American Chemical Society

Student Chapters Submission Reporting

Chapter: Monmouth College Student Chapter
Academic Year: 2018-2019
Report status: Pending

Chapter Information

Members

The *Total Chapter Members* count, the *ACS Student Members during Academic Year* count, and the *Non-ACS Members* count will be available in the PDF once the Student Chapter report is submitted. Please view your dashboard for these values.

Department/Institution/Information

The *Undergraduates Majoring in Chemistry* count and the *Chemistry Faculty* count will be available in the PDF once the Student Chapter report is submitted. Please view your dashboard for these values.

Chapter Officers

Chapter Co-President	Brandon Allen
Chapter Historian	Emily Currens
Chapter Outreach Coordinator	Sam Argubright
Chapter Vice President	Seth Croslow
Chapter President	Zelinda Taylor

Faculty Advisors

Chapter Faculty Advisor	Audra Sostarecz
Chapter Faculty Co-Advisor	Michael Prinsell

Self-Assessment

*Name 1-2 major goal(s) that your chapter focused on. What approaches did you take to achieve them, and what challenges did you face?**

This club's major goal for the 2018-2019 academic year was to increase involvement in our club. In recent years, our club's attendance has been dropping. In order to try to increase our attendance, we were very involved in this years involvement fair. For nearly every meeting, our club tried to provide an interesting demonstration for the members. By doing interesting and chemistryrelated activities and demos, we thought more people would want to join our club.

*Based on your chapter's successes and failures, what are your goals for next year and what did you do differently?**

One of our biggest failures for the club is still club attendance. Although we gained several new members throughout our last year, there are still several more members of Monmouth College that are not attending our meetings. Next year, planning more in advance and getting the word out there will be the biggest change. This year we only email people once about meetings, and a week before. For the next and oncoming years, it would probably be beneficial to email once a week in advanced, and once the day of. Also, increased communication with students one-on-one about the club to hopefully increase their willingness and desire to come to our meetings.

*Describe a specific event or tradition that you think is unique to your chapter?**

Starting last year and continuing into this year and next, our club has been creating a large scale, laser etched periodic table. This periodic will be 8 fett x 27 feet when finished and be color coordinated based on specific types of elements: nobel gases, actinides, chalcogens, etc. Members of the club were able to buy supplies (stains, woods, etc) through funding from our college. We had a general club meeting to decide what stains to use and on which elements. After that was finished, members started to laser etch the elements, which are about 6in by 8in. Once fully etched, the elements are finally being nailed up onto a wall in the chemistry department. The final periodic table will be an expanded periodic table, with the actinides and lanthanides placed within the table instead of being placed underneath the table.

Service

*In what ways do you think your chapter had an impact on each of the following communities through service and outreach: your chapter/department, your university, and your local community?**

Our chapter has been the primary student organization for our school's chemistry/biochemistry department. Students who are interested in science, particularly chemistry and ibochemistry, have been encouraged to join our club to get a broad look and understanding about science topics. Our club allows students to teach students and give them new opportunities, experiences, and knowledge. All of our club's activities are available for anybody in our department, college, and surrounding community. We believe that our chapter has allowed interested people to grow their interest and passion for the sciences and has given them a way to learn more about what they love.

*How did you incorporate NCW, Mole Day and/or CCEW into your service activities?**

Every year, one of our chapter's main events is National Chemistry Week. Every day during the week, we host a variety of activities and demos for our community. These activities and demos allow our students and community to get together and enjoy chemistry. One of the largest events that we do typically revovle around ACS' Program In a Box. Every time there is a PIB, we host a large get together in our college's auditorium for anyone to come and enjoy.??

Service Events

Finals Studying: Donuts and Coffee

Date: 2018-12-06
Location: Monmouth College Center for Science and Business
Type: Outreach/Service to University
Category: Service
Audience(s): My Student Chapter
My University/Department
NCW/Mole Day/CCED: N/A
Number of People Served (Audience): 100
Number of ACS Student/Chapter Members: 30
Number of Non-ACS Chapter Members: 30
Number of Faculty: 10

Description: The ACS student chapter at Monmouth College purchased donuts and coffee for students to enjoy on the day before finals. Students could come in, have a donut, relax, and study in a quiet environment.

