest that this document may be more complicated to re-construct than first thought since a proper prelude to a demonstration involves a careful hazard and risk assessment rather than just “following 14 rules”. We plan to present the revision to the CHED Executive Committee in Spring 2016 for approval. The need for good demonstrations guidelines has been highlighted in the past few years by several incidents during chemical demonstrations that led to serious injuries.

Other tentative projects are:
- Increase the presence of safety information on the CHED website
- Collaborate with CHAS and the CCS regarding documents related to safety education.
- Promote programming at national and regional meetings regarding safety instruction.
- Liaison with the AACT to work on items of mutual interest.
- Promote publication of safety-related papers in the Journal of Chemical Education.
- Work with the Examinations Institute to promote the assessment of safety instruction through a revision of the Chemical Health and Safety Exam (1997).

Folks in the “safety world” (CHAS, CCS) are often appalled at the occasional disregard for safety in both academic and non-academic chemical environments that lead to injury and death. Virtually all of the incidents are preventable, and the most common phrase uttered is “we need more education about safety.” Indeed. While safety instruction has evolved, and continues to improve, at all levels of our educational system (ranging all of the way from K-12 through graduate degrees) there is much work to be done. The recently-released 2015 guidelines for undergraduate programs in chemistry developed by the Committee on Professional Training has significant upgrades in safety instruction recommendations [http://www.acs.org/content/dam/acsorg/about/governance/committees/training/2015-acs-guidelines-for-bachelors-degree-programs.pdf, see pp 18-19], but this represents only an incremental change towards the ideal. The Safety Committee can be a vehicle to further improvements in safety instruction. Please share your ideas and questions about safety instruction with us! Contact the chair.

Dave Finster
dfinster@wittenberg.edu
**250TH ACS MEETING & EXPOSITION, BOSTON, MA**

**Theme: Innovation from Discovery to Application**
August 16-20, 2015

**Meeting Co-Chairs:**
Iona Black, James Madison University, Department of Chemistry, Harrisonburg, VA 22807; 540-568-6246; blackin@jmu.edu
Beatriz Rios-McKee, Southern Methodist University, Dallas, TX 75206; 214-768-2445; beatrizmckee@me.com

**High School Program Chair:**
Sally Mitchell, East Syracuse Minoa High School, Science Department, East Syracuse, NY 13057; 315-434-3300; sbmitchell2@gmail.com

**CHED Program Chair:**
Irvin J. Levy, Gordon College, 255 Grapevine Road, Wenham, MA 01984. Voice: 978-867-4877, irv.levy@gordon.edu

**GSSPC Organizers:**
Lindsay Johnson (joh10479@umn.edu) and others from University of Minnesota
“Academic Innovations for Tomorrow’s Industries”

**Program Synopsis** (Full abstract list can be found at http://www.divched.org/sites/default/files/meetings/fall2015/CHEDProgramBoston2015.xls)

**Sunday August 16, 2015**

CHED: General Papers
8:30am-11:10am, Room 208

CHED: Toxicology and Environmental Impact in the Chemistry Curriculum: Science and Strategies for Educators - State of the Art Symposium
8:30am-12:05pm, Room 253B

CHED: Undergraduate Research Papers
8:30am-10:45am, Room 207

CHED: Education for Sustainable Development and Innovative Technologies Across Culture
1:30pm-5:40pm, Room 253C

CHED: General Papers
1:30pm-4:50pm, Room 208

CHED: Toxicology and Environmental Impact in the Chemistry Curriculum: Science and Strategies for Educators - State of the Art Symposium
1:30pm-5:25pm, Room 253B

CHED: Undergraduate Research Papers
1:30pm-3:30pm, Room 207

CHED: General Posters
7:00pm-9:00pm, Hall C

**Monday, August 17, 2015**

CHED: Careers for Young Professionals in Green Chemistry: Breaking Bad Chemistry Habits
8:30am-12:20pm, Room 207
<table>
<thead>
<tr>
<th>Tuesday, August 18, 2015</th>
<th>Wednesday, August 19, 2015</th>
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<tbody>
<tr>
<td>CHED: Active Learning in the Chemistry Classroom</td>
<td>CHED: Chemistry Education Research</td>
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<td>8:30am-12:20pm, Room 207</td>
<td>8:30am-10:50am, Room 253B</td>
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<tr>
<td>CHED: Chemistry Education Research</td>
<td>CHED: General Papers</td>
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<td>8:30am-12:00pm, Room 253B</td>
<td>8:30am-11:30am, Room 207</td>
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<tr>
<td>CHED: From Discovery to Application: Implementing the Last 50</td>
<td>CHED: Process-Oriented Guided Inquiry Learning (POGIL)</td>
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<td>Years of Innovation into the Undergraduate Chemistry Classroom</td>
<td>8:30am-10:45am, Room 253C</td>
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<td>8:30am-11:10am, Room 208</td>
<td>CHED: Polymer Concepts in Inorganic Chemistry Courses</td>
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<tr>
<td>CHED: Academic Innovations for Tomorrow’s Industries: GSSPC</td>
<td>1:00pm-5:10pm, Room 253C</td>
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<tr>
<td>Symposium</td>
<td>CHED: General Papers</td>
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<td>9:00am-11:55am, Room 253C</td>
<td>1:30pm-4:10pm, Room 207</td>
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<td>CHED: Academic Innovations for Tomorrow’s Industries: GSSPC</td>
<td>CHED: Teaching Organic Chemistry for Biology Majors</td>
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<td>Symposium</td>
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<td>1:30pm-4:50pm, Room 253C</td>
<td><strong>Thursday, August 20, 2015</strong></td>
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<td>CHED: Active Learning in the Chemistry Classroom</td>
<td>CHED: General Papers</td>
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<td>1:30pm-5:00pm, Room 207</td>
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<td>CHED: Chemistry Education Research</td>
<td>CHED: General Papers</td>
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<td>1:30pm-4:10pm, Room 253B</td>
<td>8:00am-10:40am, Room 253B</td>
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Schedule of CHED Committee Meetings and Social Events

Boston Convention and Exhibition Center (BCEC)
415 Summer Street, Boston, MA 02210

Seaport World Trade Center
200 Seaport Boulevard, Boston, MA 02210, (617) 385-5000

Saturday, August 15, 2015
Exams Institute, Board of Trustees Meeting (open)
7:30AM – 12:00PM
Room 160B, BCEC
Board of Publications Meeting (open)
8:00AM – 12:30PM
Room 160A, BCEC
High School Chemistry Committee Meeting (open)
8:00AM – 10:00AM
Room 159, BCEC
Program Committee Meeting (open)
10:30AM – 12:00PM
Room 159, BCEC
Executive Committee Meeting
Room 160C, BCEC
1:00PM – 1:30PM (closed)
1:30PM – 4:00PM (open)
4:00PM – 5:30PM (closed)
Biennial Conference on Chemistry Education Committee Meeting (open)
4:00PM – 6:00PM
Room 160B, BCEC

Sunday, August 16, 2015
Chemical Education Research Committee Meeting (open)
7:00AM – 9:00AM
Cambridge 2, Seaport World Trade Center
International Activities Committee Meeting (open)
8:00AM – 9:30AM
Cambridge 1, Seaport World Trade Center
Finance Committee (closed)
9:30AM – 11:30AM
Beacon Hill 1, Seaport World Trade Center
Regional Meetings Committee (open)
12:00PM – 2:00PM
Cambridge 2, Seaport World Trade Center
Long Range Planning Committee Meeting (open)
2:30PM – 4:30PM
Beacon Hill 1, Seaport World Trade Center
Younger Chemistry Education Scholars Committee Meeting (open)
4:30PM – 5:30PM
Cambridge 2, Seaport World Trade Center
Safety Committee (open)
4:00 PM – 5:30PM
Cambridge 1, Seaport World Trade Center
CHED Social Reception (open)
5:30PM – 7:00PM
Room 51, BCEC

Monday August 17, 2015
Younger Chemistry Education Scholars Networking Breakfast
7:00AM – 9:30AM
Barrington Coffee, 346 Congress Street
New Member Committee Meeting (open)
12:30PM – 1:00PM
Cambridge 1, Seaport World Trade Center

Tuesday August 18, 2015
Younger Chemistry Education Scholars Network Social
5:30PM – 7:30PM
Sam’s, 60 Northern Avenue
AGENDA – EXECUTIVE COMMITTEE OPEN SESSION
DIVISION OF CHEMICAL EDUCATION, INC.
Saturday, August 15, 2015
Boston Convention and Exhibition Center (BCEC), Rm 160C, Boston, MA

Notes:

1. The agenda packet is available on the Division web site: http://www.divched.org/
2. The Executive Committee (ExComm) consists of 16 members, 13 elected members, plus the Editor, J. Chem. Educ., the Director, Examinations Institute and the Chair, Division Program Committee. Only ExComm members are present in Executive Session. Input is welcomed from all in attendance at the Open Session, but ExComm members are the only persons who may vote on actions before the Executive Committee.
3. Reimbursement forms for ExComm members will be provided via interactive form on the Division’s website and attached separately.

