

February 15, 2008

Student Sections Committee ANS Education and Training Division

Dear ANS Student Sections Committee,

The University of Florida student section of the American Nuclear Society is pleased to present its proposal to host the 2009 ANS Student Conference.

Our Nuclear and Radiological Engineering Department (NRE) has grown tremendously in the past few years, by about 28% per year since 2001. Furthermore, the majority of these students are active members in the ANS UF student section. The NRE faculty has also continued to grow, adding four new professors over the past six years. The faculty's research interests are extensive, covering a broad spectrum across both nuclear engineering and medical and health physics. This diverse array of research has generated over \$4 million, more research dollars per faculty than any other department in the UF College of Engineering.

The University of Florida NRE department provides unparalleled interactive training and research opportunities to students. For example, the students and faculty recently completed a DOE sponsored fuel conversion project of the University of Florida Training Reactor in a record fifteen months. Also on that note, 2009 marks the 50<sup>th</sup> Anniversary of the UFTR and it would be an honor to host this conference to help commemorate this historic event. Moreover, many students are active in research groups throughout the academic calendar and subsequently involved in internships with corporations and national laboratories including Florida Power & Light, Progress Energy, General Electric, Southern Nuclear Company, Los Alamos National Laboratory, Sandia National Laboratories, and Idaho National Laboratories.

Finally, the University of Florida is a landmark institution among all public universities. Located in Gainesville, FL, the University of Florida is Florida's largest, oldest, and most prestigious university, and is annually ranked among the most active campuses with nationally recognized sports, music, and nightlife. The University of Florida ANS student section is excited to have the opportunity to host the 2009 ANS Student Conference and share the experience of the Gator Nation with other nuclear engineering students.

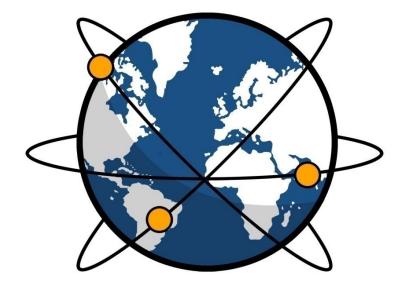
Sincerely,

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Jacob D. DeWitte University of Florida American Nuclear Society Student Section President

University of Florida American Nuclear Society Student Section

## 2009 Student Conference Proposal



## **Nuclear Engineers** Reacting To Power The World

<u>Proposal Chair</u>: Brett Dooies <u>Faculty Advisor</u>: Dr. James Baciak

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### **Executive Summary**

The University of Florida American Nuclear Society (UF ANS) student section last hosted the student conference in 1996. Since then, the student section has grown to over 140 active members representing the department's various fields of study. The University of Florida's Nuclear and Radiological Engineering (NRE) Department offers a unique environment where nuclear engineering, medical physics, and health physics students work under a common faculty. This gives students at the University of Florida exposure to variety of nuclear science applications including the traditional power, fuels, transport, and shielding applications; nuclear space propulsion; medical physics (radiation oncology, dosimetry, and imaging); nuclear medicine; non-destructive evaluation; and special nuclear materials detection. This multi-disciplinary department reflects the state of Florida's growing needs for qualified nuclear scientists with the recent approval of four new nuclear units and progressive legislation. UF ANS's roles in this nuclear renaissance make the University of Florida a fitting venue for the 2009 ANS Student Conference.



### Introduction

The University of Florida American Nuclear Society Student Section features a rapidly growing membership base of students committed to upholding a tradition of excellence. Throughout its history, the UF Student Section has consistently been recognized for its dedication to the advancement of nuclear science and engineering in both the local and the nuclear communities. This proposal aims to draw upon previous innovative programs and time honored activities while introducing new ideas for the ANS student conference. This is an exciting time for the nuclear industry, placing students and emerging professionals at the heart of all the excitement. The 2009 Student Conference will combine technical and non-technical events to foster the exchange of ideas and information in the fields crucial to the future sustainability and growth of nuclear technology. High-profile speakers and a career fair complement the goal of creating a dynamic conference that offers attendees an avenue for exploring current trends in the nuclear industry. By gathering students and faculty from around the country at our beautiful campus we will both encourage and facilitate the flow of information between our peers and mentors, and ensure the continuing education of today's and tomorrow's leaders. The University of Florida Student Section formally presents its proposal to host the 2009 American Nuclear Society Student Conference.

### **UF ANS Student Section**

The University of Florida Student Section has grown at an astonishing rate in the past several years. As the department's enrollment continues to increase, student interest in a campus organization that promotes leadership and involvement in nuclear engineering has skyrocketed. Our motivated students have made this student section one of the finest in the country, serving locally as the representatives of the department's student body. Our members include students with backgrounds that go beyond nuclear engineering and range from medicine to business to



law, and we have capitalized on the advantages offered by this diversity. UF ANS members include three high-profile student government leaders and five current and former student society presidents. The leadership potential of our students fuels our section with tremendous direction, motivation, and dedication, qualities that will undoubtedly help guarantee the successful planning of an ambitious conference.

UF ANS has responded to our growing organization's needs by tailoring the administrative structure to the members' strengths. An executive board oversees the organization's primary needs, while the committees (community service, public relations, industry affairs, professional development, and university affairs) are dedicated to accomplishing different goals that our ANS membership has set forth for itself. A sixth committee, the social committee, plans activities for the students to interact outside of the classroom through picnics, bowling nights, video game nights, bar socials, and more. The committee structure allows members to be involved directly on projects that suit their interests, and encourages members to set goals and see them through to their completion. We are proud of the strides that our ANS section has taken to better integrate its growing membership and expect this structure to drive the organization of the 2009 ANS student conference.



### **UF Department of Nuclear and Radiological Engineering**

The UF Department of Nuclear and Radiological Engineering is one of the oldest departments of its kind in the country. It was established in March 1951, when UF held an Engineering Radiological Health and Civil Defense Conference. This led to Governor Leroy Collins signing a bill in 1955 that appropriated \$500,000 toward a University reactor. The bill initiated the formation of the University of Florida Committee on Nuclear Research in January 1956, and by March 1956 Subcritical No. 1 became operational. It was the first



nuclear subcritical facility in Florida and an important teaching tool. By November 1956, the Atomic Energy Commission recognized the department's graduate program and started fellowships for nuclear engineering at UF. In December 1956, one of the country's six ORSORT educational programs was awarded to the University, and by the next February, fifteen students started the first program. The state's "Nuclear Appropriations Act of 1957" provided funds for the Nuclear Sciences Center and the department was chartered in October 1957. The first ORSORT class graduated from the University of Florida in August 1957, and a conference on Education in Nuclear Science and Engineering was held in celebration. During the department's earliest years, activities were devoted to the construction of the nuclear reactor building, the nuclear field building, the training reactor, and the radiochemistry laboratory. Formal classes began in the fall of 1958 with twelve students enrolled: ten for the Masters degree and two for the Ph.D. program. Construction complete, the University of Florida Training Reactor (UFTR) went critical in May 1959. Formal dedication ceremonies were held in 1960, the same year the student section of the American Nuclear Society was chartered.

### **Department Research Activities**

The University of Florida's Nuclear and Radiological Engineering Department is unique in its diversity of research and program endeavors. The nuclear power applications in this department include advanced, proliferation-resistant nuclear fuel designs, Generation IV reactor design, and advanced fuel cycle economics. Reactor physics and shielding numerical methods combined with parallel computing capabilities offer research opportunities, including multigroup cross section generation, perturbation methods, simulation of real-life criticality and shielding problems, thermofluids, and particle transport.

Nuclear engineering research applications also contribute to national security efforts. The Florida Institute of Nuclear Detection and Security (FINDS) uses state-of-the-art radiation detection methods to help secure America's borders. Areas of research include room temperature detection devices, passive interrogation, portal monitoring, active interrogation, effluent transport and diffusion, and SNM detection. Two detection data analysis patents were recently awarded to the FINDS group.

A new type of x-ray backscatter imaging, Radiography by Selective Detection (RSD), has been developed at the University of Florida. Originally designed for in situ land mine detection, x-rays



backscatter off buried objects and can distinguish between rocks and land mines several feet below the surface using collimators. This technology has other applications, and is currently being used by Lockheed Martin and NASA for inspecting the space shuttle's external tank.

