Interesting Articles

The Art of Speaking Science
Lisa B. Marshall provides communication tips for sciences and technology professionals. Improve your conference talks, poster presentations, interview skills, conflict management, networking skills, and public speaking. www.artofspeakingscience.com

It Pays to Join a Professional Association

Interesting Web Sites

If you need to develop a website, check out what these chapters have done.

Ball State University  web.bsu.edu/saacs
Minnesota State University, Mankato  http://mavdisk.mnsu.edu/sanchd2/
Northwestern University  http://chemgroups.northwestern.ucc/background.html
Temple University  http://www.temple.edu/tucs/index.html
University of Michigan–Flint  http://www.umich.edu/~acsa/events.html

Graduate School Web Links

Research M.S. and Ph.D. Programs
Boston College: www.bc.edu/chemistry
Duquesne University: www.science.duq.edu/chemistry/index.html
Florida Atlantic University: www.science.fau.edu/chemistry
Florida International University: www.fiu.edu/orgs/chemistry
George Washington University: www.gwu.edu/~gwchem
Marshall University Forensic Science: forensics.marshall.edu
Oklahoma State University: www.chem.okstate.edu
Old Dominion University: www.sci.odu.edu/chemistry
Rice University: www.chem.rice.edu
SUNY–Environmental Sciences and Forestry: www.esf.edu/chemistry
Temple University: www.chem.temple.edu
Texas A&M University: www.chem.tamu.edu
University of Central Florida: www.cos.ucf.edu/chemistry/
University of Cincinnati: www.che.uc.edu
University of Idaho: www.chem.uidaho.edu/gradprogs.asp
University of Nebraska at Lincoln: www.chem.unl.edu
University of San Francisco: www.usfca.edu/mschemistry
University of South Dakota: www.usd.edu/chemistry
University of Tennessee: www.chem.utk.edu

Professional Master’s Degree Programs
Arizona State University: math.asu.edu/~cbs
Keck Graduate Institute: aboldnewhybrid.kgi.edu
Rice University: www.profms.rice.edu
Temple University: www.temple.edu/psm
Towson University Forensic Science: http://grad.towson.edu/program/master/frrsc-ms
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By Charles Baldwin

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By Jacob A. Vervynckt
Chemists accept responsibilities consistent with their role(s) as employer and/or employee. As employees, chemists are expected to recognize their legitimate obligations to their employer, performing work honestly and competently while safeguarding proprietary and confidential information. As employers, chemists respect the professionalism of their subordinates and associates. They strive to provide safe working conditions, fair compensation, advancement opportunities, and acknowledgement of their employees’ scientific accomplishments.

Chemists recognize and cherish the special obligation that working with students presents. The opportunity to contribute to the intellectual and professional development of young people is not just a responsibility; it truly is a privilege. Indeed, the Society has underscored its interest in students by encouraging its membership to reach out to young people through Kids & Chemistry programs, mentoring high school students in research, and a variety of other quality programs. These programs and the dedicated members who work to make them successful are not only furthering ACS’s vision, but also providing strong positioning for the ACS brand name.

So why is strong positioning of the ACS brand name so important? In their book, Positioning: The Battle For Your Mind, Al Ries and Jack Trout detail a new approach to communication. This approach has revolutionized not only advertising, but also politics, religion, and academia as well. Positioning has become a “Rorschach symbolism” for brands, companies, and organizations across the world. Multinational companies have elevated positioning to such a fine art that a simple phrase will bring to mind their product, service, or organization. Products or services have strong positions when their brand defines the genre, e.g., Band-Aid for adhesive bandages, Kleenex for tissues, Xerox as a verb for copying or duplicating. So we hope that “Chemistry for Life” can do for the ACS what the tagline, “Just Do It!” has done for Nike.

The power of ACS grows from the force of its members’ example. The matrix of chemists’ relationships is held together by integrity, fairness, generosity, and respect. Members of ACS have issued a summons to students to participate in the shaping of the Society.

The creation of a new membership category was no small undertaking by the world’s largest scientific society, and is the culmination of the work of many who bought into the dream of Ann Nalley, past-president of ACS (2005) and longtime faculty advisor of a Student Affiliates chapter. Achieving her goal of seeing students become ACS members would not have been possible without the commitment of successive ACS presidents William Carroll, Catherine Hunt, Bruce Bursten, and Tom Lane.

In fact, Tom Lane put it in the form of a “call to arms” for local sections to go into their communities and create new relationships to help put a public face—a human face, if you will—on chemistry.

I invite you to accept the challenge and bring your energy, effort, and action to build a brighter future for people around the globe through the work of ACS. No one has summed up the challenge facing each of us more eloquently than Albert Schweitzer, who once said, “I don’t know what your destiny will be, but one thing I do know: the only ones among you who will be really happy are those who have sought and found how to serve.” Membership, indeed, has its privileges, but fulfilling its responsibilities gives one the greatest measure of satisfaction.

Charles Baldwin is a Hammons Professor of Pre-Medical Studies in the Department of Chemistry at Union University in Jackson, TN. He serves as chair of the Society Committee on Education’s Task Force on Undergraduate Programming.
Loyola University Chicago
Chicago, IL

Chapter presidents: Mary Maliakal and Pawel Kolano
Number of chapter members: 75
Number of ACS Student Affiliates: 15
Institution environment/composition: Large, private, urban, 4-year institution

Q What is your most successful recruiting event/method?
A Our most successful recruiting method is having a booth at the campus-wide student organization fair, where we can reach the maximum number of students. We attract prospective members with our displays and giveaways. For example, this past fair, we had a display including dry ice, the infamous Coke-Mentos reaction, a homemade lava-lamp, and glowsticks, along with information about the chapter and our activities.

Q What are your most popular chapter activities?
A Our most popular chapter activities thus far have definitely been our planned trips and outings, which include tours to local national laboratories. We have made trips to both Argonne National Laboratory and Fermi National Accelerator Laboratory (Fermilab).

Q How does your chapter participate in National Chemistry Week?
A Each year the ACS Chicago Local Section holds its annual Chemistry Day celebrations for local high school students at one of the universities in Chicago. We send volunteers to help set up, assist, and run activities, all within a fun environment. This year the annual Chemistry Day was held at Loyola, and it was a smashing success, with about 900 high school students who visited throughout the day. This kept our volunteers very busy!

Q How do you inform members of chapter activities?
A Our most effective method of communication is through our e-mails, which are sent regularly to all of our members, as well as to the chemistry major mailing list. We also utilize a Facebook group, making announcements, sending messages, and promoting events. Non-electronic forms of communication involve flyers, announcements in chemistry classes and labs, and word of mouth.

Q What is your most successful fundraiser to date?
A Our most successful fundraiser is the sale of molecular model kits and goggles via the chemistry department stockroom. Another very effective method of raising money is through the sale of T-shirts, which are very popular. The chemistry department generously helps to fund many of our activities, and we also receive some funding from the student activities fund of the university.

Faculty Advisor
Timothy L. Thomas, 1 year

Q Why/how did you become a faculty advisor?
A I became the faculty advisor a little over a year ago, after the chemistry department chair asked for a volunteer. I do it because I am excited about chemistry and I wish to share that excitement with the students.

Q What is your role as a faculty advisor?
A My role is to help the students organize events and act as a liaison to the chemistry department, as well as a few other functions.

Q What challenges have you faced in your position?
A It’s been pretty painless so far. The only problems are trying to work out schedules when dealing with groups and trying to increase student turnout at events.

Q What is your most successful recruiting event/method?
A Our most successful recruiting method is having a booth at the campus-wide student organization fair, where we can reach the maximum number of students. We attract prospective members with our displays and giveaways. For example, this past fair, we had a display including dry ice, the infamous Coke-Mentos reaction, a homemade lava-lamp, and glowsticks, along with information about the chapter and our activities.

Q What advice can you offer a new advisor?
A Be patient and let the student leaders lead.

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Xavier University of Louisiana
New Orleans, LA

Chapter president: Trevonne Walford
Number of chapter members: 75
Number of ACS Student Affiliates: 40
Institution environment/ composition: Small, private, urban, minority serving, 4-year institution

Q How does your chapter recruit members?
A We visit all of the general chemistry lecture classes during the first couple of weeks of school to sell materials that students will need for the course. While doing this, we introduce ourselves as members of the chapter and discuss with the students some of the advantages of being involved in the chapter and in ACS.

