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Nuclear Engineering Program

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RE: University of Florida ANS Student Section Application for Samuel Glasstone Award

May 8, 2013

Dear Glasstone Award Selection Committee,

On behalf of the Nuclear Engineering Program at the University of Florida, we are pleased to offer our support to the Samuel Glasstone Award Application of the University of Florida Student Section of the American Nuclear Society (UF-ANS).

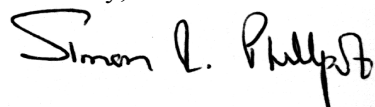
Historically, the University of Florida has been home to one of the outstanding Nuclear Engineering programs, and ANS Student Sections, in the country. As we emerge from a recent administrative reorganization, the Nuclear Engineering Program recognizes the key role our flagship student society has in the revitalization of Nuclear Engineering at the University of Florida. The 2012-13 academic year represented a major step forward in UF-ANS activities, as detailed in the attached report.

Key activities this year included:

- Launching an ANS General Body Retreat, a flagship social event in early Fall.
- Facilitating the attendance of 19 UF students at the ANS Winter Meeting and 14 UF students at the ANS Student Conference (including 13 presenters and 2 award winners).
- Hosting numerous information/recruitment sessions with the nuclear industry and federal agencies, including AREVA, GE-Hitachi, Westinghouse, the Nuclear Navy, Southern Company, PNNL, and the NRC.
- Creating a Memorandum of Understanding (MOU) with the University of Florida chapter of Women in Nuclear to ensure smooth cooperation between the two student groups.
- (Re-)Establishing an ANS End of Year Banquet in late Spring, including awards for outstanding students and faculty.

We hope that you will see to fit to recognize the work of this year's UF-ANS officers, executive board, and members with the 2013 Samuel Glasstone Award for Outstanding ANS Student Section.

Sincerely,



Simon Phillpot
Professor & Chair of MSE
Director, Nuclear Engineering Program



DuWayne Schubring, Ph.D.
Assistant Professor, Nuclear Eng. Program
Faculty Advisor, UF-ANS

University of Florida American Nuclear Society Student Section 2012-2013 Annual Report

Chelsea Collins
Diego Garcia
Aaron Holzaepfel
Jitesh Kuntawala
Madison Martin
Sarah Sarnoski
Daniel Siefman
Pablo Vaquer
Nick Yap

May 7th, 2013



Submission for Samuel Glasstone Award

Faculty Advisor: Dr. DuWayne Schubring

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1 Introduction

With the influx of new faculty, students, and funds, the University of Florida's Nuclear Engineering Program has grown very strong over the past few semesters. With this, has come new life into the University of Florida ANS Student Section. The mission of the University of Florida's student ANS chapter this year was to revive the great chapter it was once was. The following is a report detailing the activities the ANS student section at the University of Florida undertook in the 2012-2013 school year in order to execute this vision. Some highlights of this year were:

- Launching an ANS General Body Retreat, a flagship social event in early Fall.
- Facilitating the attendance of 19 UF students at the ANS Winter Meeting and 14 UF students at the ANS Student Conference (including 13 presenters and 2 award winners).
- Hosting numerous information/recruitment sessions from industry, including AREVA, GE-Hitachi, Westinghouse, Nuclear Navy, Southern Company, PNNL, and the NRC.
- Creating a Memorandum of Understanding (MOU) with the University of Florida chapter of Women in Nuclear to ensure smooth cooperation between the two student groups.
- Establishing an ANS End of Year Banquet in late Spring, including awards for outstanding students and faculty.

2 Section Management

The University of Florida ANS Student Section is managed by an executive board of 9. The External Vice President, the Internal Vice President, and the Secretary serve as the committee chairs for the External, Internal, and Communications Committees correspondingly. The Governors of the Board of Governors serve as vice-chairs for each committee and the Webmaster and Social Chair serve under the Communications and Internal Committee respectively. The treasurer and the assistant treasurer work together on the section's finances. The President oversees all committees and executive board members. Finally, the faculty advisor serves a resource person for the section and ensures compliance with UF and ANS regulations. He interfaces primarily with the President of the section, along with the Internal Vice President (for bylaws/rules matters) and Secretary (for communication with ANS National). This organization is detailed by Figure 1.

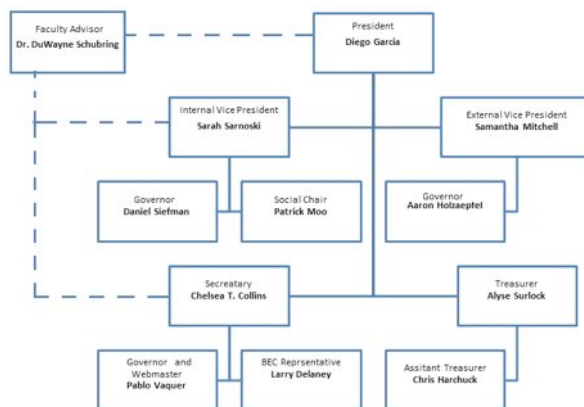


Figure 1: Student Section Executive Board Management

Each committee is composed of 10-12 general body members and plan events that correspond to the mission of their committee. The External Committee focused on professional development, industry relations and outreach; the Internal Committee focused on social events, university relations, and faculty relations, while the the Communications Committee focused on internal and external communications. For several large events, committees worked together to handle the workload.

