

2008-09 STUDENT AFFILIATES CHAPTER REPORT: Union University SAACS Chapter**General Instructions**

Please document your activities for each category on the tables below. Chapters that do not use the designated form may decrease their chances of receiving an award as the reviewers will not be able to easily extract the necessary information for a concise review.

Supporting documentation guidelines are provided for each category. In most instances, no more than two pieces of supporting documentation should be submitted for each category. In the online submission system, these documents should be uploaded separately – not inserted in this form – and only text and image files are allowed. Since the Student Affiliates Program can only include digital photos that are at least 300 dpi in its awards video presentation and *in Chemistry* magazine, please send high resolution photos separately.

For each category, provide the date of the event and the numbers of Student Affiliates (SA), other chapter members (non-SA), and faculty members that participated. In the name of event/location column, please provide a descriptive title along with the place where the event was held. Please record the number of people that were served by your activity (i.e, number in attendance) in the appropriate column and indicate whether or not the SA chapter planned the activity. It is imperative that all columns be completed for each activity.

Written summaries should give reviewers a complete, but concise, account of chapter activities. For tips on preparing your annual chapter report, visit [In Chemistry](#), click on Archives, and read the article entitled “Annual Report Reviewers Speak Out” in the February/March 2004 issue.

Chapter reports **must be submitted by MAY 13, 2009**. The online submission system and electronic versions of the report forms can be accessed via the [Student Affiliates web site](#) at www.acs.org/saprogram. If you need assistance please review the FAQ's at www.acs.org/saprogram or contact the Student Affiliates Program at 800-227-5558 (ext. 6166) or via e-mail at saprogram@acs.org if you have any questions.

Background Information

To provide institutional and departmental data, SA chapters should consult with their department chair or Registrar's Office to obtain accurate numbers. Incorrect information will limit the chapter report reviewers' ability to fully access the scope and range of your SA chapter activities.

15	Number of ACS Student Affiliates (those who submitted an application to ACS)
51	Total number of chapter members (SA and non-SA)
2317	Total number of undergraduates in the college or university
43	Number of undergraduates majoring in chemistry
6	Number of chemistry faculty

1. ACS STUDENT AFFILIATES CHAPTER MEMBERS: Union University SAACS Chapter

Please list at least six of your Student Affiliates members and their ACS Student Affiliates numbers, indicating who held a chapter office. You are encouraged to include a complete chapter roster, if possible. You may expand the table or upload a roster as an attachment to your report submission. Your chapter must have at least six national Student Affiliates in order to qualify for a chapter award or grants.

Name of Student Affiliate	ACS number	2008-09 Office	Name of Student Affiliate	ACS number	2008-09 Office
Sarah Conway	2394622	President	Brandon Lowe	2436441	Senator
Jill Frank	30019494	Vice President	Faris Bakeer	30025301	Sophomore Representative
Lauren Quick	30019449	Secretary	Amanda Davidson	30003909	-
Ashley Pugh	30020382	Treasurer	Autumn Baldock	30025300	-
Levi Lancaster	2430982	Historian Photographer	Kent Willis	2415093	NCW Coordinator-
Joey Easterling	30019364	Major Community Project Coordinator	M. Graham Guthrie	2436063	Demonstration Coordinator
Jessica Guastadisegni	30042097		Kristen Duncan	2439044	

Please provide a brief summary of your recruitment and retention efforts.

At the beginning of each school year, Union University holds a freshman orientation event. Our SAACS chapter participated in this event by making a booth in the hallway to recruit freshman to become a member of our organization. A few members of our chapter helped run this event and it turned out to be a great success. We have a little over 18 freshmen in our chapter this year.

Another event our chapter held is "Pizza in the Pit," which is a day where we have pizza available for lunch in the Chemistry student carrel area we call the Pit. When the Chemistry majors come to get free pizza, we talk to them about SAACS and all that we do through it. This has always proven to be a great recruitment tool, because our members love talking about all they do in SAACS and how much fun we have doing it all. This year our Pizza in the Pit was held on September 10th.

One event we host every year is a Liquid Nitrogen Ice-Cream event. We hold this outside the Student Dining Hall and offer ice-cream to all students who pass. Everyone at Union University loves this event and it has definitely helped us in our recruiting efforts and also with our public relations on campus. We held the Liquid Nitrogen event on the September 25th, and it again proved to be a great success.

2. OVERALL CHAPTER ASSESSMENT: Union University SAACS Chapter

Using the questions listed below please provide an overall assessment of your chapter's activities for the 2008-2009 academic year. Assessments should cover the student and faculty perspective.

- What were the major objectives of your chapter during 2008-09?
- In which areas did you succeed?
- How did your chapter members benefit from the activities in 2008-09?
- What problems did your chapter encounter during 2008-09 and how did your chapter resolve these problems?

During the 2008-09 year, the Union University SAACS chapter had several major objectives. The first of these was to give Union University students a better understanding of chemistry and its practical applications to life. Methods of accomplishing this included the display of the SAACS booth and giving public chemical demonstrations. A major aspect of our NCW celebration is the Brown Bag Seminar series in which SAACS research students give oral research presentations to which the campus community is invited. Our chapter was delighted that six research SAACS students presenting this year. Our chapter had a desire to serve the surrounding community, both on and off campus, through science-related activities. Many such activities were carried out in the course of the year, such as a major community service project for a local food bank, the Day of Remembrance project, and the Boy Scout Nuclear Chemistry Merit Badge Workshop. Another goal of the chapter was to increase member participation in SAACS activities. Members were given responsibilities to help them realize their importance to the organization. A variety of events were hosted by the chapter appealing to a wide range of science and non-science students. The final major goal of the Union University SAACS chapter was to take an active role in participating in scientific meetings. This included all aspects of these meetings, from presentations at the ACS national meeting in Salt Lake City, Utah, to hosting local and nationally acclaimed chemistry speakers. The objectives of our chapter were ambitious, but were achieved and proved valuable to the community.