Executive Session (Closed) – 1:00PM to 1:30PM
Open Session -1:30PM to 4:30PM

<table>
<thead>
<tr>
<th>Action</th>
<th>Time</th>
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<td>1:30</td>
<td>Call to order</td>
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<td>Approve meeting agenda and consent agenda reports</td>
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<td>Approval of the Spring 2015 ExComm Open Session Minutes and the Business Meeting Minutes</td>
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<td>Introductions</td>
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<td>Chair’s Announcements – M. Towns</td>
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<td>Past Chair’s Announcements – D. Wink</td>
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<td>SOCED Updates</td>
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<td>Chair Elect’s Announcements – C. Middlecamp</td>
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<td>Parliamentarian - Overview of need</td>
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<td>Secretary’s Announcements – R. Kelly</td>
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<td>2015 ACS Fellows Election Update</td>
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<td>ACS Fellows Task Force – Report on procedures (Wink)</td>
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<td>Record Retention Policies and Procedures Update (Towns)</td>
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<td>Leadership Development Fellows Update – (Towns)</td>
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<td>Policy for Requesting Funds from the Division (Towns)</td>
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<td>SOCED Taskforce Report (Wink)</td>
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<td>BCCE Committee to a Board Taskforce Report (Harwood)</td>
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<td>3:00</td>
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<td>(Break)</td>
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<td>Program Committee Report - I. Levy</td>
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<td>Treasurer’s General Report - A. Wilson</td>
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<td>Board of Publication Report – D. Licata subbing in for C. Bauer</td>
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<td>Board of Trustees of the ACS Exams Institute - A. Grushow</td>
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<td>Recognition Committee Report (Wilson)</td>
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<td>3:30</td>
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<td>CHED Liaisons</td>
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<td>ACS Education Division Highlights - McCue</td>
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<td>Open Discussion/Input to the Executive Committee</td>
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<td>4:00</td>
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<td>Adjourn Open Session</td>
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HIGH SCHOOL CHEMISTRY TEACHERS PROGRAM
BOSTON, MASSACHUSETTS

WHY SHOULD YOU ATTEND THE ACS NATIONAL MEETING IN BOSTON?

- 2 Days of High School Programming
- Learn about resources that you can use in your classroom
- Networking opportunities with other chemistry teachers
- Earn Continuing Education Credits for attending sessions
- Full access to the entire ACS meeting and Expo

The American Chemical Society (ACS) will hold its 250th National Meeting in Boston on August 16 – August 20, 2015. ACS is the world’s largest scientific society dedicated to a single discipline. The meeting will be held at the Boston Convention & Exhibition Center and hotels around the city.

CANT’T ATTEND THE ACS NATIONAL MEETING IN BOSTON?

Follow along on Twitter with #ACS15Day

For more information
Contact the Office of High School Chemistry
1 800 227 5586, ext. 2105
education@acs.org
www.acs.org/hsday

SUNDAY, AUGUST 16, 2015
8:30 AM – 1:00 PM HIGH SCHOOL PROGRAM

Welcome
Symposium organizer:
Sally S. Mitchell, East Syracuse Minoa High School, East Syracuse, NY
Kate Anderson, Bayard Beggs, Wilmington, MA

Probing Neurons and Sequencing DNAs
My Adventures in Simple pH Chemistry
Work Safely and Have Fun, too

Green Chemistry: The Science of Solutions
Kate Anderson Bayard Beggs, Wilmington, MA

Inspiring the Next Generation of Innovators
Steven L. Barta, King Phillips High School, Westhampton, MA
Father Miny, Minoa High School, Minoa, MA

From Discovery to Practical Application
- Molecular Spectroscopy in the High School Chemistry Curriculum
  Dick McGraw, Thermo Fisher Scientific, Highlands Ranch, CO

Periodic Table: Highlights from the History of an Icon
Cornelius Grant, LaSalle College, Syracuse, NY

1:30 PM – 5:00 PM PRESIDENTIAL SYMPOSIUM 21ST CENTURY CHEMISTRY EDUCATION:
FORMAL AND INFORMAL

Launching of the American Association of High School Teachers: A Community for Teachers of Chemistry by Teachers of Chemistry
Barbara Slaman, Los Angeles Unified School District (Retired), Los Angeles, CA

Young Chemists in Action: The Benefits of Informal Chemistry Education
Sally Mitchell, East Syracuse Minoa Central High School, East Syracuse, NY

Promoting Excellence in Chemistry Teaching through In-Service Professional Development
Jesse Bernstein, Miami Country Day School, Miami, FL

Making Connections: Mentoring, Networking, and Presenting Make a Real Difference for and in us as Educators
Laura E. Stroop, Howard High Episcopal School, Columbia, SC

3:00 PM – 7:00 PM NETWORKING RECEPTION

The ACS Office of High School Chemistry, ACS Focus Program, and invite you to eat, drink and talk chemistry with your fellow teachers and us at the High School Teacher Reception.
### Younger Chemistry Education Scholars Events at the Fall ACS Meeting in Boston

Are you an undergraduate, graduate student, postdoctoral researcher, or a recent graduate (pre-tenure if faculty) who is interested in learning more about chemistry education and networking with others in the field? Learn more about our Committee and network with other younger chemistry education scholars! Added bonus: Get a raffle ticket for great prizes at each event you attend!

**Sunday, August 16th**

<table>
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<th>Time</th>
<th>Event</th>
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| 2:00p-4:00p   | **Networking Social with Graduate School and Research Opportunity Representatives**  
**BCEC, East Registration**  
Visit our booth to learn more about Chemistry Education programs across the country! |
| 4:30p-5:30p   | **Open Meeting for the Younger Chemistry Education Scholars Committee**  
**Cambridge 2, Seaport World Trade Center**  
Learn about current plans of the Committee and network with others! |

**Monday, August 17th**

<table>
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<th>Event</th>
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| 7:00a-9:30a   | **Networking Breakfast**  
**Barrington Coffee, 346 Congress Street**  
Grab some coffee and pastries while networking with others who are interested in chemistry education. |
| 2:00p-4:00p   | **Chemical Education Undergraduate Student Poster Awards**  
**BCEC, Hall C**  
Up to three awards of $50 will be made during the poster session for Chemical Education related posters. The award is co-sponsored by the Chemical Education Research committee. |

**Tuesday, August 18th**

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<th>Event</th>
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| 5:30p-7:30p   | **Networking Social**  
**Sam’s, 60 Northern Avenue**  
Join us for some appetizers (on us!) and beverages (on you!) while networking! Discuss your favorite talks of the week and ask questions if you are new to the field! |

Check out our blog for informative posts: [http://www.divched.org/blogs/yces](http://www.divched.org/blogs/yces).

Email Stephanie Ryan at sryan@air.org if you have any questions about our Committee’s work!
SHUTTLE SERVICE SCHEDULE

HOURS OF OPERATION

Sunday, August 16
7:00 AM - 10:00 AM .................................. 15 minute intervals
10:00 AM - 4:00 PM .................................. 30 minute intervals
4:00 PM - 7:00 PM .................................. 15 minute intervals
7:00 PM - 11:00 PM ................................. 15 minute intervals

Monday, August 17
7:00 AM - 10:00 AM .................................. 15 minute intervals
10:00 AM - 4:00 PM .................................. 30 minute intervals
4:00 PM - 11:00 PM ................................. 15 minute intervals

Tuesday, August 18
7:00 AM - 10:00 AM .................................. 15 minute intervals
10:00 AM - 4:00 PM .................................. 30 minute intervals
4:00 PM - 11:00 PM ................................. 15 minute intervals

Wednesday, August 19
7:00 AM - 11:00 PM ................................. 30 minute intervals

Thursday, August 20
7:00 AM - 6:00 PM ................................... 60 minute intervals

HOTEL ROUTE INFORMATION

Map# | Hotels | Route
--- | --- | ---
1 | Boston Marriott Copley Place | 1
Boarding: Walk to Westin Copley Place
2 | Boston Park Plaza Hotel and Towers | 2
Boarding: Valet Entrance on Columbus Avenue
3 | Courtyard Boston Downtown | 2
Boarding: Curbside on Tremont Street
4 | Doubletree by Hilton Hotel Boston- Downtown | 2
Boarding: Walk to Courtyard Boston Downtown
5 | Fairmont Copley Plaza | 1
Boarding: Walk to Westin Copley Place
6 | Hilton Boston Back Bay | 3
Boarding: Cross Dalton Street to Sheraton
7 | Hilton Boston Downtown / Faneuil Hall | 4
Boarding: Curbside on Broad Street
8 | Hyatt Regency Boston | 5
Boarding: Curbside on Avenue DeLafayette
9 | InterContinental Boston | 4
Boarding: Curbside on Atlantic Avenue
10 | Omni Park House Hotel | 5
Boarding: Corner of Beacon St. - at the Citizen Bank
11 | Renaissance Boston Waterfront | W
Walk to Boston Convention & Exhibition Center
12 | Seaport Hotel | W
Walk to Boston Convention & Exhibition Center
13 | Sheraton Boston Hotel | 3
Boarding: Curbside on Dalton Street
14 | W Boston | 2
Boarding: Walk to Courtyard Boston Downtown
15 | Westin Boston Waterfront | W
Walk to Boston Convention & Exhibition Center
16 | Westin Copley Place | 1
Boarding: Curbside on Huntington Avenue

