

Samuel Glasstone Report 2018-2019  
American Nuclear Society,  
University of Wisconsin-Madison

Submitted to the ANS Glasstone Award Committee

April 26, 2019



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## 1 Introduction

During the 2018-2019 academic year the American Nuclear Society, University of Wisconsin-Madison (ANS-UW) has worked very hard to maintain its track record of planning, organizing, and executing events in areas of service to ANS. These service areas being public outreach, professional development, and community service. Having been recognized as a very successful student section in past years, ANS-UW has tried to uphold its image through organization of traditional events as well as undertaking several new projects involving professional development opportunities. Part of this success is due to relationships developed with other organizations such as the American Institute of Aeronautics and Astronautics (AIAA), Material Advantage, Engineering EXPO, as well as strong involvement with the Department of Engineering Physics, the College of Engineering, and the ANS Wisconsin Local Section.

Every year, ANS-UW participates in many community service events as a way to give back to the community that fosters the student section. Some of these events include Adopt-A-Highway, Second Harvest food bank, Youth Workshops, Girl Scout Workshops, and volunteering to tutor high school students. As always, we had many volunteers for these events, whose energetic presence allowed these to be very successful events. Members have had a positive impact on the community and upheld the ANS-UW image.

ANS-UW also organizes a number of public outreach events for members of the community. This years events included Engineering Bash, Nuclear Science Week, Earth Day, and Engineering EXPO. These events gave members the opportunity to educate a wide variety of people, from grade school children to senior members of the community about Nuclear Science and Engineering. Public outreach is an essential part of the student section, and careful planning and preparation goes into each of the events.

In addition to community service and public outreach, ANS-UW values professional development opportunities for our students, we were able to organize several visits from professionals to give presentations on nuclear engineering and other related fields. ANS-UW also encourages students to become involved at a national level. We sent students to attend the ANS Winter Meeting in Orlando, Florida, and a large portion (11 students) of our section attended the Student Conference in Richmond, VA. In addition to these large networking events, members of ANS-UW, as well as other students in the department, attended weekly networking events such as breakfast at Mickie's Dairy Bar on Fridays, and coffee and donuts on Wednesday mornings.

ANS-UW members have even had time to participate in social events, despite spending time in class, research, and public outreach and professional development events. The largest social event was the biannual Pic-Nuke which is a picnic held at the beginning and end of every year for the students and faculty of the entire Department of Engineering Physics. In addition, many other outings such as hockey games, chili cook-offs, and even a recreational sports league allowed students to take a break from their busy schedules and get to know one another.

In summary, ANS-UW has been able to maintain a high level of involvement in the community this past year while being able to expand interest in many other types of activities. Overall, the student members of ANS-UW have been committed and driven in everything they have done this year. This has lead to a very successful 2018-2019 academic year.



## 2 Section Management

The ANS-UW Student Section is ran by a Board of Governors and multiple volunteer committees with guidance by a Faculty Advisor. Students are elected from the section to serve on the board on an annual basis; this is the primary body that runs the student section. Students from the section who are particularly interested in helping to make the section successful can volunteer to chair committees and coordinate events. The faculty advisor is a member of the UW Faculty that helps provide insight to board.

### 2.1 Board of Governors

The ANS-UW section elects seven officers each year to serve on the executive committee. The elected positions include President, Vice-President, Treasurer, Public Outreach, Communications, and two Governors. The communications and two governor officers are re-elected each semester to provide more students the opportunity to serve on the Board, while the rest of the positions are held yearly.

#### 2.1.1 President

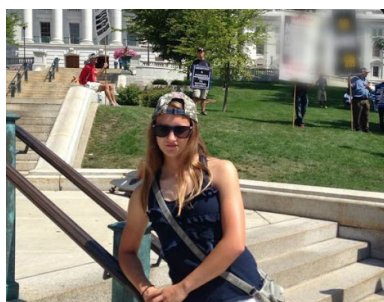
The President's main responsibilities include moderating general member and executive committee meetings, scheduling speakers for general meetings, organizing tours and conferences, managing the section's schedule, and acting as the liaison and representative for the section both professionally and within the College of Engineering. The President should also oversee other positions and make sure their duties are being performed. The President for ANS-UW this year was Kendall Barrett, who served as the governor and Vice President in previous years.



*Kendall Barrett, President*

#### 2.1.2 Vice President

The Vice-President's responsibilities are organizing the section's social activities, acting as President in the President's absence, and providing support for the President. Some of this year's specific duties included coordinating Pic-Nuke, FISSION, and ordering new t-shirts. This year the Vice-President was Marissa Brown, who has been actively involved in our student section, serving as communications in the previous years.