Q How do you retain members from year to year?
A Asking our returning members to participate in the mentoring program for incoming students is one way that we are able to keep them active as soon as we return to campus each fall. At the same time, we start planning our travel to the spring ACS meeting and require that members be active in the chapter for one year before being eligible to attend the meetings. Our guidelines for active membership have helped us to increase participation in a number of our events this year.

Q What are your most popular chapter activities?
A As part of National Chemistry Week each year, we participate in Super Science Saturday at the Louisiana Children’s Museum, an event that is sponsored by the ACS Louisiana Local Section. At this event, we do hands-on chemistry experiments with hundreds of school children.

Another popular event is the ACS Louisiana Local Section Undergraduate Research Poster Session. We have planned and hosted this event for several years, and always have a good turnout of students and faculty from colleges and universities throughout the greater New Orleans area.

Q Has your chapter attended a national meeting?
A Our members present a chapter activity poster at the spring ACS meeting each year, and many members have presented research posters at recent meetings. We usually have a fairly large group attending the spring meeting, generally 20+ members.

Q How often does your chapter meet?
A We have chapter meetings bi-weekly, with the executive board meeting the week before each general body meeting. Our e-board consists of eight members: president, vice-president, treasurer, secretary, and two community service co-chairs.

Q What is your role as a faculty advisor?
A I try to attend all chapter meetings and executive board meetings. I also act as a liaison to the ACS Louisiana Local Section, and help the officers with scheduling university facilities for their events.

Q What challenges have you faced in your position?
A It is always challenging to give the chapter members and officers what I see as good advice or provide them with some ideas without becoming too involved in their activities. Probably the greatest challenge is finding enough time to do all of things with the chapter that I would like to.

Q What has been your most rewarding experience as a faculty advisor?
A Seeing students who might not be involved in other campus organizations find a home in the Student Affiliates chapter is always satisfying. What I enjoy most is the opportunity to work with students outside of the classroom and allow them to see that, although I love chemistry, it’s not my life 24 hours a day.

Q What was your most memorable experience at a national meeting?
A My first presentation as a graduate student at an ACS meeting is certainly memorable — I even remember many of the questions that I was asked. As an advisor, my best memories will always be of the many fun undergraduate socials I have attended, especially the one that our chapter was honored to host in 2008.

Q What advice can you offer a new advisor?
A Stay positive! Trust your officers and members — they can do great things with minimal guidance from you.
Can My Student Affiliates Chapter Receive a Grant?

By Audley S.V. Burke

Does ACS really provide Student Affiliates chapter grants? How can our chapter receive a grant? These are usually the two questions I hear most often when discussing the Student Affiliates chapter grants program. The ACS Undergraduate Programs Office offers four types of grants to chapters. Before your chapter applies for a grant, it is important to know the types of grants available and the eligibility requirements for each.

National Meeting Travel Grants (NMTG)

Travel grants are awarded to chapters to help offset travel costs for members who attend the spring or fall ACS national meetings. The grant can be used to pay registration fees, transportation, and lodging. Last year, these $300 grants were awarded to 88 Student Affiliates chapters that attended the 235th ACS national meeting in New Orleans, LA and to 10 Student Affiliates chapters that attended the 236th ACS national meeting in Philadelphia, PA. To be eligible for such a grant, the chapter must have at least six paid Student Affiliates, at least one of whom is presenting a poster through the Division of Chemical Education, and the chapter must have active status with ACS. To have active status, your chapter must have submitted a chapter report at least once within the past three years.

Innovative Activities Grants (IAG)

The Undergraduate Programs Office also provides grants of up to $500 to Student Affiliates chapters to support new activities on the college campus and throughout the community. The IAG program supports innovative projects that a chapter is trying for the first time. This grant is especially beneficial to Student Affiliates chapters that are just starting out, and to chapters that are pioneering new projects within the undergraduate chemistry community. Past IAG projects have included mentoring a newly-activated Student Affiliates chapter at a neighboring institution; running chemistry competitions between Student Affiliates chapters; and presenting Green Chemistry demonstrations. During the 2007-2008 academic year, the ACS Undergraduate Programs Office received 12 IAG proposals and awarded 9 grants.

Community Interactions Student Affiliates (CISA) Grants

The CISA grant program supports projects that help to improve the scientific learning experience of minority students in grades K-12 by providing them with uplifting and enlightening learning experiences in the sciences. This grant also gives Student Affiliates an opportunity to teach and mentor students in elementary and secondary education levels. During the 2007-2008 academic year, all eight chapters that applied for CISA grants were awarded up to $500 toward their grant projects.
Has Your Chapter Attended a National ACS Meeting?

By Kristopher M. Fecteau

One great opportunity you can take advantage of as a member of a Student Affiliates chapter is to attend an ACS national meeting. The benefits of attending a meeting are numerous. To highlight a few examples, by attending a meeting you can:

- Network with other Student Affiliates;
- Display your chapter’s projects at poster sessions;
- Learn best practices from other chapters; and
- Meet and network with your fellow chemical professionals.

The planning involved in bringing a group from your chapter to a meeting is a big responsibility, but it is much less daunting if fellow officers and members lend a hand. Some tips include:

- Think about the projects you hope to work on, and submit one or more abstracts based on those ideas;
- Submit your abstract by the deadline;
- Do your best to anticipate who will attend the meeting and make sure everyone is listed on one of the abstracts; and
- Explore funding options for the trip.

Other good sources to investigate besides the National Meeting Travel Grant program are grants from your university and your ACS local section. With any luck, the bulk of the expenses for the trip can be covered by these funds.

Make sure your chapter keeps all documents and records for everything associated with the trip. Save all of your receipts. Chapter officers should create and maintain a well-organized computer folder with all of the files relating to the meeting including rosters, financial records, letters, and the like. Doing so will help you answer questions later on and will provide invaluable information that can be passed onto your successors. Doing so will also solidify that year’s activities in the history of the chapter and will allow future presidents to learn both from your accomplishments and your mistakes. If you were lucky enough to inherit records from past meetings, ensure those continue to get passed along as well.

Kristopher M. Fecteau is a senior chemistry major and current president of the ACS Student Affiliates chapter at the University of Southern Maine. He has participated in four national ACS meetings as an undergraduate.

Undergraduate Programming at Regional Meetings Grants

This grant program supports Student Affiliates chapters that are developing and coordinating undergraduate events at ACS regional meetings. These grants are especially beneficial because they provide hands-on opportunities for Student Affiliates to develop valuable planning and leadership skills. Up to $2,800 can be awarded to chapters to develop an undergraduate program for a single regional meeting.

For more information about the Undergraduate Programs Office grant programs, go to http://www.acs.org/saprogram and click on resources. Or contact Audley Burke, education associate, at 1-800-227-5558, ext. 4565, a_burke@acs.org, or via Facebook at Audley “Saprogram” Burke.

Audley S.V. Burke is an associate editor of inChemistry magazine.
Writing Chapter Reports: Gleaning Value from the Effort

Report Writing Tips
Here are a few tips to help your chapter submit a well-written report that will present the chapter in the best light. If you find your chapter is weak in a few areas this year, don’t despair; visit www.acs.org/saprogram, where we’ve provided tips to help your chapter improve.

An Outstanding Chapter Report…
Adheres to the Basics
- Uses the report template and provides appropriate supporting documents
- Completes the tables as much as possible
- Lists each activity only once (with the exception of Green Chemistry activities)

Includes Background and Chapter Membership Information
- Lists a minimum of six paid Student Affiliates
- Has a good ratio of members to majors
- Demonstrates that the chapter acted as a group
- Shows faculty involvement in chapter activities

Describes Community Service
- Contains numerous activities spread over several venues
- Lists the chapter’s extensive involvement in the community
- Describes activities that promote chemistry or science education

Describes Efforts to Plan and Attend Scientific Meetings
- Lists national and/or regional meetings members attended
- Describes local section events attended
- Shows member participation in symposia on campus

Shows Effective Communication Efforts
- Shows the use of a variety of media to reach audiences
- Shares decisions from officer meetings with chapter members
- Maintains current websites

Lists Departmental/College Service
- Demonstrates good integration and interaction with the chemistry department
- Shows the chapter encourages faculty participation

Describes Speaker/Tours and Field Trips
- Shows how the chapter leverages career resources outside of the institution
- Lists a variety of diverse events

Explains Funding Sources
- Shows a variety of funding sources
- Provides details on funds available and funds used

Includes Chapter Business Meetings
- Shows regularly scheduled meetings
- Lists officers’ meetings

Reflects on the Year with Overall Comments
- Discusses successes and challenges and how the chapter overcame them
- Looks forward to the next year

By Lori Betsock

ACS requires student affiliates chapters to submit a chapter report once every three years. However, many chapters choose to submit a report every year. Here’s why.