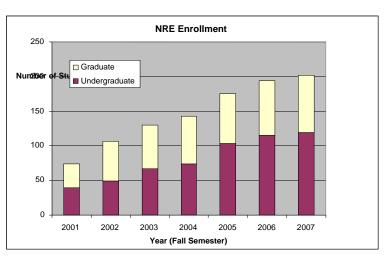
Another establishment of distinction is the Innovative Nuclear Space Power and Propulsion Institute (INSPI). As its name implies, INSPI focuses its research on nuclear space reactors and propulsion. Major areas of study are uranium tricarbide fuels, the square lattice honeycomb reactor, computational fluid dynamics, and nuclear propulsion systems for gas core reactors using magnetohydrodynamic technology.

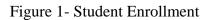
The department also offers strong programs in health and medical physics. Medical physics research fields include diagnostic radiological physics, nuclear medicine, therapeutic oncology, and radiological physics. Diagnostic radiological physics encompasses pediatric radiological dosimetry, clinical implementations of digital imaging modalities, techniques for objective evaluation of image quality, and magnetic resonance imaging. Principal areas of study in nuclear medicine include imaging methods and algorithms for SPECT and PET and dynamic gating and acquisition algorithms for cardiac imaging. Research into IMRT applications, image registration algorithms, radiosurgery applications, and development of invasive and non-invasive models to study tumor physiology characterize the areas of interest in radiation therapy. The major areas of research in health physics are population-based dose reconstruction, and environment pathway and dose analysis.

In the fall of 2001, Dr. Alireza Haghighat, after a 15-year career at Penn State, joined NRE to become the Department Chairman and the Director of the University of Florida Transport Theory Group. Since his arrival, the department has grown in all areas including: 173% increase in student enrollment, 107% increase in research awards, 50% increase in the number of faculty; establishment of the Nuclear Engineering Elite Scholarship for undergraduate students sponsored by Florida Power & Light, Progress Energy Florida, Southern Nuclear Operating Company and KAPL; establishment of the UFTTG Particle Transport and Distributed Computing (PTDC)

Laboratory (co-directed by professors Haghighat and Sjoden); establishment of FINDS (Florida Institute of Nuclear Detection and Security) currently directed by professors Haghighat and Sjoden; establishment of the x-ray backscattering Radiography by Selective Detection (RSD) laboratory Dugan and A. Jacobs): (E. establishment of the micro-CT laboratory (W. Bolch); renovating the computer laboratory; analysis and licensing of the UFTR's HEU/LEU

fuel conversion; initiation of the design, licensing and construction of



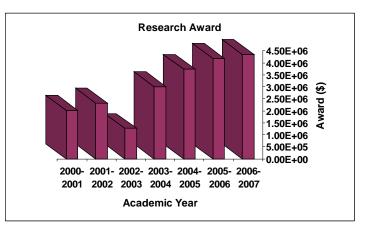


a fully digital control system for the UFTR; and refurbishment of NRE's Hauck library and



NRE's front office.

Figure 1 depicts the student enrollment between fall 2001 and fall 2007, and Figure 2 presents research awards between academic year 2000-2001 and 2006-2007.





### **Technical Facilities**

Technical tours are planned for some of the laboratories used in the Department of Nuclear and Radiological Engineering. These prominent facilities are described below and a visitation schedule is forthcoming.

#### University of Florida Training Reactor (UFTR)

The UFTR is an Argonaut style graphite moderated, water cooled research reactor that was built between 1956 and 1959 when it first went critical. It can achieve a steady-state thermal power of 100 kW. It is currently used to train students to operate reactors and to irradiate samples to be analyzed in the Neutron Activation Analysis Laboratory (NAAL). The reactor was designated a National Historic Landmark by the American Nuclear Society in 2000. In September 2006, the HEU to LEU fuel conversion was completed. In



January 2007, with major funding from the Progress Energy, a major project was initiated on the design, licensing and construction of a fully digital control system; this system will be the first of its kind in the US.

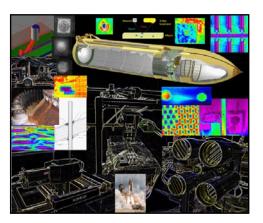
#### X-Ray Backscatter Radiography by Selective Detection (RSD) Laboratory

Radiography by Selective Detection (RSD) is a singlesided Compton backscatter imaging technique that can be used for a wide variety of applications, including nondestructive evaluation, land mine detection, and security scanning applications. NASA is currently using six RSD scanning systems for inspection of the external tank of the space shuttle. RSD scanning has also been able to find reactor pressure vessel leaks through insulation by locating boric acid deposits as small as 50 mg.

#### Radiation Detection Laboratory

The Radiation Detection Lab is used to train students in the use of radiation detection equipment and contains a variety of radiation detection systems. Some of the detectors in the lab include GM tubes, gas-flow proportional counters, NaI(Tl) detectors, silicon surface barrier detectors, <sup>3</sup>He and BF<sub>3</sub> neutron proportional counters, and HPGE semiconductor detectors.





#### Innovative Nuclear Space Power and Propulsion Institute (INSPI)

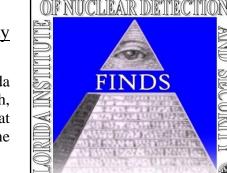
Founded in 1985, INSPI research includes feasibility analysis for ultra-compact nuclear power reactor concepts and experimental and theoretical research to establish the fundamental properties of high temperature materials and processes used in space power reactors.

#### Particle Transport and Distributed Computing Lab (PTDC)

The Particle Transport and Distributed Computing Lab is a collection of Beowulf PC clusters used to run threedimensional discrete ordinates  $(S_N)$  and Monte Carlo transport, shielding and criticality calculations. The clusters are used for particle transport methods and their applications, parallel computing, Monte Carlo methods, reactor physics, perturbation techniques, design of nondestructive interrogation systems for homeland security applications, simulation of nuclear reactors, radiation systems, and medical devices.

#### <u>Florida Institute for Nuclear Detections and Security</u> (FINDS)

FINDS was founded in 2004 by the State of Florida Legislature to serve as a design-basis center for Research, Development, Testing and Engineering (RDTE) projects that directly satisfy critical nuclear detection problems facing the nation.









### **Non-Departmental Technical Facilities**

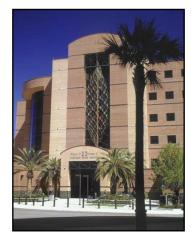
#### UF Shands Cancer Center (UFSCC)

U.S. News and World Report recently recognized the UFSCC as one of the nation's top 100 cancer programs. This facility conducts original research regarding oncogenesis and normal cell growth, and facilitates the translation of research findings into clinical strategies for therapeutic, diagnostic, and preventative cancer trials. The facility offers state-of-the-art treatment with three high-energy linear accelerators with advanced computer simulation and an adult leukemia and myelodysplasia specialty clinic.



#### McKnight Brain Institute of the University of Florida (MBI-UF)

The MBI-UF is a federally funded, world class brain institute. Some of their current research includes spinal cord regeneration, Alzheimer's disease reversal, brain tumor radiation therapy, and gene therapy for brain cancer and Parkinson's patients. Some of their facilities include a 6 MeV linear accelerator as well as an Advanced Magnetic Resonance Imaging and Spectroscopy Facility (AMRIS). The AMRIS has five MRI scanners, including 11.74 and 17.6 tesla magnets: they achieve unprecedented high-resolution anatomical and physiological information from live tissue samples by combining their strength and large bores.



#### University of Florida Proton Therapy Institute (UFPTI)

The University of Florida Proton Therapy Institute located at Shands Jacksonville is a 98,000-squarefoot facility providing conventional radiation cancer treatment and proton therapy. UFPTI includes clinics for the pre- and post-therapy and on-treatment evaluation of cancer patients, planning suites, an infusion and anesthesia suite, psychosocial and dietary services, a research office, and faculty offices. At capacity, the facility can treat up to 150 patients.





### **College of Engineering**

The UF College of Engineering has 11 departments with 12 ABET-accredited degree programs. The College of Engineering graduate school ranked 16<sup>th</sup> in U.S. News and World Report's 2007 ranking and the undergraduate program ranked 17<sup>th</sup>. In the 2006-07 academic year, 1,623 degrees were awarded by the college. The budget for the current year is expected to exceed \$107 million, a result of the college's ever expanding research efforts.

### **University of Florida Facilities and Venues**

The conference will be held at the University of Florida's J. Wayne Reitz Union. The student union features large conference rooms that are suitable for the student conference's events. The Grand Ballroom has an impressive capacity of 1400 (theater style) and 856 (banquet style). The ballroom can be broken down into smaller rooms to facilitate the needs of the ANS student conference. With the ballroom converted the career fair and poster sessions can be held simultaneously. The Rion Ballroom is just as versatile as the Grand Ballroom, but with a slightly smaller capacity of 800 (theater style) and 650 (banquet style).