Across the board, the Union SAACS chapter succeeded in reaching nearly all of its objectives for the 2008-09 year. In giving students a better appreciation for chemistry and its applications, the SAACS booth, numerous social events, and student interactions were highly successful in creating a positive atmosphere and recruiting new chapter members. Service to the community was also a major success, as SAACS members took their work beyond the Department of Chemistry to other areas of the campus and the community. Chemistry proved to be an excellent avenue for service by SAACS members to others. In increasing participation, the chapter was partly successful, but room for improvement remains. During this year, new members were recruited, several of whom brought to the chapter's attention that the email lists needed to be updated to include all members. Our treasurer and secretary then worked together to purge the role of alumni and make sure all new members were included. They did an excellent job in meeting the needs in this area. In reaching the final objective of taking an active role in scientific meeting participation, our chapter was indeed successful, planning, hosting, and attending a number of meetings on campus, in the area, and even to the ACS national meeting in Salt Lake City, Utah. Thus, in the course of the year, the Union University SAACS chapter has been highly successful, and in the coming year, even greater successes are anticipated.

Members of the Union University SAACS chapter benefited from the activities in 2008-09 in a variety of ways. First of all, through the events and activities of the chapter, members gained a greater understanding of chemistry and its practical applications in life. Whether by

listening to the numerous speakers that the chapter hosted or by attending one of the off-campus meetings, the importance and practicality of chemistry in everyday life was clearly illustrated to students throughout the year. In addition to this, SAACS members developed and strengthened planning, organization, time management, and leadership skills. In each activity, whether simply by helping or in actually planning and organizing events in advance, members of SAACS gained valuable skills that will last them a lifetime. Another area of benefit that was especially important for our chapter this year was a greater appreciation for and commitment to community service. Union University SAACS has a long tradition of service to others, and this continued to be the case during the past year. Through the major community service project, Thanksgiving Basket project, Adopt an Abused Child for Christmas program, and Boy Scout Merit Badge Workshop, SAACS members demonstrated a sincere heart for service across the campus and throughout the community. Furthermore, members of SAACS gained firsthand experience in participation at scientific meetings. From the national ACS meeting to ACS section meetings and area undergraduate chemistry meetings, Union University SAACS students were involved in all stages of planning and participating in scientific meetings. Finally, another benefit that chapter members gained from SAACS activities was the development of close bonds with each other and the formation of a strong student support group. As members came to know each other better through these activities, they made friendships, established connections, and learned skills that will last them throughout their lives.

In general, the Union University SAACS chapter was fortunate enough not to encounter many problems during the 2008-09 year. The chapter continues to work toward greater member participation in SAACS activities. The greatest of these was making sure each member was kept up to date on the opportunities to serve and social activities made available by SAACS. However, the treasurer and secretary worked hard to make sure these needs were met. The Union University SAACS chapter has attained its goals for the 2008-09 academic year. Overall, this has been a banner year for the Union University SAACS chapter. The chapter is looking forward with great anticipation to carrying out its activities with the beginning of the new academic year. With the establishment of a new School of Pharmacy and admittance of its first class the future for growth in the number of chemistry majors is very bright. Obviously, we expect to recruit many of these new chemistry majors into our SAACS chapter. We are extremely optimistic about the future of the Union University SAACS chapter.

3. **COMMUNITY SERVICE: Union University SAACS Chapter**

What community service or public outreach programs benefited audiences outside of your institution (excluding National Chemistry Week activities)? Did you administer a Community Interaction-Student Affiliates (CISA) Grant program or an Innovative Activities Grant (IAG) program relevant to this category?

Chapters will be reviewed based on the complete list of activities (both local K-12 students and general community). You may include up to two pieces of supporting documentation for this category with your report. Please label with the name of the activity.

A. **Local K-12 students** (List NCW/Mole Day/Earth Day events in section 4)

What kinds of activities did you do to encourage younger students to learn science? Did you lead hands-on activities for elementary or middle school students (*Kids & Chemistry*)? Did you interact with or mentor high school students? If so, were they involved with a high school chemistry club? You may expand the table to accommodate more activities.

Date	Number of SA Participants	Number of Chapter Participants (non-SA)	Number of Faculty Participants	Name of Event/Location	Number served by your activity	Was the activity planned by the chapter?	Did you interact with a high school chem. club?*
11/4/2008	2	17	1	Remembrance Day Service Project. Students commemorated past tornado devastation by teaching Pope Elementary School students the excitement of chemistry through demonstrations and hands-on activities.	100	Yes	No
	3	1	0	Adopt a Carl Perkins Child for Christmas. SAACS students provided Christmas gifts and holiday cheer for a child from the Carl Perkins Center for Abused Children at a Christmas Party.	1	No	No

3/7/2009	2	3	2	Boy Scout Merit Badge. SAACS members instructed boys from local boy scout troops in nuclear chemistry.	25	Yes	No
4/7/2009	3	8	2	Kids & Chemistry Activities. During Lane Elementary School's Parents' Night entitled "Love, Read, Learn", SAACS students performed exciting chemistry demonstrations and led hands-on activities to foster scientific learning by utilizing the Earth Day theme "Air: The Sky is the Limit!"	32	Yes	No

*If yes, please include the name of the high school chemistry club.

Please provide a brief summary of your work with the elementary, middle, and high schools in your area.

One of the most rewarding experiences in life is investing in a child's life and watching their face light up with excitement. SAACS students were able to partake in this joyful experience through the various outreach events focused on encouraging children and sharing with the excitement for chemistry. During Remembrance Day, a day set aside for Union University students to commemorate past tornado tragedies and thank the Jackson community for their support during the difficulties, students traveled to Bells Elementary School. Students and faculty performed demonstrations and facilitated hands on activities geared toward teaching young students basic chemistry concepts observed on a daily basis.

Not only did students share chemistry, they also shared love and Christmas cheer through the Student Activities Council sponsored Christmas Party. SAACS sponsored a young girl from the Carl Perkins Center for Abused Children by encouraging her to feast on the cafeteria's food and presenting her with gifts for Christmas.

SAACS students also enjoyed helping with the Boy Scouts Nuclear Science Merit Badge workshop. SAACS students taught sections of the workshop on famous scientists and nuclear reactors across the United States. SAACS students also aided students in group activities and crafts to reinforce the chemistry concepts of the day.

Finally, SAACS students traveled to Lane Elementary during the "Love, Read, Learn" Parent's Night to teach the kids the chemistry of air and other gases. After explaining the importance of safety in chemistry and handing out safety goggles, SAACS students led the children in hands-on activities demonstrating gas-producing chemical reactions and laws of gases. After grasping the hands-on activities, students were then shown even more excitement through chemistry with chemistry demonstrations. The Kids-in-Chemistry activities and demonstrations reinforced the "Air: The Sky is the Limit" theme of Earth Day.