*Marissa Brown, Vice-President*

### 2.1.3 Treasurer

The Treasurer's responsibilities included drafting budgets for the entire year, keeping track of all transactions completed by the organization, writing grant proposals, acting as liaison between ANS-UW and the Engineering Physics Department Administrator, and advising the other executive officers on how best to spend the section's funds. The treasurer this year was John Masse who has been greatly involved not only in UW-ANS, but in the Nuclear Engineering community as a UWNR reactor operator.



*John Masse, Treasurer*

### 2.1.4 Public Information

The Public Information (PI) Officer must develop, organize, schedule, and execute the section's public outreach efforts as well as oversee the Scholarship Essay Contest. Included in this responsibility was writing and designing presentations to be used at public outreach events, coordinating with teachers and scout leaders to help organize events such as Youth Workshops and the Essay Contest, and giving our members a chance to present our field to the youth at the Engineering Expo held by the College of Engineering. The PI for this year was Jeremiah who also served as the Youth Workshop coordinator.



*Jeremiah Oldenburg, Public Information*

### 2.1.5 Communications

The Communications Officer's duties are to take minutes at executive committee meetings; send out weekly announcements; advertise for upcoming events usually by flyers, social media, or via email; and to maintain and update the ANS-UW Google Groups mailing list, the ANS-UW website, and the ANS-UW social media accounts on Facebook, Instagram, and Twitter. The importance of this

position is to ensure that the members, students, and community are properly informed about the events going on within ANS-UW. The Communications Officer for the fall semester was Zach Wolf and for the spring semester was Thomas Adams.



*(a) Zach Wolf*



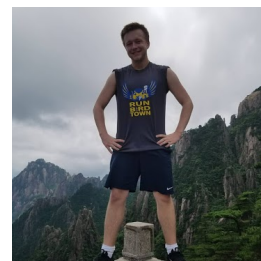
*(b) Thomas Adams*

### 2.1.6 Governor A

Governor A acts as a liaison to the Wisconsin ANS Local Section. Governor A was given this responsibility, which included a monthly conference call with the local section executives which relayed information between both executive boards. Both officers help with other events throughout the semester such as E-Week. The Governor A for the Fall semester was Katie Mummah and for the Spring semester was Peter Hotvedt.



*(a) Katie Mummah*



*(b) Peter Hotvedt*

### 2.1.7 Governor B



*(a) Ryan Dailey*



*(b) Chumani Mokoena*

Governor B is in charge of community service events such as Adopt-A-Highway and Second Harvest Food Bank. The Governor B for the Fall semester was Ryan Dailey and for the Spring semester was Chumani Mokoena.

## 2.2 Non-Elected Positions

### 2.2.1 Youth Workshop Coordinator

The Youth Workshop Coordinator's main responsibility is facilitating and organizing ANS-UW's Boy and Girl Scout Scouts Merit Badger Workshops. The workshop operates to disperse Nuclear Science Merit Badges with the scouts, but it also is open to other interested youth groups. The Youth Workshop Coordinator should understand the basic operations behind Boy and Girl Scouts, the Nuclear Science Merit Badge, and the outreach and communication required in order to organize this event. The Youth Workshop Coordinator this year was Jeremiah Oldenburg.



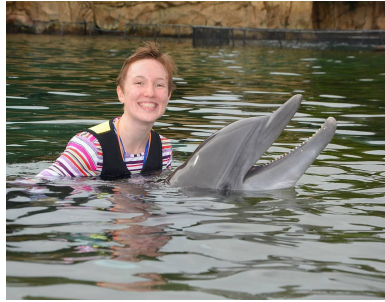
*Jeremiah Oldenburg, Youth Workshop Coordinator*

### 2.2.2 Diversity Chair

The Diversity Chair works closely with the Public Information Officer, the Youth Workshop Coordinator, and other Board members to arrange events that promote underrepresented groups in the nuclear industry and STEM fields. Additionally, the Diversity Chair advises the Executive Board for ANS on ways to improve diversity and inclusion within the student section. This year, the Diversity Chair helped with the following:

- Organized ice breakers for section meetings to encourage new students to get to know current students.
- Helped transition the previously known "Boy Scout Merit Badge Workshops" completely over to "Youth Workshops" to advocate for gender-inclusive activities.
- Advocated for cost-effective activities so more section members can participate in professional development events.

Kalin Kiesling was the Diversity Chair this year.



*Kalin Kiesling, Diversity Chair*

### 2.2.3 Faculty Advisor

The Faculty Advisor for ANS-UW is there to provide the chapter with advice and act as a liaison between the organization and the department. Often, the Faculty advisor retains his position for many years, so they are able to provide valuable information to the organization, as the Executives and Chairs often are served by people new or just getting involved in ANS-UW. This year, the Faculty Advisor was Paul Wilson, who has served as the faculty advisor for many years and is highly involved with ANS National as well.



*Paul Wilson, Faculty Advisor*





## 3 Operations

ANS-UW has been very successful with officer transitions, and this is due not only to the contributions of the executive board and general members, but also to the administrative procedures that have been implemented. The processes in use make it possible to turn over our executive board with ease. These processes have become so easy because of our utilization of on line documentation and availability of the board members.