Having two ballrooms available allows for tremendous flexibility in scheduling. Additionally, there are over 20 classrooms in the student union available to hold the technical sessions. The university strives to cater to the student organizations on campus, offering the ballroom rentals at a substantial discount and the classroom spaces free of charge.

There is a large food court located in the Reitz Union and other venues located around the campus offer a variety of meals and snacks. Food choices in the Reitz Union include hamburgers, subs, Southern cooking, sushi, and Italian cuisines, among others. The Reitz Union is also conveniently located next to the Nuclear Sciences Building.



### The University of Florida and Gainesville

The University of Florida was founded as a small seminary in 1853. Since then, it has grown to what is now the nation's fourth largest university, enrolling approximately 50,000 students each year and offering over 100 undergraduate majors through 16 colleges. In 1985 UF became a member of the Association of prestigious American Universities, the higher-education organization comprised of the top 62 public and private institutions in North America. In 2006, UF ranked 13<sup>th</sup> in U.S. News and World Report's "Top Public Universities" and the 2005 entering class had an average GPA of over 4.0 and an average SAT score of over 1300. Shands Hospital at UF is one of the leading teaching hospitals in the country and the UF medical school is one of the most competitive in the southeast. In addition to academic excellence, the University of Florida's athletic program ranks among the best in the nation, producing



nationally competitive teams year after year. The Florida Gators men's basketball team is the 2006 and 2007 NCAA national champions, while the football team won the 2006 national championship – the only Division I athletic program to hold national titles in football and basketball at the same time.



Gainesville is located in the north-central part of the state and is the home of the University of Florida. In 2005 it was chosen as one of the top ten cities in America for outdoor activities by Sperling's Best Places. It was named Tree City USA by the National Arbor Day Foundation in 2005. It was also ranked in the "Top 15 Places to Reinvent Your Life" by AARP magazine in 2003. Finally, in 2007 "Cities Ranked and Rated" chose Gainesville as the top place to live in the U.S.

Gainesville residents enjoy mild temperatures year round with the average high in January at

65°F and average high in June at 89°F. Parks and recreation areas surround UF's campus: university-run Lake Wauburg features canoeing, volleyball, and a rock climbing wall. Known for its preservation of historic buildings and the beauty of its natural surroundings, Gainesville's numerous parks, museums, and lakes provide entertainment to thousands of visitors. The beautiful landscape and urban "forest" make Gainesville one of the most attractive cities in Florida. Gainesville is within a one-hour drive to beaches on both the Atlantic Ocean and the Gulf of Mexico. Jacksonville, Tampa, and Orlando are all less than two hours away.



In addition to numerous daytime activities, Gainesville has a vibrant nightlife driven by several clubs, bars, and dining venues. Rich with culture, Gainesville is proud to offer many museums and performing arts centers such as the Harn Museum of Art, the Florida Museum of Natural History, the Hippodrome State Theater, and the Phillips Center for the Performing Arts.



### **Proposed Conference Dates**

The Student Conference is requested to be held in early spring. After reviewing the available dates and availability of resources such that the conference will not conflict with other scheduled events the following dates have been selected as potential conference dates.

- 1. April 2-5
- 2. March 26-29
- 3. February 26-March 1

### **Accommodations & Lodging**

The table below summarizes the preliminary hotel accommodations that will be available for the conference. Gainesville is well equipped to handle conferences of this size.

Number of rooms	Hotel	Group Price	2 Beds	1 King
36	Reitz Union	\$89	24	12
167	Holiday Inn University Center	\$79	100	67
200	Paramount Plaza	\$89	120	80
220	Hilton	\$129	146	74
104	Hilton Garden Inn *	\$99	60	44
90	Country Inn and Suites *	\$99	46	44
103	Homewood Suites *	\$109	60	43
115	Holiday Inn Express *	\$89	60	55
126	Springhill Suites *	\$89	72	54

\* Transportation to campus is not provided by the hotels with asterisks. Charter buses will be used to transport conference attendees staying at these hotels. These transportation costs are factored into the budget but may be adjusted as needed when hotel reservations are made.

Students are strongly recommended to stay at the Reitz Union Hotel, the Paramount Plaza Hotel, the Holiday Inn University Center, and the Hilton as they are the most convenient hotels to campus. The Reitz Union hotel is located at the center of campus and offers the most convenient location to all conference events. The Paramount Plaza Hotel, the Holiday Inn University Center, and the Paramount Plaza all provide frequent shuttle service to campus free of charge for guests. The Holiday Inn University Center is also located across the intersection from the northeast corner of campus and is within walking distance from all conference locations. The hotel is also located on University Avenue, home to Gainesville's night life.



### **Transportation**

The Gainesville Regional Airport, Jacksonville International Airport, and Orlando International Airport are the three closest airports to the university. The Jacksonville and Orlando airports are both approximately one hour and forty five minute drives to Gainesville. After checking the costs of flights from each student section's region to both airports, it was found that flights into Orlando International Airport are, on average, approximately \$30 cheaper. Therefore, bus transportation will be provided to and from Orlando. Six buses will be used on Wednesday from noon to 10 PM and will be on hourly rotations. On Thursday, ten buses will be provided from 8 AM to 4 PM. All three airports also have rental cars available if flights do not come in during those times. In addition, bus transportation from 8 AM to 4 PM. Charter buses will also be provided between the hotels and university during the conference. For those going on the Kennedy Space Center tour, buses will be used to go to Cape Canaveral and return to the Orlando International Airport for late Sunday flights. All charter bus costs were based on estimates from Bus Bank, Inc.

Student Section	Nearest Airport	Orlando	Gainesville	Jacksonville
Cal	San Francisco/Oakland	\$ 309.00	\$ 384.00	\$ 209.00
Oregon St.	Portland	\$ 293.50	\$ 477.00	\$ 309.00
Arizona	Tucson	\$ 290.00	\$ 556.00	\$ 290.00
UNM	Albuquerque	\$ 293.00	\$ 503.00	\$ 230.00
Idaho St.	Boise	\$ 247.00	\$ 716.00	\$ 416.00
UT	Austin	\$ 242.50	\$ 380.00	\$ 224.00
TAMU	Houston	\$ 217.50	\$ 384.00	\$ 265.00
UMR	St. Louis	\$ 239.00	\$ 383.00	\$ 335.00
K St.	Kansas City	\$ 201.00	\$ 472.00	\$ 186.00
Utah	Salt Lake City	\$ 330.00	\$ 587.00	\$ 383.00
UNLV	Las Vegas	\$ 294.00	\$ 488.00	\$ 284.00
LSU	New Orleans	\$ 159.00	\$ 377.00	\$ 160.00
Wisconsin	Madison	\$ 188.00	\$ 756.00	\$ 374.00
Illinois	Chicago	\$ 188.00	\$ 260.00	\$ 322.00
Purdue	Indianapolis	\$ 194.00	\$ 232.00	\$ 142.00
Michigan	Detroit	\$ 171.00	\$ 366.00	\$ 278.00
Ohio St.	Columbus	\$ 235.50	\$ 390.00	\$ 209.00
Cincinnati	Cincinnati	\$ 290.00	\$ 440.00	\$ 320.00
Penn St.	State College	\$ 256.00	\$ 274.00	\$ 220.00
RPI/Excelsior	Albany	\$ 228.50	\$ 383.00	\$ 270.00
West Point	NY City	\$ 170.00	\$ 315.00	\$ 210.00
MIT/Umass Lowell	Boston	\$ 224.50	\$ 354.00	\$ 249.00
NC State	Raleigh-Durham	\$ 159.00	\$ 315.00	\$ 175.00
Tennessee	Knoxville	\$ 406.00	\$ 507.00	\$ 353.00
Tennessee	Charlotte	\$ 174.00	\$ 315.00	\$ 199.00
Vanderbilt	Nashville	\$ 177.50	\$ 265.00	\$ 204.00
South Carolina/SC St.	Columbia	\$ 316.00	\$ 636.00	\$ 371.00
Georgia Tech	Atlanta	\$ 174.00	\$ 380.00	\$ 287.00
	Average	\$ 238.13	\$ 424.82	\$ 266.93



### **Conference Facilities**

The J. Wayne Reitz Student Union is fully capable of handling all conference activities. All of the necessary A/V equipment is available, as well as a technical staff to support the conference. The Reitz boasts 27 conference meeting rooms, 2 auditoriums, and 2 ballrooms. Temporary reservations have already been made for the necessary rooms during the proposed conference dates. The Reitz Union also has several restaurants on site including Subway, Wendy's, Southern, American, Japanese, and Italian cuisine restaurants. The Reitz Union is also home to a Starbucks coffee shop.