Benefits and incentives
Writing an annual chapter report benefits chapters in a number of ways. It helps the chapter to maintain an accurate record of activities for future officers. Also, the individual student affiliates who contribute to the report develop writing and documenting skills that are essential in the professional scientific world. Done right, the final chapter report is the result of a team effort. As collaborators, students learn how to work as a member of a team, another vital skill in the professional world.

There is also an added incentive: your chapter could win national recognition. Every year, more than 200 chapters receive awards for being recognized as outstanding, commendable, and honorable mention chapters.

Moving forward
Now is the time to begin preparing your chapter report for the 2008-2009 academic year. The first step is to download the chapter report forms at www.acs.org/saprogram, and review your current account information. If you do not have an account, set one up using instructions provided on the website.

Hopefully, throughout the current academic year, your chapter’s designated committees or officers have maintained attendance records, statistics, and key facts about each event and have kept records of all current members. If your chapter has not delegated these responsibilities, be sure to appoint people to do these tasks for the coming year. The last step, and perhaps the most vital, is to submit the chapter report form and supporting documentation to ACS by May 13, 2009.

If you have questions, contact the ACS Undergraduate Programs Office saprogram@acs.org or at 1-800-227-5558 ext 4480.
By Jonathan Hernandez

THE SOUTH TEXAS College (STC) ACS Student Affiliates Chapter is a recognized and award-winning group of students, primarily from our main campus in McAllen, TX. Our members are not limited to chemistry majors; we also have an array of students whose majors range from music to criminal justice. Our members share a common trait: they all love and appreciate chemistry.

Elementary and secondary school students need a fundamental understanding of science to become well-informed adults capable of making science-related decisions that will affect their lives and the earth’s environment. To enable students to comprehend important concepts and apply their knowledge to the issues that will be at the center of their everyday lives, we must go beyond teaching them scientific facts — we must improve their science literacy.

Filling a need

With this idea in mind, our Student Affiliates chapter formed “Traveling Chemists,” a volunteer outreach program consisting of members of the chapter and its advisors. Each year, our chapter visits more than 30 schools and goes to local libraries and museums during National Chemistry Week and on Earth Day. By interacting with these audiences and showing demonstrations, we raise public awareness and stimulate interest in chemistry and the sciences. Our travels throughout the Rio Grande Valley have touched more than 20,000 students.

The Traveling Chemists demonstrations are based on actual teachers’ lesson plans for students in elementary through high school. Most schools we visit do not have science labs or enough equipment to engage their students in any hands-on experiments. For this reason, we make sure that our demonstrations include hands-on activities and inquiries that help students bring to life the facts that they have learned in class and apply them in the “real world.” We perform a myriad of experiments that cover geology, meteorology, physics, and engineering; but the emphasis, of course, is on chemistry.

Benefitting everyone

Our main audience is fifth-grade students. In Texas, it has been mandated that each student must pass the
science portion of the Texas Assessment of Knowledge and Skills (TAKS), a standardized test. TAKS is based on the state-mandated science curriculum, the Texas Essential Knowledge and Skills, which was in turn created to align with the National Science Standards, Benchmarks for Science Literacy, Science for All Americans, established as a part of Project 2061.

As Traveling Chemists, we also help our college. Throughout the school year, several junior high schools and high schools visit our campus as a way to familiarize themselves with local colleges and universities. The Outreach Department on campus, which is in charge of welcoming the students, invites the Student Affiliates chapter to visit with the students and perform a short version of our show. We also perform special shows for different occasions such as our school’s quinceanera (15th birthday) celebration, the Science Olympiad, and several open houses held on our campus.

From a concept to a success

The Traveling Chemists started out as an experiment itself, launched during the 2004-2005 school year by our advisor, Ludivina Avila, as a favor to a peer. That year, a group of chapter members visited an elementary school to show students some demonstrations. The visit was a success, and through word-of-mouth and media coverage in local newspapers and television stations, the news reached teachers throughout the Rio Grande Valley. They began contacting us to make appointments for our group to visit their schools. Since then, we’ve formed an official team of chapter members who travel to each school that has set up a booking, earning the group its name.

Facing challenges

Even with the chapter’s success, there have been some obstacles we have had to overcome. Being a two-year school, we often have problems with membership retention, and we need to train new members every semester. We have been able to overcome this problem by adding a Traveling Chemists student coordinator who helps with the shows and schedules, and also helps recruit and train new members. We also invite our new and potential members to a show. All it takes is one look at the children’s excited faces, and they are hooked. Our recruitment efforts become an instant success.

Funding was also an issue in the beginning, but as our success grew, so did our finances. Our department and division dean have been very helpful by allowing us to use the department’s equipment for our demos, and also help us when we need to purchase items such as liquid nitrogen, or travel over an hour to a school. We also hold fundraisers and have generous advisors who help us purchase items needed for our weekly shows such as dry ice and other household items, as well as prizes for the students.

Despite the trials and tribulations that come with creating and maintaining an organization, the Student Affiliates chapter has been a success, and has even inspired other students and faculty to create similar organizations. Even with the new friendly competition, the chapter will continue to try and get the message out that science is not only interesting, it’s very fun as well.

About Project 2061

Project 2061 was founded in 1985 by the American Association for the Advancement of Science (AAAS) to help all Americans become literate in science, mathematics, and technology. To learn more about National Science Standards, Benchmarks for Science Literacy, and Science for All Americans, visit the Project 2061 website at: http://www.project2061.org
IT'S OFFICIAL! THE AMERICAN CHEMICAL SOCIETY is changing its membership categories, making it easier for undergraduate students, teachers, and chemical technicians to become members. The bylaw changes demonstrate that ACS values the participation of those who will shape the future of the Society and the chemical enterprise.

It's also a big deal! Bylaw changes in a professional society the size of ACS are not trivial, and crafting this particular change engaged a number of groups across the Society. The Membership Affairs Committee coordinated the preparation of the petition, soliciting input from the Society Committee on Education, which has oversight of the Student Affiliates program.

The ACS Council, composed of about 500 members representing 34 technical divisions and 189 local sections, voted to approve the petition on April 9, 2008. Once the ACS Board of Directors approved the petition, it was sent to the full membership for approval during the fall 2008 election and passed by an overwhelming margin. The next step was getting the membership database, forms, and website ready to go. In June, the new membership categories will be in place.

More than a name change

Upon first glance, the student membership change looks straightforward. ACS Student Affiliates will become ACS student members. ACS Student Affiliates Chapters will become ACS student chapters. You will receive the same great programs and resources at the same reduced rates that you received as a Student Affiliate — including in Chemistry magazine, reduced meeting registration rates, and access to career resources — but more as well. A closer look should convince you that the change of status is significant and offers some special opportunities.

A stronger voice

As an ACS member you will be able to vote in ACS elections, helping select ACS leaders. National elections occur in November. Statements from candidates for president-elect and members of the board of directors are available on-line and printed in Chemical & Engineering News. Members may vote electronically or by paper ballot. As a student member, you are not eligible to run for national office, but you can help ensure that candidates address issues important to you.
“Membership brings a wonderful opportunity for you to help shape the future of the Society. Your involvement and your voice are critical.”

–Thomas E. Lane
ACS President

Access to resources

As a student member, you will have access to even more resources from ACS. In addition to the materials sent by the Undergraduate Programs Office, new student members will receive an ACS welcome packet, which includes the ACS Member Handbook and ACS membership card.

Enhanced networking

As a student member, you will be officially part of your ACS local section (one of 189 local sections throughout the country). Expect increased communications and interactions, since student members will be included on local section rosters.

You can also become involved with one (or more) of the 34 ACS technical divisions. Take advantage of one year of free membership in a division of your choice – a special deal offered to new members.

Connections within your local and disciplinary communities can help facilitate the development and pursuit of career plans. Tap into the ACS network to get advice and introductions that open doors.

Current Student Affiliates

- If your Student Affiliates term expires in June, you will receive a renewal form by mail to renew as a student member.
- If your term does not expire in June, you will be sent an e-mail confirming your new status as a student member, at which time you may choose to opt out. If you do not choose to opt out, you will be automatically transitioned to student member status.

Recent Graduates

Take advantage of substantial discounts!