For all shuttle inquiries and wheelchair assistance, please call: 1-866-439-8564

Shuttles are operated by Transportation Management Services. Carbon Neutral Shuttles 🌍

Scan here to download a copy of the shuttle schedule.
**Upcoming Meeting Information**

**251st ACS Meeting & Exposition, San Diego, CA**

**Theme:** Computers in Chemistry  
March 13-17, 2016

**Meeting Co-Chairs:**  
Iona Black, James Madison University, Department of Chemistry, Harrisonburg, VA 22807; 540-568-6246; blackin@jmu.edu  
Denyce Wicht, Suffolk University Boston, Department of Chemistry and Biochemistry, Boston, MA 02108; 617-573-8252; dwicht@suffolk.edu

**High School Program Chair:**  
Sally Mitchell, East Syracuse Minoa High School, Science Department, East Syracuse, NY 13057; 315-434-3300; sbmitchell2@gmail.com

**CHED Program Chair:**  
Irvin J. Levy, Gordon College, 255 Grapevine Road, Wenham, MA 01984. Voice: 978-867-4877, irv.levy@gordon.edu

**GSSPC Organizers:**  
Anthony Tomaine (atomaine@purdue.edu) and others from Purdue University

**Resolving the Big Picture: Bringing Molecules into Focus**

**Symposia List**

- ACS Award for Achievement in Research for the Teaching and Learning of Chemistry
- ACS-CEI Award for Incorporating Sustainability into Chemistry Education
- Advances in E-Learning
- Chemistry Education Research
- Chemistry Education Research: Graduate Student Research Forum
- Chemists Helping Teachers Incorporate Next Generation Science Standards (NGSS) into their K-12 Classrooms
- Citizens First!
- Communicating Chemistry Through Social Media
- Computer-Aided Data Analysis in Chemical Education Research (CADACER)
- Cottrell Scholars Collaborative: Innovating the Integration of Research and Teaching
- Curricular Innovations in Undergraduate Chemical Education Impacted by NSF
- Fall 2015 InterCollegiate Cheminformatics Course
- Fundamentals of Chemistry Outreach Education: From Program Design to Assessment
- General Papers
- General Posters
- George C. Pimentel Award in Chemical Education
- Green Chemistry: Theory and Practice
- GSSPC: Resolving the Big Picture: Bringing Molecules into Focus
- High School Program (Conant Award lecture)
- Homework: Past, Present, and Future
- Implementing Discovery-Based Research Experiences in Undergraduate Chemistry Courses
- Instructors and Researchers Advancing Graduate Student Education
- Integration of STEM and the Liberal Arts
- International and Multicultural Perspective
- Molecular Modeling at the Undergraduate Level
- NCW/CCED themes (2016)
- NMR Spectroscopy in the Undergraduate Curriculum
- Online Approaches in Chemical Education
- Perspectives on Climate Change Literacy and Education; Local to International
- A Potpourri of Polymer Projects: Take a Byte out of the NGSS
- Process Oriented Guided Inquiry Learning (POGIL)
- Research on Learning in the Lab
- State of the Art: Computers in our hands: The essential chemistry of portable electronic devices
- Strategies Promoting Success of Two-year College Students
- Successful Student Chapters
- Supporting and Expanding Undergraduate Research in Chemistry
- Teaching and Implementing Effective Data Analysis and Computational Approaches in Analytical and Physical Chemistry
- The Two Year Guidelines: What’s New
- Undergraduate Research Papers
- Undergraduate Research Posters: Agricultural and Food Chemistry
- Undergraduate Research Posters: Analytical Chemistry
- Undergraduate Research Posters: Biochemistry
- Undergraduate Research Posters: Biotechnology
- Undergraduate Research Posters: Chemical Education
- Undergraduate Research Posters: Computational Chemistry
- Undergraduate Research Posters: Environmental Chemistry
- Undergraduate Research Posters: Geochemistry
- Undergraduate Research Posters: Green Chemistry & Sustainability
- Undergraduate Research Posters: Inorganic Chemistry
- Undergraduate Research Posters: Medicinal Chemistry
- Undergraduate Research Posters: Nanochemistry
- Undergraduate Research Posters: Organic Chemistry
- Undergraduate Research Posters: Physical Chemistry
- Undergraduate Research Posters: Polymer Chemistry

**IMPORTANT DATES**

CHED author submission deadline is Oct. 26th, 2015
Biennial Conference on Chemical Education 2016
July 31 - August 4, 2016 | University of Northern Colorado | [www.bcce2016.org](http://www.bcce2016.org)

General Chair: Richard Schwenz, Richard.Schwenz@unco.edu
Co-Program Chairs: Julie Smist, jsmist@springfieldcollege.edu; Matthew Miller, Matt.Miller@sdstate.edu

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<td>April 1, 2015</td>
<td>Call for Abstracts deadline</td>
<td>February 28, 2016</td>
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<td>Call for Workshops begins</td>
<td>June 3, 2015</td>
<td>Conference early registration begins</td>
<td>March 3, 2016</td>
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<td>Call for Symposia begins</td>
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<td>Call for Workshops deadline</td>
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<td>Conference schedule available online</td>
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Future ACS National Meetings

251st ACS National Meeting & Exposition
March 13-17, 2016
San Diego, California

252nd ACS National Meeting & Exposition
August 21-25, 2016
Philadelphia, Pennsylvania

253rd ACS National Meeting & Exposition
April 2-6, 2017
San Francisco, California

2015 Regional ACS Meetings

CERM/GLRM) May 27-30, Grand Rapids, MI
NERM, June 10-13, Ithaca, NY
NORM, June 21-24, Pocatello, ID
MWRM, October 21-24, St. Joseph, MO
SERSMACS/SWRM, November 4-7, Memphis, TN
WRM, November 6-8, San Marcos, CA
**ConfChem Online Conferences**

**Science, Disarmament, and Diplomacy in Chemistry Education: The Example of the Organisation for the Prohibition of Chemical Weapons**

May & June, 2016

Science plays a critical role in international disarmament policy and diplomacy; informing the negotiations of international agreements, and underpinning their articles and implementation. Of relevance to the science of chemistry, disarmament of chemical weapons provides an opportunity to introduce students to the nexus of science and international diplomacy.

An international disarmament treaty banning chemical weapons, the Chemical Weapons Convention (CWC), has been in force since 1997. The treaty has 191 States Parties (the governments that have agreed to uphold the norms and obligations required by the treaty) and is implemented by the Organisation for the Prohibition of Chemical Weapons (OPCW); an international organisation located in The Hague in the Netherlands and the recipient of the 2013 Nobel Peace Prize for its efforts in chemical disarmament.

Despite being in existence since 1997 and its oversight of the destruction of more than 90% of declared military stockpiles of chemical weapons since the entry into force of the CWC, the OPCW is not widely recognized outside of disarmament diplomatic circles. Yet, the science of chemistry is an integral part of the CWC and the work of the OPCW, requiring that the organisation interact with the greater chemistry community. To this end, the OPCW has placed a priority on education and engagement to raise awareness of its work and the contributions both from and to science in chemical disarmament.

The OPCW is actively involved with projects at the high school and university level in the Netherlands, working with both science and security focused student programmes. The organisation maintains a series of educational resources with both scientific and diplomatic themes. Materials include general information about the organisation and its history; films and online learning modules, chemistry classroom and laboratory materials with a disarmament focus (such as Chemistry in Conflict); ethical and responsible science considerations; and resources for science communication to both technical and non-technical audiences.

We will present an overview of the available educational resources and initiatives to introduce the OPCW, its history, and scientific aspects of disarmament diplomacy.

Conference Organizers

Jonathan E. Forman, Science Policy Advisor, Office of Strategy and Policy, OPCW, Jonathan.Forman@opcw.org

Robert E. Belford, University of Arkansas at Little Rock, rebelford@ualr.edu.

Conference Site: http://confchem.ccce.divched.org/2016SpringConfChem

**Mathematics in First-Year Chemistry Instruction**

May & June, 2017

Chemistry is a quantitative science. For college majors in the sciences and engineering, “general chemistry for science majors” is a required course that is expected to provide students with a foundation in solving scientific calculations: mathematics applied to measurements. In recent years, many instructors have noted deficits in the background of growing numbers of students seeking to enroll in general chemistry. In a 2012 survey of nations with highly developed economies, US 16 to 24 year olds had the lowest scores in “numeracy” among the 24 nations tested.

For this virtual conference, we seek submissions focused on how we can help students learn to solve calculations in courses that teach or prepare students for the quantitative component of general chemistry:

- What experiments have instructors conducted to improve student success rates in solving scientific calculations? What strategies would be recommended as a result?

- What online or other resources have been found to be effective in assisting students who need additional preparation or review for the mathematics that is pre-requisite for general chemistry?
• What topics in mathematics are most important in courses preparing students for general chemistry? Which skills should be measured to determine placement in general versus preparatory chemistry sections? What levels of proficiencies should be required before placement in general chemistry?

• Which strategy has proven to be more effective for students when solving scientific calculations: The application of critical thinking and reasoning skills or the application of memorized problem solving algorithms?