B. General Community

How did you serve the community? How did you promote the positive image of chemistry? You may expand the table to accommodate more activities.

Date	Number of SA Participants	Number of Chapter Participants (non-SA)	Number of Faculty Participants	Name of Event/Location	Number served by your activity	Was the activity planned by the chapter?
10/21/2008	4	3	1	Flyers for Major Community Service Project. In order to encourage community involvement, students passed out flyers to promote "Trick or Treating for Canned Goods for RIFA." RIFA provides food and clothes for the underprivileged.	300	Yes.
11/8/2008	4	6	2	Tree Give-Away. In partnership with the Jackson Tree Board, students loaded trees into families' trucks and informed them of the best ways to care for and manage their free trees.	1200	No
10/31 - 11/5/2008	6	8	2	Major Community Service Project. As an initiative to spread enthusiasm for chemistry to all of Jackson, students collected canned goods for a local help center; some students served in the soup kitchen while other students presented chemistry demonstrations to the GED class.	150	Yes
11/22/2008	2	3	0	Thanksgiving Day Baskets. To celebrate the Thanksgiving holiday and provide food for families in need, students joined the local Rotary Club in putting together baskets of traditional thanksgiving day food for distribution to the needy.	1100	Cooperatively Yes

Please provide a brief summary of your community service activities.

An integral component of any healthy organization is its initiative to invest back into its community. Through Union University's Student Affiliates Chapter of the American Chemical Society, students have been given the opportunity to contribute to Union University and, even more importantly, the greater Jackson community. As students have invested their time in SAACS, they have participated in

service activities to feed, educate, and encourage the residents of Jackson, TN. During the Tree Give-away, SAACS partnered with the Jackson Tree Board to distribute donated trees to Jackson residents in an attempt to replace trees damaged and destroyed from the recent tornado devastation. Not only did students tote and load trees and shrubs, they also educated the recipients on the proper method of planting and watering the trees.

SAACS students also shared the “transforming power of chemistry” through the semester’s major community service project. The major service project began with the collection of food for RIFA, the local help center and shelter, by “trick-or-treating” for canned goods through various Jackson neighborhoods. Over 640 pounds of food was delivered to RIFA. Students then volunteered in the “soup kitchen” and presented chemical demonstrations during the nightly GED class. Demonstrations were performed and talks were given to encourage the students’ interest in chemistry.

Finally, to further serve the community, SAACS students joined with a local Rotary club to stock more than 250 Thanksgiving Day food baskets. The SAACS chapter donated money, \$100, and volunteers toward this effort. These baskets came with complete furnishings for a traditional Thanksgiving day feast and would be distributed to Jackson families in need of food during the holidays.

Through the various service activities, SAACS at Union University utilized the opportunity to invest in the community of Jackson, TN and share the joy of chemistry through trees, education, and food.

4. NATIONAL CHEMISTRY WEEK/MOLE DAY/EARTH DAY: Union University SAACS Chapter

What role did your chapter play in the promotion of National Chemistry Week, Mole Day, or Earth Day? How many persons were served during your activities? Include information on how you used the ACS Office of Community Activities, if applicable. You may expand the table to accommodate more activities.

Date	Number of SA Participants	Number of Chapter Participants (non-SA)	Number of Faculty Participants	Name of Event/Location	Number served by your activity	Was the activity planned by the chapter?
10/20/2008	8	15	2	Fire and Light Demonstration Project. To promote enthusiasm for chemistry and involve the student body in National Chemistry Week, chemistry demonstrations were performed by faculty and students.	38	Yes
10/20/2008	6	10	4	Brown Bag Seminar. Jill Frank presented her summer research on "Precious Metal Recovery of UEA Fuel Cell Plates."	26	Yes
10/21/2008	7	21	7	Brown Bag Seminar. Tiffany M. Parrish presented her summer research on "Modification of the Green Chemistry Laboratory Manual for Homeschooled High School Students." Jessica Guastadisegni also presented her summer research on "Modification of the Green Chemistry Manual for a Homeschooled Environment."	46	Yes
10/22/2008	3	5	2	Periodic Table of Cookies. Students combined their cooking skills and love for chemistry to produce a Periodic Table of Elements with cookies. The entire student body was encouraged to test their chemistry trivia and eat their favorite element.	900	Yes

10/22/2008	8	23	6	Brown Bag Seminar. Sarah Kim presented her summer research on "Hydrogen Bonding in Ortho-Substituted Benzoates."	50	Yes
10/23/2008	7	14	4	National Mole Day. In order to celebrate National Mole Day, students gathered for the crowning of the Mole King and Mole Queen, to take a swing at the Mole piñata, and to enjoy the delicious Mole Cake. To commence the Mole Day festivities, students were encouraged to guess the number of moles of jelly beans in the jar and the winning guess received the jelly beans!	22	Yes
10/23/2008	4	13	5	Brown Bag Seminar. Joey Easterling presented his summer research on "Alcohol Oxidation by Metallic Complexes of p-Benzoquinones."	32	Yes
10/24/2008	5	16	5	Brown Bag Seminar. Graham Guthrie presented his summer research on "A Quantum Chemical Investigation of Pd-Catalyzed Hydrogen Production."	34	Yes
10/24/2008	13	14	5	NCW Semi-Formal Dinner with Keynote Speaker Dr. Jerry Thornthwaite. This event was the culmination of National Chemistry Week activities. After students and faculty enjoyed a nice dinner, Dr. Thornthwaite gave a presentation entitled "The Formulation", a therapeutic cocktail designed and patented as a preventative treatment against cancer.	36	Yes

4/21/2009	1	0	1	Earth Day Tree Planting. To encourage and reinforce carbon-cycle concepts involving plants and their importance in our lives, representatives of Union's SAACS Chapter planted a tree and helped elementary students mulch and water the tree as a part of ongoing tree restoration at Jackson schools following tree damage.	23	Yes
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Please provide a brief summary of your National Chemistry Week/Mole Day/Earth Day activities. You may include up to two pieces of supporting documentation for this category with your report. Please label with the name of the activity.