- During your first year as a regular member, you can receive a discount of 50% off the regular membership.
- If you are enrolling in a graduate program, you can receive an additional 50% discount off the regular membership for your first year of graduate school.

Student Affiliates Chapters

- Student Affiliates chapters will become ACS student chapters at the end of the 2008-2009 academic year. New chapters will be chartered as ACS student chapters. All chapters will continue to receive support from the Undergraduate Programs Office, including awards and grants.

Simpler transitions

Upon graduation, you will simply renew your membership to transition from a student to a regular member. In addition, your ACS member number will remain the same whether you’re a student or regular member. And your years as a student member will count toward your total years as an ACS member, allowing you to reach significant milestones sooner. Look for the acknowledgements of your 1-, 5-, and 10-year anniversaries as an ACS member. Before you know it, you will be celebrating 50 years with ACS!

Mary M. Kirchhoff is the director of the ACS Education Division. Jodi L. Wesemann is the assistant director for higher education at ACS.
Collaboration The Power of
Collaboration happens when people and organizations work together to achieve common goals.

By Lynne Friedmann

For ACS Student Affiliates, collaborations can take place on campus and with other colleges or universities or local schools and community organizations. By collaborating, some chapters are able to recruit new members or increase attendance at events. Others allow their members to gain confidence and leadership skills tutoring high school students or to introduce undergraduates to graduate programs.

The benefits reaped from collaborating with other groups are as varied as the collaborations themselves. For example, for more than 20 years, the Duquesne University Chapter has hosted an annual ACS Student Affiliates “In Miniature” symposium with nearby universities. Elsewhere, the Student Affiliates chapter of North Central College (NCC) has joined forces with the Chicago area chemistry teachers’ network to do chemical demonstrations, while Texas Tech University Student Affiliates have begun working with three area high school chemistry clubs. At the University of Central Oklahoma (UCO), the Student Affiliates chapter plans social activities and service projects with several other science-related clubs on campus.

How do you start, when do you regroup, and how do you sustain a successful collaboration?

Collaboration unlocks creativity

Finding an opportunity to collaborate with another organization may take some determination. Sometimes ideas for collaborations come from faculty, chapter officers, similar organizations, or others in the community.

While several competing student organizations, including the Student Academy of Forensic Sciences, the Health Professions Club, and the Tri-Beta Biology Club, were experiencing a growth in membership, the UCO Student Affiliates Chapter at one time had difficulties recruiting new members. However, by collaborating with fellow science-based organizations, the UCO Chapter began to experience greater student participation and increased membership. By initiating joint activities such as bowling nights, cookouts, and service projects, the UCO Chapter demonstrated that its doors were open to others aside from chemistry majors.

The NCC Student Affiliates Chapter in Naperville, IL, teamed with the Chicago area chemistry teachers’ network known as ChemWest in a collaborative effort that benefits both organizations. “Contacts I made through ChemWest led to a teacher in Naperville who asked if I would serve as the college advisor for the high school chemistry club,” says Paul Brandt, an associate professor of chemistry at NCC.

When an elementary school later invited the Student Affiliates to participate in the entertainment portion of its science night, Brandt enlisted the chapter to join in the effort. After a period of planning and rehearsal, the students felt comfortable with their demonstration assignments.

“Advisors have their role,” Brandt observes. “But to be successful, students have to take it upon themselves to get involved.” For many of the students, conducting a chemistry demonstration in public was a first — and some were reluctant, thinking they didn’t know enough chemistry to participate. “But once they become involved, they found they could do the demonstrations in an entertaining way and have fun,” Brandt explains.

A demonstration is more than knowing the chemistry; it’s putting on a show and telling a story. Brandt cites as case in point a demonstration called “Genie in a Bottle” that combines hydrogen peroxide and a catalyst to transform hydrogen into steam. Students put their own slant on it, using pop culture references. For example, one student asked children in the audience if they’d seen the movie “Aladdin.” “He was able to take something the kids knew and relate it to chemistry,” Brandt recalls. “I would not have thought of that.”

Patience brings rewards

The Texas Tech University Student Affiliates recently started working with three area high school chemistry clubs. The effort began with an attempt to launch a free tutoring program on Saturday mornings. The first weekend, only four high school students showed up.

“When you’re starting out, you don’t always know the best way to proceed,” explains Bob Blake, chair of the Texas Tech Chemical Education Division. “It turned out that Saturday morn-
ing was a terrible time for high school students to come to school and focus on chemistry.” After conferring with teachers, a better time and a different approach were identified.

The group then developed the “Chemistry Extravaganza” to introduce the Student Affiliates to high school students. The event included a dry ice and indicator solution demonstration and a quiz game based on chemistry topics. This time, more than 50 students showed up. The lesson learned: build excitement about chemistry first — and then add formal structures to aid learning. “If we had started with a diagnostic test, we would have driven students away,” Blake notes.

In the initial stages of a collaboration, it is important to listen to what teachers and school districts want. If they have struggling students who need tutoring at lower levels, and a chapter envisions a program that only tutors for advanced placement, there will be disconnects. Even when all parties are enthusiastic about collaborating, arrangements take time to put in place. There is often bureaucracy to maneuver through before school districts can give permission for new programs. Sometimes this can take months.

Once in place, collaborations often produce unexpected results. For example, through his work with Student Affiliates chapters, Blake was able to recruit a number of local teachers to a training course he conducts in the summer.

According to Blake, the long-range goal of all these efforts is to interest high school students in studying chemistry at Texas Tech and becoming Student Affiliates themselves, and thus perpetuate the Texas Tech Student Affiliates chapter. While it’s too early to gauge success, Blake does offer this anecdote involving a student who came every week to take advantage of tutoring. “He was planning to go to another university, but based on his exposure to Student Affiliates he decided to come to Texas Tech instead,” Blake says. “He’s now an engineering major in the honors college.”

**Collaboration spans a generation**

For more than 20 years, Duquesne University has hosted an annual ACS Student Affiliates “In Miniature” symposium. The event gives undergraduate students from the host campus, as well as nearby universities (such as Seton Hill, Indiana University of Pennsylvania, St. Francis University, and Slippery Rock), a forum to develop all-important presentation skills.

Rose Clark, professor of chemistry at St. Francis University, applauds the effort. “We typically start our students in research after their freshman year,” Clark says. “In Miniature” is a wonderful opportunity for students to get practice without the pressure that comes from presenting before the bigger audiences at ACS regional or national meetings.

“In Miniature” was the brainchild of Duquesne faculty member Theodore Weismann, who launched and ran the program for two decades until his death in 2007. “Ted had an innate devotion to education and this was his legacy,” says Jeffrey D. Evanseck, professor of chemistry and biochemistry at Duquesne. “His was a true, pure desire to help students in the Pittsburgh region.”

In carrying on the program, Evanseck has kept many traditional elements, and has also added a major communications component. Through this effort, he shares information with chemistry faculty members outside of Duquesne to make them aware of resources and opportunities that can benefit their students. “If you really want to help students, you have to help the faculty who are helping them at their local institution,” Evanseck notes.

According to Clark, it’s important for undergraduate institutions to have these types of collaborations in order to achieve the higher level of research and training for undergraduate students. “We all win,” Clark observes, “because students see the graduate programs at major institutions, and then will be interested in them.”

**Once in place, collaborations often produce unexpected results.**

Shanna Speaks, president of the Student Academy of Forensic Science, (right) and another student hold up their freshly created tie-dye T-shirts during NCW 2008. The event serves as a fund-raiser for both UCO-SAAKS and the Student Academy of Forensic Science.

\[ \text{Lynnne Friedmann is a freelance science writer based in Solana Beach, CA. She is a Fellow of the American Association for the Advancement of Science.} \]
Achieve Smoother Transitions in Student Affiliates Chapters

BY ALLISON BYRUM PROFITFT

Because of how the academic calendar is organized, Student Affiliates chapter transitions can be something of a hurdle. Most chapters hold elections late in the spring semester and then have the summer off before new officers take their positions in the fall. For chapters losing senior officers, the passing of the leadership baton can mean an interruption or decline in momentum, but it could also be an opportunity for chapters to refocus and recharge, ready to return to campus in August with new or refined goals.

Start in April

The most repeated advice from chapters with successful transition track records is to hold a planning meeting with both the outgoing and incoming executive board after elections in the spring. These planning meetings are opportunities for chapters to set their calendars for the next year, define officer roles, complete the annual Student Affiliates chapter report, assess the chapter’s activities and performance for the current academic year, and set expectations for the coming academic year.