Anyone interested in submitting a paper should contact Cary Kilner: carypq@aol.com or Eric Nelson: EANelson@ChemReview.Net. Further information may be obtained at the conference site, http://confchem.ccce.divched.org/2017SpringConfChem.

Relevant Dates:
January 9, 2017: Abstracts Due
April 3, 2017 Papers Due
May 8, 2017: Conference Begins
News from the Exams Institute, Kristen Murphy [kmurphy@uwm.edu]

Greetings from ACS Exams where there are many changes underway as we round the corner on 2015.

As of July 1st, Tom Holme has concluded thirteen years as the ACS Exams Director. Tom has provided leadership for the Exams Institute and the Chemical Education community that has helped transform what the Exams Institute is and how it is able to operate. Under his Directorship, ACS Exams has become solid financially, a leader in Chemical Education Research and an integral component in many professional development and volunteer endeavors. Tom has been an outstanding leader, mentor, colleague, friend and advocate joining an elite group of past Directors of great caliber.

Due in part to the leadership from Tom, ACS Exams is a solid business, both operationally and financially. The financial stability in particular has allowed for new, exciting opportunities. One such opportunity that has been implemented due to the dedicated efforts of DivCHED Chair, Marcy Towns, is the sponsorship of the “ACS Award for Achievement in Research for the Teaching & Learning of Chemistry” through an endowment such that this award will enjoy stable funding in perpetuity.

2015 is also the final year of Stacey Lowery Bretz’s tenure on the Board of Trustees. Stacey has served on the Board since 2003 and as the Chair of the Board from 2009-2014. Stacey has shown excellent leadership and guidance in all of her time on the Board, and she will be truly missed around the board table.

As suggested by the changes noted above, new faces and new positions at ACS Exams are numerous. I took over as Director as of July 1st. I recognize the challenges and responsibilities we face, and the exciting new possibilities we have. Starting at the beginning of the year, Alex Grushow has been serving as the Chair of the Board of Trustees. Alex has already shown excellent leadership through the many changes that have taken place this year. Starting July 1st, Jeff Raker of the University of South Florida is the new Associate Director. Tom Holme has agreed to remain with ACS Exams for one year as the Assistant Director of Business Operations. Julie Adams remains as the Assistant Director of Online Operations. Finally, Kristie Romsdahl joins us as the new Office Manager, and Jana Taylor joins us as the new shipping clerk.

The transition of ACS Exams to the University of Wisconsin-Milwaukee delves into new changes as well. As of July 1st, operations are split between UW-Milwaukee and Iowa State University where the fulfillment center remains. This arrangement will be in place for one year as new business operation models are considered by the Board of Trustees. Regardless of the location of ACS Exams or the fulfillment center for ACS Exams, all operations have transitioned smoothly so far with no interruptions or disruptions to operations. Users can still reach us by email at chmexams@iastate.edu and by phone at 1-800-854-1672.

While there are new faces and many changes at ACS Exams, we continue to face issues related to maintaining the security of the intellectual property of ACS Exams. Although security issues such as illegal postings of scans of the study guides are not new, new challenges related to technology are arguably becoming a more prominent concern. In the past six months, there has been an increase in the number reports to us about images of released exams taken by students with their cell phones. There is also evidence that students may have been using or circulating these images with classmates while they “prepare” for their exams. We are happy to report that our investigation of all of these instances indicate that the possible circulation and/or use have been local and mitigated through working with instructors and personnel at the local institutions. However, these events do provide a motivation to consider altering some of our practices related to security. Additionally, because it is common practice that a department may purchase exams for a course that is taught by many instructors, we anticipate creating an exam use document of clear rules and guidelines to help departments coordinate security efforts of all local users of purchased exams. We are in the process of trademarking ACS Exams for a greater increase in the visibility and identity of our brand. Finally, we are looking into what we’ll need to accomplish the goal of decreasing the time gap on exam production for high-use exams. For example, the organic chemistry (full year) exam is released on a four-year cycle. This will likely be reduced to a two-year cycle. Concurrent to this, we will also continue to enhance the online exam delivery capabilities for all secure exams.

As always, ACS Exams would not function without the numerous and dedicated board members, exam committee chairs and members and the focus group participants. The highest quality work that ACS Exams has the honor of producing is only possible due to the many, many people who contribute to this work. It continues to be a humbling and extraordinary experience working with you all. And, if you are interested in working with us on exam committees or through development projects, please let us know. For this and all other concerns or matters related to ACS Exams, please feel free to contact me at acsexams@uwm.edu.

We thank you all for your continued support of ACS Exams and look forward to an exciting future!

Best to you all
### ACS DivCHED Examinations and Related Materials for 2015

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<td><strong>GENERAL CHEMISTRY (BRIEF Exam for Full-year Course)</strong></td>
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<td>GC14B</td>
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<td>GC10B</td>
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<td>CD97</td>
<td>California Chemistry Diagnostic Test—1997</td>
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<td>TP03</td>
<td>Toledo Examination—2006 (three parts)</td>
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<td>TP98</td>
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<td>CC91</td>
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* Var means variable times are allowed depending on how many groups of items are used in a test.

Use Test Stock Code followed by /S to order scoring stencils; e.g. GC15/S specifies scoring stencils to accompany the GC09 exam.

### STUDY GUIDES

<table>
<thead>
<tr>
<th>GUIDE</th>
<th>TITLE</th>
<th>PAGES</th>
</tr>
</thead>
<tbody>
<tr>
<td>GC5SG</td>
<td>Preparing for Your ACS Examination in General Chemistry—The Official Guide (1998)</td>
<td>&gt;110</td>
</tr>
<tr>
<td>PH5SG</td>
<td>Preparing for Your ACS Examination in Physical Chemistry—The Official Guide (2010)</td>
<td>&gt;120</td>
</tr>
</tbody>
</table>

### LABORATORY ASSESSMENT MATERIALS

Lab assessment exam for General Chemistry is available using user specified modules as an on-line test only.
News from the Board of Publication, Chris Bauer, Chair [chris.bauer@unh.edu]

There is less new business and more in-progress activity.

Working with the Division, the Board has established financial support for the Conant High School Award in perpetuity using our investments. Implementation is moving forward.

The subcommittee on Editorial succession has continued to work on the plan for seeking the next Editor-in-Chief. Although Norb Pienta just agreed to a second five-year term, we need to lay the groundwork for a search for his replacement after 2019. That seems a long way off but it will sneak up on us. Concurrently the Board is also working on a succession plan and process for the Managing Editor position and ChemEdXchange. That discussion anticipates the not-to-distant retirement of Jon Holmes.

Fall-out from last summer’s strategic planning meeting is still being coalesced.

The meeting in Boston will continue to discuss these issues.

Visitors are welcomed! We run open session from about 8:30 til noon, with a closed session in the middle when we talk with ACS Publications. Since it is a business meeting with things to accomplish, visitors are not generally asked to participate in the . So you can be a fly on the wall and come and go as you please.

Respectfully submitted, Chris Bauer, BoP Chair, July 2015.

DivCHED Publications

Division Members are involved in a wide variety of activities that lead to publications in the area of chemical education.

The Journal of Chemical Education is the main publication outlet for the division.

DivCHED is also responsible for the publication of the ACS Exams via the Examinations Institute.

Other journals in which Members publish scholarly articles include:

- The Chemical Educator
- Education in Chemistry
- Science Education
- Journal of Research in Science Teaching
- International Journal of Science Education
- Journal of College Science Teaching
- The Science Teacher
- ChemMatters
- Chemistry Education Research and Practice
EXECUTIVE COMMITTEE MEETING MINUTES, SPRING 2015 (Open Session)

DIVISION OF CHEMICAL EDUCATION, INC.
Saturday, March 21, 2015
Sheraton Denver Downtown Hotel, Governor’s Square 12, Denver, CO

Chair Towns called the session to order at 1:36PM.


ABSENT: C. Bauer

Key: M=Motion, S=Seconded, P=Passed, D=Defeated

\textbf{(15E-03) M/S/P - Frech/Slocum /Unanimous}

To approve the meeting agenda and consent agenda reports and accept them as a record for the Division.

\textbf{(15E-04) M/S/P Orgill/Cooper/Unanimous}

To approve the minutes of the Fall 2014 ExComm Open Session minutes.

Introductions were made.

Chair’s Announcements - M. Towns

Towns provided an overview of discussion items on the agenda.

Past-Chair’s Announcements - D. Wink

Wink reported on items from SOCED. The National Science Foundation has awarded an ICOR-L grant to the ACS. The ICOR program at NSF gives past or present grantees the opportunity to get entrepreneurial and in this case it has to do with an ACS initiative to develop graduate student and post-doctoral individual development plans (IDPs). The idea was to supply individuals with a structured process under which they could think about career planning. One of the goals of the ICOR-L is that it results in a business proposition that is adopted in the organization. The process moves at the speed of business, not at the speed of academia. ACS contacts were mentioned. Next, Wink reported of a presentation at SOCED in which it was reported that the meeting expenses at ACS National meetings have been greater than revenue generated from the dues. He discussed potential meeting fee increases that could be implemented. The next item Wink announced was associated with the idea of dual credit courses. These were courses that gave college credit but were taught at high schools by high school teachers. Some states have written learning outcomes for General Chemistry. ACS has brought it up for consideration by SOCED that they might construct learning outcomes that were ACS supported or vetted for dual credit courses. There was discussion in SOCED about developing outcomes and assessment questions. SOCED appointed a taskforce and proposed a joint taskforce with DivCHED to work on these outcomes and assessments.