### Catering

The food for the conference will be catered by Classic Fare Catering at the University of Florida. Classic Fare Catering is the official caterer at the university under the direction of Executive Chef Christian Drouin. All meals the final banquet will be held at the Reitz Union. A continental style breakfast will be provided and executive lunches will be served for lunch.

The final banquet will be held at the Touchdown Terrace at the Ben Hill Griffin football stadium (home of the Gators) where a sit-down formal dinner will be served. The dinner will be catered by a local restaurant to be determined.

### **Kennedy Space Center**

As an added activity, an all day trip to the Kennedy Space Center (KSC) in Cape Canaveral, Fl will be offered. This institution is the face of NASA in the state of Florida. Tourists flock from all over the world to take part in this one-of-a-kind experience. A patron could spend the whole day in the Visitor Complex, experiencing the Rocket Garden, IMAX movies on a five-and-a-half story screen, space history exhibits, a full-sized walk-through Space Shuttle display, bus tours, restaurants, gift shops, the Apollo/Saturn V facility, and the Astronaut Hall of Fame.

Students may elect to purchase tickets to either of two special tours offered by the Space Center. The "NASA Up-

Close Tour" takes students to the KSC headquarters where they will be able to observe the space shuttle launch pads in the closest view possible. This tour also features a visit to the Space Shuttle Landing Facility. Here, the Vehicle Assembly Building and enormous Crawler Transporters are viewed. This tour ends at the Apollo/Saturn V Center, a tribute to the first mission to the moon. This center boasts a real Saturn V rocket. The tour costs \$59.00 per person and lasts approximately 120 min. The first tour departs at 10 AM, and the last tour departs at 1:50 PM.

The second tour is called "Cape Canaveral: Then and Now". Students will explore the original



launch sites of the Mercury, Gemini, and Apollo programs. The launch of America's first satellite will be experienced at the Air Force Space and Missile Museum. Also, Apollo Launch Pad 34, the site of the Apollo 1 fire will be viewed. The tour ends at the Apollo/Saturn V Center. This tour costs \$59.00 per person and lasts approximately 150 min. The first tour departs at 11:30 AM, and the last tour departs at 12:50 PM.

Included in regular admission is the Kennedy Space Center Tour. Attendees will explore the International Space Station Center, LC 39 Observation Gantry (a 60-foot-tall launch complex), and Apollo/Saturn V Center. This tour departs every 15 min from the Visitor Complex.

General admission is \$38.00 per person. The KSC hours of operation are 9:00 AM - 5:30 PM. Students will be able to use the entire time to explore this exciting center. Charter buses will be reserved to accommodate up to 200 participants. The buses will cost approximately \$720 per bus and will transport visitors from Gainesville to KSC and finally to the Orlando airport at the end of the day. Students will be required to indicate whether or not they will participate in this event prior to the conference.

### **Conference Committees**

In recognition of the fact that hosting a conference is a large undertaking, the UF ANS student section has prepared to receive the bid to host the 2009 Student Conference by forming the organizational committee structure for the conference. This will greatly enhance the quality in which the conference is executed and allow the section to begin work on the conference immediately after receiving the bid to host the conference. The subcommittees are the Conference Chairpersons, Technical, Publicity, Finance, Accommodations, Transportation, Website, and Social Committees. The responsibilities of the committees are as follows.

- I. <u>Conference Chairpersons</u> Jacob DeWitte (Chair), Josh Richard (Co-Chair)
  - a. Provide overall direction
  - b. Set up general timeline and ensure deadlines are met
  - c. Serve as the primary contact for funding solicitation
  - d. Serve as the primary interface between university and all other organizations
  - e. Serve as the Masters of Ceremonies for the Awards Banquet
- **II.** <u>Technical</u> Brandon Cunningham (Chair), Tom Plower (Co-Chair), Mike Wayson (Co-Chair)
  - a. Choose topics for technical sessions and process abstracts
  - b. Set up facilities for technical sessions
  - c. Approve abstract, paper, and presentation formats
  - d. Approve and publish presentation and paper evaluation criteria
  - e. Recruit and assign judges
- III. <u>Publicity</u> Chris Perfetti (Chair), Alex Restrepo (Co-Chair)
  - a. Write articles for ANS and Nuclear News
  - b. Write press releases and public service announcements



- c. Design brochures and conference transactions
- d. Write announcements for distribution to schools and students
- e. Arrange for ad space in local papers
- f. Conduct mass mailings, posting of flyers, and other publicity campaigns
- g. Oversee awards

#### IV. Finance – Danny Long (Chair), Thomas Roomy (Co-Chair)

- a. Arrange to get a tax ID to solicit tax-deductible contributions
- b. Adjust existing accounts
- c. Plan and conduct student registration
- d. Assist with sponsor solicitation campaign
- e. Track revenues and expenses
- f. Write financial report for ANS HQ

#### V. <u>Accommodations</u> – Mireille Rowe (Chair), Kristin Whitlow (Co-Chair)

- a. Reserve hotel and banquet space
- b. Reserve session rooms
- c. Plan lunch and dinner menus
- d. Run meals and conference reception

#### VI. <u>Transportation</u> – Brian Barnhart (Chair), David Borrego (Co-Chair)

- a. Evaluate and reserve buses for transportation between airports and Gainesville
- b. Work with hotels to arrange shuttles to campus

#### VII. <u>Corporate Relations</u> – Anthony Hardy (Chair), Nelia Sanchez (Co-Chair)

- a. Oversee communications with participating companies and corporations
- b. Plan and conduct professional registration and check in
- c. Plan and manages career fair
- d. Plan and manages interview sessions

#### VIII. <u>Student Relations</u> – Tim Goede (Chair), Courtney Thomas (Co-Chair)

- a. Oversee communications with participating students
- b. Plan and conduct student registration and check in
- c. Optimizes manpower allocation

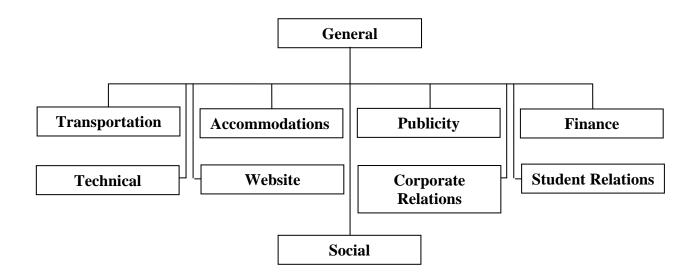
#### IX. Website – Travis Bennett (Chair), Nissia Sabri (Co-Chair)

- a. Designs website
- b. Maintains and updates website as needed

## X. <u>Social</u> – Andres Abadia (Chair), Laura Padilla (Co-Chair), Lindsay Sinclair (Co-Chair)

- a. Arrange technical and non-technical tours
- b. Plan and execute student mixer