“We have a retreat where we get together for a four-to-five-hour meeting with the past officers and the new officers at my house, and we also have dinner,” explains Carmen Valdez Gauthier, Student Affiliates faculty advisor at Florida Southern College. Before the retreat, Gauthier meets with both the incoming and outgoing presidents to set the meeting’s agenda, define a mission statement for the year, and write job descriptions for each executive board member. “It helps the meeting to go smoothly,” says Gauthier. At the meeting the officers plan the calendar for the next year, complete the annual report, and take responsibility for events in the coming year.

Matthew Johll holds a similar planning meeting for the Student Affiliates chapter at Illinois Valley Community College. “In the spring when we elect our new officers, they sit down with our outgoing officers and plan out the entire next year’s activities,” he says. “When we come back in August, we already have our game plan made. We’re already going before school even starts, and we’ve got that momentum right from the beginning.” Time is precious at a two-year institution, Johll explains. “If we’re not very active for a semester, that’s a quarter of the time I have with them. We can’t really have that kind of down time.”

Get them early

Another element to smooth transitions is to fill the “officer pipeline” with freshmen and sophomores, which means active recruiting.

At Union College in Schenectady, New York, the chapter has implemented a mentoring program. At the beginning of the fall semester, junior and senior chapter members get the names of incoming freshmen who have declared an interest in chemistry. “All of the upperclassmen try to e-mail their ‘mentorees’ to introduce ourselves, and let them know that we’re available to help them, talk about classes, and answer any questions that they have,” explains chapter president Laura Castellano.

The mentoring program is only in its second year, but already the chapter is seeing more involvement from freshmen and sophomores, says Laura MacManus-Spencer, the chapter’s advisor. “We’re trying to encourage the younger students, if they are really interested in chemistry, to start taking a leadership role. Not just being part of the Student Affiliates chapter, but being an officer.”
Try new ideas

Transitions are also a great time to reassess the chapter’s goals. When the entire executive board of the Central Michigan University Student Affiliates Chapter graduated, advisor Sharyl Majorski says it was tough at first. “The students have to realize that it’s a whole new team, a whole new group — and this isn’t last year anymore.”

Majorski encouraged her new executive board to take the pulse of the chapter. “Just because we did a particular event in the past does not mean we have to do it again,” she says. “In a transition year, you have to not only look at and evaluate what was done, but also look to see if the chapter is still meeting the needs of the incoming students. We have to identify who we are and what we want to do… The new people coming in can be completely turned off if planned activities are not what they’re into.”

Find a balance

Advisor changes can also disrupt continuity, and finding the right balance is crucial to a successful advisor transition. Carrie Shepler started as the Student Affiliates chapter advisor at Georgia Institute of Technology in August, and she and her executive board are still defining their relationship. “They were very student-driven,” Shepler says. “Hopefully, in my role as faculty advisor, I’ll be a more stable factor in the equation, and help streamline some of the officer transitions.” But identifying the right balance takes time. “They have been so autonomous in the past,” Shepler explains. “I want to be here in a support role, but I want them to be doing things that are their ideas, that they’re excited about.”

Cristina De Meo at Southern Illinois University, Edwardsville is also a new advisor, but she had the advantage of being able to overlap with the previous advisor last semester to observe and get to know the chapter. “I think overlapping is a must,” she says. “The previous advisor is still making decisions and directing students, and the new advisor can see how to do it.”

Dylan Downs, chapter president at Southern Illinois, points out that having a new advisor can be a great opportunity. “I think sometimes clubs get rooted in what they’re doing and when you bring in a new advisor, things change. It might be a little difficult, but new ideas come up for events that you haven’t done before.”

Prepare and create

Student Affiliates chapters should approach transitions as opportunities. Make a point to set aside time in the spring to have a meeting between old and new officers and the faculty advisor to create goals, brainstorm, and discuss what has worked in the past and what might work in the future. Use the chapter report as a starting point for the conversation and a map for the next year. Take advantage of transitions in leadership to check the membership’s needs and make sure the chapter is meeting them.

With preparation and creativity, times of transition can be smooth segues from one year to the next, and a chance to push a chapter toward the next level.
SHE WAS TALKING WITH STRANGERS. (OMG!)

Turns out, though, she was teaching me a very important skill — how to break the ice and start conversations. So it’s not surprising to me how popular this topic is. It seems the art of conversation really is a lost art (and clearly not everyone had a mother like mine)!

So how exactly do you start a conversation?

For in-person conversations, it boils down to five things. First, you need to cultivate a zen-like attitude toward conversation-making. Second, you need to pay attention. Next, you need to be genuinely curious and ask questions. But you also need to be careful. And finally, you need to practice.

That’s it ... really! So let’s talk about the nitty-gritty details.

**Cultivate a zen-like attitude**

What do I mean by a zen-like attitude? You need to let go of self-conscious and judgmental thinking. Be yourself.

Introverts — read carefully — you do not need to be an extrovert! The most important thing is to be you.

Talk real, act real, and be real. Being yourself allows you to be comfortable, confident, and consistent. For me, it helps to remember that most people are happy to engage in a conversation and really appreciate it when someone else takes the lead.

Ask a few questions to quickly find common ground. People build bridges between themselves by discussing things they have in common. Think of small talk and questions not as insincere conversation, but as tools for swiftly discovering what it is that you have in common with someone else.

**Pay attention to everything**

So how exactly do you come up with appropriate questions? It’s simple. You just need to pay attention.

Pay attention to your immediate environment. Do you see or hear something unusual? Is someone wearing an interesting watch or tie? Is there music playing? There is always something you can comment on.

Pay attention to the news. What’s going on at your school? What’s in the national or local news? What’s the current buzz in pop culture (celebrities, TV shows, movies, YouTube videos, “cewebrities,” etc.)?
Pay attention to people. Is there someone who can introduce you to the person you really want to meet? Is anyone standing alone? Does anyone look bored?

**Be genuinely curious about others**

Once you’ve gathered your “intelligence,” it’s easy to follow the next step…be curious. It’s important to be genuinely curious. Get to know people. Learn from them. Show your interest by sharing a comment or asking a question.

But be careful not to interrogate. Again, the key is to be genuinely interested and inquisitive. I started asking people’s shoes after my friend Mike suggested it to me. Turns out, most people like it when someone notices his or her shoes. (Who knew?)

Mike told me a story about a guy he met on a plane who was wearing a very expensive pair of shoes. So, of course, Mike had to ask the guy about them. They ended up talking through the entire two-hour flight. Several weeks later, Mike received a pair of the same shoes in the mail. Mike called to thank the guy and ask him why he had sent him the shoes. After all, Mike told me, there really wasn’t any reason for them to do business together. The guy responded by saying, “I sent them because you took such an interest in my shoes and I thought you seemed like a person who should have a nice pair of shoes!” Turns out the shoes were worth $1,200! And yes, Mike still wears the shoes.

There are, however, some questions you should avoid. It is never appropriate to ask questions like, “Are you pregnant?”; “You must be his mother, right?”; or “Is that your daughter?” These should all be avoided, because if you have made the wrong assumption, you might find yourself in hot water. Let me explain.

A junior researcher recently told me he attended an event with a very prestigious senior scientist. A young toddler was standing next to the scientist. The researcher had met the senior scientist’s college-age son in the past, so … in an effort to strike up some friendly conversation he naturally said, “Is that your grandson?” When the senior scientist explained that the pre-schooler was his own son, it was very clear to the young researcher that he had just offended the scientist—obviously, his words had exactly the opposite effect that he was shooting for.

Don’t ever make assumptions about someone’s personal situation. You never know, that young “hottie” standing next to an older gentleman just might be his wife! Or worse, the older woman whom you mistook for his mother is really his wife! It’s best just to wait until the person directly tells you; if you guess and you get it wrong, you’re likely to offend.

**Practice and be prepared**

And finally, practice your interpersonal conversation skills. Always try to project confidence. Smile more. Use good posture. Have a firm, web-to-web, full-handed handshake. Use gestures.

Always communicate in a compelling manner. Then when you meet someone new, these interpersonal behaviors will be second nature. You can concentrate on paying attention to the other person and not yourself.

People make judgments quickly. Some researchers say this can occur in a minute or less, so all of these tips can have a significant impact on the first impression. And by the way, first impressions are hard to change.

So, practice breaking the ice and making conversation every chance you get, because these skills can be cultivated! Practice in class, at your favorite coffee shop, and at sporting events … and of course you’d make my mother proud if you also practiced while waiting in long grocery lines!

There you have it, five easy steps for breaking the ice and making conversation. Why wait? Go give it try. You’ll be glad you did, and so will your new conversation partner! 

**Be careful**

• Do you like what you are doing?
  This gives you a measure of optimism in general.

• What specifically do you love/like about your school/work?
  This helps to better understand the motivations of the person.

• What are you passionate about?
  This is my personal favorite question to help build common ground!

• I didn’t expect so many people to be here, did you?
  This is simply small talk; you’ll need other questions with this.

• That laptop bag looks really sturdy…do you like it?
  You may actually find a better laptop bag for yourself.

• I read your website/blog/paper—really interesting. Can you tell me more about it?
  People enjoy it when someone reads what they write.

Again, it is important to be genuine and sincere with your questions. Ask questions that you really want to know the answers to! 

**be genuinely curious about others**

That’s it! It’s as simple as asking questions. Next time you think about what to say in conversation, think about questioning. You’ll see that people enjoy it, and you’ll be more skillful at making connections! It’s a step by step process, so just keep practicing and you will get better.

Time Waits for No One
As chapter president, I found that time management was a most valuable skill I had to learn at all costs. Time management was a challenge for me because the chapter's activities and my school projects were competing for my time. If you want to be successful and productive, time is a most precious thing you cannot afford to waste. The way you use your time shows how productive you are and how good you are in managing it. The fortune 500 CEOs of today make good use of time by ensuring that every minute counts. They delegate projects to their subordinates with assigned deadlines in order for goals to be accomplished. My advice to incoming ACS Student Affiliates chapter presidents is that you need to learn how to manage your time by delegating activities to other officers and making sure you do not procrastinate on school projects.

Posted by Oyebola

Remember Spiderman
Uncle Ben tells Peter Parker to “remember with great power comes great responsibility.” However, Uncle Ben forgets to tell Peter that not everything is his responsibility. During my term as chapter president for WKU, I had what can only be called the “Spiderman Syndrome” — the overwhelming feeling that every detail was my responsibility. My advice to any incoming chapter president is simple: trust and communicate with your other officers. It’s important to communicate with the other officers frequently, so everyone stays focused in the same direction. I think the most important thing to remember is you’re not alone. Use the power of delegation and communicate clearly with other officers. It’s far better to work as a team than try to accomplish things as individuals. Remember, Maverick had Goose, Batman had Robin, and as chapter president, you have the other officers. The responsibility isn’t solely yours to bear.

Posted by CJ

Keep Members Actively Engaged
When I first became the president of Bellarmine University’s Student Affiliates chapter, the first lesson I quickly learned was how essential it is to keep club members actively involved in chapter events. The problem of maintaining member participation often plagues chapters, but I’ve found that giving each member an active role in decision-making helps to keep them coming back and ensures stable, knowledgeable leadership in the future. Yearly events from Earth Day to National Chemistry Week can be great ways to produce innovative, fun activities that appeal to the chapter members and others in the campus community. We encourage participation through service events that help promote the environment and youth education, as well as eye-catching experiments and field trips. We also have interesting speakers from local industry, research programs, and graduate schools. Having a great member base is vital — without them the chapter wouldn’t be possible.

Posted by Matt

Remember to Plan and Laugh
Having a leadership position might be intimidating, overwhelming, and exciting all at the same time. It’s easy to get entirely focused on accomplishing the chapter’s goals. Don’t allow the planning to overshadow making new friendships, appreciating the children’s smiles from chemistry demonstrations, and noticing the confidence gained in your leadership skills and abilities. Of course, you can’t forget the moments when glitches occur, for they become the memories you will later remember and enjoy a good laugh over with the chapter. Almost forgetting to order the pizza for the opening social, thanking everyone at the social for joining the chemistry and biochemistry lab, and missing the carpool to an elementary school after three of us carried all of the equipment for making slime across campus were times I experienced stressful and embarrassing days. But don’t worry: in the end, everything works out. If they don’t, remember to laugh and enjoy the moment.

Posted by Christina
Love What You Are Doing
Chairing a student chapter of the ACS is a unique experience. If you’ve already been elected to lead, I congratulate you and invite you to enjoy this experience to the fullest. During my term as president, I have learned that teamwork is the key to success. The members are the engine of the chapter and we must keep them active in order to proceed. I assure you they have great ideas, so listen to them. I also learned that it is important to divide the work load and maintain efficient communication; this will help everyone feel like important parts of the chapter, because they are. Planning ahead helps to achieve success. Things do not always go as one expects, but the end result is amazing! And the most important part, love what you are doing, because if you do... you will do your best!

Posted by Emily

Don’t Forget the Fundamentals
Our chapter is successful because we have outstanding public relations and an effective way to share responsibilities. The fundraisers are also good public relations events, helping maintain good relations between the chapter, students, and faculty — and motivate all to support the chapter. It’s also important to share responsibilities. The treasurer keeps track of funds, and the secretary takes notes and maintains display cases. The public relations officer sets up new activities. The historian takes pictures at events and uses them for the website and for posters. The vice president writes the newsletter and helps the president. The president and vice president essentially do everything that is not covered by other officers — sending reminders for ACS meetings and filling out and turning in paperwork, etc. It boils down to electing officers who are willing to put forth the effort.

Posted by Ian

Lead by Example
The opportunity to serve as vice president of the SAACS Chapter at Keene State College (KSC) was a chance for me to help the chemistry department shine in the eyes of prospective new chemistry majors, surrounding KSC departments, and the professional chemical community in the region. I was mindful to set a good example of the quality education, inspirational faculty, and dedicated students in the department whenever I discussed our chapter with a potential member or speaker/host. I used this approach when recruiting new members and motivating participation in lyceum-sponsored trips and activities. With the help and guidance from our president Joe Meany, coordinator Susanna Ayers, and treasurer Molly Croteau, we all formed a team that was able set this positive tone throughout. My lesson learned was to have fun, enjoy the office, motivate others, and spread the word of the organization daily. Do this, and the chapter naturally becomes more enriched.

Posted by Ben

Inspire and Involve Non-science Majors
Shortly after becoming chapter president, I realized that many students who lacked chemistry backgrounds avoided our events. They assumed our activities would be uninteresting to them and too complex for them to understand. As you and I both know, chemistry is not only interesting, but is also relevant to everyone’s lives. I felt as president, it was my duty to get my peers to understand this as well. The board, the advisors, and I worked on creating fun events with underlying chemistry themes and educational objectives. We held a magic show, tie-dying event, field trips, and more, always including either handouts or discussions to explain the chemistry involved in the event. Student participation in our chapter increased as others realized that they could understand and were actually interested in what chemistry had to offer them. Look to inspire and involve your peers — you could change the way they think about chemistry.

Posted by Grace

OYEBOLA OLADEINDE is the president of the ACS Student Affiliates chapter at Morgan State University in Baltimore, MD.

CJ PRUITT is the president of the ACS Student Affiliates chapter at Western Kentucky University in Bowling Green, KY.

MATT GALANTE is the president of the Bellarmine University ACS Student Affiliates chapter in Louisville, KY.

CHRISTINA HANSEN is president of the Utah State University Chemistry and Biochemistry Club in Logan, UT.

EMILY ROBLES is president of the ACS Student Affiliates chapter at the University of Puerto Rico–Río Piedras.

IAN PEARCE is vice president of the Park University ACS Student Affiliates chapter in Parkville, MO.

BEN MICHAELSON is the vice president of the ACS Student Affiliates chapter at Keene State College in Keene, NH.

GRACE CHARLES is president of the ACS Student Affiliates chapter at Stern College for Women-Yeshiva University in New York, NY.
Speaking Out for Science

BY BRAD SMITH

The LAN plan
You can speak for science by becoming active in LAN, a Web-based political involvement program that gives you an easy, effective way to voice opinions on legislation that could affect the field of science — and your future career. In the process, you can play a valuable role in shaping the debate on issues ranging from federal research to K–12 science education. Members of Congress listen to their constituents and value their timely input — and the LAN makes it easier than ever for you to voice your opinion.

Involvement in the LAN is free, simple, and takes place entirely via the Web. But more to the point, by participating in the LAN, chemists can impact federal policies critical to chemistry and our nation. Please register online at http://www.act4chemistry.org/register.

GAC attack
The ACS Office of Public Affairs (OPA) operates the GAC program, which works to facilitate interaction between local section members and elected officials on policy issues affecting chemists. Because face-to-face meetings between legislators and chemists “back home” are often the most effective way to advance ACS positions, this program is a high priority for OPA and integral to its issue campaigns. For GAC program members, these meetings are an important opportunity to begin developing long-term relationships with their elected officials.

ACS identifies, trains, and supports local section GACs to advance positions with select legislators through district meetings and other forums. Ideally, a GAC consists of three to four ACS local leaders, with representation from academic, industry, and students like you. OPA staff can help you get involved in a number of ways, by familiarizing you with a given issue, your legislator’s position, and tips for meeting with a Member of Congress.

Here are some other ways you can join the effort to speak for science:
• Visit your policymakers’ district offices during their April and May congressional recesses.
• Go to town hall meetings and ask science-related questions.
• Invite your policymakers to speak at your chapter or science club meeting.
• Participate in the Chemists Celebrate Earth Day or National Chemistry Week activities.
• Encourage elementary and high school students to pursue science.

Let’s challenge ourselves to make sure our voices are heard over the next year. Science and technology can only advance if we as scientists promote it. If you would like to participate in the LAN, your local section’s GAC, or both, please contact the OPA at 1-800-227-5558, ext. 4386 or grassroots@acs.org.

Since 1998, BRAD SMITH has worked for the ACS Office of Public Affairs to bridge the gap between practicing chemists and policymakers by advocating ACS policy positions to federal and state policymakers and directing the Society’s grassroots programs.

www.acs.org/saprogram   • APRIL/MAY 2009   • inChemistry
SUNDAY AUGUST 16, 2009

Hospitality Center
8:00 a.m. – 5:00 p.m.

Scientific Communications Workshop—How to Prepare and Present a Scientific Poster
9:30 – 10:45 a.m.

Planning Science Events for Kids Workshop
11:00 a.m. – 12:30 p.m.

Chemistry of Our Oceans Symposium
1:30 – 2:45 p.m.

Graduate School Reality Check
3:00 – 4:30 p.m.

Networking Social with Graduate School Recruiters
4:30 – 6:00 p.m.
August 16-20, 2009
Washington, DC

...A MONUMENTAL EXPERIENCE!

MONDAY AUGUST 17, 2009

Hospitality Center
8:00 a.m. – 5:00 p.m.

Graduate School Recruiting Breakfast
8:30 – 10:00 a.m.

Chemistry of Our Atmosphere Symposium
10:15 – 11:30 a.m.

Eminent Scientist Lecture and Lunch with Dr. Susan Solomon
11:45 a.m. – 1:30 p.m.

Undergraduate Research Poster Session
2:30 – 4:30 p.m.

Sci-Mix / Successful Student Affiliates Chapter Posters
8:00 – 10:00 p.m.

Elect to Attend the Graduate School Recruiting Events in Washington!

Here’s a great opportunity to network and politick with graduate students and recruiters from prestigious graduate programs and learn the in’s and out’s of graduate school.

Recruiting events kick off on Sunday, August 16, with the Graduate School Reality Check from 3:00 – 4:30 p.m., immediately followed by the Networking Social with Graduate School Recruiters from 4:30 – 6:00 p.m. Recruiting events culminate with the Graduate School Recruiting Breakfast, from 8:30 – 10:00 a.m. on Monday morning.

ATTENTION GRADUATE SCHOOL RECRUITERS!

The graduate school recruiting events in Washington D.C. will be a great place to lobby undergraduate students to attend your graduate school programs. Please contact Lori Betsock at l_betsock@acs.org for more information on how you can participate in these events. Registration materials are also available online at www.acs.org/saprogram.

Program format and times are subject to change. Please consult the final program.

All events are sponsored or co-sponsored by the Society Committee on Education Task Force on Undergraduate Programming. Chair: Charles Baldwin, Union University, Jackson, TN. Program Chair: Michael Schuder, Carroll University, Waukesha, WI.
OUR STUDENT Affiliates chapter at the University of Central Arkansas (UCA) was asked by the 2008 ACS Southwest Regional Meeting (SWRM) planning committee to provide the Undergraduate Programming for the meeting held at the Peabody Hotel in Little Rock, AR.

Getting involved

Even though UCA was only 35 minutes away from the meeting site and our student chapter has previously attended national and regional meetings, we were apprehensive about planning the event. It sounded like a big responsibility, and we were not sure if we were ready. Our chapter had been dormant and re-activated only a few years ago, and we were still building membership and yearly activities. Could we do this?

Our department chair and two faculty advisors assured us that they would help and, after attending an ACS national meeting in Chicago, we were psyched for the challenge. We had lots of ideas about events that we could organize to provide useful information and opportunities for ourselves and other undergraduate students. This could be fun, right?

One of the issues we faced was that the officers of our chapter were all seniors, so we needed to set up two groups of students. One group planned the initial events and wrote a grant proposal for preparing the Undergraduate Programming at a Regional Meeting, which we submitted in the summer of 2007. After the grant was awarded, another group volunteered to plan and run the October 2008 meeting. To provide continuity, we added a SWRM coordinator as one of our officer positions this past year. We also held several socials, where officers from both years met to discuss the regional meeting.

Organizing the events

Technical Program

One of the most important and exciting parts of an ACS meeting is the opportunity for students to present their research. We originally expected to have only one poster session and a half-day oral session. This grew to include two undergraduate poster sessions with a total of 98 posters, plus a one- and-a-half-day oral session with 23 students presenting talks. Many students benefit from presenting research through oral seminars, so the more slots available for this, the better. These high participation numbers were exciting, but also caused some last-minute changes in event locations and times. We learned that you have to be flexible and communicate often with the meeting chairs. We were honored to have Keith Pannell, an inorganic chemistry professor at University of Texas at El Paso and recipient of the 2004 ACS Award for Research at an Undergraduate Institution, deliver a plenary lecture to open the undergraduate sessions.

Graduate School Expo & Breakfast

We were very proud to have 21 graduate schools attend our Graduate School Expo & Breakfast. We began contacting schools in May for the meeting in October. We found this task easier to accomplish by assigning each student a state. A good place to start looking is the ACS Directory of Graduate Research (http://dgr.rints.com). We then set up a contact list and sent mass e-mails out to all schools inviting them to the Expo &

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**UNDERGRADUATE PROGRAM**

**Thursday, October 2**

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<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>8:30 – 10:45 AM</td>
<td>Plenary Speaker and Oral Session I</td>
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<tr>
<td>9:00 – 11:00 AM</td>
<td>Career Services Workshops</td>
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<tr>
<td>9:00 AM – 5:00 PM</td>
<td>Graduate School EXPO</td>
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<tr>
<td>11:00 AM – 12:30 PM</td>
<td>Careers in Chemistry Panel Luncheon</td>
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<tr>
<td>12:45 – 2:45 PM</td>
<td>Poster Session I</td>
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<tr>
<td>3:15 – 5:15 PM</td>
<td>Poster Session II</td>
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**Friday, October 3**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>7:30 – 8:45 AM</td>
<td>Graduate School Recruiting Breakfast</td>
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<tr>
<td>9:00 AM – 12:00 PM</td>
<td>Oral Session II</td>
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<tr>
<td>9:00 AM – 5:00 PM</td>
<td>Graduate School EXPO</td>
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<tr>
<td>1:20 – 5:00 PM</td>
<td>Oral Session III</td>
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Breakfast. We also asked ACS Undergraduate Programs staff member Lori Betsock (l_betsock@acs.org) to send out invitations to graduate schools on the mailing list she uses for national meetings.

Having more graduate schools participate generated more interest among students to attend the meeting. In addition, we received a portion of the booth registration fee from the expo to cover the costs of our breakfast and luncheon events. These are huge events for undergraduates, because they provide opportunities to talk to many regional graduate programs in a single day.

Careers in Chemistry Panel Luncheon

We planned for the Careers in Chemistry Panel Luncheon to encompass jobs in industry, pharmaceuticals, forensic science, national laboratories, and academics. Two students emceed the event by walking among the audience with cordless microphones. Unfortunately, due to some planning mistakes, we had to put together a panel at the last minute. We were grateful for those who stepped in, but our variety of careers could have been wider. However, participant feedback was positive and everyone seemed to enjoy the event.

We learned a few lessons about organizing a panel:
1. Start planning early — the first people you invite may not be available;
2. Make a list of people from each branch of chemistry. This way, if the first industrial chemist you invite cannot attend, you have a list of other industrial chemists as backup;
3. Contact the panel members a week or two before the event to confirm. Make sure they are ready to attend, and that they know what time the event is; and
4. Make sure there is a moderator at the event with questions ready. If the audience doesn’t ask questions, the moderator can.

Sending e-mails galore

We wanted to have as many undergraduates from as many schools as possible attend the meeting. We sent e-mail invitations to undergraduate students and faculty advisors in Arkansas, Louisiana, Missouri, New Mexico, Oklahoma, Tennessee, and Texas. Because the deadline for students to submit abstracts was much earlier than the meeting date, it was important to e-mail early and often. In addition, we kept the meeting website up to date with event details, including which graduate schools were attending the Expo & Breakfast, as well as dates and times for the Technical Program. Our publicity efforts were successful! We had 208 undergraduate attendees (32% of the total meeting attendees).

Lessons Learned

We hope our experience can inspire and help your chapter plan a regional meeting. The following is a list of lessons we learned in the process. Hopefully, by reading these you can be more efficient in your event planning process.

Be flexible: High participation numbers were exciting, but also caused last-minute date and location changes for certain events.
Advertise: Send several e-mail reminders and update your website weekly. E-mail lists are available from the ACS Undergraduate Programs Office.

Plan a Grad School Expo: If a large number of schools are participating, keep them separate from industrial vendors and place them close to undergraduate events.

Get all involved: This shouldn’t be a “just for officers” experience. Get everyone in your local chapter involved in planning — it takes a lot of hours.

Meet over the summer: Many of us were on campus working in a research lab during the summer months. We had weekly meetings and assigned specific tasks to each person attending.

Provide food: If you feed them, they will come. Providing food at events promotes undergraduate presence.

Offer travel $$: Offer travel awards to out-of-state students. We had three travel award winners of $300 each.

Visit the meeting site: Actually seeing the room layout assists in planning. We encountered a squeaky door leading to the oral session meeting room that would have been disruptive.

Avoid procrastination: It will make your life a lot less stressful in the long run.

Stepping to the plate

If you decide to plan the next regional meeting in your area, remember to have fun with it. If your ACS Student Affiliates chapter comes up with an idea that is original, don’t be afraid to try it. Just remember that the undergraduate program exists to expose undergraduates to research and career options. Ask yourself: What events would you like to attend?

We weren’t so sure when we agreed to host the Undergraduate Programming, but we had a great time and would do it again in a heartbeat. We highly recommend it as a way to inject life into your chapter.

Charles Nichols is the Student Affiliates chapter president at UCA and Karen Steelman and Kyle Felling are chapter faculty advisors.
In September 2007, our Western Kentucky University (WKU) Student Affiliates Chapter, with a little prodding from our faculty advisor, took on the task of submitting a proposal to host the 2008 ACS Southeastern Regional Meeting (SERMACS). With little to no experience in organizing such a large event, we were a little tentative about what we were getting ourselves into, but determined to do our best.

Three months later, we were informed that our proposal would be funded, thus beginning an intensive year-long process of planning filled with triumphs and frustrations. The result was a learning experience that caused incredible growth, developed strong relationships, and left us amazed at what we had accomplished. All our time and effort paid off in the end, with our program being hosted on November 14 and 15 at the Music City Sheraton in Nashville, where we were able to provide a range of opportunities to undergraduates.

Demo extravaganza

Our undergraduate program commenced with a Student Affiliates chapter-sponsored Chem Demo at our exposition booth. Lucky for us, one of our chemistry department’s faculty members was the exposition chair, and graciously volunteered two booths to be hosted by the undergraduate program. Each chapter attending the meeting was given a one-hour time slot to present a poster about its chapter activities and perform members’ favorite chemical demonstrations, which ranged from Rainbow Milk and Shrinky Dinks to Radial Chromatography of T-Shirts and the Amazing Disappearing Beaker. Young and old were amazed and entertained by the intricacies of the chemistry involved, with the demos being one of the highlights of the Expo.

Chapter building

Next on our agenda was an exercise in chapter building. One of the hang-ups of many chapters is filling out the end-of-the-year report. Many chapters often wonder what should be included, what the reviewers are looking for, etc. To answer some of those questions, Nancy Bakowski, manager of the ACS Undergraduate Programs Office, came to discuss the ins and outs of filling out the yearly report. She gave attendees pointers on the need for variety and more complete descriptions in their responses, along with ideas for chapter activities under each category.

“Chemistry is Sweet”

Following this informative session, we had a little fun. In order to get to know each other better and fire up that competitive spirit, we had a “Chemistry is Sweet” liquid-nitrogen-ice-cream-making competition. Eleven chapters came prepared with goggles, mixing bowls, spoons, and their secret chapter recipes. What ensued was organized chaos — with ingredients flying, liquid nitrogen pouring, and a mad dash of people as each new flavor was ready to be sampled. In the end, everyone left happy, having had their fill of ice cream. Judges

Meeting the Challenge

2008 Southestern Regional Meeting Undergraduate Program

by Jacob A. Verlynckt

Students from Berry College present a demonstration during SERMACS Exposition.

Students from Berry College present a demonstration during SERMACS Exposition.

Students from Berry College present a demonstration during SERMACS Exposition.

Above: Delta State University students whip up their recipe for the ice-cream-making competition.

Right: A student enjoys some liquid nitrogen ice cream.
5 Tips for Planning a Successful Undergraduate Program

1. Get multiple opinions. When planning an event, tell everyone and anyone who will listen about your ideas. They may have great feedback that can correct any oversights and/or improve your events.

2. Don’t be afraid to pick up the phone. The local section committee, venue staff, and the Undergraduate Programs Office all want your program to run smoothly, and will be more than willing to help you. If you have any questions or need help with doing or obtaining anything, don’t hesitate to ask.

3. Plan early. Your first choices for event venues, guest speakers, etc. may not always be available. The earlier you confirm these items, the less stressed you will be as the event approaches.

4. Pay attention to details. Although bogging yourself down in details may not seem very enjoyable, attention to detail will increase the likelihood of your program running smoothly. You do not want to get to the day of the event and realize you have forgotten something important.

5. Relax. In all reality, no matter how much planning you do, something is bound to go wrong. Don’t panic. Almost any mishap can be righted. For instance, the liquid nitrogen dewar for our ice-cream competition was supposed to be delivered on Thursday to the hotel staff. At breakfast Friday morning, we were informed that the dewar had never arrived. After a few phone calls, it arrived just in time for the event. With your support team in place and your details planned, you can overcome any obstacle.

Downtown

After the chaos of competition, we provided some time to relax by having a social event at McFadden’s, a restaurant and saloon in downtown Nashville. Undergraduates were able to get to know each other in an informal atmosphere away from the meeting, with appetizers and soft drinks provided. With great dancing music, ample space to sit and converse with new friends, and pool tables, it provided a great starting point from which to experience the Nashville scene.

Research-it’s what chemists do

Following a day of chapter building and socializing, we got down to the core of the meeting: research presentations. Over 200 students presented their research in poster and oral sessions on Saturday morning, with topics throughout all fields of chemistry and chemical education. At the same time as the presentations, we hosted both a graduate school fair and an Experiential Programs in Chemistry (EPiC) booth to allow students to look into graduate work and learn about summer research and study programs. These activities gave students the opportunity to show off all of their hard work, see what other undergraduates are working on, and learn about future opportunities all at once.

Following the presentation sessions, students were invited to attend an awards luncheon to celebrate their achievements. After an appetizing meal, keynote speaker Eric Bigham, member of the ACS Board of Directors, gave a presentation on his experience as a chemist and member of the Society, detailing many chemical career paths. Finally, to conclude our meeting and honor exceptional work, awards were given out to the winners of the ice cream competition and presentation sessions.

In the end, our program was able to offer a little something to everyone. Although at first it seemed a very daunting task, hosting the undergraduate program was a very rewarding and fulfilling experience. If your chapter is looking for something new, challenging, and rewarding, consider applying to host the undergraduate program at a regional meeting!
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Florida Atlantic University, Boca Raton, FL is located 40 miles north of Miami and less than two miles from the Atlantic Ocean. It serves a diverse enrollment of more than 26,000 students, and along with its tradition of teaching excellence it has a growing reputation as a major research university.

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If your school would like to include a notice in an upcoming issue of in Chemistry, contact Lori Betsock, (800) 227-5558, ext. 6188 or e-mail l_betsock@acs.org.

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The first step is submitting your abstract. For abstract submission and award requirements and limitations, visit neworleans.setac.org.

Hurry, the deadline to submit is 6 June!