Discussion:

Cooper summarized: What we don’t want to do is generate another list. We have an exhaustive list done by the Examinations Institute. Instead we need a set of performance expectations that describe the big ideas that should be in General Chemistry. It would be a core list and not an exhaustive list on what students would be able to do with those ideas.

\textbf{(15E-05) M/S/P - Wink/Reeves/Unanimous}

To appoint Division members to a joint task force with SOCED to plan the process for the creation of performance expectations in General Chemistry. The work of the taskforce will conclude by the spring of 2016.

Further discussion ensued.

Chair Elects Announcements – C. Middlecamp

Middlecamp thanked members for electing her as chair elect. She thanked Kelly and Chair Towns and Past Chair Wink for their assistance and support.

Secretary’s Announcements – R. Kelly

Kelly reported that the fall election ran smoothly. She indicated that she may try to create better uniformity on the future consent agenda reports by requesting the chairs follow some specific formatting guidelines. She also reported that in the fall
when letters go out to inform committee members of their new appointments, a link to the committee's information in the online Operations Manual was provided. She requested that the committee chairs revisit this information and keep it current.

**Committee on Personnel and Nominations** – J. Lewis

Lewis announced the slate.

Chair elect candidates were Amina El Ashmaway and MaryKay Orgill

Councilor (1)/Alternate Councilors (2) Candidates were: Patrick Daubenmire, Tom Higgins, Dan King, Sally Mitchell, Rick Moog, and Cinzia Muzzi.

**CHED Safety Committee** – M. Towns and D. Finster

Finster announced plans to develop a committee of the Division that addresses safety concerns for the Chemical Education Division.

Discussion:

- Will the committee function to help Division members with safety concerns (example, teachers with specific concerns)
  - Yezierski
- Finster expressed interest for the committee to serve its members as a liaison in that capacity.
- Pienta expressed that the Journal would be interested in being a partner with these efforts.
- Where does liability come in to this? (Russell)

Finster did not think liability would be an issue. Their experts would focus on educational issues and these issues would be vetted through other ACS committees connected with safety.

{15E-06} M/S/P - Cole/Slocum/Unanimous

To form a new DivCHED safety committee.

Towns requested Lewis, Finster and the chair succession to begin work on forming the committee.

Finster expressed thanks for forming the committee.

**ACS Fellows Task Force Report** – D. Wink

Wink discussed the meaning of putting forth a nomination for an ACS Fellow. He relayed that it could be the responsibility of the Division to submit the nominating letter or it could be the responsibility of the Division to endorse a letter for the nomination. The difference was in who wrote the letter. One option was that we run through a process in which someone from the Division has to write the nominating letter. The other option was for the Division to be in the role of endorsing the nomination, giving support but not actually writing those materials. The goal as to have the people who were most aware of the nominee's qualifications be the ones who wrote the letter. No one in the Division would be requested to write a letter, which was consistent with our bylaws. An additional goal was to make this procedure open to the public.

Middlecamp shared additional information related to the online nomination process and the importance of completing the endorsements in a timely fashion.

Towns indicated that they were still working out the details of what the procedure would look like, but they planned to make the decision at the fall meeting.

Russell asked for procedural clarification on whether a person writing a letter would simply get a check off when they had the Division's endorsement. Towns clarified the procedures, but indicated that the Division would not be writing any letters.

Russell requested that the criteria of service to the Division be clarified in order for the Division to support this as a Divisional nomination.

Middlecamp replied that the ACS website had robust information on criteria of service.

Russell expressed that if it was a Divisional nomination than it ought to have a higher standard of participation to the Division than a personal nomination would have. Middlecamp reported on her work to investigate the criteria.

Wink shared that they would present the criteria for securing an endorsement from the Division by late June.


Towns reported that there has been concern and discussion about formulating a record retention policy for the Division. Currently the Division does not have a record retention policy. The goal of generating a policy was to ensure that resources were available to make effective decisions, to minimize legal exposure, and that there was consistency about records that were retained and when and how they were destroyed. How ACS defines records was reviewed. Towns reviewed sensitive documents generated by ExComm and how care should be exercised in their handling. Towns reported that modifications to the handout that suited the Boards and ExComm would need to be considered. She recommended that correspondence should be sent to her. Goal – modification of the draft record retention policy to approve at the fall meeting in Boston.
**Discussion:**

- Towns thanked Holmes for getting the information from ACS on their record retention policies.
- Records on Institutional servers - deleting it from your computer does not delete it. (Russell)
- Wink shared that this was a burden with the departure of service. He shared that there was a Good Samaritan type clause associated with doing volunteer work.
- Important to notify past members of this policy. (Wink, Reeves)
- Would correspondence about committee assignments with committee chairs be governed by this? (Creegan)
- Policy should be added to “thank you for service” correspondence as members rotate off committees. (Cole)
- Consideration in the policy for back up of electronic documents with paper documents. (Linenberger)
- Concern that institutional memory could be compromised with this policy. (Wilson)

**DivCHED sponsorship of ACS Awards – M. Towns**

Towns provided an overview of ACS award sponsorship status. The Pimentel award was co-sponsored for the next 3 years. The CER award was losing its sponsorship from Pearson in 2016. The Conant award was in a state of Flux as well.

**Program Committee Report – I. Levy**

A. Marsch reported on the size of the DivCHED sessions at the Denver meeting. He shared that there was a total of 1035 papers accepted. Many were undergraduate research posters.

W. Jones shared that this meeting included several community colleges and he shared other exciting highlights connected to the meeting. He reported that the MAPS system worked pretty well, but there were some communication issues, such as minor problems associated with the rejection of a paper. Levy praised his program committee’s conference organization. Levy noted that Thursday sessions were empty. As a result they moved one session to Tuesday evenings and indicated that they needed feedback. In the future they may also invite select Thursday papers to present during SciMix to give them more exposure. Levy announced people that were present that were on the committees for San Diego and Boston. He rallied support for Denise Wick, whose health did not permit her to attend the meeting. Levy and Mitchell shared updates on the high school committee. Levy announced that program co-chairs were in place up to Fall 2018. In addition, during the fall meeting, the committee will select the next program chair. The chair elect will shadow Levy until he/she takes over as chair.

**Pimentel Award Winner Dwayne Eubanks – M. Towns**

M. Towns congratulated Dr. Dwayne Eubanks on winning the Pimentel award.

**Treasurer’s Report – A. Wilson**

Wilson provided an overview of her report. The ACS annual report was filed and the audit and federal taxes were also filed. The Division was prepping for the 2015 audit and taxes. Wilson was willing to share more information from her report through Dropbox.

A break was taken at 2:52PM. The meeting resumed at 3:06 PM.

**Award for Achievement in Research for the Teaching and Learning of Chemistry Winner Vickie Williamson - M. Towns**

M. Towns congratulated Vickie Williamson on winning the award for Achievement in Research for the Teaching and Learning of Chemistry.

**Board of Publication (BoP) – D. Licata**

BoP Treasurer David Licata presented on behalf of BoP Chair Chris Bauer who was not present. He provided an overview of the BoP morning meeting. Highlights included that the Board reviewed and revised their investment policy and intended to continue to work cooperatively with ACS Publications on the production of the Journal. There was no intention to return to self-publishing the Journal and expansion of the Journal to include ChemED Xchange as a second publication was feasible. ChemED Xchange is expected to become a long term and fully funded portion of the journal, and changes to the Managing Editor’s duties to develop the publication were under development. The Board discussed and wished to recommend to the Executive Committee that the treasurer of BoP be directed to arrange to withdraw investment funds in the amount necessary to endow the ACS Conant award ($300,000.00) and to arrange the transfer of those funds to the ACS office by the next ACS meeting. It was also announced that a subcommittee of the Board with assistance from Editor Norb Pienta were planning for the Editorial succession of the Journal through construction of a job description and expectations of the Editor position. The timeline for the hiring process would be outlined and presented at the Boston ACS meeting. Lastly, Licata referred to documentation of future membership criteria proposed by the Board to help CPN identify and attract potential board members. He noted that the Board was still working on how best to define and make use of “Associate” members. There was a request to have Heather Johnson include the associate position on DivCHED’s online “Get Involved” form.

**Board of Trustees (BoT) – A. Grushow**

Chair Towns introduced Alexander Grushow as the new chair of the Board of Trustees. Grushow reported that the Examinations Institute’s (El) Director Tom Holme was stepping down on July 1st, and he thanked both, Past Chair of BoT, Stacey Lowery Bretz, and Director Tom Holme for their transformative service to the Board and Examinations Institute (applause). He added that the Board had met and discussed the potential candidates for the next director and they were entering into negotiation with Kristin Murphy to be the next El director. Plans to move the Examinations Institute from Ames, Iowa to Milwaukee, Wisconsin...
Reports & News

Grushow shared ways that the Institute was supporting the efforts of members of the Division: BoT provided support ($130,000.00) to volunteers to attend the BCCE and work on exams for the Institute, they funded the Chem Ed reception at the Denver meeting, and they gave $5K to support Chemical Education symposia at the Pacificchem Conference. The Board also discussed and agreed that they would put forth the funds ($300,000) to support the ACS Chemical Education Research Award (Award for Achievement in Research for the Teaching and Learning of Chemistry) and fully endow this award.