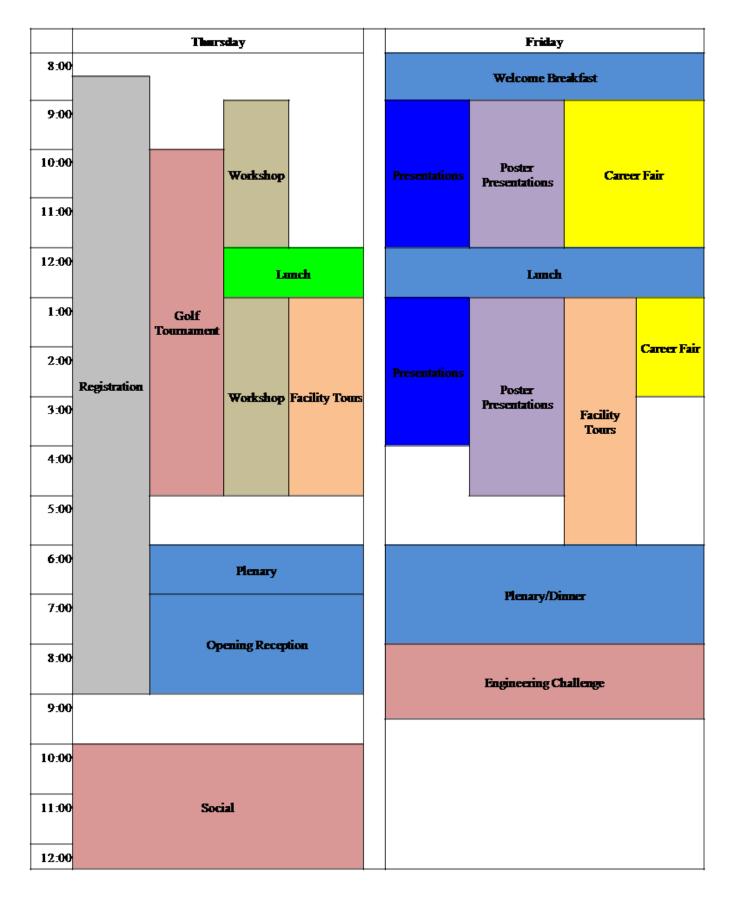


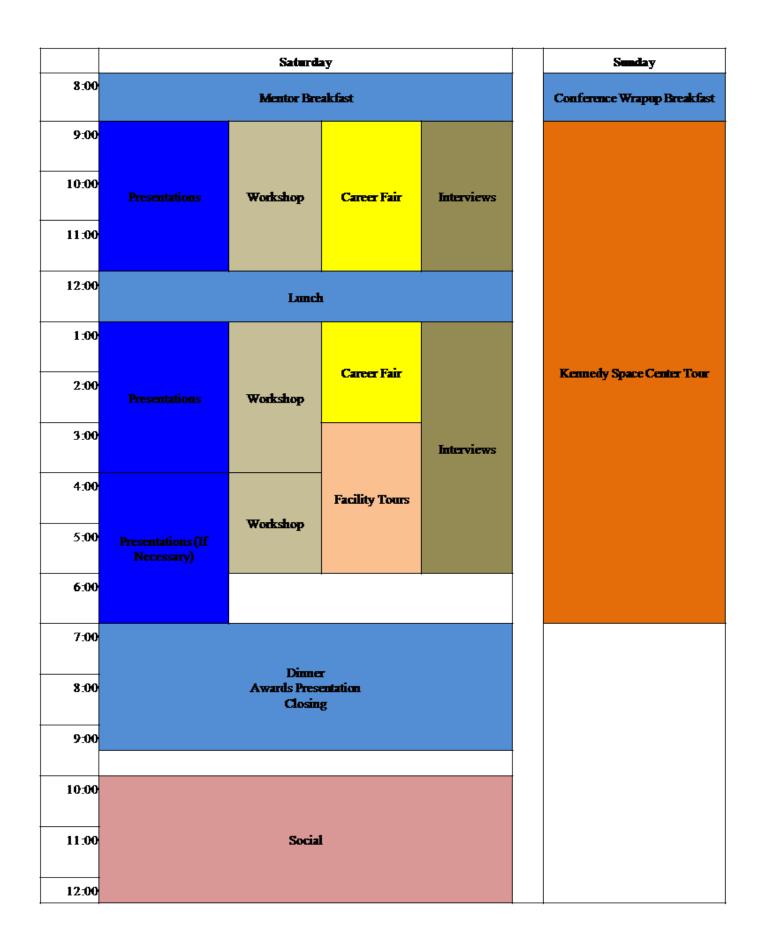
### **Conference Program**

The 2009 ANS Student Conference will offer a balanced program that will feature a synergistic combination of technical and non-technical events. From the keynote speakers to the individual student presentations, the conference will aim to provide a venue that encourages the exchange of ideas pertaining to the many facets associated with the role that nuclear science plays today, as well as its role in the future. The conference will offer students the opportunity to present research in three media: presentation, poster, and paper formats. Tentative presentation and paper tracks include: Accelerator Applications, Aerospace Nuclear Science and Technology, Biology and Medicine, Education and Training, Environmental Sciences, Fuel Cycle and Waste Management, Fusion Energy, Human Factors, Isotopes and Radiation, Materials Science and Technology, Policy, Radiation Protection and Shielding, Reactor Physics, Student Sections, and Thermal Hydraulics.



### **Tentative Schedule of Events**





#### **<u>Thursday</u>** – University of Florida Reitz Union and Golf Course

- **8:30 am 10:00 pm Registration** Registration desks will open at 8:30 am and close at 10:00 pm to ensure students will be able to check in throughout the day and evening.
- 10:00 am 5:00 pm Golf Tournament Pending the success of the planned golf tournament at the 2008 ANS Student Conference at Texas A&M, the University of Florida ANS Student Section will host an 18-hole, best ball scramble style golf tournament at the University of Florida Golf Course. The tournament aims to provide students and professionals the chance to network in a refreshing venue.
- 9:00 am 5:00 pm Workshops Several workshops will be provided throughout the conference. Possible themes include Particle Transport Theory Methods and Their Applications (Organized by UFTTG), MCNPX burnup features, SCALE 5.1, RELAP, Space Nuclear Propulsion and Power, Advanced (Fast) Reactors, and Professional Development workshops.
- 12:00 pm 1:00 pm Lunch A casual lunch buffet will be offered for conference attendants.
- 1:00 pm 5:00 pm Facility Tours – Directors of the University of Florida Training Reactor, NRE Robotics Laboratory, Backscatter X-Ray Radiography Facility, Florida Institute of Nuclear Detection and Security, and the Innovative Nuclear Space Propulsion Institute will personally conduct tours of these facilities. Tours of the University of Florida campus will also be offered and conducted by members of the University of Florida Alumni Association.
- **6:00 pm 9:00 pm Plenary and Opening Reception** – A plenary involving state officials and corporate executives discussing current and near-term nuclear efforts is tentatively planned to precede an opening reception to be held at the University of Florida Reitz Union Grand Ballroom. This will provide students the opportunity to interact with other students, professionals, and distinguished guests in a laid back and welcoming environment.
- 10:30 pm 2:00 am Social Students and professionals will be treated to Gainesville's vibrant night life.

#### Friday – Reitz Union

- **8:00 am 9:00 am** Welcome Breakfast Students will enjoy a full service breakfast while listening to a keynote address.
- 9:00 am 12:00 pm Presentations Professionals will lead with keynote addresses in each technical track.
- 9:00 am 5:00 pm Poster Presentations
- **9:00 am 3:00 pm Career Fair** Students will have the opportunity to meet with representatives from attending companies. Students will have the opportunity to sign up for interviews that will take place the following day. A university fair will also be offered, allowing graduate programs from across the nation to advertise their programs.



#### 12:00 pm - 1:00 pm Lunch

- 1:00 pm 4:00 pm Presentations
- 1:00 pm 6:00 pm Facility Tours
- **6:00 pm 8:00 pm Dinner with Keynote Plenary** Semi-formal dinner will be served while attendees enjoy presentations form distinguished speakers emphasizing the future of nuclear engineering education and areas of special interest for future research activities.
- 8:00 pm 9:00 pm Engineering Challenge One or more major sponsors of the 2009 ANS Student Conference will host the engineering challenge. An engineering competition, developed by one of these professional entities, will face off schools in direct competition. The competition will require each team to design a working prototypic solution to a given problem using limited resources in a limited timeframe. Prizes will be awarded to the top three teams.

#### Saturday – Reitz Union

- 8:00 am 9:00 am Mentor Breakfast Student attendees will have the opportunity to be paired with a mentor. This program will be similar in style to the mentor programs ANS puts on during its national conferences. Students and mentors will have the opportunity to interact in a more isolated and conversation-conducive environment during this breakfast.
- 9:00 am 12:00 pm Presentations
- 9:00 am 6:00 pm Workshops
- 9:00 am 3:00 pm Career Fair
- 9:00 am 6:00 pm Interviews
- 1:00 pm 4:00 pm Presentations
- 4:00 pm 7:00 pm Presentations (If necessary)
- 7:00 pm 9:30 pm Keynote Address and Awards Reception – Formal dinner will be served at the Touchdown Terrace overlooking Florida Field at Ben Hill Griffin Jr. Stadium, considered to be the loudest college football stadium in the nation and affectionately referred to as "The Swamp." After dinner, a keynote speaker will address the assembly and present student awards. Possible speakers include President George W. Bush and Former President and CEO of GE, Jack Welch.



#### Sunday – Reitz Union and the NASA Kennedy Space Center

- 8:00 am 9:00 am Conference Wrap-up Breakfast A final morning breakfast after conclusion of the conference will be held to discuss the organization and operation of the conference. Ideas and suggestions can be presented to future hosts. This meeting offers an opportunity for attendees to discuss general problems and areas of cooperation.
- **9:00 am Evening** Kennedy Space Center Tour Interested conference attendees will have the opportunity to tour nearby Kennedy Space Center. A shuttle service will take students to Cape Canaveral in the morning and return students to Orlando International Airport.