Through National Chemistry Week, Mole Day, and Earth Day, students from Union University's SAACS chapter were able to share with Union University and the city of Jackson, TN, the excitement and power of chemistry. In order to kick off the week of celebration and activities, students and faculty performed a Fire and Lights demonstration. As the reactions sparked and exploded, students were amazed and surprised at the entertainment. As the week continued, students presented their research experiences from the past summer with faculty and students over lunch. Students encouraged community and university involvement in National Chemistry Week by handing out flyers publicizing the chapter's upcoming Community Service Project as well as baking multiple batches of cookies. The cookies were frosted and formed into a Periodic Table of Cookies. As the student body traveled through the main hallway, SAACS students encouraged them to take part in the chemistry trivia and enjoy their favorite element's cookie! National Mole Day festivities were next to excite the student body. Crowning the Mole King and Mole Queen and smashing the traditional Mole piñata were followed by a delectable Mole cake and jelly bean count. As students attempted to count the moles of jelly beans, they learned the significance of the Mole. The winning guess enjoyed Mole day even more as they ate the prize of jelly beans! Finally, to conclude National Chemistry Week, SAACS organized a Semi-Formal dinner. Students and faculty were able to enjoy spending time together outside of the classroom while learning of the continuing research on the chemistry and treatment of cancer by Freed-Hardman University's Dr. Jerry Thornthwaite. Through National Chemistry Week, students were able to promote chemistry and share its excitement with the students of Union University.

Not only did Union University Students promote chemistry during National Chemistry Week, they also enthusiastically participated in Earth Day. Students traveled to Lane Elementary during the Parent's Night to teach the kids the chemistry of gas and air. After explaining the importance of safety in chemistry and handing out safety goggles, SAACS students led the children in hands-on activities demonstrating substance and laws of gases. After grasping the hands-on activities, students were then shown even more excitement through chemistry with chemistry demonstrations. The activities and demonstrations reinforced the "Air: The Sky is the Limit" theme of Earth Day. Finally to reinforce the concepts learned during Parent's Night, SAACS planted a tree and taught the children the importance of trees, water, and air.

5. PLANNING/ATTENDING SCIENTIFIC MEETINGS: Union University SAACS Chapter

Please list any scientific meetings (national, regional, or local) that your chapter attended, planned, or hosted. Please note the professional organizations with which the events were affiliated, if applicable. In the summary box, include the names of students in your chapter who presented research or chapter-related posters at events that were attended by the chapter. Only chapter-related scientific meeting attendance should be listed, not individual student conference attendance. You may expand the table to accommodate more activities.

Date	Number of SA Participants	Number of Chapter Participants (non-SA)	Number of Faculty Participants	Name of Event/Location	Number served by your activity	Was the activity planned by the chapter?
9/18/2008	12	18	4	The Kentucky Lake Section Meeting of the American Chemical Society. Union University SAACS chapter hosted the Kentucky Lake Section of the American Chemical Society monthly meeting.	52	Yes-within the calendar of the Kentucky Lake ACS Section.
10/23/2008	6	3	2	The Kentucky Lake Section Meeting of the American Chemical Society. During the monthly sectional meeting at the University of Tennessee at Martin, Union SAACS students performed demonstrations as part of the meeting's program.	72	No
11/14/2008	1	3	1	Southeastern Regional Meeting of the American Chemical Society. At the regional meeting in Nashville, SAACS students participated in the undergraduate program and presented a poster entitled "Carrying on the Light of Chemistry after a Storm."	2500	No
11/21-11/22/2008	8	18	2	Tennessee Science Teachers Association. SAACS students attended sessions on teaching science in K-12 grades. They also assisted a Union University chemistry faculty member in the presentation of a Green Chemistry laboratory session for	1100	No

				high school teachers.		
11/21-11/22/2008	4	1	1	Tennessee Academy of Science. SAACS students attended technical sessions in chemistry, environmental science, and biochemistry.	600	No
3/22-3/26/2009	6	0	5	The 237th Annual ACS National Meeting. Through the interesting speakers, chapter award acceptance, and research presentations, students and faculty participated in the undergraduate program and the technical sessions.	11,000	No
2/28/2009	4	0	2	29th Annual Undergraduate Research Conference, University of Memphis Three SAACS students presented oral papers on their research at this meeting	85	No
4/4/2009	2	0	1	32nd Area Collegiate Chemistry Meeting. Hosted by Murray State University's SAACS chapter, the meeting held a poster session from five universities, including two presentations from Union University students, and provided a broad synopsis of the activities of Chemistry students across the region. The keynote speaker for the meeting was ACS President-Elect Dr. Joseph Francisco, who presented a motivating challenge to college students and faculty on "The Joys of Chemistry and the Challenges Ahead."	65	No

Please provide a brief summary of your scientific meeting activities. You may include up to two pieces of supporting documentation for this category with your report. Please label with the name of the activity.

The SAACS members and affiliates have enjoyed attending and even hosting a wide variety of meetings this year. To kick off the participation in scientific meetings, Union University's SAACS chapter hosted the Kentucky Lake Section of the American Chemical

Society's (KLACS) meeting. During its 50th year of supporting the chemical profession, the KLACS meeting began with a social hour and a catered meal followed by a program entitled "*Is It Chemistry...or Magic*" from ACS tour speakers Dr. Otis Rothenberger and Dr. James Webb. Attendance at this successful meeting included members of KLACS, many Union faculty and students, members of the Jackson community. Following the engaging meeting, the next month's KLACS meeting was also attended by Union students and faculty. SAACS students joined with other West Tennessee university SAACS chapters to provide the meeting's program by giving demonstrations to those in attendance at the University of Tennessee at Martin. As November meetings arrived, students attended and contributed to a number of meetings. At the Southeastern Regional meeting of the American Chemical Society, students attended and presented a poster entitled "*Carrying the Light of Chemistry after a Storm.*" Students also attended the Tennessee Science Teachers Association meeting. The statewide meeting provided SAACS students a welcoming forum to present to science (chemistry) teachers, greener laboratory experiments for use in their classes. Students also attended other various informative meetings on methods of teaching chemistry to K-12 students. The final meeting of the month was the Tennessee Academy of Science. Students attended various sessions in chemistry, including environmental and biochemistry. During the spring semester, students traveled to the 237th Annual ACS National Meeting in Salt Lake City, Utah. This meeting provided students the opportunity to present their research to many different chemists from around the world as well as listen to their choice of speakers. The meeting was informative as well as a great networking opportunity. The 29th Annual Undergraduate Research Conference at the University of Memphis was another meeting attended by SAACS students. At the meeting, students were given the opportunity to present papers on their research. The final meeting attended by SAACS students from Union University was the 32nd Area Collegiate Chemistry Meeting. During the course of this meeting, SAACS students joined students from five other schools in presenting their research during poster and oral presentation sessions. The meeting provided SAACS students a view of the range of chemistry projects and activities across the region. As a culmination of the meeting, ACS President-Elect Dr. Joseph Francisco presented the motivational keynote address challenging the students and faculty on "The Joys of Chemistry and the Challenges Ahead."