### 3.1 Active Membership

Active members are ANS-UW students that have paid dues to the section and achieve three or more active member points per semester. Dues are \$10 per semester or \$15 for the whole year. Active membership status is required to participate in social events and professional development opportunities.

#### 3.1.1 Active Member Points

Beyond paying dues, active members are expected to participate in varying activities held by ANS-UW. Active members are rewarded for participating at section events and helping with section business. Points can be earned by attending meetings, workshops, outreach events, tours, etc. that ANS-UW hosted or encouraged.

Active membership points come with benefits, such as reduced T-shirt prices or access to special social and professional development events. In the fall members with sufficient active members points were invited to an end of the semester banquet and were eligible to receive funding to attend the ANS Winter Meeting. In the spring sufficiently active members were invited to a spring banquet and had the opportunity to attend the end of the year social with minimal out-of-pocket costs.

These special events serve as an incentive to get ANS-UW members to help with demanding tasks such as hosting youth workshops, volunteering at the student conference, or organizing an Engineering Expo display. With these incentives and the Active Membership Points system, the ANS-UW Board of Governors can more easily delegate work to and organize our members.

#### 3.1.2 Captain Neutron

At general section meetings, ANS-UW likes to recognize one student member who has been particularly active in the period prior to the meeting. The student is honored by being named "Captain Neutron" of the section and maintains this title until another student is picked. Students who receive this award have their picture, often times a humorous picture, posted on the bulletin board outside the departmental office for everyone in the department to see. The student also receives a free ANS-UW t-shirt.

#### 3.1.3 End of Semester Banquet

End of semester banquets are held to reward highly active ANS-UW members. Members are welcomed to socialize and eat a meal traditionally prepared by the executive board. The Fall banquet featured a potluck for dinner theme with chicken dip, tater tots, chili, and a massive salad. The spring banquet featured an new addition of Portillos as the main meal, with sides prepared by the executive board. These banquets are followed by our awards meeting. Here, there are awards for the member involved in the most ANS-UW activities, most active undergraduate and graduate, and a couple gag awards are presented. Following the award ceremony, we hold our officer elections for the next semester.

### 3.2 Financial Planning

The yearly budget is produced by the Treasurer at the beginning of the academic year and presented to the executive board at a meeting where they are ratified. The budget is a mechanism for the board



to outline priorities for the upcoming year. Anticipated expenses are detailed as greatly as possible, allowing us to set accurate funding.

Our income comes from two sources: fund-raising and cash income. The treasurer is responsible for handling all these incomes. All of this income is used to support general chapter operations. Cash income comes from numerous sources. Our largest source of income is from Youth Workshops. Our members pay dues for the year or semester, and chapter t-shirts are sold as an additional source of income.

### **3.3 Communications**

Our internal and external communication methods allow us to run a successful student section. All important meetings, procedures, and contacts are archived so future executive board members can search for them. In addition, we communicate with our members through multiple avenues including: email, our website, social media, etc.

#### **3.3.1 Website**

Our website ([atomicbadger.org](http://atomicbadger.org)) contains information on ANS-UW including how to join our student organization, ANS National Conferences coming up and resources for scholarships and job opportunities. The website also has a calendar that is updated as often as possible to include all of ANS-UW's events, including section meetings, professional development activities, socials and more.

#### **3.3.2 File Storage & Sharing**

In order to have all our communications synced and in one place we rely on Google Drive for nearly all internal documentation. Google Drive holds a variety of applications such as word processing, spreadsheet editing, and presentation creation. With Google Drive we are able to share specific files with those in the organization who should have access to them. When multiple people are editing a document changes are updated immediately making real time collaboration possible. Another use of Google Docs is their form submissions which allow members to sign up for events or submit specific information that is needed. Finally, within Google Drive we keep our member email list which allow for email communication within our group.

#### **3.3.3 Slack Channel**

Slack was utilized this year to improve both internal and external communications. The ANS Supreme Council slack channel included only members of the executive board. The channel was primarily used to plan meetings, youth workshops, conference travel, and day-to-day communications. A Student Conference slack channel was also created for communication between members that attended the National ANS Student Conference.

#### **3.3.4 Social Media**

With the majority of the student body active on social media, it is a great tool for communicating with members. The American Nuclear Society UW Student Section Facebook page is used to post about upcoming events and outreach to the general public. ANS-UW started an Instagram account for the student section to share photos of events.