### Budget

The proposed 2009 ANS Student Conference is projected to have approximately 400 student attendees. We base this projection on recorded attendance at recent student conferences combined with the recent growth of nuclear programs across the nation. All 400 attendants are accounted for in the proposed budget.

The UF ANS Student Section operates an annual budget that will exceed \$40,000 in the 2007-2008 fiscal year, and thus has existing accounts run through the University of Florida Student Government Finance Office (SG) capable of handling all conference finances. All transactions are routed through SG and the student section has already set up a tax exempt account for the conference through SG. In addition, the University of Florida offers a department dedicated to aiding organizations hosting conferences.

The Conference Department at UF is a group of professionals who work specifically to aid in the successful execution of conferences at the university. Their services include organizing room setups, A/V equipment, catering, registration, and travel arrangements. They also provide assistance with financial management tools including processing registration fees, tracking invoices, and allowing registration to be paid online by credit card through secure servers. The aid of the UF Conference Department will ensure that all conference details are accounted for and that the event runs smoothly.



## Preliminary Budget

COSTS	Category	Price	e Per Quantity	Wednesday	Thursday	Friday	Saturday	Sunday		Cost
\$	Classroom		Free	2	16	16	16	5	\$	_
itie	Rion Ballroom Rental	\$	125.00	-	1	1	1	-	\$	375.00
acili	Grand Ballroom Rental	\$	300.00	-	-	1	1	_	\$	600.00
Meals and Facilities	Touchdown Terrace Rental	\$	1,000.00	-	-	-	1	_	\$	1,000.00
an	Welcome Breakfast	\$	13.00	-	-	450	450	100	\$	13,000.00
sals	Lunch Buffet	\$	17.00	-	-	450	450	-	\$	15,300.00
Ψ.	Dinner Entrée	\$	19.95	-	450	450	450	-	\$	26,932.50
	Subtotal								\$	57,207.50
uo	Charter Buses (MCO)	\$	630.00	6	10	_	_	14	\$	18,900.00
tati	Hotel Shuttles	\$	720.00	2	4	4	4	-	\$	10,080.00
por	Charter Buses (KSC)	ې \$	720.00	-	-	4	4	- 4	ې \$	2,880.00
Transportation	Travel Reimbursement	\$ \$	15,000.00	-	-	-	-	4	\$	15,000.00
·	Subtotal								\$	46,860.00
	Student Socials	\$	5,000.00	-	1	-	1	-	\$	10,000.00
	Awards	\$	1,500.00	-	-	-	3	-	\$	4,500.00
ts	Publications	\$	3,500.00						\$	3,500.00
Other Costs	Marketing Costs	\$	2,500.00						\$	2,500.00
ler	T-shirts	\$	2,700.00						\$	2,700.00
đ	Postings for Conference	\$	1,500.00						\$	1,500.00
	Mailings	\$	500.00						\$	500.00
	Speaker Gifts	\$	500.00						\$	500.00
	Subtotal								\$	25,700.00
								Total Cost	\$	129,767.50
VENUE	Category		Price Per	Number Expected						Total
qi										
orst	Student Registration	\$	25.00	400					\$	10,000.00
ponse	Professional Registration	\$	200.00	50					\$	10,000.00
d S	Sponsorship Level 1	\$	15,000.00	2					\$	30,000.00
u a u	Sponsorship Level 2	\$	10,000.00	3					\$	30,000.00
tior.	Sponsorship Level 3	\$	5,000.00	5					\$	25,000.00
trat	Sponsorship Level 4	\$	2,500.00	7					\$	17,500.00
Registration and Sponsorship	Sponsorship Level 5	\$	1,000.00	8					\$	8,000.00
								Total Revenue	\$	130,500.00

Net \$732.50

### Sponsorship

Five levels of sponsorship will be delimited. Each successive level will provide sponsors with additional benefits at the conference including career fair space, advertising space on the website and in the conference program, banners at the conference and an advertisement on the conference t-shirt. Besides the five levels of sponsorship, we will also seek sponsors for specific events such as the golf tournament, the engineering challenge, and the social events. Using recent conferences as a guide, the proposed budget includes projected revenue from sponsorships. This estimate is considered realistic. Appendix A contains several letters of proposed support from industry.

### In Closing

The University of Florida American Nuclear Society Student Section feels that its members and available facilities are ready to meet the challenge of hosting a student conference. The ANS Student Section will put together a unique conference experience that will foster enthusiasm across the discipline from a broad variety of topics. With support for nuclear energy on the rise and preparations for the next wave of nuclear plants underway, this conference will provide a forum for discussing current and future challenges facing the industry and an opportunity for students to take part in the discussion. The UF Student Section thanks the ANS Student Sections Committee for its consideration of this proposal.

Go Gators!

University of Florida American Nuclear Society Student Section



### **Current ANS Officers**

#### President

Jacob DeWitte

#### **Vice-President Internal Affairs**

Tim Geode

#### **Vice-President of External Affairs**

Thomas Plower

Treasurer

Danny Long

#### Secretary

Courtney Thomas

#### **BEC Representative**

Holly Van Sicklen

#### **Student Conference Proposal Chair**

Brett Dooies

#### **Faculty Advisor**

Jim Baciak, PhD



### **Conference Planning Committee**

#### **Proposal Chair:**

• Brett Dooies

#### **Major Contributors:**

- Jacob DeWitte
- Brian Barnhart
- David Borrego
- Andrew Hwang
- Amrit Patel
- Thomas Plower
- Danielle Rickman
- Mireille Rowe
- Daniel Vega
- Mike Wayson
- Kristin Whitlow



## **Appendix A – Letters of Support from Industry**





February 8, 2008

University of Florida ANS Student Chapter University of Florida Department of Nuclear & Radiological Engineering 202 Nuclear Science Building P.O. Box 118300 Gainesville, FL 32611-8300

Dear University of Florida American Nuclear Society Student Section:

AREVA supports the University of Florida American Nuclear Society student section's efforts to host the 2009 ANS Student Conference and hopes to have a positive impact on the implementation of the event.

AREVA has considered the UF ANS student section's request for support for the 2009 American Nuclear Society Student Conference, and has decided that the conference is mutually beneficial to the UF ANS student section and to AREVA.

Events that encourage the exchange of new and novel ideas are critical to the advancement of the nuclear industry. Because of this, AREVA is interested in providing assistance to fund the event, pending the UF ANS student section's successful bid to host the conference.

Sincerely,

Paul E. Burneson AREVA Program Manager, University Relations

AREVA NP INC. An AREVA and Siemens company



**Entergy Corporation** P.O. Box 61000 New Orleans, LA 70161-1000 Tel 504 576 4340 Fax 504 576 6010 msavoff@entergy.com

Mark T. Savoff Executive Vice President Operations

University of Florida ANS Student Chapter University of Florida Department of Nuclear & Radiological Engineering 202 Nuclear Science Building P.O. Box 118300 Gainesville, FL 32611-8300

Dear University of Florida American Nuclear Society Student Section:

Entergy supports the University of Florida American Nuclear Society student section's efforts to host the 2009 ANS Student Conference and hopes to have a positive impact on the implementation of the event.

Entergy has considered the UF ANS student section's request for support for the 2009 American Nuclear Society Student Conference, and has decided that the conference is mutually beneficial to the UF ANS student section and to Entergy.

Events that encourage the exchange of new and novel ideas are critical to the advancement of the nuclear industry. Because of this, Entergy is interested in providing assistance to fund the event, pending the UF ANS student section's successful bid to host the conference.

Sincerely,

University of Florida ANS Student Chapter University of Florida Department of Nuclear & Radiological Engineering 202 Nuclear Science Building P.O. Box 118300 Gainesville, FL 32611-8300

Dear University of Florida American Nuclear Society Student Section:

GE Hitachi Nuclear supports the University of Florida American Nuclear Society student section's efforts to host the 2009 ANS Student Conference and hopes to have a positive impact on the implementation of the event.

GE Hitachi Nuclear has considered the UF ANS student section's request for support for the 2009 American Nuclear Society Student Conference, and has decided that the conference is mutually beneficial to the UF ANS student section and to GE Hitachi Nuclear.

Events that encourage the exchange of new and novel ideas are critical to the advancement of the nuclear industry. Because of this, GE Hitachi Nuclear is interested in providing assistance to fund the event, pending the UF ANS student section's successful bid to host the conference.