6. **COMMUNICATION: Union University SAACS Chapter**

Briefly describe how your chapter communicated about its meetings and activities to chapter members and the general public. You should include information about your Web page, media coverage of events, flyers, e-mails, etc. Also, discuss the effectiveness of your communication efforts. You may include up to two pieces of supporting documentation for this category with your report. Please label with the name of the activity.

To keep chapter members informed about the many activities of the chapter, several methods were employed. So that all students could be kept abreast of the upcoming chapter activities weeks in advance, the permanent SAACS glass display case was used to hold a calendar of events that was updated on a monthly basis. This case is located in the Department of Chemistry just outside where students and faculty exit major departmental classrooms. In addition, calendars with each semester's events were created via Excel sheets and distributed among members along with contact lists of the coordinators of each event. The president and vice president used email to keep officers abreast of the latest developments in advance of chapter meetings. The chapter's senior, junior, sophomore, and freshman representatives used email, campus voicemail, Facebook, and personal interactions to notify all chapter members of the upcoming meeting. Also, the secretary prepared fliers for each meeting and event which were prominently posted around campus, notifying all the students of chapter activities. To involve Union University faculty from areas other than chemistry, important SAACS events were posted on the weekly calendar of events for the College of Arts and Sciences that was distributed throughout the campus by the Dean of the College of Arts and Sciences. Chemistry faculty were also notified by email of upcoming events and asked to announce the activities in their classes.

The chapter website was kept updated <http://www.uu.edu/dept/chemistry>. This site contains chapter information, a calendar of events, a photo gallery highlighting chapter activities, past and upcoming special speakers, SAACS researchers, and information about the chemistry program. The popular student networking site Facebook was used to notify students of events and share pictures and information pertinent to the group.

7. DEPARTMENT/COLLEGE SERVICE: Union University SAACS Chapter

Did your chapter plan or participate in any departmental activities (e.g. tutoring programs, visiting with departmental speakers, career fairs, mock interview sessions, résumé reviews) or any campus-wide activities? You may expand the table to accommodate more activities.

Date	Number of SA Participants	Number of Chapter Participants (non-SA)	Number of Faculty Participants	Name of Event/Location	Number served by your activity	Was the activity planned by the chapter?
9/6/2008	2	0	1	SAACS Display Booth. During the college activities fair SAACS students informed new students of SAACS, its importance and its events.	600	Yes
11/6-11/7/2008	3	5	5	Homecoming Activities. During the homecoming festivities, SAACS hosted seminar presentations from alumni, presented awards, and hosted a reception for alumni.	23	Yes
12/1/2008	2	1	2	Christmas Decorations. Students decorated the chemistry department and 3 rd floor of White Hall and made spiced cider each day to encourage students as they faced finals.	All students, faculty, and visitors to the chemistry floor.	Yes
3/21-3/25 ?	6	0	5	ACS National Meeting Hotel Funding. As a help to students, SAACS provided funding to support students in paying for hotel rooms during their stay at the ACS National Meeting.	3	Yes
3/13/2009	8	12	3	West Tennessee Regional Science and Engineering Fair. SAACS Chapter members assisted in many different ways from managing registration to helping with awards, safety and display compliance, and security. Students were vital to every aspect of hosting the science fair.	275	No

Please provide a brief summary of your department/college service activities. You may include up to two pieces of supporting documentation for this category with your report. Please label with the name of the activity.

The Union University Department of Chemistry has been incredibly supportive of SAACS events and activities throughout the year. To thank and encourage the department and its students, SAACS serves the department in a number of ways. During the week of freshman orientation, SAACS students represented the organization during the College Activities Fair. Incoming students enrolled in science were encouraged in their pursuit of science degrees, advised on classes to take, and informed of the advantages and excitement of being involved in SAACS. As homecoming activities commenced, SAACS also welcomed alumni back through a series of lectures. Dr. Lee Nicholson presented his work as an optometrist as well as his fondest memories of Union University's chemistry department. Students were also exposed to the excitement and dangers of practicing medicine in the middleeast by a Union University chemistry graduate who is helping establish a clinical educational institution for medical care-givers to women and children. Dr. Mark Prince also spoke. Dr. Prince informed faculty and students of his work as an Information Specialist for Chemical Abstracts and the range of work available. After the presentations were made, departmental awards were given out to deserving staff and faculty followed by a reception to fully celebrate and catch up with alumni.

To celebrate the Christmas holidays, SAACS decorated the Chemistry department with a chemistry ornamented tree (a "chemis-tree"), molecule model snowflakes, and festive streamers. During the spring, SAACS aided students by supplementing the cost of research students' hotel cost as they traveled to Salt Lake City, Utah to present their summer research at the 237th Annual ACS National Meeting. Finally, SAACS students were involved in every aspect of the West Tennessee Regional Science and Engineering Fair. SAACS students volunteered their time and skills as calligraphers, registration, safety regulation, security, qualification compliance regulation, judging, tallying, final awards, fall orientation meeting for teachers and so much more.

8. SPEAKERS/TOURS/FIELD TRIPS: Union University SAACS Chapter

Please list the name and affiliation of each speaker and the title of his/her presentation. Please list the name and location of the companies, institutions, or organizations you visited for field trips or tours. Technical meeting and conference speakers should not be included here: please list those in the scientific meeting category. All green chemistry-related speakers should be reported in category 9. You may expand the table to accommodate more activities.