2.1 Fundraising Packet

A fundraising packet was constructed in order to raise funds for the activities of the section. This packet was sent not only to companies like AREVA, Westinghouse, FPL/NextEra, Southern Company, Duke, and Dominion, but also to alumni and family of student members. The fundraising packet is shown in Figure 2.

American Nuclear Society
University of Florida Student Section
202 Nuclear Sciences Building
Gainesville, FL 32611

Date _____
Name _____
Address _____
Dear _____

The Student Section of the American Nuclear Society (ANS) at the University of Florida is comprised of nuclear engineering students who wish to not only obtain a nuclear engineering degree, but also advance the nuclear engineering field.

We understand that the nuclear industry workforce is rapidly maturing and well-trained, enthusiastic professionals are needed. Students in our organization realize not only the importance of education, but also the importance of involvement in nuclear issues prior to our graduation so that we can "hit the ground running" after earning our degree.

I'm writing to ask your company to consider making a donation to the Student Section of ANS at UF to help us provide the best experience possible for UF nuclear engineering students.

Some of the activities we conduct and for which your gift will be used include:

- ❖ Boy Scouts Nuclear Science Badge workshop
- ❖ Assist UF ANS student members attend the National ANS Winter Conference
- ❖ Assist UF ANS student members attend the ANS Student Conference at MIT
- ❖ Orientation hosted for new UF nuclear engineering students who wish to become Student Section ANS members and to provide an opportunity for them to network and meet other students, giving them a support system

Donations of any amount are welcome and appreciated. If you do wish to support our organization, please complete the enclosed gift form and make your check payable to American Nuclear Society UF Student Section and return to the address on the form.

I will be glad to discuss our request or provide any additional information you may need. You may visit the ANS website at <http://ansgators.wis.com/home> or contact me at ufl.ans.secretary@gmail.com.

Thank you for your consideration.

Sincerely,

American Nuclear Society
University of Florida Student Section
202 Nuclear Sciences Building
Gainesville, FL 32611

Gift Form

Company Name _____
Contact _____
Address _____
E-mail _____
Phone _____

Our gift of the following amount is enclosed:

_____ \$100 _____ \$1,000
_____ \$250 _____ Other
_____ \$500

Please make check payable and return to:
American Nuclear Society University of Florida Student Section
ATTN: Treasurer
202 Nuclear Sciences Building
Gainesville, FL 32611

For more information contact Alyse Scurlock, Treasurer, at ufl.ans.secretary@gmail.com.

Thank you for your support of the American Nuclear Society University of Florida Student Section.

Figure 2: ANS Fundraising Letter and Form

2.2 ANS - WiN Memorandum of Understanding

This year with the creation of another nuclear engineering society, Women in Nuclear, at UF an administrative challenge of time conflicts, event hosts, and other relationship issues arose. To alleviate any stresses on the two groups a "Memorandum of Understanding" was drafted and set in place by ANS and WiN. This document sought to outline the interaction and cooperation between the two groups for the betterment of each. Shown below is a full copy of the Memorandum of Understanding between UF ANS and UF WiN.

THIS MEMORANDUM OF UNDERSTANDING (MOU)

is made on the August 23rd day of 2012.

BETWEEN

AMERICAN NUCLEAR SOCIETY: UNIVERSITY OF FLORIDA STUDENT SECTION

and

WOMEN IN NUCLEAR: UNIVERSITY OF FLORIDA

1. Purpose

The purpose of this document is to outline the mode of interaction and cooperation between the two student sections to ensure the betterment of each group and avoid conflict. This MOU is subject to revision as the needs and goals of the two societies develop. Changes to the relationship between UF-ANS and UF-WIN, as reflected in this MOU, will be discussed by the executive boards (to include faculty advisors) and discussed and voted on by the general membership of both organizations.

2. Missions

1. Employ reciprocal promotion of events.
2. Coordinate outreach efforts to avoid conflict and instead work to complement existing efforts in each organization.
3. Events should be scheduled to avoid any time overlap or conflict.
4. Executive board meetings, general body meetings, and elections meetings for each organization should be held separately and scheduled to avoid time overlap or conflict.
5. ANS and WIN should each have their own separate faculty advisors who will collaborate as appropriate to ensure compliance with this MOU and a mutually-beneficial relationship between the organizations.
6. WIN members are to be welcomed at ANS events and ANS members are welcomed at WIN events, regardless of the gender/sex (required by SG policy) or organizational affiliation(s) of the student. Single gender/sex events that may be organized by others (e.g., seminar speaker holding lunch for female graduate students only) may be promoted by WIN (and/or by ANS), at the discretion of the officers.
7. Most events should be hosted by a single organization, with promotion by the other. Co-hosted events should have clearly-defined responsibilities and funding sources, with both organizations actively participating.

8. The organizations should coordinate outside fund raising efforts to avoid inter-organizational conflict and maximize the total return to the nuclear program.
 - a. The organizations will collaborate on a yearly Fall funding drive between the beginning of Fall semester and September 15; this funding drive will include letters to identified nuclear industry organizations requesting funding for specific activities and general revenue for both organizations as appropriate. ANS and WIN shall send separate letters packaged together or separately at the discretion of the executive boards.
 - b. Funding requests outside of the fund drive may be submitted by either organization after discussions with and approval by the other organization within a calendar week. Such approval shall not be unreasonably withheld.
 - c. No portion of the current (August 2012) UF-ANS Outside Revenue Account shall be transferred to UF-WIN.
 - d. Either organization may request funding from the Florida Local Section of the American Nuclear Society (Professional Section) at will.

.....
DuWayne Schubring
ANS UF Faculty Advisor

.....
Diego A. Garcia
ANS UF President

.....
Ping Neo
WIN UF Faculty Advisor 1

.....
Madison Martin
WIN UF Presumptive Co-Chair

.....
Katherin Goluoglu
WIN UF Faculty Advisor 2

.....
Samantha Mitchell
WIN UF Presumptive Co-Chair

2.3 Newsletter

Every month, we write and disperse (via email) our ANS Newsletter, which is designed to keep faculty and students informed about past and future events for our ANS section. This newsletter is very well received by our faculty and is often forwarded to alumni. All of our newsletters from our 2012-2013 year can be found at <http://www.nuceng.ufl.edu/component/content/article/21>.

2.4 ANS Social Media

Throughout the year, we used Facebook as an efficient and effective tool for all members to communicate. It was a great way to alert members of meetings and other events. Members also posted current articles involving nuclear and other interesting links and information.

2.5 Op-ed Writing

Our ANS student section became very involved in op-ed writing this year publishing 3 pieces that were featured in the Alligator campus newspaper and in the Gainesville Sun. The first article published is titled: "A Conversation About Nuclear Energy" and was written by our chapter president Diego Garcia; the second article is titled: "Nuclear energy: Our generations time is now to make a change" and was written by incoming secretary Nick Yap and chapter president Diego Garcia. Lastly, the article published is titled "Tulenko and Garcia: Dispelling the myths about U.S. nuclear power" and was written as a response to an article trying to discourage people from supporting new nuclear builds in Florida; it was written by chapter president Diego Garcia and emertius faculty member and former national ANS president, James Tulenko.

2.6 Creation of ANS UF Website

The website, <http://ansgators.wix.com/home>, was created to increase involvement in the ANS chapter at UF. The website was mainly built to assist UF students in learning more about ANS by providing a map with the location of the next ANS chapter meeting, providing several important contacts, and giving an overview of the many activities held by ANS. In addition, the website also helps current members keep in touch with recent events, provides links to other websites, and even gives a step-by-step of how to join ANS national.

3 Social Events

3.1 End of Year Banquet

The end of the year ANS banquet was held on the last day of classes at Ustler Hall. Many students and professors were in attendance and had the opportunity to socialize and interact with one another. It is rare that students and professors have the availability to interact outside of a school setting and this allowed for such interactions. At the banquet awards were given to the most outstanding undergraduate and graduate students and the most outstanding professor. The recipient of the outstanding instructor award was voted on by ANS members and was awarded to Dr. William Vernetson. Dinner and dessert was served and a slide show of pictures from ANS activities throughout the year was shown. Also the president, Diego Garcia, the vice president, Sarah Sarnoski, and the future president and current secretary, Chelsea Collins, all gave speeches at the banquet. Also, professors spoke at the banquet: Dr. DuWayne Schubring, ANS faculty advisor, Dr. Kelly Jordan, University of Florida Training Reactor Director, and Dr. Jim Baciak. Pictures of the End of Year Banquet can be found in Figures 3, 4, 5, & 6.



Figure 3: ANS Executive Board and Faculty Advisor during the End of Year Banquet



Figure 4: Sarah Sarnoski, Brian Triplett, Diego Garcia, Daniel Siefman, & Alyse Scurlock, Student Award Winners & Finalists



Figure 5: Dr. William Vernetson Receives Best Instructor Award from our ANS Chapter



Figure 6: ANS End of Year Banquet

3.2 ANS General Body Retreat

The fall retreat was hosted at Chelsea Collinss (ANS Secretary) house by the Ichetucknee River. ANS members car pooled to the house and around 20 members attended. The retreat began with numerous icebreakers. For the first icebreaker, everyone selected Skittles out of a bag and however many Skittles one took was the number of fun-facts they had to give about themselves. This activity gave each attendee the opportunity to introduce themselves and to tell everyone some important information about their lives. This activity also helped everyone to grow comfortable with each other and to gain confidence speaking in front of people. Then during the next activity everyone had a name taped to their back. The names varied from famous celebrities, famous scientists, and even some of our professors. Each person had to figure out the name on their back by asking yes/no questions. This activity was very fun and allowed all ANS members to interact with each other and learn even more from each other. The rest of the retreat was spent grilling food and eating and afterwards floating down the Ichetucknee River. This retreat was very effective in establishing connections between ANS members and set the tone for strong connections throughout the school year.



Figure 7: ANS Fall Retreat (1)

3.3 ANS Tailgates

For seven weekends during the fall semester, several members of UF ANS met for tailgate parties to grill-out and have a good time before watching the Gators win every home game of the 2012 season. These proved to be excellent opportunities for freshman and transfer students to become acquainted with other nuclear engineering students as well as learn how to become more active in the UF ANS section.



Figure 8: UF vs. Kentucky Game



Figure 9: UF vs. Bowling Green Game

3.4 Spring Bonfire

The first major social event for the 2013 Spring semester was a bonfire. Some of the guests arrived a few hours early to play card games and then prepare for the rest of the guests to arrive. The night was a bit on the cold side but there was plenty of hot apple cider and Smore making materials for everyone to enjoy. Overall, around thirty members were in attendance. Because of the great turnout, more events similar to this will be planned in the future.



Figure 10: Spring Bonfire

3.5 Bowling Social

UF ANS members met in the Reitz Union game room on campus for a friendly bowling competition. There were enough members to fill four lanes for about two hours of non-stop bowling. Despite being a bit on the amateur side, a great time was had by those in attendance. The event was organized by social chair Pat Moo.



Figure 11: ANS President, Diego Garcia, at the Bowling Social

3.6 ANS Swamp Social

Shortly after several of the seniors finished a Monday evening exam, UF ANS members met at The Swamp restaurant to socialize and discuss their recent trip to the 2012 ANS Winter Meeting. Many members enjoy meeting after exams to relax and unwind before tackling their next academic task.

3.7 Weekly Poker Nights

During the 2013 Spring semester, a few UF ANS members got together on Friday nights to play poker at Pat Moos house. These events were just one more way UF ANS members got together outside of the study room to take some time to socialize and get better acquainted with one another. Poker nights were organized by Pat Moo and Pablo Vaquer.

3.8 Intramural Soccer

ANS hosted a soccer match against UF-ASME on Sunday, October 21, at 5:00 pm at Flavet Field. Despite being outnumbered 9 to 12, ANS held their own in the match, being barely defeated by ASME 3-to-2. The match was organized by Social Chair Pat Moo. A picture of the event can be found in Figure 12.

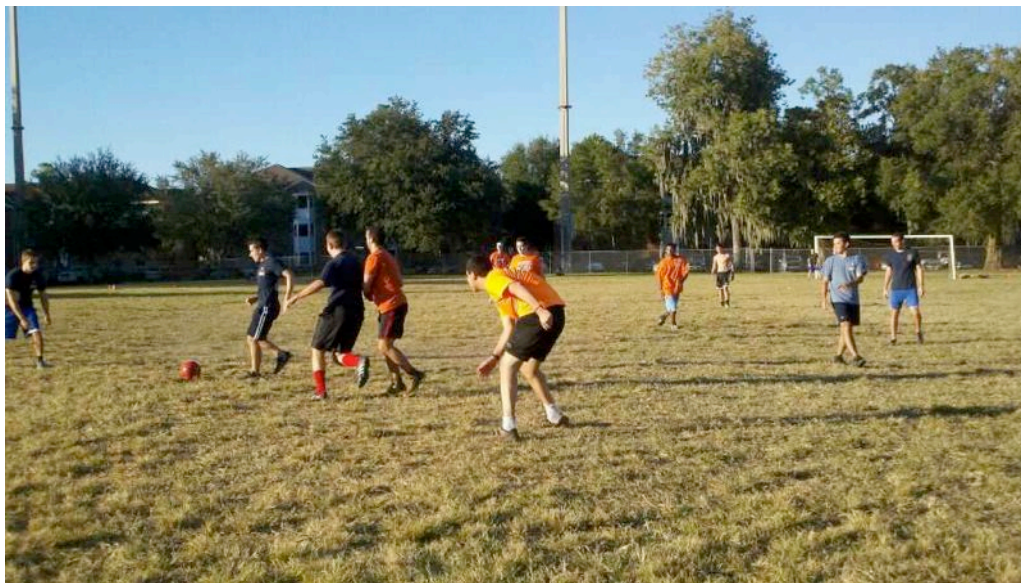


Figure 12: UF-ANS vs. UF-ASME Soccer Match

3.9 ANS Mentor Program

Older and younger ANS members apply to be matched with mentors or mentees. We match members based off of their hobbies and career interests. This program is a great way for younger members to learn from the wisdom of their older mentors.

3.10 ANS and WiN: Harold Agnew/LANL Video Viewing

American Nuclear Society University of Florida Student Section partnered with the recently created Women in Nuclear Gator Chapter to host a video viewing party of a past speech given by Harold Agnew at Los Alamos National Laboratory. As part of the Heritage Series presentations at LANL, Harold Agnew gave a speech about his experience during the Manhattan project as well as his opinions on stockpile stewardship. Students brought their own lunches and engaged in discussion post video viewing.

4 Professional Development

Professional development was a large part of UF ANS this year. We were able to send 19 students to the ANS annual winter conference as well as 14 students in the annual student conference, including 13 UF ANS paper presenters. In addition, UF ANS hosted a multitude of technical and recruitment presentations throughout the year including the NRC, AREVA, GE-Hitachi, Nuclear Navy, Westinghouse, and more. Professional development sessions were also held for UF ANS by the UF career resource center on the topics of resume building, and interview skills.

4.1 ANS National Winter Conference

19 UF students had the opportunity to attend the annual national ANS winter conference this past year in San Diego, California. Almost all the students attending were attending as student assistants for speaker sessions where they were able to listen and learn from leading industry professionals in a variety of subject matters.



Figure 13: UF ANS Students by Pacific Beach in San Diego

4.2 Student Conference Presentations

Fourteen UF students attended the ANS Student Conference at MIT; 13 of the attendees presented papers or posters. Sarah Sarnoksi won Best Paper in the Education, Training, and Workforce Development section, while Andy Cartas was one of the four students awarded for Best Paper overall.



Figure 14: UF ANS 2013 Student Conference Attendees

In addition to attending the conference, students were also able to tour Harvard, MIT, and MITs research reactor. ANS National President Michael Corradini and Commissioner Apostolakis both spoke for the opening dinner on Thursday night and AREVA VP Andy Cook spoke for the closing dinner on Saturday. Friday nights dinner was a cruise of Boston harbor with speaker Margaret Harding. Pictures from the trip are available on our Facebook page <http://www.facebook.com/pages/American-Nuclear-Society-at-UF/243959355690743>. Included is a list of each of the attendee's and their paper/poster topics.

1. Pablo Vaquer and Patrick Moo: "A Low Temperature Gas Reactor with VASIMR Thrusters for Near-Term Interplanetary Travel"
2. Diego Garcia and Jitesh Kuntawala: "Performance Analysis and Fabrication of PARES Based Nuclear Battery for MEMS Application"
3. Sarah Sarnoski: "University of Florida Digital Controls Work Force Training"
4. Pablo Vaquer: "A Quantitative Comparison of Inverse transport Methods Using Three-Dimensional Problems That Have Local Minima and Multiple Solutions"
5. Diego Garcia and Chelsea Collins: "Effective Communication Strategies for Nuclear Engineering Students in Risk Presentation, Media Engagement, and Political Messaging"
6. Danny Permar: "FRAPCON 3.4 To Determine Enhanced Performance of UO₂ Composite Fuel Fabricated by Spark Plasma Sintering"
7. Daniel Seifman and Sam Kowalczyk: "The Quest for a Negligible-Risk Reactor: A Safety Analysis of the University of Florida Training Reactor"
8. Jitesh Kuntawala and Devin Kelley: "Computational Shielding and Dose Analysis for Student Common Areas Due to a D-D Neutron Generator"
9. Andrew Cartas: "Fabricating the Next Generation of Nuclear Fuel Utilizing Spark Plasma Sintering"
10. Alexander Zorilla and Emily Marshall: "Analysis of Skin Dose Mapping for a Standard Fluoroscopy Procedure in Patients of Varying Sizes"

4.3 AREVA Recruitment Energy Fair

AREVA Inc. accepted an invitation from section president Diego Garcia to host a recruitment fair organized by the students. Finnish Southworth AREVA's Chief Technology Officer, Pedro Salas the Director of Regulatory Affairs, and Natalie Martin Smith the Head Talent Recruiter all attended to speak and advise students about careers in the nuclear industry and recruit the next generation of AREVA's nuclear engineers from the University of Florida. In addition, Erik Haas the Associate Project Manager of AREVA's Innovation Incubator and Jennifer Musgrave, a December 2012 graduate from the UF who now works in Mr. Salas department, spoke about the roles that young nuclear engineers assume in the industry and at AREVA.

Over 50 students attended from the student section, the college of engineering, and even the colleges of liberal arts and business. Eight students received full-time job offers or internships as a direct result from the recruitment fair. Pictures of the event can be found on Figure 15 & 16.



Figure 15: AREVA Recruitment Energy Fair (1)



Figure 16: AREVA Recruitment Energy Fair (2)

4.4 GE Recruitment Hitachi Session

Representatives from GE Hitachi gave an informative presentation to nuclear engineering students. Presentation included an overview on GE Hitachi, existing endeavors, developing technology, and student opportunities.

4.5 Southern Company Information Session

Representatives from Southern Company gave an informative presentation to nuclear engineering students. Presentation included an overview on Southern Company, existing endeavors, developing technology, and student opportunities.

4.6 Nuclear Regulatory Commission Recruitment Session

The head Human Resources manager of the NRC visited our student ANS chapter. She and her team talked to our students about employment opportunities with the NRC after graduation.



Figure 17: US NRC Presenters

4.7 Westinghouse SMR Information Session

Rick Wright from Westinghouse Electric Company gave a presentation regarding the design process of SMRs and the current Westinghouse SMR design. This was especially helpful for the senior nuclear engineering students who were currently working on designing an SMR for ENU 4192 (Nuclear and Radiological Engineering Design).

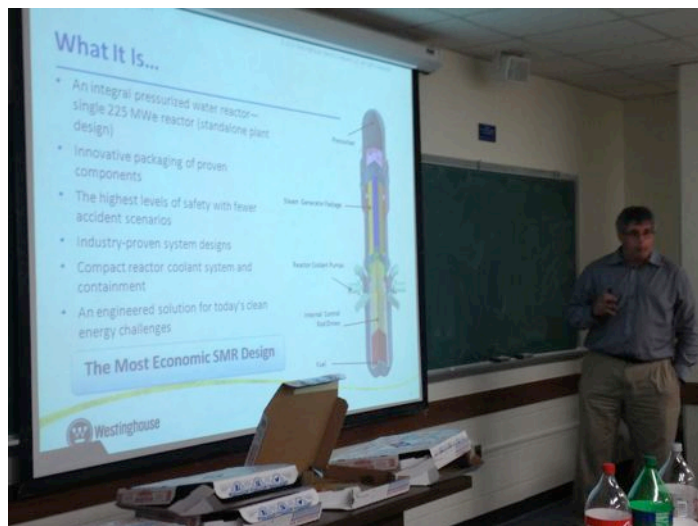


Figure 18: Rick Wright presenting the latest Westinghouse SMR design to our student ANS section

4.8 Pacific Northwest National Laboratory Information Session

Representatives from Pacific Northwest National Laboratory gave an informative presentation to nuclear engineering students. The presentation was given by Ryan Boscow, an HR executive from PNNL, and a UF alumnus who went through the NNSA nonproliferation graduate program. Existing endeavors, developing technology, and student opportunities were presented.



Figure 19: PNNL Presenters

4.9 Navy Nuclear Recruitment Session

Representatives from the Navy Nuclear Program gave an informative presentation to nuclear engineering students. The presentation included an overview of the Navy Nuke program, student benefits for those enrolled, developing technology, and requirements for joining.

4.10 UF MBA-Engineering Partnership Information Session

The University of Florida has a very well established Graduate Business program and they are very interested in having engineering students join their program. A representative from the Masters of Business Administration program, Katie Beland, came to one of the ANS meetings to give us more information about the opportunities engineers have in the business world. The UF MBA program offers numerous scholarships to engineers and the ANS students were informed of the very generous offers available to them. Many nuclear engineers are unaware of the opportunities available to them outside of the typical career paths. This presentation given by Katie Beland exposed UF ANS students to a different option after graduation.

4.11 Benton Engineering Council Leadership Retreat

The Benton Engineering Council (BEC) hosted a leadership retreat on August 26. Benton Engineering Council is an organization that links engineering students and their governing bodies and advocates for the College of Engineering to UF students and the community. ANS Executive Board members Diego Garcia, Sarah Sarnoski, and Alyse Scurlock attended the event. The retreat provided the ANS E-board with the opportunity to interact and collaborate with the executive board members from many of the other student engineering organizations on campus. Budgeting for the upcoming year was discussed as well as ideas for the development of an ANS website.

4.12 Career Resource Center Resume and Interview Information Sessions

Our section invited 2 speakers from the UF career resource center to prepare students for both the correct ways to behave in an interview and also how to prepare a great resume. The speakers were hosted before the trip to the ANS National Conference in San Diego and the AREVA Recruitment Energy Fair since they presented our students the opportunity to interact with top recruiters in the nuclear field.



Figure 20: UF Career Resource Center Resume Workshop

5 ANS/Nuclear Industry Support

5.1 AREVA Republican and Democratic National Conventions Innovation Energy Fair Events

Six UF ANS members traveled to Tampa and Charlotte to volunteer with AREVA at their Innovation Energy Fairs at both the Republican and Democratic National Conventions. The Energy Fairs displayed six new pieces of AREVA technology (a spent fuel pool monitoring system, mini-probe and robotic crawler inspection tools for steam generators, and an ATRIUM 10 BWR fuel assembly, among others) and were designed to allow AREVA to showcase their developing technology to delegates and members of Congress from states attending the conventions. The RNC Energy Fair took place on the Starship Yacht docked next to the convention center in Tampa while the DNC Energy Fair was at the Charlotte Country Club in North Carolina. ANS members had the opportunity to meet with Representative Joe Wilson and Senator Lindsey Graham from South Carolina and Representative Gerry Connolly from Virginia at the events, as well as with the CEO of AREVA, Mike Rencheck. As volunteers, the UF ANS members assisted with the setup and logistics of both events and communicated AREVA's mission of providing clean, safe, affordable forms of energy. Pictures of this trip are represented by Figures 21, 22, 23, 24, & 25.



Figure 21: ANS Volunteers at Yacht Starship at the RNC



Figure 22: ANS Volunteers Packing Gift Bags at the RNC



Figure 23: Pablo Vaquer, ANS Webmaster, Presenting AREVA Technology at the RNC



Figure 24: Diego Garcia, ANS President, and Chelsea Collins, ANS Secretary, with Congressman Joe Wilson



Figure 25: ANS Volunteers at the DNC

5.2 Westinghouse Fuel Fabrication Facility

On January 10th, 2013, 13 ANS members made the trip to Columbia, South Carolina to tour Westinghouse's fuel fabrication facility. The students were first given a presentation of the fuel production process and the actions that take place at the Columbia facility. Then after that the students were broken into small groups and given a personal behind the scenes tour of the facility. The entire process from the enrichment, to the production of fuel pellets, fuel rods, and the zirconium cladding were explained in detail on the tour. Also the production of the fuel assemblies and the procedure for shipping them to utilities was described in detail. This facility tour was very informational and allowed students the opportunity to see firsthand many of the processes and procedures studied in class. A picture of our trip can be found on Figure 26.



Figure 26: ANS Trip to Westinghouse Fuel Fabrication Facility

5.3 AREVA Recruitment Energy Fair

Please see AREVA Recruitment Energy Fair under the Professional Development Section.

5.4 Local Section Dinner with Assistant Secretary of Nuclear Energy Pete Lyons

As part of the executive board meetings for the American Nuclear Society Florida Local Section a student representative from both American Nuclear Society University of Florida Student Section and Women in Nuclear Gator Chapter were able to participate. This allowed leadership from both nuclear student organizations to have a voice in dinner meeting planning, annual meeting planning, membership drives, and other involvement opportunities. In addition, students were invited to attend the ANS Florida Local Section Kickoff Dinner Meeting on March 19, 2013. Approximately 25

students attended. Special guest speaker Dr. Peter Lyons, Assistant Secretary for Nuclear Energy spoke after dinner following an introduction by guest Simona de Silvestro, Indy car driver and spokesperson for the Nuclear Clean Air Energy Campaign. Students had an excellent opportunity to network with these special guests as well as nuclear professionals from UF, Crystal River, and various national laboratories.



Figure 27: ANS members participating in the local section Pete Lyons Dinner

6 Community Public Service

6.1 Boy Scouts Merit Badge

A committee was started within our student section of ANS to begin hosting annual Boy Scouts Nuclear Science Merit Badge workshops. The committee was headed by Jitesh Kuntawala and Christopher Greulich who organized and oversaw the first ever Nuclear Science Merit Badge Workshop for UF ANS. On December 8, 2012 over 20 local boy scouts from the Gainesville area attended the workshop where they were taught about nuclear energy, nuclear physics, radiation, and other various nuclear science topics. The scouts partook in hands on activities like building an electro-scope or observing the effects of distance, time, and shielding on radiation detection measurements. The day ended with a tour of UF facilities, including the UF neutron activation analysis laboratory and the University of Florida Training Reactor. The Boy Scouts Committee withing UF ANS will continue to host at least one workshop a year with the plans already in place for Fall 2013.



Figure 28: Some of the Boy Scouts with a few of the ANS volunteers

6.2 Engineering Fair

As part of Engineering Week our student ANS section participated in the Engineering Fair, an event that hosts over 1000 k-12 students at the University of Florida. The ANS section booth had students participate in a half-life experiment using M&M's; with us at our booth we also spoke to many seniors uncertain about their engineering paths, and provided an insight to those students about the exciting life of a nuclear engineering and the bigger energy problems our planet faces.

6.3 Nuclear Energy Financing Hearing Trip

The UF student section accepted an invitation from Jerry Paul to travel to Tallahassee and meet with the Energy Information Center to outline how two new bills that were being introduced by the Florida Senate Energy Committee would impact our department. The two bills addressed Floridas Nuclear Cost Recovery Act and aimed to take the risk of financing of new nuclear builds away from tax payers, but possibly making new nuclear build much harder to finance.

Students who attended meet with top executives in the nuclear industry in Florida, legislators in the Florida Energy Committee, and representatives of the Nuclear Energy Institute- the trade group representing the industry in Washington D.C. Most importantly, students were given a chance to testify on the floor on this matter, with Diego Garcia doing so. Diego and the rest of the students who attended were recognized by NEI for the initiative and concern. The article can be found here: <http://neinuclearnotes.blogspot.com/2013/03/diego-garcia-left-and-gators-for-long.html>.



Figure 29: ANS President, Diego Garcia, testifies in front of the Florida Senate Energy Committee

6.4 NRC Atomic Safety and Licensing Board Levy County Power Plant Panel

Plans to build a nuclear power plant in Levy County have been facing opponents in the Levy and Alachua county areas recently, most notably from a group called the Committee for Nuclear Responsibility for the Florida League of Conservation Voters. The groups chair, Francine Robinson, has been quoted in an article on the Levy County plant in the Alligator Newspaper (“Some residents oppose nuclear power plant”, [link below](#)) and wrote an opinion piece (“No new nuclear power in Levy”, also below) in the Gainesville Sun, criticizing the plant. ANS President Diego Garcia and Professor James Tulenko both contributed letters to the Gainesville Sun and the Alligator in response to the articles by the Committee and Ms. Robinson. In addition, the NRC’s Atomic Safety and Licensing Board held a panel hearing at the Levy County Courthouse on October 31, which was attended by several members of the UF ANS group. The hearing was to address allegations that the Final Environmental Impact Statement, filed by Progress Energy in 2008 along with the application for the two nuclear reactors, had failed to consider the full impact the two reactors would have on Levy County. Based on these recent issues, the Communications Committee will begin working more closely with the Energy Information Center, founded by former UF nuclear engineering graduate and Florida Representative Jerry Paul, to author several editorial articles for local and hometown newspapers to spread factual information about nuclear energy. A picture of the group that the panel hearing is found in Figure 30.



Figure 30: ANS Members attend NRC Hearings on Proposed Levy Country Duke Energy Plant

6.5 Op-ed Writing

Please see the Op-ed Writing in the Section Management Section.

6.6 AREVA Republican and Democratic National Conventions Innovation Energy Fair Events

Please see AREVA Republican and Democratic National Conventions Innovation Energy Fair Events under the ANS/Nuclear Industry support section.

6.7 Newsletter

Please see the Newsletter paragraph under the Section Management section.

7 University Service

7.1 SWE eSwamp

The Society of Women Engineers (SWE) hosted their annual eSwamp event on Saturday, August 25. Over 100 students attended the event, which was held at Lake Wauburg. eSwamp is aimed at allowing freshman females interested in engineering a chance to interact with and get information on all of the different engineering student organizations at UF. ANS and the new Women in Nuclear (WiN) chapter at UF shared a table at the event and spoke to interested freshman about nuclear engineering, ANS, and WiN, and answered any questions they had about nuclear energy or UF engineering. Sarah Sarnoski and Chelsea T. Collins represented ANS with Professors Neo and Goluoglu representing WiN. A picture of this event can be found on Figure 31 & 32.



Figure 31: SWE eSwamp (1)



Figure 32: SWE eSwamp (2)

7.2 Engineering Fair

Please see Engineering Fair in the Community Public Service Section.

7.3 Engineering Bowl

Our student section participated in the Engineering Bowl as part of Engineering Week at the University of Florida. The team was composed on section members Thomas Underwood, Kyle Ramey, ANS section president Diego Garcia, and ANS Webmaster Pablo Vaquer. From 15 societies that competed ANS went on to the final 4, qualifying after a written test preliminary round. In the final round our ANS section won first place beating Tau Beta Pi!

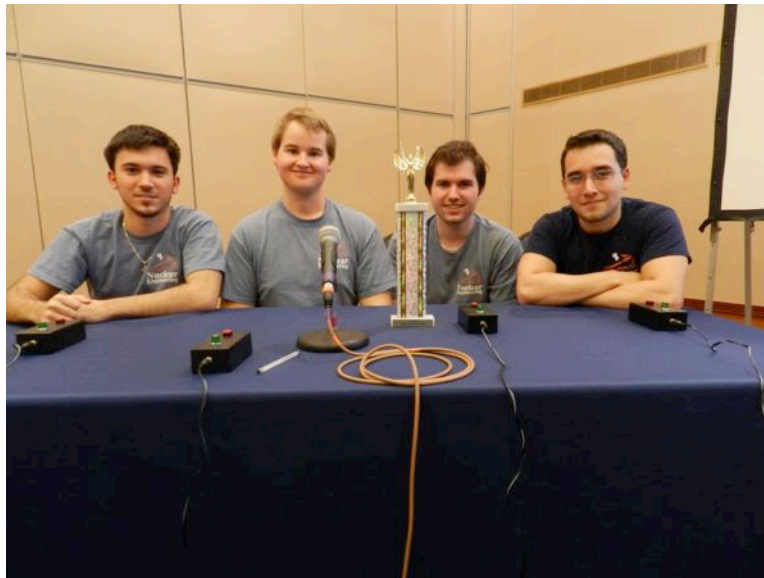


Figure 33: ANS Team after winning the Engineering Bowl at UF

7.4 Benton Engineering Council Leadership Retreat

Please see Benton Engineering Council Leadership Retreat under the Professional Development section.

7.5 End of Year Banquet

Please see End of year Banquet under Social Events. At this event we recognized an outstanding professor with the Best Instructor Award on behalf of the students.

8 Conclusion

As the UF Nuclear Engineering Program has found new life, so has too the UF ANS student section. Our student executive board was determined to match the major effort put forth by the faculty in recruiting top notch professors and bringing in a slew of federal funds that was quickly reviving the program. In the beginning of the fall semester of 2012 our executive board put a plan in motion to revive our section and made winning the Glasstone Award our ultimate goal.

This year we have successfully reestablished lost traditions like the End of Year Banquet and the student and professor awards. We have also started many new ones that we hope will endure like the General Body Retreat and Spring Bonfire. Our younger students have been successfully pulled in and are now poised to lead a great year for the 20132014 cycle. This year 13 of our members presented at the ANS Student Conference when it was only one and zero the two prior years.

Without a doubt this year's ANS executive board has gone above and beyond to breathe new life into our section as our department heals. We hope the evaluation committee will be able to appreciate the effort this executive board has given in the circumstances that we received the organization.

Thank You,

ANS 2012-2013 Executive Board