Date	Event	Speaker/ Company
September 11, 2018	Fall Kickoff Meeting	-
October 11, 2018	General Meeting	Richard Rolland III, Westinghouse
November 8, 2018	General Meeting	Dr. Gabe Bacerra, Phoenix
December 6, 2018	Fall Banquet	-
February 5, 2019	Spring Kickoff Meeting	-
March 7, 2019	General Meeting	Drew Nigh and Ben Chen, Jensen Hughes
April 18, 2019	Spring Banquet	-

Table 1: List of General Meetings

## 4 General Meetings

### 4.1 General Meeting Speakers

ANS-UW holds general meetings several times throughout the course of the semester to better disseminate information among the members about upcoming events, opportunities, and meetings. To add an extra facet of interest and professional development to the meetings ANS will frequently invite speakers to present at these meetings.

### 4.2 Westinghouse

On October 11th, we were lucky enough to get UW-Madison alum, Richard Rolland III from Westinghouse, for our general meeting. In this presentation, Ricky talked about Westinghouse and how they are able to provide their customers around the world with a reliable energy source coming from nuclear power plants. The main focus of the presentation was Westinghouse's 10 CFR 50.69 program. Ricky explained that this program allows for the industry to focus on improving safety on high safety components, while lowering the expenditure on low safety significant components. By the end of this general meeting presentation, we were able to see how Westinghouse is trying to improve the industry's objective of delivering the nuclear promise.

### 4.3 Dr. Gabe Bacerra

On November 8th, ANS-UW student section hosted Dr. Gabe Bacerra at our general meeting to talk about his research at Phoenix Laboratories. Dr. Bacerra focuses his research on IED detection with high neutron flux emitting sources. These high neutron emitting sources have the ability to detect explosive material through the use of gamma rays, and decreases human interaction in the field. One concept many of our students found interesting was the dose consideration in this lab experiment. The heavy neutron source being used doses the surrounding fields with high amounts of radiation, and can be preventative in using this kind of IED detection in actual field of combat. The student section was really captivated by this presentation, and we hope to have Dr. Bacerra back again next year.

### 4.4 Jensen Hughes

Drew Nigh and Ben Chen, UW-Madison Nuclear Engineering alumnus, gave an information session on their employer Jensen Hughes. Jensen Hughes provides safety and risk management consulting services to nuclear power plants around the world. Drew and Ben spoke about what life is like as a nuclear industry consultant and what opportunities are available to new college graduates. They also spoke about their experience with JH and provide additional tips on how to seek employment post graduation from college. Overall, this information session was very helpful to our student section, giving them an opportunity to submit applications and work alongside UW-Madison alumni.





## 5 Professional Development

### 5.1 Palo Verde Generating Station

Each semester this year, we held two informational sessions with Palo Verde Generating Station, a nuclear power station located near Tonopah, Arizona. They had two representatives give us a description of their facilities, and an overview of their career opportunities. During this, they highlighted many of their company successes and attributes. For example, they are known for being the largest clean energy supplier in the United States. After their presentation, they accepted applications and were able to grant both internship and career offers to our members. These sessions have continued to be mutually beneficial for both our members and Palo Verde, and as such, we will continue to host more in the future.

### 5.2 Dominion

This past September, Dominion Energy came and spoke to our student section chapter about their Nuclear Power Plant operations focused out of Richmond, Virginia. Brian Vitiello, a UW Alum, referenced Dominion's importance in supplying power to not only Virginia, but also North and South Carolina, Ohio, Pennsylvania, and many other states in the US. He walked us through the average day of working on site at any of these power plants, as well as the benefits of working in a large corporate industry within the Nuclear field. After the presentation, members of ANS-UW chapter and the two representatives from Dominion made our way to memorial union terrace to network and enjoy the Madison sunset over Lake Mendota.

### 5.3 Dr. Steffi Diem

As part of Nuclear Science Week, Dr. Steffi Diem came and presented to the ANS-UW student section. As a research scientist at Oak Ridge National Lab, Dr. Diem spoke of her research in experimental plasma physics for fusion energy development. Her research emphasis was primarily on numerical models compared to experimental data. The members of the student section really appreciated this talk because it allowed for younger members to learn about an advanced topic, in a very comprehensible way. Dr. Steffi Diem's ability to portray nuclear fusion in a way that is not overly complex sparked many questions and interest within the audience. Overall, we, as a student section, were very lucky to have Dr. Diem present as a way to partake in Nuclear Science Week.