Towns thanked both Boards for agreeing to endow the Conant award and the ACS-CER award. (Applause)

Russell asked that it be noted that the Division also sponsors the Regional HS awards.

**Discussion:**

Reeves expressed concern that providing support for people to participate at conferences on behalf of the EI was becoming an expectation and while he supported the use of funds for assistance, he wondered if it was sustainable. Holme shared that the EI was financially stable and that they have been net positive in revenue for 13 years without raising the cost on exams.

**Biennial Conference Committee – T. Greenbowe**

Greenbowe shared that there were few volunteers willing to be the next general chair and this was challenging. He announced that the BCCE was at Grand Valley State last summer and he officially recognized the General Chair (Sherril Soman) and Program Chair (Julie Henderleiter) with certificates (applause).

Soman gave a summary report of the BCCE. She shared that there were 1580 attendees, 77 symposia, 102 workshops, and 1045 papers. The net income from the conference was $77,000.

Towns asked if there was one thing you could do to change the BCCE what would it be? Soman replied that she recognized that there were challenges with the management of the BCCE being in the hands of the host institution and it would be helpful to have more support in terms of structure and administration from the Division. She expressed support for making the BCC a Board of the Division.

Additional applause was given for the BCCE chairs' work.

J. Smist reported on the 2016 BCCE that will be at the University of Northern Colorado, July 31 to August 4th, 2016. They were preparing the call for workshops (estimated date of call, early June 2015) and conference symposium (beginning of August 2015). Matt Miller and Julie Smist are the co-chairs of the BCCE. She highlighted plans being negotiated to have live streaming feeds from researchers who work at national parks during the conference that would continue after the conference. She shared potential plenary sessions with a science fiction writer, and former Conant award winners and how a symposium of regional high school award winners was also planned. Smist shared that there was a lot of support from people who have hosted past BCCEs and she noted particularly that records from past BCCEs housed via online storage were very useful for hosting and running a BCCE. She hoped to continue to contribute to this important database of institutional knowledge.

Chair Greenbowe reported that the BCC would be meeting to approve a memorandum of agreement for the site of the next BCCE in 2018 and they were already working toward preparations for the 2020 BCCE.

**Discussion:**

Middlecamp inquired whether the BCCE database would fall under the Record Retention Policy. Towns indicated that it was likely and they would need to explore this further.

**Recognition Committee - A. Wilson**

Wilson announced that she had an official committee that would come up with nominations for outstanding service to the Division. She welcomed nominations for outstanding service (due in May).

**Long Range Planning Committee – I. Montes and T. Jose**

Wink reported on behalf of Montes and Jose. He shared that they were moving forward with the strategic planning work for the Division.

**Regional Committee – F. Creegan**

Creegan shared that the committee provides oversight for Division’s regional awards. A problem they were encountering was that the Regional Awards Committee, involved in selection of awardees, was having difficulty finding a sufficient number of nominations. Awards committees have been operating since 2007, under three assumptions: 1) Region awards are a middle component in an awards pipeline that leads to the Conant award 2) The awards committee can rely on a sufficient number of nominations coming from the ACS local sections. 3) Nominators and nominees for these awards can find guidelines for these awards, including the nomination packet, on regional meeting websites. Creegan reported that only the first assumption was valid. Creegan conducted a poll with 184 local sections – 109 of 184 local section chairs responded, 53% claimed to have an awards program, but 47% did not. Many local sections did not recognize excellence in local high school teaching through awards. Many regional meeting websites were not running or kept up to date. The Committee’s solution for addressing the
problem was to have Heather Johnson create an awards website page on the DivCHED website. downloadable guidelines and the nomination packet for regional awards will be posted on the website, it will be updated annually following the fall meeting. all of the local sections have been notified that the site exists. the Regional committee was still considering other ways that they could inform both nominators and nominees about the awards program and how to get the information including the nomination packet. they planned to partner with the Division's High School Committee to communicate with AACT in future interactions. they also wished to pursue social networking through Facebook as a means to enhance communication about regional awards. He inquired about how to do this.

Discussion:
Cole suggested communicating through the Division's Facebook page and tweets could be made through the Division's Twitter account.

Russell suggested connecting to the ACS Education Division. Kevin McCune, representing the ACS Educational Division agreed that they had ways to assist the Regional Committee with disseminating information.

YCES – S. Ryan
Ryan reported on a variety of networking events that YCES had undertaken previously at the BCCE and also at the ACS National meeting, as well as other activities of the group. Examples included: Email a friend in the field, networking with a speed dating format, Ask me about Chemistry Education buttons, social events and an online blog. She shared a travel award request handout with the Executive Committee. Towns replied that their travel award request would be discussed in Closed Session.

CHED Liaisons – K. McCue
McCue shared Education Division highlights. He reported of staffing changes, and he announced that in September of 2014, the American Association of Chemistry Teachers (AACT) was launched and achieved 1900 target members. The AACT received a 1 million dollar grant from Dow Chemical. In November, the Office of Research of Grants was reorganized within the Education Division. It houses the Petroleum Research Fund (PRF). This brought on 12 new staff members.

Open Discussion
Towns provided an IUPAC update on the effort to redefine the mole, kilogram, and other units. She shared where information on this initiative could be found and noted that a report was still being written, and they desired involvement from the education community. The report will be made available to the public upon its completion.

No further discussion items were raised. The Open Session adjourned at 3:51PM. Respectfully submitted,
Resa Kelly
Secretary/Councilor of DivCHED

Introduction to the Fall 2016 Graduate Student Symposium

On behalf of the recently selected GSSPC from the University of Pennsylvania, Philadelphia, I am delighted to share our aims for our symposium to be held during the 252nd National Meeting of the ACS in Fall 2016. We are a group of seven graduate students from the Departments of Chemistry and Materials Science at Penn, and are particularly excited to be planning a symposium in our home city, Philadelphia.

The theme of the Fall 2016 meeting – Chemistry of the People, by the People and for the People – hints at the oft-neglected personal aspect of our very technical discipline. We plan to utilize our symposium to highlight the human aspect of research in the chemical sciences. We hope to achieve this from two perspectives: demonstrating the impact that chemistry has upon people's lives, and illuminating the personal stories behind those conducting groundbreaking research. To do this, our symposium will focus on scientific research that enriches the work and lives of others, by enabling other researchers' work or by having a positive impact on the everyday lives of members of the public. Our technical program will be supplemented with an opportunity for networking and discussion with other attendees and with the symposium's speakers, thus giving attendees the opportunity to learn about what motivates established researchers, and providing a venue in which connections can be made with peers and future colleagues. Through our program, we hope to inspire graduate students and other attendees to think broadly about the impact of their work, and reflect upon their integration into the chemistry community on a local, national and global scale. Naturally, there is no better venue for highlighting the strength and diversity of the chemistry community than at a national meeting of the ACS!

We'd like to thank the Division of Chemical Education for giving us the opportunity to participate in the GSSPC program, and wish the GSSPC from the University of Minnesota all the best with their upcoming symposium in Boston. We look forward to updating DivCHED members with developments throughout the upcoming year, and are excited to welcome you to Philadelphia in August 2016!

Benjamin Partridge, Fall 2016 GSSPC
2015 AWARD FOR OUTSTANDING SERVICE TO THE DIVISION

The Recognition Committee is pleased to announce Diane Bunce has been awarded the 2015 Award for Outstanding Service to the Division. This award is presented during the Division of Chemical Education's Sunday Reception at the Fall ACS meeting. The award is for a Division member who has a long history of serving the Division but is no longer in a leadership role.

The committee will be accepting nominations for the 2016 award from now until April 30, 2016.
Anna Wilson, Chair

DIANE M. BUNCE

2015 AWARD FOR OUTSTANDING SERVICE TO THE DIVISION

Diane has served, in leadership roles, the Division of Chemical Education for more than twenty years including service on the Executive Committee in the Chair succession (1999-2001) and Member–at-Large (1993-1998). One of her most significant and demanding roles was serving as Chair of the Board of Publications (2007-2010). This was a critical period during which the Journal transitioned from a solely Division publication to an ACS/Division joint publication that is part of ACS Publications – a transition that Diane was instrumental in successfully facilitating. She has also served as Chair of the Recognition Committee, the Chemical Education Research Committee, and the ACS College Chemistry Consultant Service.

Diane was the Founding Editor of the Chemical Education Research Feature in the Journal of Chemical Education and served as a Journal Feature Editor for more than 15 years. She was Editor of five exams produced by the ACS Examinations Institute and served on the Search Committee for the Director of the ACS Examinations Institute in 2001.

A prolific participant in CHED activities, Diane has also been both a presenter and symposium organizer at numerous Biennial Conference of Chemical Education and ACS National meetings.

Perhaps Diane's most important contribution to the Division is her unending support of her Chemical Education colleagues whether they are peers at other institutions or young chemical education professionals. She gives freely of her time and shares her wisdom unselfishly.

2015 ACS Fellows who are DivCHED members – Congratulations!

The American Chemical Society has named 78 members as ACS Fellows. Of these 78, 17 are Division of Chemical Education members. The new fellows will be feted at the society's national meeting in Boston in August. We congratulate these new fellows!

Mark Anthony Benvenuto, University of Detroit Mercy
Linda C. Brazdil, Loyola University Chicago
Diane M. Bunce, Catholic University of America
Amber Flynn Charlebois, SUNY Geneseo and Fairleigh Dickinson University
Renee S. Cole, University of Iowa
Brian P. Coppola, University of Michigan
Matthew A. Fisher, Saint Vincent College
Steven A. Fleming, Temple University
Mark D. Frishberg, Eastman Kodak, Eastman Chemical, and Seres Laboratories (Retired)
Willem R. Leenstra, University of Vermont
Jennifer E. Lewis, University of South Florida
R Daniel Libby, Moravian College
David C. Martin, University of Delaware
Joshua Pak, Idaho State University
Vickie M. Williamson, Texas A&M University
Wayne C. Wolsey, Macalester College (Emeritus)
Frankie Kay Wood-Black, Northern Oklahoma College

For the full list of 2015 ACS Fellows in the C&E News, visit http://cen.acs.org/articles/93/i28/2015-ACS-Fellows.html
**ACS Education Division Report, February–June 2015**

**Recruitment and retention of ACS student members and chapters**
As of June, there were 19,801 undergraduate student members, compared to 19,616 a year earlier. There are currently 1,103 chartered student chapters.

**College to Career website**
In June, the College to Career website (www.acs.org/collegetocareer) received 75,568 page views from 32,764 unique viewers. The number of page views is up 48% compared to June 2014 and the number of unique visitors is up 124% compared to a year ago. Since the site became available, there have been 937,175 page views from more than 271,473 unique visitors.

**Collaborative Opportunities Grants available**
The ACS Undergraduate Programs Office (UPO) is piloting a new grant program. Collaborative Opportunities Grants are designed to support small activities between two-year colleges and four-year institutions, industry, government, ACS Local Sections, K–12 institutions, and/or community or workforce development organizations. These can form the basis for lasting, mutually beneficial partnerships. Applications will be accepted through July 15 for activities to be completed by August 2016. More information is available at www.acs.org/2YColleges.

**ACS Guidelines for Chemistry in Two-Year College Programs revisions completed**
The Society Committee on Education (SOCED) task force on the revision of the 2009 ACS Guidelines for Chemistry in Two-Year College Programs completed its major revisions. Significant proposed revisions include incorporation of recommendations regarding chemistry-based technology programs and chemical safety throughout the guidelines, recommendations regarding online courses and internships, and expanded recommendations regarding transfer students, mentorship and advising, and partnerships.

**2015 assessment review cycle launched with 30 two-year colleges participating**
This year, 31 faculty members from 30 institutions signed up to complete the ACS Assessment Tool for Chemistry in Two-Year College Programs over the course of the summer. The assessment tool review cycle launched on June 10 with an orientation webinar for participants. The completed assessments will be submitted in the fall for peer review and feedback on strengths, areas for growth, and recommended resources.

**ACS Summer School on Green Chemistry and Sustainable Energy**
The annual Summer School was held at the Colorado School of Mines in Golden, Colorado on June 17–24 and hosted 60 graduate students and postdoctoral scholars from the United States, Canada, and Latin America. Participants engaged in lectures on a variety of topics, including hydraulic fracturing, greener fossil fuels, and green chemistry in the pharmaceutical sector; presented research posters; and conducted a modified Life Cycle Assessment on alternate synthetic pathways. The Summer School was financially supported by an ACS Petroleum Research Fund Scientific Education (Type SE) grant.

**International Student Chapters chartered**
There are currently 15 chapters from 13 countries: Germany, Singapore, Italy, Malaysia, Egypt, India, Nigeria, Hungary, Jamaica, Saudi Arabia, UAE, Colombia, and México. 13 chapters have representatives attending the National meeting in Boston.

**inChemistry provides information to help students take the next step after graduation**
The April/May issue of inChemistry magazine was mailed to 165 undergraduate ACS student members, 3,622 two- and four-year college department chairs, 1,081 faculty advisors, and 306 Minority Science Improvement Program grant recipients. Emails were sent to 20,901 students notifying them that the electronic versions of the issue were available. This email had a 33.89% open rate. The features focused on the value of informational interviewing, tweaking your scientific skills by enrolling in community college courses, and debunking common myths about careers in chemistry.

**ACS Graduate & Postdoctoral Chemist**
The ACS Graduate & Postdoctoral Chemist focused on the 249th ACS National Meeting. A special issue of the Chemist highlighted events at the meeting in Denver geared towards graduate students and postdocs. These included workshops, forums and networking events. This issue was disseminated to over 3,000 graduate students and postdocs registered for the meeting.

**ACS Graduate & Postdoctoral Scholars Reception fosters connections to ACS**
An estimated 550 graduate students and postdocs attended the ACS Graduate & Postdoctoral Scholars Reception at the 249th ACS National Meeting. They networked with ACS technical division and Younger Chemists Committee (YCC) representatives, members of the ACS Graduate Education Advisory Board (GEAB), and ACS staff. YCC and ACS technical divisions cosponsored and coordinated the event in collaboration with and support from Membership and Scientific Advancement.

**May PRF Advisory Board recommends 108 proposals for grants**
The PRF Advisory Board met May 14–15 at the Portland Marriott Downtown Waterfront Hotel in Portland, Oregon. The meeting took place to evaluate and recommend proposals for funding. Out of 488 proposals, 108 were recommended for support, with
a combined total funding of $10,760,000. These recommendations were approved by the ACS Board of Directors’ Standing Committee on Grants and Awards at its June meeting.

The breakdown of recommendations by grant type is as follows:

- 43 New Directions grants ($4.73 million)
- 40 Doctoral New Investigator grants ($4.40 million)
- 17 Undergraduate Research grants ($1.19 million)
- 8 Undergraduate New Investigator grants ($440,000)

**Undergraduate Programs in Denver**

There were 2,767 undergraduate students at the meeting in Denver, of which 2,615 were ACS members. The Undergraduate Programs Office provided two and a half days of programming for undergraduate students. Award-winning ACS Student Chapters were recognized with 47 chapters receiving Outstanding, 101 receiving Commendable, 152 receiving Honorable Mention, and 97 receiving Green Chemistry awards. Other highlights included the Eminent Scientist lecture from Henry Kohlbrand of Dow Chemical Company and the "Undergraduate Speed Networking with Chemistry Professionals” event which was cosponsored by ACS Corporation Associates and the Senior Chemists Committee.

**2YC3 conferences**

"Teaching with technology... What works and what doesn’t: A Resources for Excellence workshop” attracted 17 registrants at the 210th Two-Year College Chemistry Consortium Conference, May 22. The workshop brought two-year college chemistry faculty together to discuss the most effective uses of technology in the classroom.

**Preparing for Life After Graduate School (PfLAGS) Workshops**

PfLAGS workshops were held in the chemistry departments of Auburn University on April 9–11, Wayne State University on May 7–9, South Dakota EPSCoR on May 27–29, Purdue University on June 8–10, and the University of South Carolina on June 15–17. A total of 230 students attended the workshops.

**Chemistry in Context**

In May, the author team for the 9th edition of *Chemistry in Context* met in Dubuque, IA at McGraw-Hill headquarters to learn their Habitat system. This system will streamline the authoring process for the text and allow the authors to design and create the textbook experience for the e-environment. The team also discussed digital enhancements and the timeline for publication of the 9th edition. Chapters 4, 5, and 6 for the 9th edition of the text were submitted to McGraw-Hill.

A workshop focused on the 8th edition of *Chemistry in Context* was held at Loyola University in Chicago, Illinois on June 1–2. Sixteen instructors participated in the workshop. Participants explored activities within the text, online activities, and performed lab experiments.

**ACS Scholars**

There are 194 Scholars in the program as potentially renewable students. As of June 30, 68% of the Scholars in the program have been matched with mentors. Eighty-four ACS Scholars graduated this year. The Mean/Median GPA’s among this year’s graduates is 3.56/3.48. All 84 participated in undergraduate research/internships, 41 plan to attend graduate school, 72 had a mentor, and 90% rated the mentor-protégé relationship as good/very good.

As part of this year’s ACS Scholars Program 20th Anniversary activities, C&EN has published six of a series of twelve ACS Scholars’ profiles. These profiles have been featured in the last issue of each month. The program also confirmed that there are 221 PhDs among the Scholars graduates.