Sincerely,

Man Beth Mowery EEDP Manager Manbeth. mowery @ge. com 910-675-5033

Appendix B – University Support



**College of Engineering** Office of the Dean 300 Weil Hall PO Box 116550 Gainesville, FL 32611-6550 352-392-6000 352-392-9673 Fax

February 14, 2008

Student Sections Committee ANS Education and Training Division

RE: 2009 ANS Student Conference

Dear Committee Members:

It is my pleasure to offer a letter supporting the University of Florida American Nuclear Society Student Section's proposal to host the 2009 ANS Student Conference. I am sure they will be very successful in reaching the broad community that utilizes nuclear and radiological engineering applications and will coordinate an outstanding conference.

In light of a renewed interest in nuclear energy to provide for our nation's growing appetite for power, our Department of Nuclear and Radiological Engineering has experienced a significant growth in enrollment, faculty, and research awards in the past seven years. In that time span, department enrollment has grown by over 150%, the faculty has increased by 50%, and research awards have increased by over 100%. The department is constantly engaged in cutting-edge research activities that have and will continue to benefit the nuclear industry, the state of Florida, and the United States of America. These efforts have not gone unnoticed, and I can only imagine their success will continue into the future.

The ANS student section has also enjoyed several years of outstanding success on the university level and the national stage. The section has been active in college activities and has consistently produced one of the best displays at the college's Engineering Fair during Engineers Week, and has won several awards for its efforts, including best display in 2007. The section has also represented the quality of the department well nationally, taking home awards for best presentations at recent student conferences and placing as finalists in the ANS Student Design Competition twice in the last three years.

A fraction of the department's graduate student population also pursues research in the medical applications of radiation and would make substantial contributions to the conference. These medical physics students participate in a variety of professional activities and would actively participate in the proposed conference. I also believe that the department's status as one of the eight CAMPEP accredited medical physics programs in the country will attract the attention of students studying medical physics at

many other Universities and will likely draw students to the conference that may not otherwise participate in ANS activities.

We look forward to the possibility of hosting a venture that would involve the many aspects of nuclear and radiological engineering in the 2009 ANS Student Conference and will help the student section in hosting the conference should they so need.

Sincerely,

Hharm

Pramod P. Khargonekar Eckis Professor of Electrical and Computer Engineering Dean, College of Engineering



**College of Engineering** Department of Nuclear & Radiological Engineering 202 Nuclear Sciences Bldg. PO Box 118300 Gainesville, FL 32611-8300 352-392-1401 x306 352-392-3380 Fax haghighat@ufl.edu

February 14, 2008

American Nuclear Society Attn: Student Section Coordinator 555 N. Kensington Ave. La Grange Park, IL 60525

Dear ANS Student Sections Committee:

I am pleased to offer this letter in support of our Student Section's proposal to host the 2009 ANS Student Conference. This proposal has the endorsement of the department of Nuclear & Radiological Engineering. The department will provide support, as necessary, to assist the students in the organization of the conference and solicitation of financial support from external sponsors.

We are fortunate to have an excellent group of students (both undergraduate and graduate) who have been working together very effectively on numerous activities. For example, they have been participating at the UF Engineering fair, career fair, and soapbox car competition; efforts which earned them first place honors in several of the categories. I believe that this group of students will be able to organize a very successful and rewarding meeting.

The students, faculty, and I are looking forward to the opportunity of hosting the 2009 ANS Student Conference at the University of Florida. For your information, Gainesville has excellent weather in April (~75 °F and blue skies), and our students are planning an excellent program for you.

If you need further information, please do not hesitate to contact me at haghighat@ufl.edu or (352) 392-1401 x306.

Sincerely,

Kli Kji+

Alireza Haghighat, PhD Professor and Chair

The Foundation for The Gator Nation An Equal Opportunity Institution



College of Engineering Department of Nuclear and Radiological Engineering 202 Nuclear Sciences Center PO Box 118300 Gainesville, FL 32611-8300 Tel: (352) 392-1401 Fax: (352) 392-3380 http://www.nre.ufl.edu

February 12, 2008

Dear Student Sections Committee, ANS Education and Training Division:

It is indeed my pleasure to write this letter supporting our proposal to host the 2009 ANS Student Conference here at the University of Florida. We look forward to our proposal's acceptance and the opportunity to host another successful student conference. We are fortunate to have a very enthusiastic and growing cadre of students who are eager to take on this responsibility. In recent years, they have been very active in attending ANS as well as other meetings; we sent 23 students to the November ANS Winter Meeting in Washington DC!

We have seen an increase in student interest and good cooperation among the graduate and undergraduate students in our three emphasis areas of nuclear engineering, health physics and medical physics. In addition to this cooperation, we are seeing renewed interest and involvement by our growing undergraduate student body in the Nuclear and Radiological Engineering Department. This cooperation and longevity plus my service as faculty advisor for the conference will assure a successful meeting.

We look forward to the opportunity to host this conference. If you have any questions, feel free to contact me at (352) 392-1401 x312 or via email at jimmer@ufl.edu.

Sincerely,

for bail

James Baciak, Ph.D. Assistant Professor, Nuclear and Radiological Engineerng University of Florida ANS Student Section Faculty Advisor

As a member of the University of Florida Nuclear and Radiological Engineering faculty, I fully support the UF ANS Student Section's bid to host the 2009 ANS Student Conference. The UF student section is a dedicated group of students who are prepared to manage a successful event. In the past seven years the department has grown exponentially, increasing enrollment by over 150%, faculty by 50%, and research awards by over 100%. Research activities in the department span nuclear power engineering, nuclear space power and propulsion, medical physics, health physics, radiation detection, non-destructive evaluation, radiation shielding and protection, and more. With this broad range of departmental research activities, a conference at UF would foster a transfer of information in all fields related to nuclear engineering. We look forward to bringing the ANS Student Conference back to the University of Florida for the first time since 1996, and hosting a venture that would involve the many aspects of nuclear and radiological engineering in the 2009 ANS Student Conference.

Name Ait BO oden pr

Signature

I pledge my time and effort to support the University of Florida Student Section hosting the 2009 ANS Student Conference

Name Sickler rion 10mas Roomy stin Tail Brett Rampal Jellieth Cardona Oscar Lastres Arla Swallow Brandon Cunningham ohn N Cacyer Patrick Stelen van Stephens eune H raus MATTHEW MARZAND J.M Racioppo

Smith prok  $\mathcal{N}$ nella

Signature Sal sck H an INTI

I pledge my time and effort to support the University of Florida Student Section hosting the

2009 ANS Student Conference

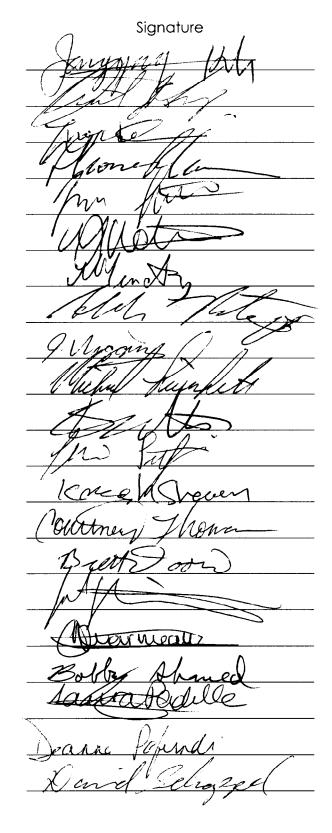
Name AYRES, David Spindlel 1 yler Greene Ulatt 4.1.1.52'r 10.ather ONNALSau oshua Richard Barnhart Brian onchor-Monial Nelia Rowe vireille David Borrego Steinte JE F Tred Gonglit Douglas 11mithy Goelp SOCK MORTOW Juan Perry Johnson homas Plower Kevin Manalo AMPIT PATEL

Signature OIM lin huse

I pledge my time and effort to support the University of Florida Student Section hosting the

2009 ANS Student Conference

Name Hull cingularia .01.0 lanii Badal Juncia over Mumas P - ya N Shit Will Walters Mike end sin P.  $1C_{t}$ Jonathan Wiggins -iesert nae hp Shirvan burtney Thomas Brett Pooles acch Dr Alnne (Thar mean adillo unch anne Hasenauxi Pafunchi David Schappe



