

Glasstone Award Submission



2009-2010



American Nuclear Society

TEXAS A&M AGGIES



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Summary

Our goal for the 2009-2010 school year was to return our chapter to a form befitting of the biggest, and one of the best, Nuclear Engineering Departments in the nation. We sought to return to the basics of what makes a professional society live up to its billing as a professional society: to engage with industry, to outreach to the community, and to build the professional community.

To engage with industry

- Increase the quality and regularity of meetings
- Have speakers from a variety of backgrounds
- Bring in speakers that have never before been to Texas A&M

To outreach to the community

- Continue strong traditions of coordinated school visits
- Increase involvement at University wide events
- Establish and pass on a Boy Scout Merit Badge program
- Continually look for new outreach opportunities

To build the professional community

- Increase ANS meeting attendance
- Engage freshman and sophomores and keep them involved in the department
- Continue our winning tradition of intramural sports
- Have at least one large social event per semester
- Increase visibility of departmental research and involve undergraduates in research

2009-2010 TAMU-ANS Officers

Will Sames	President
Peter Maginot	Vice-President
Samantha Edgington	Treasurer
Oscar Rodriguez	Secretary
Mclan Amos	Director of Academic Affairs
Mike Hackemack	Director of Company Affairs
Maria Catanach	Director of Outreach
Wes Deason	Director of Scouting Programs
Ty Foster	Director of Student Affairs
Kevin Kapka	SEC Liaison
Sara Loupot	SEC Liaison

Engaging Industry

Our society recognizes the importance of organizing speakers, interviews, and other activities with companies and organizations in the nuclear field. This is why our society strove to bring in as many guest lectures and speakers as possible. Descriptions of these events follow.

Kickoff Meeting

Dr. Jim Olson, former CIA operative and faculty member at the Bush School of Government and Public Service at Texas A&M University, talked to our students after an introduction to TAMU-ANS activities. Dr. Olson served his entire career in the CIA's Directorate of Operations. He talked about serving as the chief of CIA counterintelligence at CIA headquarters and in overseas assignments in Moscow, Vienna, and Mexico City. Our students learned about career opportunities in the CIA and how they can serve our government. The speech was very engaging, and this event was the biggest of the year with 120+ attendees.



Book written by TAMU-ANS Kick-Off Meeting speaker Dr. Jim Olson.

LES/NEF/URENCO

TAMU-ANS hosted the COO of URENCO-USA, Mr. Gregory Smith, for a joint meeting with HPS, Tau Beta Pi (engineering honor society), Eta Kappa Nu (electrical engineering honor society), and the Student Engineers Council (SEC). Mr. Smith presented on centrifugal enrichment and the development of the facility in Eunice, NM. This event was highly successful, with good turnout from the other engineering societies. We got rave reviews from the other societies; one even called it one of their best meetings of the past year. This kind of success promotes nuclear energy to other engineers, and encourages them to become involved in the industry.

ANS National President- Dr. Sanders

Dr. Tom Sanders, the current ANS National President, visited Texas A&M University to talk to our Student Section about “Global Energy Needs: Defining a Role for a ‘Right Sized Reactor.’ ” Our section arranged for his guest lecture, a student roundtable, faculty meeting, laboratory tours, and a guest visit to the first Women In Nuclear (WIN) meeting at Texas A&M. Dr. Sanders took the opportunity to talk to our new section of WIN about the importance of women getting involved in the nuclear field and the contributions that women continue to make to nuclear energy. This meeting was successful with a turnout of 80 students.



ANS President Dr. Sanders with TAMU-ANS President Will Sames and Vice-President Pete Maginot.

HPS Joint Meetings

TAMU-ANS has co-sponsored several meeting Texas A&M student chapter of the Health Physics Society (HPS). Presentations given in 2009-2010 have covered medical physics (Dr. Mike Charlton- UTHSC), space radiation protection (Dr. Mary Van- Baalen- NASA), and a meeting on becoming a certified health physicist (Dan Menchaca- TAMU RSO).

Company Visits

In addition to the above meetings, TAMU-ANS also hosted the following members of the nuclear industry in 2009-2010:

- U.S. Navy
- U.S. NRC
- Bettis Laboratories
- South Texas Project
- Halliburton
- Westinghouse
- ERIN Engineering
- Entergy



Lt. Turner describing life and opportunities in the U.S. Navy.

Outreach to the Community

TAMU-ANS recognizes the need and importance of teaching the community about nuclear energy. Our goal is to represent the industry well, and talk to all members of the community, both those in favor and those against. TAMU-ANS continued many previous outreach events, started a Nuclear Science Merit Badge Program, supported the Nuclear Engineering Department, and looked for new outreach opportunities.

UTPB Mentoring

Texas A&M volunteered at the 2009 Winter Meeting to mentor the newly formed Student Section at the University of Texas- Permian Basin (UTPB Chapter). The two sections have corresponded over numerous topics from logo usage to conference attendance to End-of-the-Year reports. A&M will continue in its mentor capacity next year, and hopes to aid UTPB in the formation and continuation of an active Student Section.

Chemistry Open House (Roadshow)

To encourage elementary student to take an interest in science, the Texas A&M Chemistry Department holds an annual open house. Over 1000 children and adults from the College Station community come to see the hands on demonstrations and booths like the one occupied by TAMU-ANS and other Texas A&M student organizations and departments.

Aggieland Saturday

TAMU-ANS supported the Department of Nuclear Engineering talking to prospective nuclear engineers. This event is part of a University wide day, where prospective students come to talk to different departments. Our members talked with 100+ high school students and their families. Our job is not just to recruit, but to talk to members of the community about nuclear energy and nuclear science. High school students and families learn about the positive impact that nuclear has in America, and leave better informed about the nuclear industry, even if they don't choose to be nuclear engineers.



Director of Outreach Maria Catanach with Dr. William Marlow talking to prospective Nuclear Engineers.

Boy Scout Merit Badge Program

This was our organization's first year to offer the Nuclear Science Merit Badge Workshop. We hosted 2 workshops this year. The first program was small, with 15 scouts. Our second program had 83 scouts, and 30 parents. Having gained valuable experience with the first workshop, our section grew the size of the program. The program involves lectures, activities, and a tour of the Nuclear Science Center (NSC) research reactor at Texas A&M.

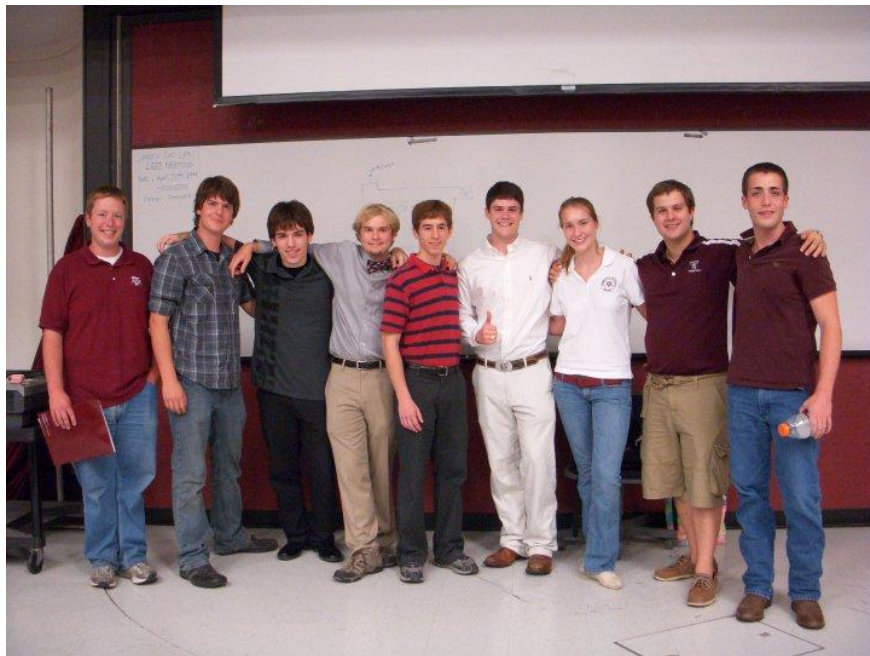
There was a great response to the programs at the community, departmental, and national levels. Wes Deason received National recognition by the Student Sections Committee (SSC) for his dedication to community outreach. His work in the scouting program has been invaluable. We will reprise his role next year as head of the Scouting Program Committee at A&M.



Scouts listening attentively during a lecture at the Nuclear Science Merit Badge Workshop.



A group of scouts outside the Nuclear Science Center during a Merit Badge Workshop.



TAMU-ANS members involved in running the Merit Badge Program.

Mentor Program

TAMU-ANS continued its mentoring program this year. First year students were paired with upperclassman and graduate mentors. Mentors were required to contact their mentees and check up with them periodically throughout the year. TAMU-ANS hosted a Mentor Ice Cream Social and other events to encourage participation in the program.



Mentors and Mentees at the TAMU-ANS Mentor Ice Cream Social.

Freshman Welcome

Before the first day of class, TAMU-ANS hosted a freshman welcome to introduce students to Nuclear Engineering, ANS, and college life. Current students shared their knowledge and advice, and mixer worksheets were handed out. Nuclear Engineering cookies were provided. This event was the first step in spurring greater freshman involvement in our society for the year.

Engineering Open House

At the beginning of every school year, the College of Engineering hosts an open house where all undergraduate students interested in engineering may see what activities and academic areas each department and student organization focuses on. TAMU-ANS, TAMU-HPS and TAMU-INMM all assisted the department in recruiting interested students.

CAST

Again this year, members from TAMU-ANS and the Nuclear Engineering Department worked a booth at the CAST conference. CAST, the Conference for the Advancement of Science Teaching, is an annual event held every year within the state of Texas. It is the largest gathering of teachers in the United States, apart from the annual NEA annual meeting. Members of TAMU-ANS answered questions and gave interested K-12 teachers age appropriate activities and worksheets covering topics such as radiation safety, radiation uses in industry, and nuclear power, that teachers could incorporate into their science curriculum.

Support of Exelon's Early Site Permit Application

On March 26, 2010, Exelon submitted an Early Site Permit application for a possible new reactor site in Victoria County, TX. To show support for Exelon and nuclear power as a whole, TAMU-ANS Vice-President Peter Maginot, Professor Karen Vierow, and staff member Marna Biliter worked a booth at the NRC public meeting held in Victoria, TX. Both pro- and anti-nuclear power advocates attended the meeting and asked questions, which all A&M representatives attempted to answer with facts and without bias.

The Big Event

TAMU-ANS participated in the Big Event held in the Bryan-College Station area. The Big Event is the largest one day community service event in the nation, and is held annually in the spring. TAMU-ANS is proud to be able to serve our community by participating in this event.



TAMU-ANS members with a family member at a Big Event job site.

Other Outreach

The Texas A&M Nuclear Engineering Department is lucky enough to be of sufficient size to be able to fund a full time staff member to coordinate and a multitude of other outreach events. TAMU-ANS members work closely with Department staff to work at recruitment events and class room visits. Students frequently visit classrooms across Texas to dispel misconceptions about radioactivity, inform students of the variety of career paths that can come from a degree in nuclear engineering, or speak on any other nuclear related topic.

Building the Professional Community

To build a successful professional society requires that all members of TAMU-ANS be engaged within the profession, and that all members desire to be a part of the community. To make students feel a stronger connection, it is necessary to get them involved and exposed with the heart of the Nuclear Engineering Department, research. This alone is not sufficient, students must view the society as a community of like minded individuals who can not only work, but have fun together.

Lab Nights

This was our first year to offer research oriented Lab Nights. Two events were held, one in the spring and one in the fall. Each event consisted of a brief talk about undergraduate research opportunities, graduate school, and careers in research. Between the 2 events, 8 professors and 65+ students participated. The event was considered highly successful, with many students finding research positions as a result of the event.



Dr. Shannon-Bragg Sitton presenting some of her research with NASA.



Dr. Lin Shao with one of his graduate students talking about Ion Beam research and facilities.



Dr. Cable Kurwitz with a laboratory demonstration in the Interphase Transport Phenomena Laboratory.

Socials

Beginning of Year/ Glow-in-the-Dark Party

TAMU-ANS hosted our annual Beginning of the Year Party. This year's party was themed "Glow-in-the-Dark," and glow sticks were passed out to contribute to the festivities. The event was hosted at the REC Center Backyard, where sand volleyball, frisbee, and basketball were available. Barbeque was provided, and many faculty and staff attended. After the party was over, interested attendees went to Fightin' Texas Aggie Yell Practice at Kyle Field before the coming day's home football game.

ANS Winter Meeting TAMU Mixer

At the 2009 ANS National Winter Meeting in DC, TAMU-ANS coordinated a former student mixer. With 40+ attendees, the mixer was a big hit. Drinks and food were provided, and attendees were encouraged to mingle and meet other Aggies. Attendees from other schools and organizations were encouraged to attend. TAMU-ANS hopes to partner with a corporate sponsor in the future, to increase the turnout at the event.

Spring Lake Social

This event will be held May 2nd at Lake Bryan (report submitted before May 1st). The Texas A&M Sailing club has been invited to join us for food, drinks, and socializing. In previous years, the Sailing club has provided sailing lessons to our students. Faculty and staff are invited, and this event looks to be an excellent way to unwind at the end of the school year.

Chili Cook Off

For the 27th consecutive year, Prof. Kenneth L. Peddicord again opened his home to TAMU-ANS and TAMU-HPS to hold the annual Chili Cook-Off. The Chili Cook-Off is an excellent time for student chefs to bring out their best chili, side dish, and desert creations to be judged by Department faculty and spouses. Alternatively, this is an excellent opportunity for students to extract revenge on those professors with whom they have grading grievances. This year's winning recipe was, "My Father's Lack of a Recipe- Recipe Chili," submitted by TAMU-ANS Vice President Peter Maginot.



Students enjoying each other food and company, while Dr. Craig Mariano and other faculty members carefully review the chili entries.

Advisory Council Tailgating Party

In conjunction with the fall meeting of our Departmental Advisory Council, TAMU-ANS coordinated a tailgate party in conjunction with the home football game. The tailgating was successful with around 100 members participating. Food and drinks were provided.



TAMU-ANS members at a tailgate party before a home football game.

Intramurals

Team sports build a sense of camaraderie that can translate back into the school and work place. Sporting activities are also an important way to unwind at the end of the day. With more than 12,000 students participating in intramural sports, Texas A&M has one of the largest traditions of sports participation in the nation. TAMU-ANS is proud to hosts a variety of intramural teams, many of which are co-ed.

Intramural teams for the 2009-2010 school year:

- Soccer
- Sand Volleyball
- Softball
- Basketball
- Flag Football



ANS Soccer IM team going for a goal!



Nuclear Engineering graduate student, Jessica Feener, serving the ball.

Goals for the Future

TAMU-ANS plans to continue its leadership role among student organizations within the department. Next year, TAMU-ANS hopes to increase the number of joint activities between TAMU-ANS and the other nuclear related societies. Specifically: we hope to continue joint meeting with the Health Physics Society (HPS), host joint socials and topical meetings with the Institute for Nuclear Materials Management (INMM), aid the Alpha Nu Sigma honor society in starting a tutoring program for nuclear engineering students, and to support and encourage A&M's new section of WIN. Finally, we would like to sponsor more interdisciplinary meetings with other professional societies, outside of the nuclear engineering department. We look to repeat on the success of our meeting with URENCO that involved 5 other engineering societies, and continues to be mentioned by the other societies as a highlight of their year.

One of our biggest goals is to ensure the survivability of all our programs. Wes Deason has volunteered to reprise his role heading the Scouting Program committee. Wes's committing to a second year of leading the program is a key step in this program becoming a yearly tradition. Also important, is increasing the involvement of other students involved in the scouting and other programs. To survive initial leaders graduating and moving on, new and younger students must get involved today to become the future leaders of both the program and of TAMU-ANS as a whole.

We wish to continue the trend of involving more students on committees. Members of committees this past year are going to be the leaders of TAMU-ANS next year. The continuity of qualified and engaged leadership is key to ANS excellence at Texas A&M.