Involvement Fair

Date: 2018-08-20
Location: Monmouth College
Type: Outreach/Service to University
Category: Service
Audience(s): My Student Chapter
My University/Department
NCW/Mole Day/CCED: N/A
Number of People Served (Audience): 200
Number of ACS Student/Chapter Members: 5
Number of Non-ACS Chapter Members: 2
Number of Faculty: 2

Description: Members of Monmouth College's Student chapter of ACS made a stand with a variety of chemistry themed demonstrations and items for people to see. During this event, every club on campus has a booth and shows current and new students what they do and provides addition information about the club to interested students. This is the primary way in which our club collects new members.

Laser Etched Periodic Table

Date: 2019-02-12
Location: Monmouth College Center for Science and Business
Type: Outreach/Service to University
Category: Service
Audience(s): My Student Chapter
My University/Department
NCW/Mole Day/CCED: N/A
Number of People Served (Audience): 10
Number of ACS Student/Chapter Members: 5
Number of Non-ACS Chapter Members: 5
Number of Faculty: 2

Description: Using a resource provided by the chemistry department, a laser engraver, the club has been slowly cutting, staining, and etching each and every element on the periodic table. During this meeting, we were able to stain the remaining boards to be engraved, prep them for engraving, and engrave a few elements. During this time, student who were not familiar with the laser engraver were taught how to use it as well as some additional information about our periodic table.

Periodic Table of Cookies

Date: 2018-10-24
Location: Monmouth College Center for Science and Business
Type: Outreach/Service to University
Category: Service
Audience(s): My University/Department
NCW/Mole Day/CCED: NCW
Number of People Served (Audience): 30
Number of ACS Student/Chapter Members: 10
Number of Non-ACS Chapter Members: 15
Number of Faculty: 5

Description: For a general meeting of the chemistry and biochemistry students at Monmouth College, the ACS student chapter was tasked with making a Periodic Table completely out of cookies. Members took part in mixing and baking the cookies, frosting the cookies, designing the cookies with their respected symbol, and organizing the cookies in the extended periodic table (with the lanthanides and actinides within the periodic table). As an additional "wow factor", the club was assisted by the chemistry faculty in making some liquid nitrogen ice cream for everyone to eat.

REU Personal Statement Workshop

Date: 2018-12-06
Location: Monmouth College Center for Science and Business
Type: Outreach/Service to University
Category: Service
Audience(s): My University/Department
NCW/Mole Day/CCED: N/A
Number of People Served (Audience): 10
Number of ACS Student/Chapter Members: 5
Number of Non-ACS Chapter Members: 5
Number of Faculty: 0

Description: Students at Monmouth College were invited to come to this event where previous REU students gave advice on students resume, personal statement, and application. They talked about their REU, what to expect, and answered any questions people had.

Professional Development

*What areas of professional development do you think your chapter needs to address most and which events did you hold that significantly contributed to your chapter's improvement in those areas? (You feel)**

Our chapter has two main downfalls: service and enrichment. Our chapter was not able to plan any service activities for the last school year where we could go out and help members of the community or help teach science to our community. We were also not able to have any members of the scientific community or attend any interesting places for our enrichment. Although we did not do anything to completely overcome these shortcomings this year, it was made evident, so we are going to try strongly to overcome them next year.

*What challenges did you face in any part of the planning, delegating, advertising or implementing of your professional development activities?**

One of the hardest challenges we faced this year was trying to find interesting professional development activities for our club to do. As a small club from a small liberal arts college, we do not have large amounts of funds or support to do large activities for our club. We are forced to find small things around our community to do, even though there are not many. Additionally, we had hard times advertising our club's activities to the greater community, as our only form of communication is through the Monmouth College E-mail, which members of the community do not have.??