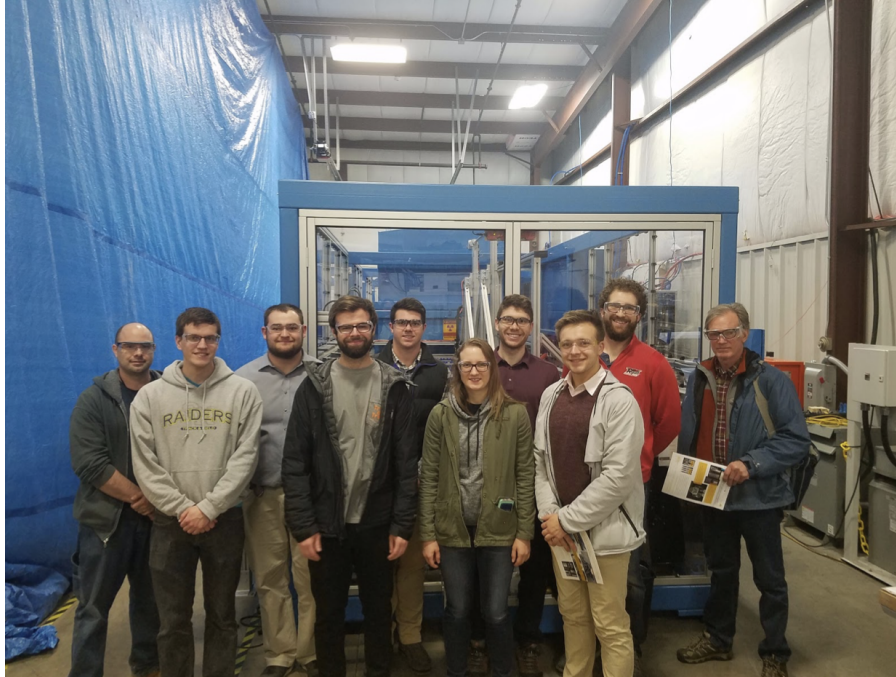
### 5.4 Y-12

Representatives from Y-12 National Security Complex came to talk to our members about opportunities in nuclear criticality safety. Y-12 has been essential for the security of our nation, particularly with respect to nuclear materials and weapons. These speakers came to our members with the intent of hiring bright minds that can provide valuable contributions to the facility and its goal of maintaining a safe and secure country. Much of their work is involved with using nuclear materials for peaceful purposes, such as providing fuel to research reactors, or developing medical isotopes. After the session, they were pleased to be able to accept resumes from our members.

### 5.5 Phoenix Tour

This spring, nine members of the chapter toured the local neutron generator manufacturing plant, Phoenix LLC. Many students had previously expressed interest in touring the facilities given their proximity to campus and frequent representation at meetings and socials. Governor A, Peter Hotvedt took responsibility to set up the event as the CEO of Phoenix happened to also be the ANS Wisconsin Section Leader, and ANS-UW alumni, Ross Radel.

On April 11, the students and other guests met in the lobby of ERB and drove themselves to Monona where the facilities are located. The group met with Ross, and were shown a variety of different new technologies being developed for various customers including the United States Army. The tour itself lasted a little over an hour and spanned both facilities that were owned by Phoenix. The students, both graduate and undergraduate, came away feeling satisfied and inspired with what they had seen and heard. A future tour of another local facility that produces medical isotopes, SHINE was also discussed with Ross and is likely to take place sometime this fall during the next academic year.



*Phoenix Tour*

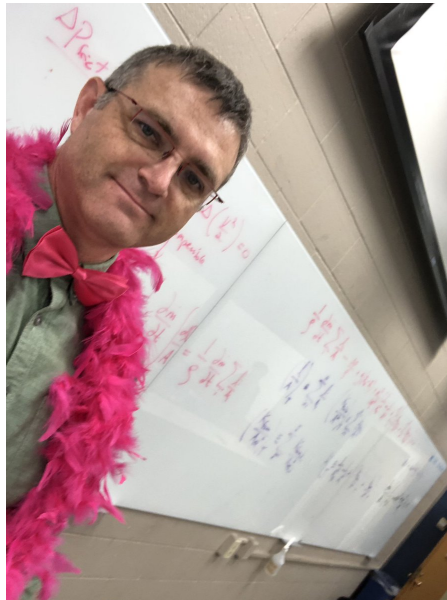
## 6 Public Outreach

### 6.1 Nuclear Science Week

Nuclear science week was held October 15th -19th in which we hosted a series of events to reach out with the public. We first released a scholarship with an essay prompt to high schoolers. Professors in pink was also held during this week. Another event was the Packer potluck to gather members for and talk about nuclear stuff, watched football, and de-stressed from homework. These events are shown in the list below.

1. Essay contest- Launched during Nuclear Science week : gave a cash prize to winning high school student, middle school student, and gift basket to elementary schooler
2. Potluck and packers game with food prepared by the exec board
3. Nuclear scavenger hunt

### 6.2 Professors in Pink



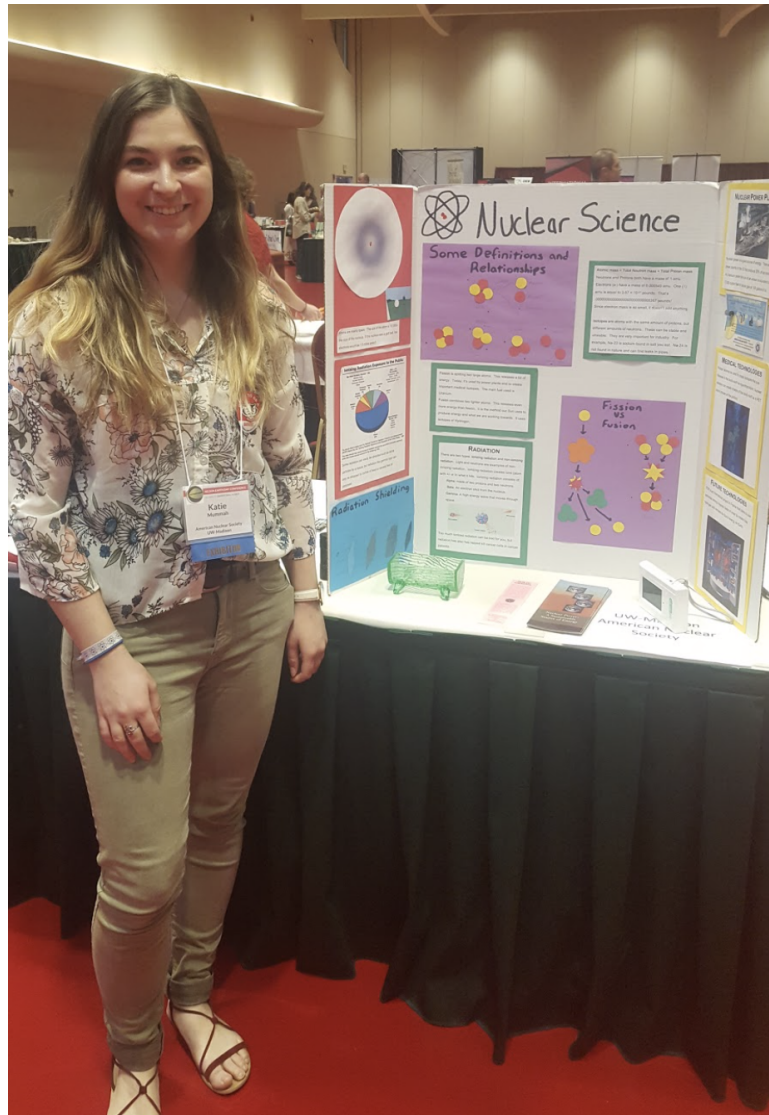
*Paul Wilson in a feather boa for Professors in Pink*

Professors in Pink is an annual fundraising event held in October for Breast Cancer Awareness Month. All money raised from the event goes directly to the Breast Cancer Research Foundation. For two weeks in October, students and faculty could "bid" on silly pink costume items for their professors to wear during classes for a day. Items could be bid on for various starting amounts (ranging from \$10 to \$100) and included items such as a pink feather boas, pink bow ties, and even a pink bunny suit and flamingo costume. In total, \$255 was raised from the Professors in Pink event and 8 professors participated.

### 6.3 Earth Day

The ANS UW Student Section attended an Earth Day conference hosted by the Nelson Institute for Environmental Studies on April 22, 2019. Members volunteered to help advocate at the exhibition which included posters, handouts, and other items pertaining to nuclear advocacy. The exhibition was a great experience for members to speak to members of the community. Being an Earth Day conference, we were surrounded by environmentalist organizations with strong anti-nuclear policies as

well some with pro-nuclear nuclear statuses. Many of our members did a great job advocating when faced with criticism by educating and informing the public the truths about nuclear energy. We also met some environmentally concerned members of the public very different views than us and there were other small contingents that supported nuclear. The common message that we put out there is that nuclear is not the end all be all solution to climate change but it is an important part of the solution to moving forward.



*ANS Member, Katie Mummah at our Earth Day Booth at Manona Terrace*

## 6.4 Engineering EXPO

Engineering Expo is an annual two-day event held by the UW-Madison College of Engineering. This event was open to the whole community and there were attendees of all ages who were able to participate. Representatives from ANS volunteered at one of the stations in this event, informing the community about nuclear science, radiation and the benefits of nuclear power. This was done through interactive activities and a short informative presentation that made the content presentable and interesting. This event was a great way to interact with the community and share our passion for our industry.





## 7 Public Service

ANS-UW strives to be an active and positive force in the Madison community. To this end, we try to coordinate community service efforts and engagement with the public.

### 7.1 Adopt a Highway

ANS-UW participated in Adopt-A-Highway for the fourteenth consecutive year. Members cleaned a two mile stretch of University Avenue between County Highway Q and Old Middleton Road. Per the requirements of the program, participants are required to clean the highway a minimum of three times between April 1st and November 1st every year. We completed the first events in the Spring, Summer, and Fall. For the Fall clean up, we started cleanup around 6PM by Segoe Rd, on the eastbound side of University Ave. Since our stretch of highway is roughly 2.5 miles long, we only had time to make a round trip on half of the highway. We cleaned up to Craig Avenue, and then worked our way back to Segoe Rd at about 7:45PM. The current plan for the next cleanup is to start at Allen Blvd, and work our way to Craig Avenue and back. Though considered community service, this was still considered very social, as the members had a blast while working together to clean up.

### 7.2 Second Harvest

In February of 2019, the American Nuclear Society UW Madison student chapter attended a Saturday morning volunteering session at Second Harvest Foodbank in Madison. The primary objective for this was to provide our members an opportunity to engage in community service in ways that are meaningful for them and the people of Wisconsin, some of whom are food insecure. Second Harvest is a nonprofit organization that gets food donations from major supermarkets in order to feed Southern Wisconsin citizens who are living in poverty. The two and a half hours that our members gave to help sort, and package food items for those in need, was a fulfilling experience which left a majority of us wanting to go back again soon. The administration at Second Harvest was very welcoming and we intended to attend a second time in the spring semester, however we could not establish a common date where six or more people could attend at a single time. Regardless, this is a partnership which we hope to continue in the future as our members enjoy giving back while also learning a lot about themselves.

### 7.3 Nuclear Science Youth Workshops

Over the course of the academic year, ANS-UW holds six workshops for boy and girl scouts, along with other interested youth of high school age and younger. ANS-UW managed to bring in over 150 scouts and youth, not counting the adults that also came with their children through our program this year.

Our workshop consists of five stations and an introductory nuclear science lecture. First we had an intro presentation to give them the background material. Then we had two coupled stations, the counting station, where the attendees took radioactive sources and experimentally observed the effects of time distance and shielding, and the cloud chamber station, where the attendees were able to learn about half lives and see radiation in a cloud chamber. Next, the workshop attendees received a careers presentation about the vast amount of opportunities available in the field of nuclear science and technology. Lastly, the attendees were able to tour cyclotron and Madison Symmetric Torus which is a plasma research lab. We were able to award around 150 merit badges this year, we hope to continue this tradition of bringing in a large number of scouts and youth in the future.



*Youth workshop tour in the RDS Cyclotron Facility*

## 7.4 Tutoring Volunteers

During the fall semester ANS-UW had sent volunteers to tutor at the local Madison West High School every Tuesday. On average, there would be three volunteers each week. Volunteers would tutor from 4:00 - 5:30 PM on topics such as chemistry, biology, social studies, and trigonometry. They would also help students on preparing for standardized testing, AP testing, and college applications. This was a great opportunity for ANS-UW members to reach out to the community and inspire young minds.

## 8 University Service

### 8.1 Engineering Bash

Within the first week of school, ANS-UW held a recruitment and education event open to UW-Madison's College of Engineering. We handed out pamphlets and gave talks to passing by college students to see if they were interested in learning more about nuclear science or technology and possibly joining ANS. Many of the demonstrations we were able to display were fiesta ware, Geiger counters, and posters which included fun facts about nuclear energy. We discussed what involvement in an ANS student section would look like and tried to welcome all the new students to campus. The event was an overwhelming success over past years, with an addition of over thirty people to our emailing list. We hope to continue our involvement in the UW-Madison College of Engineering E-Bash for many years to come.

## 9 Nuclear Support

### 9.1 Annual Meeting

ANS-UW sent a student to 2018 ANS Annual Meeting in Philadelphia, PA. The student participated in multiple committee and division meetings in addition to other conference events.

### 9.2 Winter Meeting

ANS-UW sent 10 students to the 2018 ANS Winter Meeting in Orlando, Florida. Many of our members gave presentations at this conference, and also took part in the division meetings. The undergraduate members really appreciated the ANS student program, which allowed for a reimbursement in return for helping work the conference.

### 9.3 Student Conference

This year we sent 11 members, with the addition of our faculty advisor, to the yearly ANS Student Conference held at Virginia Commonwealth University. We had a strong showing with 5 of these members attending for their first time. Two of our members presented their research in a technical presentation with one being recognized at the final banquet. After listening to many presenters, our members were inspired to advance their work in the field. Our younger members expressed their desires to bring in additional participation to the student section from their peers, and our older members expanded their networks to pursue internship and career offers related to advocacy. Aside from the professional development opportunities the conference offered, our members also enjoyed themselves as they participated in social events and explored the campus. As always, the conference was a huge hit and one of the high points of the year for all of our attendees.



*Members of ANS-UW attending the ANS Student Conference at VCU*

## 10 Social Events

### 10.1 Fall Pic-Nuke

Picnuke is one of the largest events held by the UW-Madison ANS student chapter and has been for many years. Picnuke is a biannual social put on by the ANS-UW executive board for all members, department faculty, friends and family to enjoy. The event provides students and faculty the opportunity to become acquainted in an informal setting. This year's fall Picnuke took place on September 21st, 2018 at the Hoyt Park Shelter. Over 75 people came to enjoy burgers, brats, and beverages along with a friendly softball game. The spring Picnuke will be on April 26th at Vilas Park. This will be a great way to destress before finals as well as say goodbye to those graduating.



*Vice President, Marissa Brown, grilling at our Fall PicNuke*

### 10.2 Ice Skating

This year's winter social took place on December 7th, in which UW-ANS hosted ice skating at The Shell, one of the University's recreation centers. Many of our members skated around the rink, helped others learn to skate, and hopefully stayed on their feet. The winter social is always a great way to have some fun before finals kick in. The social provided an opportunity for our members to de-stress and have some fun before final exams.

### 10.3 UIUC Visit

This year the UW-Madison ANS student chapter hosted members from the University of Illinois Urbana-Champaign ANS chapter. Five members from UIUC came to the UW-Madison campus on Friday February 15th. After arriving, members attended a tour of the Pegasus Lab, a toroidal exper-





iment researching fusion science. Later that day, both UW and UIUC students attended a Madison Capitals hockey game. This was a great opportunity for members of both student chapters to socialize and get to know each other. On Saturday they were given tours of both the Environmental Degradation of Nuclear Materials Laboratory and the Thermal Hydraulics Laboratory. This gave UIUC students a chance to see first-hand the research going on at UW-Madison. The visit ended with a social in which all department students and faculty were invited.

#### 10.4 Chili Cook-off

This February, the Essen Haus Restaurant hosted their 6th Annual Chili Cook-off in Madison, WI. Fifteen cooks, each with their own homemade recipe, gathered to have their chili judged by professionals and contest attendees. This year's chili was derived from one of our graduate students own personal recipe. The morning of the competition, the executive board got together to cook the chili. ANS-UW members of all ages made it out to the Essen Haus on Saturday to vote for the chili. In the end, our chili won third place in People's Choice! This was the 6th time the ANS executive board took one of the People's Choice Award. The Chili Cook-off has become a popular event for both the executive board and members to spend time with one another, try some great chili, and help the club win the competition.

#### 10.5 General Meeting Social

To increase attendance at our general meetings, we decided to start having small socials after each general meeting. For the Fall Semester, we focused on ice breakers. This form of introduction allowed for our members to get to know each other and learn more about their fellow nuclear engineers. For the Spring Semester, the theme for the socials was game night. This was received well by all the members! A few of the games played were Nuclear Jeopardy, Nuclear Pictionary, and Quiplash. These "game nights" allowed for hilarious conversations and inter department bonding. Because of the great reviews, we hope to continue this next semester and for years to come.

#### 10.6 Wednesday Coffee and Donuts

For many, Wednesday is the most mundane of days. In the middle of the week when ambitions run low, the ANS student section provides free coffee and doughnuts to its members and other department friends. Between 8:30 and 10:00 am, undergrad and graduate students gather in the Engineering Research Building for Greenbush doughnuts. Conversations about nuclear energy and politics resound down the hallway as faculty and students line up for coffee refills between classes. This weekly tradition has been around since 2005 and continues to stimulate connections within the Engineering Physics Department.

#### 10.7 Mickies Dairy Bar

ANS-UW continued their weekly breakfast social event at the local breakfast diner "Mickies Dairy Bar". Every Friday morning around 7 A.M. a group of undergraduate and graduate students as well as some faculty met and conversed about various professional and social topics. All involved find it is a great way to start off the final stretch of the week, and regularly return to keep the tradition going. Breakfast at Mickies is a decades long tradition that continues to hold consistent attendance.

#### 10.8 Intramural Sports

This year ANS-UW formed two intramural sport teams, an ultimate frisbee team during the fall semester and a volleyball team in the spring semester. The ultimate frisbee team had 13 team members. The season started on September 28th and was six weeks long. Members had a great time playing ultimate frisbee and became closer as the season went on. The volleyball season started on



November 26th, and games were played every Sunday at 8:00 PM for eight weeks. After the regular season, the team entered the playoffs in which they were able to make it to the semifinals. Intramural sports were very successful and will be continued next year.



## 11 Future Work for ANS-UW

ANS-UW is proud of the work it has done but is always looking for ways to improve. We were able to fulfill our past goal of improving our community service pillar. Our next goal is to increase attendance at the ANS conferences. ANS-UW plans to challenge not only the exec board, but also its members to pursue research and be able to show their work at these well developed conferences. ANS-UW also plans to collaborate with more energy and environmental focused students groups on campus. The student section hopes to hold joint discussion and events with these groups focused on how nuclear technology can help better our world.

## 12 Conclusion

The American Nuclear Society at the University of Wisconsin-Madison has had a great year in providing its members opportunities in professional development, public information, public service, university service, nuclear support, and social events. The Student Section has consistently received thanks and praise from members of the community as well as parents and students at events. All of the members of the society have been nothing short of extraordinary this year and have dedicated a large amount of their time to help run our numerous events. We are looking forward to already starting to plan and prepare events for the 2018-2019 year.