**U.S. National Chemistry Olympiad (USNCO)**

The USNCO Study Camp was held June 2–17 at the U.S. Air Force Academy in Colorado Springs, Colorado. The members of the Alpha Theta Team were selected. They will represent the United States at the 47th International Chemistry Olympiad in Baku, Azerbaijan on July 20–29. The team members are:

- **Soorajnath Boominathan** (Oklahoma School of Science and Mathematics in Oklahoma City, Oklahoma), Oklahoma Local Section
- **Bryce Cai** (Barrington High School in Barrington, Illinois), Chicago Local Section
- **Janice Ong** (Thomas Jefferson High School for Science and Technology in Alexandria, Virginia), Chemical Society of Washington
- **David Wang** (Monta Vista High School in Cupertino, California), Santa Clara Valley Local Section

Two alternates were also named:

- **1st alternate: Rueih-Sheng Fu** (Arcadia High School in Arcadia, California), Southern California Local Section
- **2nd alternate: Richard Wang** (North Hollywood High School in North Hollywood, California), Southern California Local Section

The USNCO program received textbook and e-book donations to support student training at the study camp from Pearson Education, John Wiley & Sons, Inc., Cengage Learning, and University Science Books. Additional donations, including chemicals
and laboratory supplies, were received from Advanced Chemistry Development, Carolina Biological Supply, Fisher Science Education, Flinn Scientific, Sigma Aldrich Chemical Company, and Texas Instruments.

**Project SEED**

As of June 30, 370 students are participating in this year's Summer I and Summer II programs, representing 84 programs at more than 115 institutions. The total stipend amount disbursed is $498,522.

The Project SEED Scholarship Committee selected 28 candidates and five alternates from a group of 38 applicants for the Project SEED College Scholarships, which are awarded to former SEED students entering college for the freshman year (2015–2016).

**American Association of Chemistry Teachers (AACT)**

AACT membership includes over 2,300 charter members (through June 30). Of this number, 87% are K–12 teachers of chemistry. The online renewal system was launched on May 12 for current AACT members.

AACT webinars presented during the months of April–June included: NGSS in the Chemistry Classroom, Preparing for the AP Chemistry Exam, the Connected Chemistry Classroom in Action, and Using Odyssey in the Chemistry Classroom.

AACT was presented the Gold Circle Award for Branding Campaign from the American Society of Association Executives in May. Creation of the AACT brand was a collaborative effort between the Office of Research & Brand Strategy in MS&A, the Education Division, and Everidge Designs.

The Camille & Henry Dreyfus Foundation awarded $50,000 to AACT for the creation of specialized multimedia for teachers of chemistry. These online resources will focus on atomic and molecular structure and will help students make connections between the macroscopic, particulate, and symbolic conceptual levels of chemistry.

The Ford Motor Company approved a $50,000 grant for AACT in June. The grant will be used to create a *Chemistry of Cars* content module, containing lesson plans and multimedia created by K–12 teachers of chemistry and incorporated into the AACT resource library.

The inaugural Governing Board of AACT has been formed and met in July. Members are: President: Barbara Sitzman; President-Elect: Scott Hawkins; Special Consultant: Sally Mitchell; Committee Representative: Regis Goode; High School Ambassador: Adrian Dingle; Middle School Ambassador: Sarah Paquette; Elementary School Ambassador: Rebecca Field; SOCED representative: Diane Krone; DivCHED representative: Roxie Allen

**ACS Science Coaches**

An article on the ACS Science Coaches program appeared in the June 15 issue of C&EN. Current coach-teacher partnerships were highlighted with a call for the community to participate in the 2015–2016 program. The application period for the 2015–2016 ACS Science Coaches program is open. ACS Science Coach Patricia Takahara was featured as one of Harris’ Heroes on ABC 7 News in DC. The story aired in May.

**STEMosphere at George Washington University**

The ACS Education Division participated in STEMosphere, a free one-day event hosted by The George Washington University in April, where students, parents, educators, and lifelong learners of all ages enjoyed a public exhibition of fun, interactive, STEM-inspired activities. Hundreds of visitors to the ACS Education Division exhibit experienced “Adventures in Chemistry,” a set of hands-on investigations.

**ACS-Hach Programs**


**Middleschoolchemistry.com**

Since launching, the site has received over 5.2 million visits from 230 countries and territories. The book has been downloaded 31,801 times.

Professional development pertaining to middleschoolchemistry.com was held in May and June at Central Michigan University's College of Education and Human Services and Wilson High School (for DC Public Schools), respectively.

**ACS K–12 Professional Development Opportunities**

Staff attended the NSTA National Conference in Chicago in March. The ACS Education booth, which featured K–12 educational products, received a significant number of visitors. A number of professional development opportunities were offered to meeting attendees by staff in collaboration with ACS contractors and volunteers. These included:

- Developing lesson plans using reading materials aligned with the Next Generation Science Standards (NGSS) and the Common Core State Standards (Patrice Pages)
- An overview of ACS high school chemistry teaching resources (Karen Kaleuati)
• Modeling in the high school chemistry classroom (Michael Mury)
• Implementation of NGSS in the high school chemistry classroom (Michael Mury)
• Presentation relating to middle school chemistry at the National Middle Level Science Teachers Association’s Meet Me in the Middle Day at NSTA (James Kessler)

High School Chemistry Clubs
There were 562 ChemClubs for the 2014–2015 school year. In June, 200 clubs renewed their membership in the ChemClubs program for the 2015–2016 school year. Twenty new clubs were added. The ChemClub website at www.acs.org/chemclub was updated with the May “Activity of the Month” on “Chemistry Careers”.

AACT, the National Historical Chemical Landmarks, and the ChemClub program launched a social media campaign using #MyChemSafetyTip to learn what teachers constantly remind their students about in the lab. The tips will be narrowed down and the top tip will be made into a poster with DayGlo® to be distributed in October.

The new ChemClub logo has been approved as part of the 10th anniversary for the 2015–2016 school year. The new logo will be officially revealed on September 1.

ChemMatters Magazine
The ChemMatters Policy Board met in May at ACS headquarters. The Policy Board discussed ways to improve the content of the magazine, an update to the magazine’s mission statement, and evaluation of the publication and/or its ancillaries. The board members also expressed their strong enthusiasm for the ongoing project, The Best of ChemMatters: Connecting Science and Literacy.

Chemistry in the Community
Staff and teacher leader Cece Schwennsen wrote an article for the May issue of AACT Chemistry Solutions that was a continuation of the March 3rd webinar focusing on the Next Generation Science Standards (NGSS) in the chemistry classroom. Examples from the Chemistry in the Community textbook were used to show teachers how to determine how current curricular materials can be used to address NGSS. The article provides answers to the many questions that were posed during the webinar and is meant as a resource for teachers as they incorporate NGSS into their instruction.
Nomination Form for CHED Committees & Elected Positions

Below are listed the various committees or elected positions of the CHED Division. If you are interested in serving, or if you know of division members who are willing to become involved please fill out this form. For more information, please visit the Division of Chemical Education website at <www.acs.org> or contact the individuals listed below.

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Computers in Chemical Education (CCCE)
Finance (FC)
High School Chemistry (HSCC)
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Long-Range Planning (LRPC)
New Member (NMC)
Passer Portfolio (PPC)
Personnel & Nominations (CPN)
Program (PC)
Recognition (RC)
Regional Meetings (RMC)
Younger Chemistry Education Scholars (YCES)

Elected Positions (3 year terms)
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Secretary/Councilor
Treasurer
Member-at-Large (3 positions)
Alternate Councilor (4 positions)

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Board of Publications (J. Chem. Ed.)
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**Division of Chemical Education Teaching Excellence Endowment**

Why are you a chemist? Many of us would agree with Eli Pearce, Past President of the American Chemical Society (ACS), when he said “my excellent high school teacher was definitely responsible for my choosing chemistry as a career.” And now you can join the effort to ensure that the great teachers who launch so many scientific careers are recognized and rewarded by their professional society!

The ACS Division of Chemical Education has stepped forward to establish an endowment that will support awards for high school science teachers in every Region of the ACS. By establishing an effort to solicit funds for the Division of Chemical Education Teaching Excellence Endowment, the Division is making a firm financial commitment to high school science teaching, ACS Regions, and the profession of chemistry. But the project will not be successful without your help.

Our goal is not just a financial one; we are anxious to assemble a lengthy list of donors containing names, of both individuals and collective entities, that will demonstrate to the secondary education community that there is a large number of science professionals who appreciate the value of good science teaching in the Nation's high schools and who are willing to reward it.

Join other individuals and organizations that have already contributed to the. Most of all join what will be thousands of people who know, without that special teacher, their future would look very different.
Division of Chemical Education Teaching Excellence Endowment!

I want to help ensure that our great teachers are recognized and rewarded!

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Thank you for your contribution. All gifts of $250 or more will be acknowledged in writing. Acknowledgment will be sent to others upon request.
Membership Form

Introduce a friend, colleague, or student to the Division of Chemical Education!

I wish to join DivCHED: _____ as a Member, $20/year (for ACS members only)
_____ as an Affiliate, $20/year (for non-ACS members).
Affiliates have all membership privileges except voting for
CHED Councilors and holding elective office.

New members will receive information about CHED in general and about its major activities such as the
Exams Institute, the *Journal of Chemical Education*, JCE Software, JCE Online, and 2YC3.

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Your Name: _____________________________________________
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❑ Send me an ACS Membership Application Form—this form is also available online:
  https://center.acs.org/applications/acsmembership/join.cfm

Did anyone encourage you to become a DivCHED member? ❑ Yes ❑ No
If yes, who? ___________________________________________

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Payment ($20) must be made in U.S. funds on a U.S. bank—by draft or credit card. Purchase orders not
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