Date	Number of SA Participants	Number of Chapter Participants (non-SA)	Number of Faculty Participants	Name of Event/Location	Number served by your activity	Was the activity planned by the chapter?
9/26-9/27/2008	6	2	1	Vanderbilt Graduate School Open House. Students toured the research labs and research support centers at Vanderbilt University and learned of graduate school opportunities.	9	No
3/6-4/3/2009	6 (average over 4 seminars)	14 (average over 4 seminars)	5 (average over 4 seminars)	Departmental Faculty Research Presentations. Presentations were given by faculty members each Friday through the month of March focused on their summer research opportunities and foci.	29 (average over 4 seminars)	Yes
4/17/2009	7	13	5	Seminar presentation by Dr. Tommy Sewell. Dr. Sewell presented his research on "Shocking Studies of Energetic Materials Properties and Behaviors."	28	Yes
4/24/2009	6	15	4	Seminar presentation by Dr. Keith Hollis. Dr. Hollis presented his research on "Tridentate CCC-NHC Carbenes: Synthetic Method Development and Applications in Organic Synthesis and Nanomaterials.	24	Yes
3/8/2009	3	0	1	Tour of Jackson General Hospital's Labs. Jackson General was toured by students to learn of the practical applications of chemistry and its implications in toxicology and medicine.	12	Yes
5/1/2009	2	3	4	Union University Scholarship Symposium Speakers. Five chemistry students presented	850	No

				oral presentations of their research and one student gave a poster presentation.		
5/8/2009	8	17	5	Seminar presentation by Dr. John McLean. Dr. McLean presented his research on "Structural Separations by Ion Mobility-Mass Spectrometry: New Prospects for Complex Biological Systems."	27	Yes

Please provide a brief summary of your speakers/tours/field trips. Please include information as to how these activities assisted chapter members with building their professional development skills. You may include up to two pieces of supporting documentation for this category with your report. Please label with the name of the activity.

Through the speakers hosted by Union University's SAACS chapter, students have learned of many aspects of chemistry research, the chemistry job field, graduate school, and developing areas of science. SAACS students first traveled to Nashville for the Vanderbilt University Center for Molecular Toxicology graduate school tour. The day highlighted the importance of graduate school and provided information on applying to and performing in graduate school, as well as, vignettes of research by Vanderbilt faculty.

During the semester, students were given the opportunity to listen to SAACS hosted seminar speakers. And during the month of March, the faculty of Union University presented their proposed research for the summer. From computational chemistry projects to environmental research projects, the wide range of research opportunities at Union University informed students contemplating their independent undergraduate research project. During April and part of May, seminar speakers from across the United States came to present their research. The three professors' topics ranged from energetic materials properties to carbene chemistry and even included Ion Mobility Mass-Spectroscopic instrument design.

Also, SAACS students were given the opportunity to see chemistry in action as they toured the highly advanced medical laboratories of Jackson Madison County General Hospital. The students toured the toxicology lab and the general analytical laboratory and learned of the applications of many of the instruments used in those laboratories.

As the culmination of the year, Union University hosts a Scholarship Symposium. During the symposium, SAACS students attended the speakers' presentations as well as presented their research to the attendees.

Through the variety of speakers, tours and field trips, a well-rounded environment was provided for students to learn, from theoretical research speakers to watching the robotic laboratory instruments at work in a hospital laboratory setting.

9. GREEN CHEMISTRY (optional): Union University SAACS Chapter

In order to be recognized as a Green Chemistry chapter, Student Affiliates chapters must engage in a least three different types of green chemistry activities during the academic year. Please reference the “Student Affiliates Chapter Report Review Criteria and Considerations” to help you craft this section. **NOTE: You can repeat activities in this section that you report in other categories (i.e. conferences, community outreach). This category will only be used to determine Green Chemistry chapter status. It will not be used to determine SA chapter award status.**

Date	Number of SA Participants	Number of Chapter Participants (non-SA)	Number of Faculty Participants	Name of Event/Location	Number served by your activity	Was the activity planned by the chapter?
1/5-1/23/2009 3/22-3/28/2009	4	3	1	Environmental Global Outreach Trip. Students devised educational chemistry packets for use on the spring break mission and outreach trip to North Africa. The packet utilized Green Chemistry concepts to provide informative and applicable projects for the students in North Africa.	65	Collaboratively with Union University engineering student group
11/4/2008	2	17	1	Remembrance Day Service Project. Students commemorated past tornado devastation by teaching the elementary students of Pope Elementary the joys of chemistry through demonstrations and hands-on activities.	100	Yes
11/20/2008	4	3	1	Green Chemistry Homeschool Field Trip SAACS members helped homeschool high school students understand basic chemistry concepts and experiments through a homeschool chemistry field trip to Union University’s laboratories.	16	Yes
11/21-11/22/2008	8	18	2	TSTA Green Chemistry Workshop. Students traveled to the TSTA meeting and presented a workshop on Green Chemistry demonstrations and strategies to high school chemistry teachers.	28	Yes

Please provide a detailed summary of a minimum of three green chemistry activities, including a two-three sentence explanation of why you think each activity qualifies as green chemistry. The ACS Green Chemistry Institute will use this information to determine if your activities qualify as green chemistry. You may include up to three pieces of supporting documentation (i.e. speaker abstracts) for this category with your report. Please label with the name of the activity.

As students learn of the uses and practicality of chemistry, they must also learn to use environmentally friendly alternatives. Union University SAACS students have been able to focus on spreading this theme to local schools and literally around the world.

The first Green Chemistry activity was the Remembrance Day activities at Pope Elementary School. SAACS students educated the children on chemistry and its application to their lives. Demonstrations, such as a Vitamin C clock reaction, gun cotton experiment, oscillating reaction, were used to excite young students about the power of chemistry. To encourage long-term knowledge of chemistry, students also led hands-on activities such as pH change in Goldenrod Paper Secret Messages. The service event ended as everyone enjoyed liquid nitrogen ice cream. The event is Green Chemistry in that the experiments done were chosen and even changed in order to use more environmentally friendly chemicals and produce less harmful products. For example, the normal clock reaction and oscillating reactions utilize beautiful but harmful transition metals. During the Remembrance Day, the reactions were changed in order to use gentler and less harmful reactants.

The next Green Chemistry event was the homeschool field trip. From set-up to facilitation, SAACS members helped homeschool high school students understand basic chemistry concepts and experiments through a homeschool chemistry field trip to Union University. The fieldtrip utilized experiments and concepts outlined in the department's Green Chemistry Homeschool Manual and further focused their experiments on spectroscopy and light. Students were able to observe and participate in exciting chemistry aspects not available otherwise. This event was also a Green Chemistry focused event. All of the reactions utilized the Green Chemistry Homeschool Manual, a manual consisting of purely green experiments designed to be performed at home.

In order to focus on those less exposed to chemistry, students devised educational chemistry packets for use on the spring break mission and outreach trip to North Africa. The packet utilized Green Chemistry concepts to provide informative and applicable projects for the students in North Africa. Focused on light and its impact, North African students participated in Goldenrod Paper experiments, created color and UV focused crafts, and learned of the importance of disinfecting and light. The activities involved reactions that could be toted in luggage. These experiments were very safe and informative to the North African students.

Finally, students presented an overview of lessons and experiments found in the Green Chemistry High School Lab Manual at the TN Department of Environment and Conservation workshop. They demonstrated to the teachers the lab manual's practicality and ease as teachers were encouraged to participate in the experiments. The workshop covered main concepts in chemistry including ionic and covalent bonds, polar and non-polar bonds, gas laws, and acids and bases. The simple experiments utilized chemicals that teachers could use to maintain the Green-ness of their labs and classrooms. This event qualifies as Green Chemistry because not only did the students perform Green experiments, they motivated teachers to adapt their experiments and concepts into labs of their own. The ability of students to provide Green options to teachers across the state will aid in promoting Green Chemistry!

10. FUNDING: Union University SAACS Chapter

Briefly describe any funding that was donated to your chapter (e.g., from the department), as well as any funds that were raised through various activities including proposal writing (IAG, CISA, NMTG, grant funding should be included). In the description you should not only include the amount of money that was raised or donated, but also indicate how the funding was spent. You may include up to two pieces of supporting documentation for this category.

Optional: Upload the Chapter Finances template. Complete a chapter finances spreadsheet using one of the downloaded spreadsheets or your own template. If you choose to upload a file please indicate in the comments below that you have done so.

Do not include the statement in this document.

The Chapter Finance template provided by the SA Program Office was modified to fit the accounting system with which we work at our institution. A copy of the modified spreadsheet was uploaded with this report. The income/expenses of several SAACS-sponsored activities are more easily handled through a departmental account administered by the chair of the chemistry department. Thus, all meal events such as the KLACS meeting hosted by the Union University SAACS chapter, the semi-formal NCW dinner, and most of the pizza nights are financially handled through the more flexible departmental account. Donations for Thanksgiving baskets and the Christmas gifts for the Carl Perkins Abused Child guest are not typically deposited and then requisitioned. When the chapter provides the supplies for members to make cookies for the Periodic Table of Cookies or cake and moleata for Mole Day, a member makes the required purchases and is then reimbursed from petty cash, sometimes from the departmental account and other times from the SAACS Agency account. Perhaps, \$1,500-\$2,000 is handled in this way. This places more responsibility on the faculty advisors, however, should any question arise regarding impropriety they would rather be the ones dealing with those issues. All accounts are kept with the Union University Business Office and thus enjoy the protections and security provided by the institution.

11. SOCIAL FUNCTIONS: Union University SAACS Chapter

Please list the social functions that were part of your yearly chapter activities. Social activities include events such as holiday or back-to-school parties; bowling or skating events; dances, banquets, etc. You may expand the table to accommodate more activities.

Date	Number of SA Participants	Number of Chapter Participants (non-SA)	Number of Faculty Participants	Name of Event/Location	Number served by your activity	Was the activity planned by the chapter?
9/10/2008	9	10	5	Pizza in the Pit. All students enrolled in chemistry classes were invited to enjoy pizza in the chemistry department.	20	Yes.
9/12/2008	9	20	12	Fall Kick Off Party. Students and faculty from Chemistry, Physics, and Engineering were all invited to enjoy the festivities, food, and fellowship together in a cross departmental celebration.	100	Yes.
9/25/2008	3	3	2	Liquid Nitrogen Ice Cream. This delectable treat was prepared in the main hallway for the student body as it entered the cafeteria and provided an avenue to share just a taste of chemistry with every student that walked by!	45	Yes.
10/9 - 10/31/2008	7	10	4	“Putting a Face on Chemistry” Presidential Challenge Video Competition. In response to the Presidential challenge, Union’s SAACS chapter involved children, students, and faculty in “Putting a Face on Chemistry” through a five minute film directed at teaching children what chemistry is.	Accessible via YouTube	Yes.
12/5/2008				Christmas Party. Complete with pizza, drinks, and a movie, students and faculty relished the time to relax and enjoy each other’s company before finals and Christmas		Yes.

				break.		
12/16/2008			1	Garfield Study Break. To encourage students in their studies, Dr. Baldwin hosted students at his house for lasagna, cheesecake, Christmas stories, and a well deserved study break.		Yes.
5/8/2009				Spring Celebration. As a time honored tradition, students and faculty celebrated the culmination of yet another school year by gathering at Dr. Johnston's house for food and the greatly anticipated faculty versus students volleyball game.		Yes.

Please provide a few details about your social events and how they help to boost chapter morale and encourage chapter participation. You may include up to two pieces of supporting documentation for this category with your report. Please label all supporting materials with the name of the activity.

Activities and events have great impact on the motivations for and retention of members. During the fall semester, SAACS hosted Pizza in the Pit. During the first week of classes, all students enrolled in chemistry courses, especially freshmen, were encouraged to come eat pizza and get to know the SAACS organization. During this initial pizza party, many students show interest in and sign up for SAACS. As the start of the school year continued, the Physics, Engineering, and Chemistry departments joined together for the Fall Kick-Off Party. Students and faculty devoured famous West Tennessee barbeque and pies and then faced off through the highly anticipated student vs. professor volleyball match. These initial activities strongly encouraged participation in SAACS events and motivated past members to stay involved. As student involvement increased, SAACS hosted the next social event: Liquid Nitrogen Ice Cream. Students concocted this tasty treat in the middle of the main corridor in one of the Student Union Building, right outside the cafeteria. As students walked by, SAACS members astounded them with the beauty and flavor of the wonderful experiment. SAACS members were encouraged by the general student population's interest in chemistry.

This encouraged further participation in SAACS events, such as the Presidential Movie Challenge. Over fifty faculty, students, and children invested time and effort to produce a movie focused on "Putting a Face on Chemistry." Many students were excited to work on the project and see their hard work manifest itself in video form. As the semester came to a close, Christmas festivities dominated the SAACS calendar. First, the Christmas party provided the members a time to simply sit back and relax. Watching the movie *Amazing Grace*, the story of William Wilberforce, eating pizza, and enjoying time to hang out with friends gave many members a much needed rest before finals. During finals, SAACS hosted one last event. The Garfield Study Break was hosted by Dr. Baldwin at his house and involved all of his organic students, as well as the SAACS officers. Dr. and Mrs. Baldwin hosted the students and fed them lasagna and cheesecake. After

the dinner, students gathered to hear Christmas stories. The Christmas Party and Garfield Study Break were wonderful times to allow members, officers, and students to enjoy their time in college and in SAACS. The activities were most refreshing and motivated students to continue in their studies. The final social event of the year, the Spring Celebration, was held in the small gym of Union's Penick Academic Complex. Once more, students and faculty gathered to eat and fellowship before the whirlwind of finals. Volleyball and hotdogs and hamburgers straight off the grill encouraged students to sit back and enjoy the company of friends and food. The celebration encouraged the students in their studies and the excitement of SAACS. Through all of the activities, students were encouraged in their studies and motivated in their participation in SAACS. The wide range of activities also allowed all diverse aspects of the SAACS students to be met.

12. CHAPTER BUSINESS MEETINGS: Union University SAACS Chapter

Please list the executive committee and chapter business meetings that were held. In the purpose of meeting column, please list the major goals of the meeting—i.e., to elect officers; to plan for the April outreach activity; to plan for the holiday party. You may expand the table to accommodate more meetings.

Date	Number of SA Participants	Number of Chapter Participants (non-SA)	Number of Faculty Participants	Purpose of meeting
9/3	2	0	2	Executive Meeting. Events and dates for the fall semester were planned.
9/8	6	11	2	Officer Orientation. Student officers and advisors enjoyed dinner and then discussed responsibilities involved in each position as well as the calendar of events for the semester.
9/11	8	31	2	Member Meeting. Students were welcomed back to school and were informed of the upcoming events of the semester.
9/16	5	5	2	KLACS Worker Informational Meeting. Volunteers for the Kentucky Lake local section meeting were informed of responsibilities and provided with needed resources.
10/7	5	8	2	Executive Meeting. Upcoming National Chemistry Week events and Video Competition details were discussed and further coordinated.
10/9	7	25	2	Member Meeting. Volunteers for National Chemistry Week, the Major Community Service Project, and “Putting a Face on Chemistry” movie challenge were recruited and members were encouraged to support and attend events.
11/18	6	6	2	Executive Meeting. Officers were encouraged to support the last few events. Thanksgiving basket details were provided and movies for the Christmas party were nominated.
11/20	7	19	2	Member Meeting. Volunteers for the Thanksgiving basket service project were informed of final details and members voted on the movie for the Christmas party.
2/17	5	3	2	Executive Meeting. Dates for spring events were finalized and upcoming events were discussed among the officers.
2/19	6	18	2	Member Meeting. Members were welcomed back from winter break and informed of upcoming events.
3/5/2009	1	3	2	Boy Scout Merit Badge Volunteer Meeting. Students were informed of order of events of Boy Scout event and were delegated topics of interest to speak to troops

				events of Boy Scout event and were delegated topics of interest to speak to troops about.
3/17	4	3	2	Executive Meeting. Earth day activities were finished and officers were notified of the upcoming officer elections.
3/19	5	14	1	Member Meeting. Officer interest forms were distributed and members were encouraged to get involved with Earth Day activities and Lane Elementary.
4/14	3	2	2	Executive Meeting. Officers were informed of final semester plans including Officer Installation to celebrate their year of service.
4/16	5	13	2	Officer Elections. Members voted on officers and were reminded of the upcoming Spring Celebration and canoe trip.
5/4	7	13	2	Officer Installation. Outgoing officers were thanked for their service and upcoming officers were charged to excel.

CHAPTER BUSINESS MEETINGS—PART II: Union University SAACS Chapter

Please discuss the effectiveness of your meetings—were you able to accomplish your goals? Describe how your chapter meetings assisted chapter members with developing leadership skills. Include any incentives that your chapter provided to encourage attendance at chapter meetings.

In order to have a functioning SAACS chapter, members must be informed of and encouraged to participate in the various SAACS organized events. Executive meetings and member meetings kept members and officers up to date on the upcoming activities of SAACS. Through printed agendas and calendars, the wall calendar, and time for any and all pertinent questions, SAACS members were informed of events and given the means to involve themselves as much as possible. The handouts and questions encouraged unity within the section. As events were planned, officers and members were given opportunity to coordinate the activities. As students stepped up to lead, they made announcements during meeting and explained information. Students learned to motivate and inspire participation in their events through the meetings.

13. LOCAL SECTION INTERACTION: Union University SAACS Chapter

Briefly describe any interactions that you've had with your ACS Local Section. If you have not worked with your Local Section, please list the barriers that prevent these interactions. Also, please include any suggestions that might be passed along to ACS Local Sections that are looking for more ways to interact with Student Affiliates Chapters. **NOTE: This category will be used to increase Local Section and Student Affiliates Chapter interactions. It will not be used to determine SA chapter award status.**

Throughout the year, students participated in and even hosted the Kentucky Lake Section of the American Chemical Society's meetings. Student members and KLACS members supported each other and enjoyed each other's company, however interaction outside of a handful of meetings was limited. This lack of interaction is largely due to lack of communication between the local ACS section and the student affiliates. The most effective communication link between student affiliates and the local section was through the SAACS chapter faculty advisors who often announce meetings in class and posted a meeting announcement on their office door. Activities beyond meetings were never publicized, thus not attended. As students and KLACS members also follow different schedules, the attendance and interaction suffered another blow.

As student affiliates move to student members, interaction between the two groups should increase. Communication is key in organizations and there should be no disconnect within ACS. Students and local section members are not able to interact with each other if they do not hear of activities or service opportunities. With the increase in student roles in the ACS, student interaction through the local sections should increase, for the benefit of students and local members alike.