Professional Development Events

National ACS Meeting

Date: 2019-04-27
Location: Orlando, Florida
Type: Attending Scientific Meeting
Category: Professional Development
Audience(s): General Community
My Student Chapter
NCW/Mole Day/CCED: N/A
Number of People Served (Audience): 1000
Number of ACS Student/Chapter Members: 11
Number of Non-ACS Chapter Members: 0
Number of Faculty: 4

Description: Members of the ACS club that are actively perusing research at Monmouth College took a trip to Orlando to present their research at the 2019 National Conference. Students that went attended scientific talks as well as learned how to present their research to other members of the scientific community.

PIB: Red Planet Chemistry

Date: 2018-10-23
Location: Monmouth College Center for Science and Business
Type: Hosting Presentation/Speaker
Category: Professional Development
Audience(s): General Community
My Student Chapter
My University/Department
NCW/Mole Day/CCED: N/A
Number of People Served (Audience): 20
Number of ACS Student/Chapter Members: 10
Number of Non-ACS Chapter Members: 10
Number of Faculty: 2

Description: The chapter opened to members of the ACS club, students at Monmouth College, as well as members of the public to join in an ACS webinar on Red Planet Chemistry. This focused primarily on chemistry of Mars as well as had some scientific members talk about various aspects of rovers and various science used in exploring the Red Planet.

Program in the Box: Periodic Table

Date: 2019-05-01
Location: Monmouth College Nutrition Lab
Type: Hosting Presentation/Speaker
Category: Professional Development
Audience(s): My Student Chapter
NCW/Mole Day/CCED: N/A
Number of People Served (Audience): 9
Number of ACS Student/Chapter Members: 5
Number of Non-ACS Chapter Members: 2
Number of Faculty: 2

Description: We hosted the ACS Program in the Box about the Periodic Table. Students that attended were able to learn about the periodic table's history and how it was organized. As a side activity, students were able to enjoy some liquid nitrogen ice cr-eam that the ACS Executive Board members prepared. A few details about the organization for the upcoming year were also discussed.

Chapter Development

*What do you actively do to recruit and retain members as a chapter? In addition, what recruitment/retention challenges does your chapter experience?**

Every year, our chapter attends Monmouth College's Involvement fair to help recruit new members. During this, nearly every stu-dent at the college comes outside to view booths made by every club on campus to get more information on that club and enjoy fun demos, games, and food. Throughout the year, we do not do very much recruiting except for doing mass emailing to everyone on the department email lists. We retain our members throughout the year by doing fun activities and demos that make our members want to come to our club meetings.??

*What specific events do you host to bond and promote camaraderie among your chapter?**

Our club likes to host several events that allow our members to come in and build something together that they can then take home with them to remind them of the fun they had. Some of the specific events that we have done this year paper mache planets and DIY rockets. We also like to encourage a slight competiton with some of these events, such as "whose rocket can go the highest". This type of competition allows our members to compete against each other in a friendly fashion and in turn become better friends with each other.??

*Describe how the chapter conducted executive and/or general meeting for business and planning. Specify frequency, attendance, delegation of tasks and the role of your advisor.**

Our chapter holds biweekly meetings for both general and executive meetings. During the executive meetings, our executive board gets together to plan the events for the ensuing week(s) as well as plan large events for the future. Our executive board consisted of eight people. For the executive meetings, the president is the person who keeps the ideas flowing and makes sure that we are on track and that everything is viable. Our vice president assists in this as well and contributes to the ideas. Our secretary takes minutes and writes everything down to then distribute to the historian who distributes it to all of the members of the club.??

Chapter Development Events

Edible Solar System

Date: 2018-10-23
Location: Monmouth College Center for Science and Business
Type: Social
Category: Chapter Development
Audience(s): My Student Chapter
NCW/Mole Day/CCED: NCW
Number of People Served (Audience): 20
Number of ACS Student/Chapter Members: 15
Number of Non-ACS Chapter Members: 5
Number of Faculty: 1

Description: During this event, members of the ACS executive board pre-made several cakes, formed them into balls, and dipped them into bakers chocolate. When members of the club arrived, they were given a single objective: make the most realistic edible solar system you can. They were able to use food coloring and extra chocolate to design and shape their "planets" to mimic the appearance of planets in our solar system. When finished, students placed them into a Styrofoam brick and displayed them for a competition before consuming their planetary goodness.

Elephant Toothpaste Pumpkins

Date: 2018-10-18
Location: Monmouth College Center for Science and Business
Type: Social
Category: Chapter Development
Audience(s): My Student Chapter
My University/Department
NCW/Mole Day/CCED: N/A
Number of People Served (Audience): 20
Number of ACS Student/Chapter Members: 10
Number of Non-ACS Chapter Members: 10
Number of Faculty: 1

Description: Students carved pumpkins in preparation for the night's event. When everyone arrived, executive members prepared the solutions needed to perform elephant toothpaste. This demonstration, which served as our Halloween meeting, was an exciting take on elephant toothpaste by having it erupt out of carved pumpkins. Elephant toothpaste is the catalytic decomposition of hydrogen peroxide which gets trapped in soap to produce bubbles/foam.

Finals Studying: Donuts and Coffee

Date: 2019-05-02
Location: Monmouth College Center for Science and Business
Type: Social
Category: Chapter Development
Audience(s): My Student Chapter
My University/Department
NCW/Mole Day/CCED: N/A
Number of People Served (Audience): 100
Number of ACS Student/Chapter Members: 10
Number of Non-ACS Chapter Members: 40
Number of Faculty: 10

Description: On the morning before finals started, we reserved a room and set up study tables. We provided donuts for breakfast, as well as coffee, juice and milk. Students came in and enjoyed a refreshing cup of coffee to start the day strong and stayed to study with their fellow classmates.

Learning about Phosphorescence

Date: 2018-10-18
Location: Outside Monmouth College Center for Science and Business
Type: Social
Category: Chapter Development
Audience(s): My Student Chapter
NCW/Mole Day/CCED: N/A
Number of People Served (Audience): 11
Number of ACS Student/Chapter Members: 5
Number of Non-ACS Chapter Members: 5
Number of Faculty: 1

Description: Students were able to learn about photochemistry using luminol, potassium hydroxide, and potassium ferricyanide. When luminol was added to a solution of potassium hydroxide, potassium ferricyanide, and water, the solution would be a bright blue that would eventually fade. The difference between fluorescence and phosphorescence and the overall reaction was explained to the students. The demonstration was performed in the evening outside to have a better visual of the chemiluminescence. Students were provided with safety glasses.

Painting Night

Date: 2019-02-12
Location: Monmouth College Nutrition Lab
Type: Social
Category: Chapter Development
Audience(s): My Student Chapter
NCW/Mole Day/CCED: N/A
Number of People Served (Audience): 12
Number of ACS Student/Chapter Members: 9
Number of Non-ACS Chapter Members: 2
Number of Faculty: 1

Description: Monmouth College students were invited for a chemistrythemed painting night. Food was provided for the students as well as all painting supplies. The students could either have kept their paintings or have let them be used for decoration in the Monmouth College chemistry research space. Students could create their own paintings or look at images online for inspiration. Several upcoming events were discussed as well.

Paper Mache

Date: 2018-10-22
Location: Monmouth College Center for Science and Business
Type: Social
Category: Chapter Development
Audience(s): My Student Chapter
NCW/Mole Day/CCED: NCW
Number of People Served (Audience): 15
Number of ACS Student/Chapter Members: 10
Number of Non-ACS Chapter Members: 3
Number of Faculty: 1

Description: During this event, students at Monmouth College used balloons, old news paper, glue, and paint to create realistic replication of individual planets. First, the students were tasked to blow up their balloons to a size similar to their planet (in relation to other balloon sizes being made). Once blown up, newspaper was cut and dipped into a glue/water solution and placed onto the balloon. When dried, the balloon was popped and the hardened shell was painted to mimic the design of the planet being made.

Pumpkin Demonstration Using Boric Acid

Date: 2018-10-22
Location: Outside Monmouth College Center for Science and Business
Type: Social
Category: Chapter Development
Audience(s): My Student Chapter
NCW/Mole Day/CCED: NCW
Number of People Served (Audience): 12
Number of ACS Student/Chapter Members: 7
Number of Non-ACS Chapter Members: 3
Number of Faculty: 2

Description: Students observed a demonstration using pumpkins, boric acid, and hand sanitizer. With these materials, pumpkins were lit on fire and flames of multiple colors were produced. This demonstration was performed for National Chemistry Week, "Chemistry is out of this World," because boric acid has been involved with space related research. Students were able to learn about flame chemistry and why certain colors are produced. Students were informed beforehand about the reactions involved and were provided with the proper safety materials for the demonstration.

Rockets: Methods of Thrust

Date: 2018-10-25
Location: Monmouth College Center for Science and Business
Type: Social
Category: Chapter Development
Audience(s): My Student Chapter
NCW/Mole Day/CCED: NCW
Number of People Served (Audience): 10
Number of ACS Student/Chapter Members: 5
Number of Non-ACS Chapter Members: 5
Number of Faculty: 1

Description: To begin this event, members of the executive b-oard set up a simple demo: the electrolysis of water. Through this, water is split into its constituent atoms, oxygen and hydrogen, with a perfect 1:2 molar ratio. This ratio is perfect for ignition. Once a few bottle of gas was collected using the setup shown in the s-upporting material, participants began to create their "rockets". These rockets were to be launched via a chemical reaction of alka seltzer and water. Crushed up alka seltzer was placed into small bottles with push-to-close caps. Hot water was added, the cap closed, and the bottle was placed upside down into a 1000mL graduated cylinder. A slight competition was held to see whose rocket could fly the highest. Once finished, members of the ex-ecutive board lit the oxygen/hydrogen bottles to show another method of propulsion.

Santa's Workshop

Date: 2018-12-05
Location: Monmouth College Center for Science and Business
Type: Social
Category: Chapter Development
Audience(s): My Student Chapter
My University/Department
NCW/Mole Day/CCED: N/A
Number of People Served (Audience): 17
Number of ACS Student/Chapter Members: 10
Number of Non-ACS Chapter Members: 5
Number of Faculty: 2

Description: The Monmouth College ACS student chapter hosts a "Santa's Workshop" event every year through the chemistry department. Students that attend are able to make different crafts and gifts using the equipment in the Physical Chemistry lab. This year, students were able to do glass blowing, make stained glass pieces, and use the Laser Engraver. Students are able to have a fun evening by making these items and are also able to learn a-bout some of the equipment available through the chemistry d-epartment.

Budget

*Please provide a budget narrative to accompany your budget sheet and include information such as: What is your primary or most effective form of fundraising and why? How did fundraising help members develop professional experience (sales skills, grant writing, etc.)? Did you have enough money to accomplish your goals for the year? NOTE: all chapter expenses and chapter income must be included on your budget sheet.**

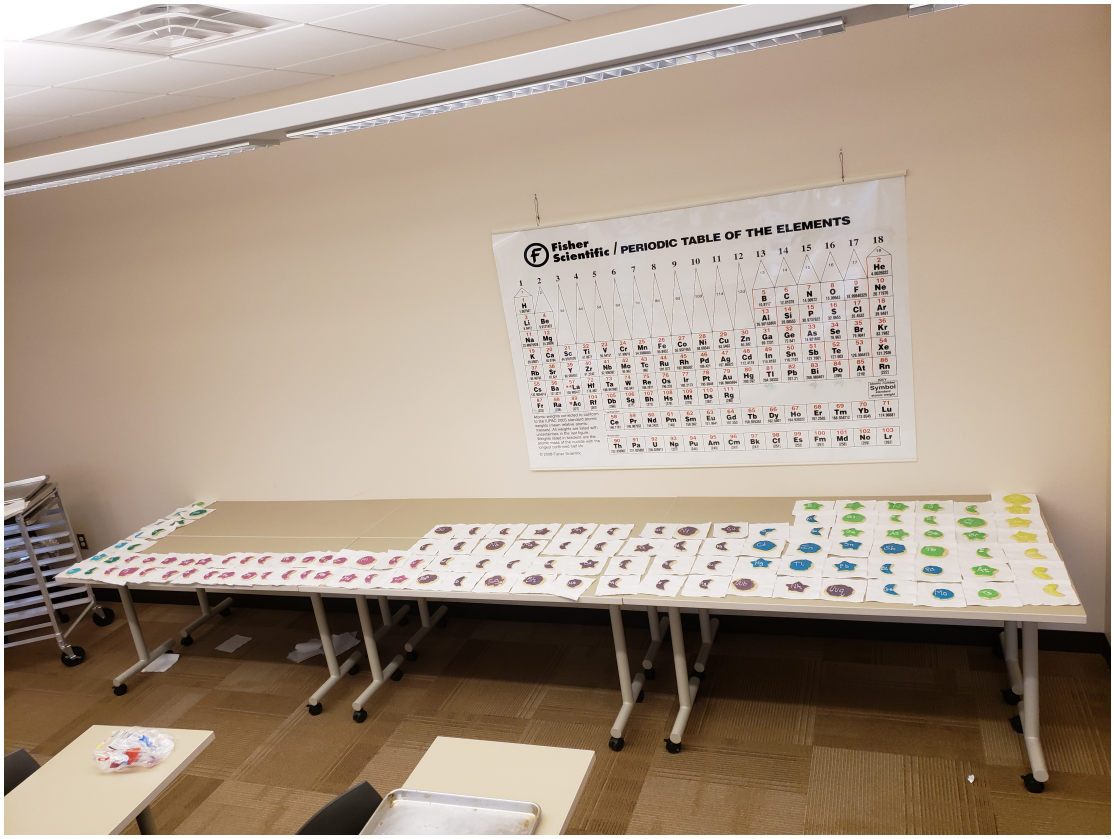
Our primary source of funding comes from the selling of lab notebooks and safety glasses to students in classes that have a lab requirement(gen chem, analytical, organic, etc.). We always have success with this as we frequently receive requests from students about needing a notebook or safety glasses. This year, several of our members on the Executive Board collaborated together to apply for funding for National Chemistry Week. We were able to receive those funds which was able to cover any expenses for the development for our NCW events. We also received funding from our student government that was used for providing food for our meetings or for buying supplies for future demonstrations. Managing our budget and applying for funding was a useful experience for our Executive Board members as we learned to work as a team, remained organized, and developed skills related to funding applications. With careful planning, we were able to host some entertaining and informative meetings this year with the funding that we received.

Green Chemistry

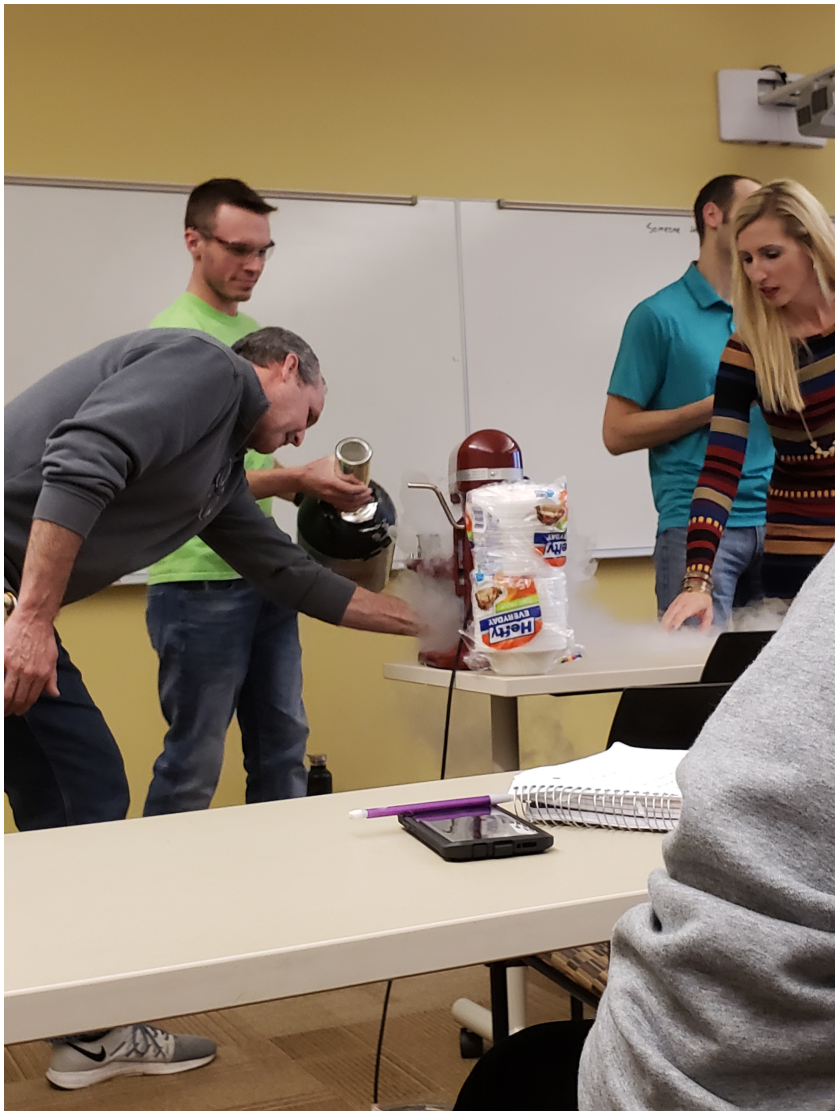
Not submitting for Green Chemistry Review

*Please provide a detailed summary of a minimum of three green chemistry activities, including a two to three sentence explanation of why you think each activity qualifies as green chemistry.**

No response provided. Response is required.


Fisher Scientific / PERIODIC TABLE OF THE ELEMENTS


Columbia


Hefty
EVERYDAY


PERIODIC TABLE OF THE ELEMENTS


Sprite
Minute Maid


-10
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I'd make a chemistry pun but I wouldn't get a Reaction
THE NAMES BOND
HYDROGEN BOND
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PERIODIC TABLE OF THE ELEMENTS


TABLE OF THE ELEMENTS
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TRACK
FIELD


Book
Chapter
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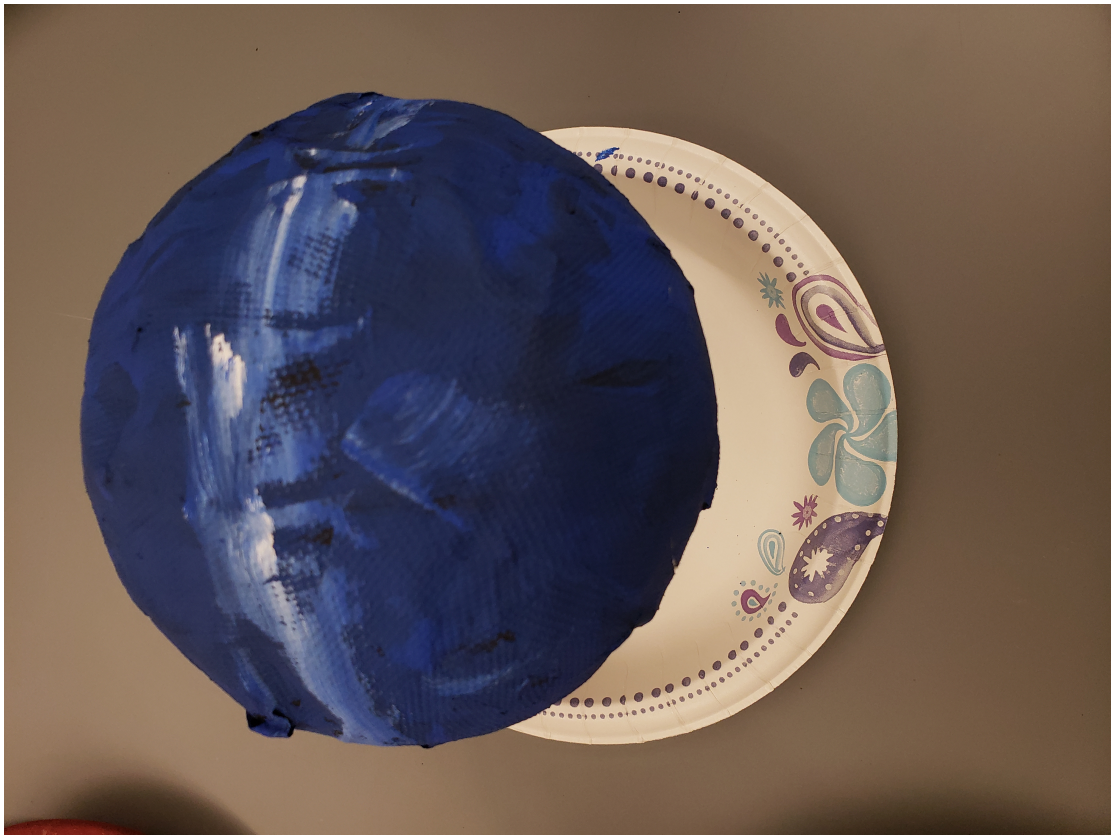
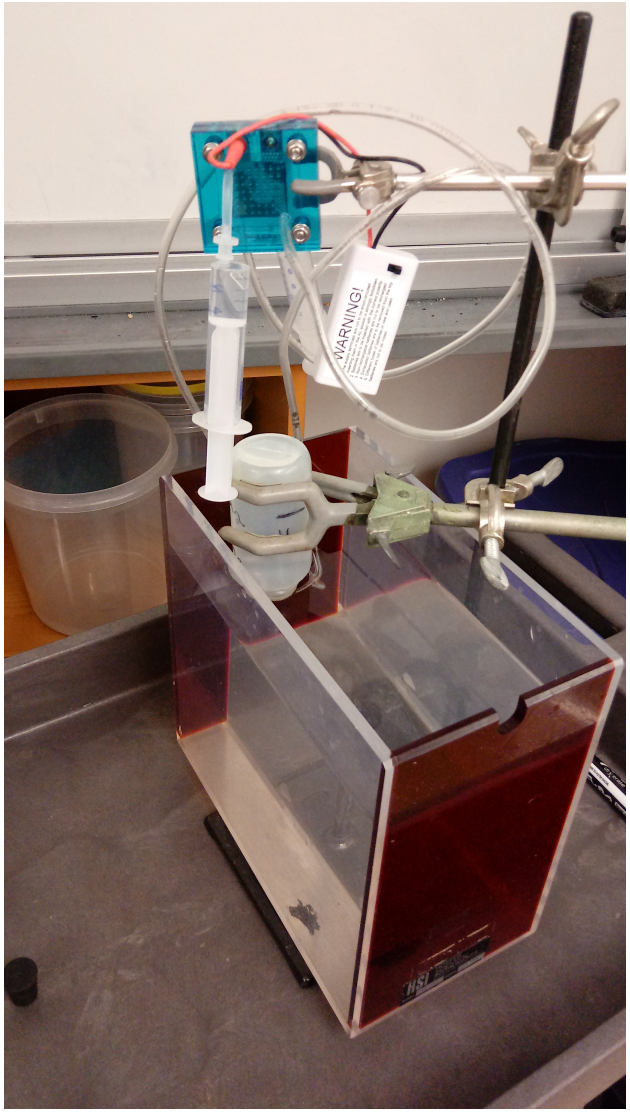
Welcome
to
ACS PAINT
NIGHT!!!




WARNING!


Diet
Coke


MONMOUTH COLLEGE
FOOTBALL
HOMECOMING