## **Appendix C - Conference Timeline**

Deadline	Task	Responsible Committee
L/28/08	Appoint conference committee chairs	General Chai
	Reserve Reitz Union facilities for proposed conference dates	General Chai
/3/08	Begin inviting keynote and plenary speakers	General Chai
122 122	Finish adapting existing ANS accounts with UF Student Government	Finance
/22/08	Select marketing director	Publicit
/28/08	Finalize conference date	General Chai
/31/08	Reserve hotel block and remaining conference venues	Accommodation
/5/08	Finalize marketing scheme	Publicit
	Create sponsorship packets	Publicit
	Website up and running	Website
17 100	Reserve charter buses and shuttles	Transportatio
/7/08	Mail/Email sponsorship packets	General Cha
/10/08	Elect 2008-2009 ANS officers	AL
/12/08	Hold 2008-2009 planning meeting	AL
1/25/08	Finalize budget	Finance
6/8/08	Attend 2008 ANS Annual Meeting to garner support	Variou
7/1/08	Finalize topic tracks and release Call for Papers	Technica
	Post hotel Information on website	Accommodation
14 100	Post local information/tour details on website	Accommodation
9/1/08	Invite judges	Technical Affair
	Secure 25% of sponsorships	General Cha
	Confirm faculty session chairs	Technica
100 100	Send advertising to schools/student sections	Publicit
9/29/08	Finalize judging criteria for presentations, posters, and papers	Technica
.0/6/08	Website updated with flight info, shuttles, etc	Transportatio
	Setup internet payment site with UF for registration	Website
1/1/08	Registration opens	Websit
1/9/08	Attend ANS Winter meeting to present progress update	General Cha
2/1/08	Program schedule finalized and posted on website	Websit
/1/09	Expect to have received 75% of sponsorships	General Chai
/12/09	Make social venue reservations and finalize social event details	Socia
	Advertise via student listserv mailing/newsletter	Publicit
L/19/09	Send promotional item designs to printers	Publicit
2/1/08	Determine sponsors of major events	General Chai
2/2/09	Order speakers gifts	General Chai
	Setup worker schedules	Student Relation
	Order student presentation awards	Technica
2/16/09	Expect to have received 100% of sponsorships	General Chai
	Confirm judges	Technica
	Confirm keynote, plenary speakers	General Cha
1 1	Finalize career fair attendees and set floor plan	General Cha
2/27/09	Abstract submission deadline	Technica
/2/09	Advertise career fair on campus	Publicit
8/6/09	Conference registration deadline	Websit
3/13/09	Notify accepted presenters	Technica
	Finalize headcount with caterers	Accommodation
	Print t-shirts	Publicit
	Finalize student presenter schedule	Technica
	Finalize tour schedules	Accommodation
/16/09	Send final conference program booklet to printer	Publicit
	Post conference program on website	Websit
	Gather flight information and schedule shuttles	Transportatio
	Send posters/signage to printer	Publicit
	Gather materials for welcome packets	Publicit
	Receive career fair materials from companies	Corporate Relation
	Give press release	Publicit
/22/09	Prepare remaining materials needed for check-in	Accommodation
	Print name badges	Technica
	Assemble welcome packets	Accommodation
/1/09-4/5/09	HOST CONFERENCE	AL
/13/09	Send thank you letters to sponsors/judges/venues/etc	Publicit
/17/09	Host thank you party for volunteers	General Cha
/24/09	Send travel reimbursements	Financ
/26/09	Close books	Financ
		General Chai

## Appendix D – Conference Documents

## **American Nuclear Society: 2009 Student Conference**

### April 2-5, 2009 ♦ Gainesville, FL ♦ University of Florida



"Nuclear Engineers: Reacting to Power the World"



# CALL FOR PAPERS

#### <u>Conference Chairs</u> General Chairs

Jacob DeWitte Josh Richard

#### **Technical Program Chair**

Brandon Cunningham Tom Plower Mike Wayson

#### Tracks Themes

- Accelerator Applications
- Aerospace Nuclear Science and Technology
- Biology and Medicine
- Education and Training
- Environmental Sciences
- Fuel Cycle and Waste Management
- Fusion Energy
- Human Factors
- Isotopes and Radiation
- Materials Science and Technology
- Mathematics and Computations
- Nuclear Criticality Safety
- Operations and Power
- Policy
- Radiation Protection and Shielding
- Reactor Physics
- Student Sections
- Thermal Hydraulics

#### **Guidelines for Summaries**

Please submit summaries describing work that is new, significant, and relevant to the nuclear industry. ANS will publish all accepted summaries in the Transactions. Papers are presented orally at the meeting, and presenters are expected to register for the meeting. Completed papers may be published elsewhere, but the summaries become the property of ANS. Under no circumstances should a summary or full paper be published in any other publication prior to presentation at the ANS meeting. It is the author's responsibility to protect classified or proprietary information.

#### <u>Format</u>

Authors are required to use the ANS Template and "Guidelines for Transactions Summary Preparation" provided on the ANS Web site. Summaries must be submitted electronically using Adobe Acrobat (PDF) files and/or original Microsoft Word documents and the Student Conference Electronic Submission System. Summaries not based on the ANS Template will be rejected.

#### **Content**

- 1. Introduction: State the purpose of the work.
- 2. Description of the actual work: Must be NEW and SIGNIFICANT.
- 3. Results: Discuss their significance.
- 4. References: If any, must be closely related published works. Minimize the number of references.
- 5. Do not present a bibliographical listing.

#### <u>Length</u>

- 1. Use at least 450 words, excluding tables and figures.
- 2. Use no more than 900 words, including tables and figures.
- 3. Count tables and figures as 150 words each. Use no more than three tables or figures.
- 4. Limit title to ten words; limit listing authors to three or fewer if possible.
- 5. Exclude references from word count.

#### Awards

Awards will be given to the top two papers submitted before the early deadline. All papers submitted before the late deadline will be added to the Transactions CD.

#### **Deadlines**

Summary Submission: December 1, 2008–February 15, 2009 Notification of Acceptance: By March 1, 2009

## 2009 ANS Student Conference Judging Sheet

Date:	Start time:	Stop time:	Duration:
Presentation Title:			
Presentation Track:			
Presenter(s) Name:			
School Affiliation:			
Educational Level: UND	DERGRADUATE or GRA	ADUATE	
Content (40 points, 8 pc			
	ly stated why research is rele		
	ect data		
	priate level of analysis?)		
	rrect? Well-drawn?)		
	vided?)		
Oral Presentation (20 p			
Introduction (ap	propriate? Attention-grabb	ing?)	
	gical discussion?)		
Speaking Style (1	rhythm, tone, inflection)		
	lled well?)		
	) points, 5 points each)		
Slide design (goo	od contrast, easy to view?) -		
	/charts		
	ount of information per slid		
Appearance (10 points,			
	n audience		
	ire		
	d gestures		
	ement		
Timing (10 points)			
	short? Did the presentation	a co over time limit?	
	naximum of 5 points, none		
	reason for bonus – how did the p		
1 wase include lije i	cuson jor vonns – now une the p	τοσοπιστ χο άσονο απά συγοπά 10	Chinante 110 0101444 Cffell?

TOTAL POINTS

Comments for presenter:

Comments for Technical Chairs:

## 2009 ANS Student Conference Judging Sheet

Date:
Poster Title:
Presenter(s) Name:
School Affiliation:
Educational Level: UNDERGRADUATE or GRADUATE
Content (50 points, 10 points each)
Objective (clearly stated why research is relevant?)
Technically correct information
Analysis (appropriate level of analysis?)
Conclusions (correct? Well-drawn?)
References (provided?)
Oral Presentation (10 points, 2 points each)
Introduction (appropriate? Attention-grabbing?)
Explanation (logical discussion?)
Appearance (attire, enthusiasm, eye contact)
Speaking Style (rhythm, tone, inflection)
Questions (handled well?)
Visual Presentation (40 points, 10 points each)
Poster design (good contrast, easy to view?)
Organization
Graphs/figures/charts
Appropriate amount of information

Bonus points (maximum of 5 points, none required) ------Please include the reason for bonus - how did the presenter go above and beyond to enhance the overall effect?

**TOTAL POINTS** 

Comments for presenter:

Comments for Technical Chairs:

## 2009 ANS Student Conference Judging Sheet

Date:
Paper Title:
Paper Track:
Author(s) Name:
School Affiliation:
Educational Level: UNDERGRADUATE or GRADUATE
Content (80 points, 20 points each)   Objective (clearly stated why research is relevant?)
Presentation (20 points, 5 points each)   Spelling/Grammar   References (Properly provided?)   Graphs/figures/charts (effectively used?)   Writing style (rhythm, tone, inflection)
Bonus points (maximum of 5 points, none required)

TOTAL POINTS

Comments for presenter:

Comments for Technical Chairs: