# 2017 AMERICAN NUCLEAR SOCIETY NATIONAL STUDENT CONFERENCE PROPOSAL



# **DISPELLING NUCLEAR MYTHS**

## Submitted by:

## American Nuclear Society

**University of Pittsburgh Student Section** 



## University Of Pittsburgh

Swanson School of Engineering Department of Mechanical Engineering and Materials Science

Selection Committee Members **ANS Student Conference** February 15, 2016

**Dear Selection Committee Members**,

Thank you for considering the University of Pittsburgh section as a host for the 2017 ANS Student Conference. The University of Pittsburgh is developing its nuclear engineering program at a remarkable pace. Since the start of our program in 2008, an average of 160 undergraduates enroll in a nuclear engineering class each year. The graduate curriculum attracts industry professionals from the surrounding nuclear organizations: Babcock & Wilcox, Bettis Atomic Power Laboratory, Bechtel Marine Propulsion Corporation, FirstEnergy, General Electric, Rolls Royce, and Westinghouse who are looking to enhance their nuclear education. Additionally, these companies supply most of the instructors who teach our courses, bringing first-hand, real-world experience to the classroom and to our school. Therefore, we believe that attendees to an ANS conference hosted at Pitt will benefit from a high level of professional development and networking experiences.

Given Pittsburgh's history with Shippingport Atomic Power Station and the nuclear navy program, it has been natural for the city of Pittsburgh, and therefore the University, to attract this field of study. We believe that for the same reason, our location will attract students from around the country to attend the ANS student conference. Seated at the crux of three rivers, the Ohio, the Allegheny, and the Monongahela, Pittsburgh is a charming testament to our nation's beauty. Surrounded by an industrial district that quickly transitioned into a buzzing metropolis, it is now a city bustling with innovation, young professionals, technological advancements, and medical research.

Our ANS section is prepared to host the 2017 ANS student conference under the theme "Dispelling Nuclear Myths". We want to take our fellow members through a reflective and active understanding of myths in our technical field. How can research clarify scientific controversies? How can we address public opinion about nuclear technology? In what ways can students impact the concerns of nuclear safety? These are all questions that we plan to address during our conference by offering attendees a strong technical program and an instructive professional experience.

Sincerely,

**Brendan Stack Conference** Chair

Brenks Stoke Miniam ARatthe

Miriam Rathbun **Technical Director** 

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Nuclear power plants are among the safest, most affordable, and environmentally friendly options for powering billions of homes around the world, yet there is still negativity surrounding the industry. We believe that a crucial aspect in the growth of the next generation of nuclear engineers will be to have the fundamental knowledge to combat these misconceptions. What better place for students to understand important controversies of nuclear science than where the country's first commercial power plant was developed, a mere one hour drive from the University of Pittsburgh? With these thoughts in mind, we chose to focus on developing awareness of common myths to equip and educate the future nuclear workforce, i.e. the conference attendees, with the conference theme "**Dispelling Nuclear Myths**."

The primary changes in this proposal include a **larger conference board**, a new theme, a well-thought out **sponsorship plan**, and a change in **conference location**.

The University of Pittsburgh's proximity to many nuclear landmarks makes it a perfect host for this theme. Attendees will be able to visit Shippingport as it stands now as well as the Westinghouse headquarters and its related facilities, Holtec dry storage cast manufacturing sites, and the University of Pittsburgh Medical Center research facilities. Our conference emphasizes our theme through these **site visits**. This type of first-hand experience truly enhances technical knowledge, further equipping students to understand the reality behind nuclear science and technology.

With an abundance of nuclear-related industry in our city, we estimate 150 professionals will be in attendance, providing student ANS members with opportunities to interact with representatives and speakers who work in industry and research. Professional development workshops hosted by companies or ANS divisions will allow students to intimately converse with professionals, address the misconceptions of those outside of the industry, and learn techniques to influence the future generation of nuclear engineers.

These **workshops** will focus on practical professional development, such as resume critiques and mock interviews, technical skills through a software package training course, and public outreach through a "Tell Your Story" workshop. **Panels** will include both technical subjects (fusion technology, non-proliferation, etc.) and non-technical subjects (diversity, life after university, etc.). Two days of **technical sessions** will cover a wide range of sub-fields in nuclear science, and each Session Chair will open with a **short introduction** on the myths faced in that particular topic. Then, our culminating panel discussion, the **Myth Busting Panel**, will bring the attendees together to discuss major technical controversies and public opinion misconceptions in the nuclear field, drawing from the numerous branches of nuclear.

The new aspect we are bringing to the student conference is a **morning plenary**. This will bring the entire attendee body together each morning to examine communication and anti-nuclear arguments. Therefore, our theme will appear at the beginning of each day and throughout each technical session as our attendees will be stimulated to reflect on how each division of ANS brings unique challenges and strengths to the nuclear discussion.

The conference location will be in the heart of downtown Pittsburgh at the **Omni William Penn Hotel**, located fifteen minutes from the University of Pittsburgh's campus by bus. This building will comfortably accommodate the 450 projected student, 150 professionals, and will host two of the conference dinners. The third dinner will be hosted at Heinz Field, the home of the Pittsburgh Steelers.

The opening banquet will highlight the most common myths in the world today. It will take place inside the Omni William Penn Grand Ballroom and feature a talk by a sponsor guest and the President of ANS. On Friday night, we will promote interaction between attendees and industry professionals as we dine at the Heinz Field UPMC Club. The closing banquet will again take place in the Grand Ballroom. We will recapitulate how students can contribute to the debunking of nuclear myths as well as recognize the accomplishments of the attendees during their time at the conference.

## **2: PITTSBURGH: OUR CITY AND OUR UNIVERSITY**



## **2.1: PITTSBURGH WELCOMES YOU**

#### It All Started Here!

Pittsburgh has been at the center of innovation ever since the Industrial Revolution. It can be argued that America was built up through Pittsburgh. The steel that was produced by Carnegie Steel & Co. was used to help this nation build up to the sky. That steel helped build the Cathedral of Learning at the University of Pittsburgh, which was the first university skyscraper and is still the tallest academic building in the Western Hemisphere and the second tallest in the world. John Roebling invented the wire cables that made suspension bridges possible and that, combined with the steel produced in Pittsburgh, helped make Pittsburgh "the City of Bridges." But not all of the innovations from here are what would be considered blue-collar. In medicine, Dr. Jonas Salk developed the vaccine to cure Polio at the University of Pittsburgh. Along with this, UPMC conducted the first ever simultaneous heart, liver, and kidney transplant and has continued to be recognized worldwide for their advancements in medicine. Carnegie Mellon University founded the first ever robotics institute here. The Jeep was invented in a suburb of Pittsburgh to aid the United States in World War 2. Pittsburgh also loves its food. The Big Mac was invented in Pittsburgh, as were the Klondike bar and the banana split. Innovation runs through Pittsburgh, and it is apparent throughout the history of the city.



#### Pittsburgh: Nuclear's Home

Pittsburgh's history of innovation is also very apparent with its involvement in the nuclear industry. Pittsburgh has been at the forefront of the field ever since the advent of commercial nuclear power. In 1957, the Shippingport Atomic Power Station, roughly 25 miles outside of Pittsburgh, became the first nuclear power plant in the country. The fact that this power plant could be built at the height of nuclear concerns in the United States goes to show just how well Pittsburgh has done dispelling the myths surrounding atomic power. This was further emphasized when the Shippingport plant was to be decommissioned because roughly one mile down the road, another nuclear power plant was being built to replace it. This has allowed multiple nuclear-related companies to flourish in the area such as:

- Bechtel Marine Propulsion Company
- Bettis Atomic Power Laboratory
- Curtis Wright
- FirstEnergy Corporation
- General Electric
- Holtec
- Rolls Royce
- Westinghouse

University of Pittsburgh

## **2.2: UNIVERSITY OF PITTSBURGH NUCLEAR ENGINEERING PROGRAM**

The Department of Mechanical Engineering and Materials Science offers an M.S. degree, as well as undergraduate and graduate certificates in Nuclear Engineering. The program takes advantage of unique industrial resources in Western Pennsylvania. Classes are taught by current and former nuclear engineers, and the curriculum focuses on nuclear operations and safety, fulfilling an industry recognized educational need. The objectives of the Nuclear Engineering Program are:

- To develop the basic competencies needed by science and engineering graduates to contribute quickly and effectively to the renaissance of nuclear science and technology in the United States and abroad.
- To create a benchmark educational program that can serve as a model throughout academia.

### **2.3: UNIVERSITY OF PITTSBURGH ANS STUDENT SECTION**





Our ANS section is young and vibrant. The membership base spans multiple departments, including mechanical, chemical, electrical, and civil engineering. Therefore, we are confident that these departments will support us in hosting the 2017 ANS student conference. We are establishing ourselves on the local and national level in several ways. We have sent representatives to the student conference every year since Pitt's section has been established, and we are beginning to attend national conferences. Additionally, several of our students are also members of the Pittsburgh Local Section, and one of our students is a member of the ANS Student Sections Committee.

The Director of the Nuclear Engineering Program, Dr. Daniel Cole, is also our faculty advisor. Therefore, Pitt ANS and

our nuclear program collaborate in many ways, resulting in larger, more meaningful events. This relationship has led to a better collaboration with well-established employees and CEOs from the nuclear industry. Our close contact with Pittsburgh's Local ANS Section benefits us in similar ways. By collaborating, we have boosted our range of outreach and development and expanded our professional network.

For these reasons, we look forward to overwhelming corporate support thanks to our personal interactions with well-established employees and managers throughout all levels of corporate leadership.



## **3: TENTATIVE SCHEDULE**

As we look forward to hosting the student community of the American Nuclear Society, we have carefully planned the conference schedule to give our attendees the full experience of a professional development conference. Among technical sessions, reception dinners, and workshops are numerous opportunities for networking and learning from our peers and superiors in the nuclear field. Highlights from this program include plenary sessions which are a new feature for the student conference. The flow of the schedule is built to incorporate our theme. Activities throughout the weekend will build up conversation around industry challenges faced through controversies and myths, and then culminate in a large panel discussion to address all the ideas brought up throughout the conference.

## **3.1: SCHEDULE CHOICE**

The schedule for the 2017 ANS conference was chosen to center around our theme "Dispelling Nuclear Myths."

The first day will be filled with professional development tours to allow guests to visit nuclear facilities in the area. Students will have the option to sign up for professional tours around the city, including Westinghouse headquarters and branches, University of Pittsburgh Medical Center (UPMC) radioisotope medical research, and the FirstEnergy site at Beaver Valley, located at Shippingport. As additional professional development, the workshops for Thursday include a resume critique and mock interviews in preparation for the conference and the career fair. Finally, attendees will receive a flyer of suggested cultural activities to enjoy their first day in Pittsburgh as site-seers. We hope our guests can enjoy these activities on the day of their arrival and during their free evenings. The opening dinner will feature a sponsored speaker and the President of ANS. Our welcome speech will open the discussion on myths in the nuclear field and set the stage of our conference theme.

The second day will begin with a special plenary session and breakfast to encourage attendees to begin the day. It will feature a speaker from the Nuclear Literacy Project to speak on how we can act against public impressions of nuclear technology. Throughout the conference program, students will learn about current research in the technical sessions which will promote our large Myth Busting panel on Saturday, explore opportunities during various panels, and network with industry in the career fair. Friday's dinner will be hosted at the Heinz Field UPMC Club and focus on networking. Professionals will be seated by company, and students will join them to enjoy the dinner and the sponsor speaker.

The final day of the conference will again begin with a plenary session with a speaker from ANS on communication and public policy. The technical presentations will continue to promote the culminating panel on nuclear myths which will be among the last events of the day. This will gather speakers from various ANS divisions to foster a conversation about technical controversies and how research and industry can work to promote nuclear science and technology. Our final reception will host a sponsor speaker and distribute awards to openly congratulate the best podium presentations and best poster winners. The seating will be arranged by ANS divisions, and students will choose which table to sit at. This is appropriate for the final banquet because the awards are given by technical track.

## 3.2: CALENDAR VIEW

Figure 1 presents a calendar view of the proposed schedule for each day of the conference. The following section, "3.3: Schedule Specifics," provides details on the items identified in this schedule. It should also be noted that the color of each event corresponds to its type of event following with the scheme laid out in the color legend (e.g. light blue represents professional development events).

Logistics
Professional Development
Workshops and Panels
Career & University Fair
Dinner Receptions
Socials

	THURSDAY			FRIDAY				SATURDAY																
8 A.M.				F	lenary session,	breakfa	st	Plenary s	ession, breakfa	ist														
9 A.M.								ivities	tivities	tivities		Fusion panel	ssions	sion	nd fair	Non-Prolif panel	nical ions							
10 A.M.	lesk		sted ac		Proposal writing	ical se	er ses: setup	reer ai versity	Software & LNT	Tech sess														
11 A.M.	ation d	tours	Sugges	ity fair	Life after school	Techn	Post	Ca univ	Medical physics	SSC														
12 P.M.	ISTRATION/informa Professional 1			niversi	Lunch & learns	Lunch	n break	Lunch & learns	Lunch break	meet														
1 P.M.			TION/	TION/	TION/	Profes	Profes	Profes	Profes	Profes	Profes	Profes	Profes	Profes	Profes	Profes	Resume workshop	r and u	Policy workshop	suc	dging	dging	Diversity panel	suc
2 P.M.			/Mock interviews	Career	& China Syndrome	l sessic	ní - uo	ní - uo	Tell your story	l sessic														
3 P.M.	REG		Pandora's		Fukushima Fables	chnica	er sessi	er sessi	Myth	chnica														
4 P.M.			Promise			Te	Poste	Poste	panel	Te														
5 P.M.																								
6 P.M.	Opening dinner		Industry dinner			Awards Ceremony																		
7 P.M.	On	Omni William Penn Grand Ballroom			Heinz Field UPI	MC Club	)	Omni William Penn Grand Ballroom																
8 P.M.	C																							
9 P.M.	Social: Buckhead Saloon			Social: McFadden's			Social: Strip District																	

#### **Figure 1: Tentative Schedule**

## **3.3: SCHEDULE SPECIFICS**

Below is a summary for each major section of the schedule. In the following section, a more detailed description is provided which includes a schedule for the room distribution, prices for each venue, and all relevant information.

Registration logistics: Registration will take place in the registration area set aside at the Omni William Penn hotel, and will be open all day on Thursday. For the remainder of the conference, it will remain staffed during business hours for late registration and as an information desk.

First day activities: Since Pittsburgh has many nuclear-related industry headquarters, we are organizing several visits for arriving students on Thursday, including Shippingport, Westinghouse, Holtec, and the University of Pittsburgh. Additionally, attendees are invited to explore cultural activities in the area.

Technical program: The unique aspect of our conference proposal is the introduction of plenary sessions each morning. The speakers that we will reach out to are exemplary communicators in the nuclear field. These plenaries are meant to be an exciting start to the programs for Friday and Saturday. Through a series of workshops, student presentations, and professional development opportunities, the theme "Dispelling Nuclear Myths" will guide our attendees toward expanding their networks and improving their technical skill set.

Dinning: We have selected three dinner receptions to allow for networking. The opening dinner and closing dinners will take place at the hotel while the Friday night dinner will be held at the Heinz Field UPMC club.

#### **3.3.1: REGISTRATION LOGISTICS**

On Thursday, registration will be open all day and during the evening to accommodate late-comers. On Friday and Saturday, the desk will be open during business hours for information and late registration. We would also like to include a side table with a laptop set up where students can conveniently join national ANS. Since ANS is trying to boost membership, we believe this might help the initiative and gather student interest in the national organization.

When an attendee arrives to register, they will pick up their name tag, program booklet, and a gift bag. The logistics and cost for the registration gifts are detailed in Table 1.

Item	Estimated Cost	Count	Company/Sponsor		
Tote Bag	\$576	600	Quality Logo Product		
Conference T-shirt	\$2,484	600	Custom Ink		
Umbrella	\$3,342	600	Quality Logo Product		
2 GB USB	\$4,782	600	Quality Logo Product		
Water Bottle	\$438	600	Quality Logo Product		
Pens	\$150	600	Quality Logo Product		
Notepads	\$120	600	Quality Logo Product		
Lanyard	\$618	600	Quality Logo Product		
Adhesive ID Holder	\$342	600	Quality Logo Product		
Microfiber Rag	\$780	600	Quality Logo Product		
Circle Magnet	\$42	600	Quality Logo Product		
Lanyard/Lanyard Pouches		600	American Nuclear Society		
Name Tags		600	American Nuclear Society		
Programs		600	American Nuclear Society		
Total Cost	\$13,674				

#### **Table 1: Registration Giveaways**

Not all the items will be provided. Sponsors will choose which items they wish to have their logos appear on. Any items not selected will not be part of the gift bag. Since only tier 1 and tier 2 sponsors may have an item, we expect to only include four, besides the USB sticks. Choosing the four most expensive items, the total price of the registration packet is \$13,674.00. As confirmed by Paula Cappelletti, ANS headquarters will print the conference programs and provide lanyard pouches and name tags at no expense. For convenience, conference papers will be pre-loaded onto 2GB USBs instead of CDs. A T-shirt will be given away as it is a great way to promote the conference for the duration of the weekend. We cannot design one before choosing a final conference graphic, but when that is finalized, the

graphic will be on the front, and the sponsors' logos will appear on the back. If our budget becomes tight, the T-shirts will not be made, and the list of available items for companies to sponsor will exclude the most expensive items (notably the umbrella and microfiber rag). Please note that all the estimated costs include shipping.

### **3.3.2: FIRST DAY ACTIVITIES**

Since Pittsburgh has many nuclear-related industry headquarters, we are organizing several visits for arriving students on Thursday including Shippingport, Westinghouse, Holtec, and University of Pittsburgh research laboratories. Additionally, we have provided some suggested cultural activities for those individuals who would like to explore the history and rich culture of our city.

#### **3.3.2-A: PROFESSIONAL DEVELOPMENT TOURS**

Students will be able to take advantage of a number of professional development tours on Thursday before the conference. On-site tours play a role in dispelling preconceived ideas of public risk posed by nuclear facilities, further equipping ANS students with experience to bring to future discussions about nuclear plant management, security, and procedures.

#### Shippingport Nuclear Power Plant and Coal-Fired Plant:

The Shippingport Atomic Power Station first produced electricity in 1957. Although the original plant was decommissioned, the 2-unit Beaver Valley Plant operated by FirstEnergy Corp has replaced it with 1,800 megawatts net generating capacity. Right next to it is the Bruce Mansfield Power Station, a coal-fired plant which will prove just as interesting to our ANS guests. Contrasting the two plants is an extremely interesting way to learn more about nuclear technology's advantages and disadvantages. The site is an easy 45minute drive away from Pittsburgh.



An exact list of attendees must be provided to the plant ahead of time, and all visitors must be US citizens and provide their social security numbers to FirstEnergy for clearance purposes.

Primary contacts: Tonya Horn (HR) and numerous Pitt ANS alumni

#### Westinghouse Headquarters:

As a world class supplier of power plant designs and components, Westinghouse Electric Company's headquarters are located in Cranberry Township, a mere 25 minute drive away from downtown Pittsburgh. The facility offers a tour of their AP1000 simulator and a presentation of the history of Westinghouse and the nuclear industry. This way, we can offer a visit to two groups at a time alternating between those sessions.

Primary contacts: Tracey Rapali (HR) and numerous employees and managers





Primary Contact: Bill Kersting (Operations Manager)

#### Westinghouse Churchill Facility:

The purpose of this facility is for Westinghouse's internal and external customers to conduct experiments for failure analysis of components in the field, as well as to participate in innovation projects within Westinghouse. This is only one of three active Hot Cells in the industry and the only one that can handle high radiation of components.

Visitors must be over 18 years old. The site supplies safety glasses; closed-toe shoes are required. The Operations Manager is ready and willing to organize a tour for ANS.

#### Westinghouse Specialty Metals Plant:

The Westinghouse Specialty Metals Plant (SMP) is one of the world's leading producers of seamless zirconium-alloy tubing products. The site opened in 1955 and began manufacturing Zircaloy tubing in 1967. The facility is approximately 562,000 ft<sup>2</sup> and typically produces 12-14 million feet of tubing per year based on customer needs. As of September 2014, the Specialty Metals Plant has produced approximately 416 million cumulative feet.

Tours of the Westinghouse SMP are to be kept small (10 people or less) and take two hours. The restrictions are typical to factory sites: long pants, no cameras, phones, or food.

Primary contact: Mary Ringbloom, Diane DiCenzo (HR)

#### Westinghouse Waltz Mill Site:

Waltz Mill is a service center which employs approximately 800 people. The site handles services for steam generators, reactors, equipment, and training. Although Waltz Mill no longer hosts as many visits as it used to, Westinghouse customers and award winning students are still given tours, typically in groups of ten.

We plan to submit a request for a small tour once we can offer a concrete date.

Primary contact: Rosemary Peta (HR)

#### Holtec Manufacturing Facility:

Holtec is a nationally recognized manufacturer of large custom-built products for the nuclear industry, such as modular storage devices. At more than 660,000 ft<sup>2</sup>, Holtec Manufacturing Division located in Turtle Creek, PA, is one of the largest manufacturing plants in the U.S. The location is 25 minutes away from Pitt, and our primary contact is willing and ready to host a tour for ANS.

Primary contact: Chris Williams (HR)







In addition to these off-site visits, we will offer tours of Pitt's nuclear research laboratories. Many of the Swanson School of Engineering's professors have directed their research toward nuclear engineering by applying their area of expertise to problems that relate to nuclear energy or medical radioisotopes. In collaboration with National Laboratories, local industry, and the Department of Energy, our research facilities have expanded and are contributing to the advancement of nuclear science and technology.

#### **UPMC Radiology Department:**



The Molecular Imaging Laboratory in the Department of Radiology at the University of Pittsburgh develops noninvasive molecular imaging agents for the early diagnosis and monitoring of treatment in pulmonary and cardiovascular diseases and cancer. Through the development of radiopharmaceuticals labeled with radionuclides, such as copper-64 and gallium-68, Dr. Carolyn Anderson's group aims to provide new opportunities to diagnose and treat diseases.

#### Positron Emission Tomography Research Center:



The PET Radiochemistry Laboratory produces radionuclides and investigational radiopharmaceuticals for PET imaging using a dedicated Siemens Eclipse HP medical cyclotron. The Eclipse HP is an 11 MeV negative-ion cyclotron equipped with targetry for producing the positron-emitting radionuclides carbon-11, fluorine-18, nitrogen-13, and oxygen-15. The PET Facility at the University of Pittsburgh has been operational since 1992, and is administered as a research division of the Department of Radiology under the direction of Dr. Chester Mathis.

#### Instrumentation and Controls Laboratory:

The Instrumentation and Controls Laboratory (I&C Lab), directed by Dr. Daniel Cole in the Mechanical Engineering and Materials Science department, researches dynamic systems, measurement, and control of phenomena from the nano- to macroscale. Past research has focused on nanoinstrumentation, precision motion control, and energy harvesting. Current efforts are focused on I&C for nuclear power and in particular, the automated control of small modular reactors, control paradigms for fault-tolerant supervisory control, and cyber security for supervisory control and data acquisition. The I&C Lab is equipped for real-time controller development and testing.



#### Sounds, Systems, and Structures Laboratory

The Sounds, Systems, and Structures Laboratory, directed by Dr. Jeffrey Vipperman, has several nuclear-related projects under way. The first project explores how to externally read acoustic-based temperature signals from advanced sodium cooled reactors in collaboration with Westinghouse and Argonne National Laboratory. The second is concerned with improving the accuracy and reliability of source range radiation detectors through digital signal processing methods.



#### Advanced Materials and Microscopy Laboratory:

Dr. Jorg Wiezorek in the Mechanical Engineering and Materials Science department directs a research group that studies relationships between the processing, microstructure, and properties of advanced materials with a focus on metallic alloys and intermetallic compounds. One current research thrust explores surface related enhancements of the irradiation damage tolerance of structural alloys by microstructural scale refinement. His team extensively uses scanning and transmission electron microscopy to quantify changes in the modified microstructures due to irradiation and thermal exposures. In collaboration with other universities, national laboratories and industry partners, this project holds promise for developing enhanced performance materials technologies for applications to safe life extension efforts for light water reactor nuclear power plants.

#### **Energy Materials Laboratory:**

Dr. Jung-Kun Lee's research group in the Mechanical Engineering and Materials Science Department investigates ion irradiation effects in a wide range of materials. His research is focused on energy materials, and so his work employs a number of nuclear measurements for applications in solar cells, silicon, and plasmas. His group publishes regularly in the journal Nuclear Instruments and Methods.



#### Laser Photonics Fiber Optics Research Laboratory:

Dr. Kevin Chen's group in the Electrical and Computer Engineering department studies fiber optics applications for fossil energy, nuclear energy, and structural health monitoring as well as nuclear micro-engineering, especially in tritium. Some recent successes in fiber optics research include probing chemical reaction in solid oxide fuel cells, mapping 3D internal strain field during hydraulic fracturing process, developing multi-functional fiber for radiation environments and their cablizations, and demonstration of flow sensors with record-high operational temperature at 750°C.



#### **3.3.2-B: SUGGESTED CULTURAL ACTIVITIES**

In addition to professional development tours, we have suggested a number of cultural activities. Tours will not be organized by Pitt; however, the activities we suggest are easily accessible, and we encourage our attendees to take advantage of them, either on Thursday or during other possible free time.

#### **Carnegie Museums of Art & Natural History Museum:**

As two museums adjacent to each other with a plethora of interesting exhibits, the Carnegie Museums have the second largest collection of dinosaur bones in the country, including one that you can touch. Both museums are open from 10 A.M. – 5 P.M. and open until 8 P.M. on Thursdays. Admission for both is \$11.95 for students with a valid ID, \$17.95 for adults, and \$14.95 for seniors. They are located on Forbes Avenue near Pitt's campus.





#### **Carnegie Science Center & Omnimax:**

Hands-on science exhibits (space simulation, underwater construction, robot hall, etc.) make this an exciting attraction to visitors of all ages. The Science Center has a diesel submarine docked there which can be toured. The Omnimax plays various movies throughout the year, and next door is the SportsWorks building with games, rides, and physics-based tests. It is open from 10 A.M. – 5 P.M. and stays open until 7 P.M. on Saturdays. It costs \$18.95 for admission, or \$23.95 for admission with one Omnimax film or laser show. The Science Center is located on Allegheny Avenue, on the North Shore.

#### **Phipps Conservatory:**

A self-guided tour of the conservatory includes the fern room, orchid room, tropical forest room, desert room, and more. It is always warm and slightly humid inside the building which transports the visitor to another ecosystem to view the beauties of nature that Phipps has to show. The conservatory is open from 9:30 A.M. – 5 P.M. and until 10 P.M. on Fridays. Admission costs \$14.00 for students with a valid ID, \$15.00 for adults, and \$14.00 for seniors. The conservatory is located in Schenley Park, near Pitt's campus.





#### **National Aviary:**

This museum on the North Shore of Pittsburgh is self-guided. You can buy bird feed and walk through the exhibit, interacting with the birds. You can also have penguin encounters there. The aviary is open from 10 A.M. – 5 P.M. and general admission is \$14.00.

#### **Cathedral of Learning/Nationality Rooms:**

The Cathedral of Learning is the second tallest educational building in the world and is the campus centerpiece. As a Pittsburgh historic landmark, the building showcases the city's cultural diversity by having Nationality Rooms for several countries and cultures. These Nationality Rooms are used for classrooms and tours. The Cathedral of Learning is at the heart of Pitt's campus and is free to the public from 9 A.M. – 4 P.M. Additional touring information can be found at www.nationalityrooms.pitt.edu.





#### Andy Warhol Museum:

The Andy Warhol Museum is the global keeper of Andy Warhol's legacy. The collection includes 900 paintings, approximately 100 sculptures, nearly 2,000 works on paper, more than 1,000 published and unique prints, and 4,000 photographs. The museum is open from 10 A.M. – 5 P.M. and stays open until 10 P.M. on Fridays. Admission is \$10.00 for students with a valid ID and \$20.00 for adults. The museum is located on General Robinson Street on the North Shore.





#### Mount Washington/Station Square:

Ride the Monongahela incline, a funicular, to the top of Mount Washington to admire the view of Pittsburgh's skyline. This was recently voted the second most beautiful vista in America. This viewpoint contains the downtown skyline, the location of the three rivers meeting, and several of the city's bridges. The incline costs \$5.00 round trip, is open daily between 5:30 A.M. - 12:45 A.M., and can be boarded at Station Square

#### Hofbräuhaus Restaurant:

Hofbräuhaus is Pennsylvania's first authentic Hofbräuhaus, modeled after the legendary 400+ year-old Hofbräuhaus in Munich, Germany. Located in South Side, it has a great atmosphere and is still close to campus. Their menu can be found on their website: http://hofbrauhauspittsburgh.com.



### 3.3.3: TECHNICAL PROGRAM

The technical program is the most important part of any engineering conference. Through technical sessions and a poster session, students will showcase their research, and technical panels will promote discussion on select topics in the nuclear field such as fusion technology and nonproliferation. A series of workshops will provide the opportunity to build technical and soft skills, and a career fair will be available for students to search for professional opportunities. A special emphasis in our technical program is put on the plenary sessions offered each morning. These are meant to bring the body of attendees together at the start of each day to hear distinguished speakers directly address our theme "Dispelling Nuclear Myths." This theme will manifest in a variety of ways throughout the technical program, from workshops to technical session introductions, and will culminate in a large panel discussion about some of the most controversial challenges faced in nuclear science and technology.

#### 3.3.3-A: Schedule

The programs section tabulates the use of each room and ensures that none are double-booked. The room capacities are included in the table and are appropriate for the projected attendance of each session.

The workshops and panels are set up with gap time between them to welcome more sessions or to accommodate overflow time. Although we hope to fill them with many more sessions, if there are still many slots left open, as shown in the graphical, we will extend certain panels and workshops to be two hours long to allow for more content.

The Omni William Penn is currently our top choice of hotel venue for this conference. We have included their proposal in full in Appendix A. In this proposal, they have included the room capacities and floor plans that they suggest we use. They have also offered to waive all room rental fees. Please note that the proposal is not binding in any way and that we have not signed any contracts or made any commitments. Although the current proposal from the Omni William Penn does not set aside a room for a judges' lounge or a room for interviews, we plan to request this before signing a contract with them or with any other hotel that we have been in communication with.

Registration/information
Professional development
Socials
Plenary sessions
Technical sessions
Poster session
Dinners

	Registration Area	Grand Ballroom	Frick	Phipps	N/A
		530 rounds	165 theatre	70 theatre	
9 A.M.					
10 A.M.					
11 A.M.					
12 P.M.					Sito
1 P.M.				Resume	Vicite
2 P.M.	Registration Desk			Workshop/ Mock Interviews	V15105
3 P.M.	& Information		Pandora's		
4 P.M.			Promise		
5 P.M.					
6 P.M.		Opening			
7 P.M.		Dinner			
8 P.M.		Diffier			

Legend

Figure 2-A: Graphical Representation of Thursday Programs

	Reg. Area	Judges' Lounge	Interview Room	Grand Ball- room	Allegheny	Franklin/ Greene	Mononga- hela	Frick	Phipps	Sky Room	Urban Room								
Cap.				530 rounds	138 theatre	50 theatre	230 theatre	165 theatre	70 theatre	180 recep.	400 recep.								
8 A.M.				Plenary	Set up	Set up	Set up				Setup								
9 A.M.					Decom./ Env. Science	Math. &	Materials	Fusion Panel		dn									
10A.M.					Extra	Comp.	Science		Proposal Writing	ssion Set									
11A.M.	rmation		SMa		Human Factors/I&C	Extra	Rad .Protect/ Shield	Life after Univ.		oster Ses									
12P.M.	sk & Info	unge	r Intervie		Lunch & Learn	Lunch & Learn	Lunch & Learn	Lunch & Learn	Lunch & Learn	4	er Fair								
1 P.M.	ation De	ges' Lo	reer Faiı		Op. &	Extra	Thermal		licy kshop		Caree								
2 P.M.	Registr	Judg	Judg	Judg	Judg	Judg	Jud	Jud	Jud	Jud	Jud	Ca		Power	Hydraulics	China Syndrome	Po	Session	
3 P.M.					Isotopes/ Radiation	Reactor	Nuclear Criticality/ Safety		Fukushima Fables	Poster									
4 P.M.					Nuclear Inst. Safety	Physics	Extra												
5 P.M.																			

Figure 2-B: Graphical Representation of Friday Programs

	Reg. Area	Judges' Lounge	Interview Room	Grand Ball- room	Allegheny	Franklin/ Greene	Mononga- hela	Frick	Phipps	Sky Room	Urban Room																		
Cap.				530 rounde	138 theatre	50 theatre	230 theatre	165 theatre	70 theatre	180	400 recen																		
8 A.M.				Plenary	Set up	Set up	Set up	uicau c	uicatie	Tecep.	recep.																		
9 A.M.			iir 8		Bio/ Medical Apps	ation, ning, cforce	Fuel	Non- Prolif. Panel			ir																		
10A.M.	tion	tion	areer Fai nterview		Eucion	Educ Trai Work	Cycle/Waste	LNT debate	Software Package Workshop		lareer Fa																		
11A.M.	Informa	nge				Accel. App.	Nuclear Policy	Medical Physics Panel	SSC Meeting	sion	0																		
12P.M.	esk &	Loui	Lou	Lou	Lou	Lou	Lou	Lou	Lunch & Learn		Lunch & Learn	Lunch & Learn	Lunch & Learn	Lunch & Learn		r Ses													
1 P.M.	tion De	dges'				Non-	Aerospace	Diversity Panel		Poste	e																		
2 P.M.	Registrat	legistrati	Jud	Juc	Juc	Juc	n[	Juc	n[	nſ	Ju	)n(	)nr	Juc	]n	'nſ	n(	'nſ	'n	P.	eer Fair trviews		Robots	Prolif.	Sci./Tech.		Tell Your Story Workshop		eakdowr
3 P.M.														Care		Extra	Extra	Extra	Myth Busting Banal			Br							
4 P.M.					Extra	Extra	Extra	Panei		1																			
5 P.M.																													
6 P.M.				ds																									
7 P.M.				var inne																									
8 P.M.				AD																									

Figure 2-C: Graphical Representation of Saturday Programs

#### 3.3.3-B: PLENARY SESSIONS

On Friday and Saturday mornings, there will be a plenary session from 8 – 9 A.M. to encourage student attendees to participate in conference activities at the start of the day. Both plenary sessions will take place in the Grand Ballroom. This room is also equipped with A/V equipment for the use of electronic presentations. The plenary will occur during breakfast so that attendees can eat and listen. If funds permit, we will have a raffle at the plenary like Penn State did during several of their events as an additional incentive to attend. The plenary speakers will also follow the theme of the conference by addressing communication in the public sphere. These speakers are committed ANS members and regularly speak or contribute to conferences. Therefore, we believe they will be likely to accept our invitation to speak.

#### Suzy Hobbs Baker

Suzy Hobbs Baker is the Executive Director of PopAtomic Studios, the parent organization and fiscal sponsor for the Nuclear Literacy Project (NLP). Baker has taken on a leadership role in the development of the NLP which aims to help overcome all of the misinformation reproduced by the anti-nuclear sector. As a plenary speaker, she can provide us with insight on public relations in the nuclear field and how increased "nuclear literacy" can open people's minds to new technology.





#### Mary Lou Dunzik-Gougar

Mary Lou Dunzik-Gougar received the Landis Public / Communication and Education Award from the American Nuclear Society. She is the chair of the ANS Communications Committee and presented at the 2015 annual meeting on public communication. We believe that Mary Lou Dunzik-Gougar can equip the ANS student population with practical pointers when it comes to education and outreach.

#### **Craig Piercy**

Craig Piercy heads the Washington D.C. office of the Bose Public Affairs Group as managing director of federal relations. He brings nearly 20 years of experience as a congressional Chief of Staff, House Appropriations Committee staff member, and government relations professional. He has previously spoken at the University of Pittsburgh and at ANS meetings. With Craig's assistance, the ANS student body will be better informed how to interact with our politicians when we are faced with their concerns and misconceptions about nuclear energy.





#### Mimi Limbach

Mimi Limbach works as a volunteer to raise the quality of communications trainings offered by ANS. She has been instrumental in helping the Society to create a more strategic approach to communications. She has presented on public communication, as well as prepared ANS members to talk to congressional representatives. Public communication is a terrific way to combat myths in the nuclear field, so having Mimi Limbach as a plenary speaker will coincide with our conference theme.

#### **3.3.3-C: TECHNICAL SESSIONS**

Technical sessions will be conducted on Friday and Saturday and will consist of presentations from both undergraduate and graduate students. We will have the capacity to run multiple technical tracks concurrently. Each room is properly equipped with audio and video (A/V) for the presentations, including projectors and screens, podiums, computers, and supplementary equipment such as laser pointers.

Each presentation will be 20 minutes long, with 15 minutes for the talk and 5 minutes for questions. The presentations will be judged by at least two people on a variety of criteria including significance of work, relevance to the field, and originality. Each room will have one volunteer to ensure that tracks are running smoothly or to assist if technical help is required. The volunteer will also determine if one of the extra rooms needs to be used in the case of an unresolved technical difficulty and will manage the logistics of that transition. The theme of the conference is evident through every technical session. The Chair of each session will be asked to prepare a two minute discussion opener on the field, addressing a few of the major myths faced in this topic, and advertise the Saturday afternoon Myth Busting Panel. Then, the research presentations will begin normally.

The technical tracks will be based on the divisions of ANS, while final tracks are to be determined by the abstracts submitted. In line with the theme of the conference, on Friday the technical track topics will concentrate on debunking various nuclear myths as well as discuss the industry's current technology. On Saturday, the discussion will shift to future nuclear technological possibilities in order for attendees to better incorporate the challenges nuclear power faces today as well as in the future. The tracks can include:

Friday:

- Decommissioning & Environmental Sciences
- Mathematics and Computation
- Materials Science & Technology
- Human Factors, Instrumentation & Controls
- Radiation Protection & Shielding
- Operations & Power
- Thermal Hydraulics
- Isotopes & Radiation
- Reactor Physics
- Nuclear Criticality Safety
- Nuclear Installations Safety

Saturday:

- Biology & Medicine
- Education, Training & Workforce Development
- Fuel Cycle & Waste Management
- Fusion Energy
- Accelerator Applications
- Nuclear Policy
- Robotics & Remote Systems
- Nuclear Nonproliferation
- Aerospace Nuclear Science & Technology

We plan on having three technical tracks concurrently on Friday and Saturday. We have 10 extra session times available in our schedule if necessary, depending on the number of paper submissions. The Allegheny, Franklin/Greene, and Monongahela rooms will be used for the podium presentations on the seventeenth level of the Omni William Penn Hotel. These rooms can hold 138, 50, and 230 people, respectively, in a theatre-style seating arrangement.

#### 3.3.3-D: POSTER SESSIONS

Poster sessions will be held concurrently with technical sessions to allow additional students to present their work to a large audience in a more informal manner. Posters will be arranged on the walls and on easels for ease of access. Students will be asked to stand by their poster to talk to attendees and judges during their assigned judging time, although they are welcome to stay longer. Posters will be selected from the same tracks as mentioned above.

The Poster session will take place in the Sky room which can hold 180 people in a reception style setup.

#### 3.3.3-E: Abstract Review Process

Each technical track of the conference will have a minimum of two reviewers to judge the submitted abstracts. Reviewers will consist of graduate students who are familiar with the field of work, but may also include professors from Pitt, other universities, or professionals from Local Section with advanced degrees. We will also reach out to ANS divisions to participate in the abstract review process.

The call for papers will be put out in early January, on the same day that registration for the conference becomes available. This call will be located on both the conference website as well as the conference information page located on the ANS National Website. Information will include solicited tracks, information on the special session track, and abstract templates in Microsoft Word.

The review process will use a method similar to previous ANS national student conferences. As papers are submitted, they are uploaded to a restricted-access website that can only be accessed by the technical director and reviewers of that track. On this page will be the abstract and a form to fill out with four possible grades: Accept, Accept with Revisions, Reject unless Revised, or Reject. Once all of the reviewers have submitted their grades for an abstract to the Technical Director, they will accordingly notify the author(s) of the decision.

In the event of an acceptance, the author(s) will be notified of which form their presentation will be (i.e. podium or poster). In the event of a revision grade, the author(s) will be given one week to revise and resubmit the abstract for reconsideration. A rejected author(s) is not permitted to resubmit an abstract for reconsideration.

In the event that not enough abstracts are submitted by the deadline (late February), an extension of 1 - 2 weeks (early-to-mid March) will be given in order for additional students to submit their work. For the extended deadline, the only grades that can be given are Accept or Reject. This allows sufficient time for the graders to review abstracts and for the authors to prepare their presentations.

#### 3.3.3-F: JUDGING

Each track will have one award winner for podium presentations. If the track has more than three undergraduate and three graduate podium presentations, an undergraduate best talk and a graduate best talk award will be given for that track. We estimate that there will be 10 out of the 20 tracks in this situation. For the poster session, two awards will be given: a best overall poster award to one undergraduate and to one graduate student. Instead of monetary awards, we would like to give plaques to podium presentation winners (at \$44 each) and small trophies to poster winners (at \$110). We believe that a tangible, visible award will be more meaningful than a check for a small amount of money.





Judges will critique both the podium and poster presentations. For the podium presentations, each student will be judged by at least two people. These judges will be consistent per track, so that each set of students within a track is critiqued by the same standards. Posters in each track will be evaluated by at least three judges. During the judging time, students presenting posters within the tracks being evaluated should be at their poster location in order to interact with their judges. If a student is not present at their poster, the judge can still score the poster, but the student may lose points for failure to clarify questions or concerns.

Judges will be solicited from both professional sources (industry) and academic sources (universities). In the event that not enough judges can be procured, or if a judge cancels for any reason, professors and graduate students at the University of Pittsburgh, or other nearby universities (Carnegie Mellon University, Robert Morris University, Duquesne University, etc.) will be available to fill in as a judge for a podium presentation or poster. The judging forms used for podium talks and poster presentations are included in Appendix B and Appendix C.

Judges will be solicited in two formats. The first is solicitation via the registration form. When a professional or a professor conference attendee registers online, there will be a location in the form where they can indicate their willingness to be a judge for the conference and in which track areas they are familiar (in terms of work or research). The second is through the industry and university connections. Pittsburgh's ANS Local section will be contacted in order to solicit judges from local industry (Westinghouse, Bettis Atomic Power Laboratory, First Energy, etc.). Professors at the University of Pittsburgh who are involved in the Nuclear Engineering program will also be solicited to act as judges or provide additional contacts who may be willing to judge.

#### 3.3.3-G: WORKSHOPS & PANELS

We are currently planning 15 workshops and panels during the conference, with a focus on professional development and nuclear myths. More groups may contact us to set up panels and workshops, so we are prepared to accommodate them. In fact, we plan to reach out to ANS divisions and high level sponsors to invite them to name and host sessions. We have put aside two rooms for panels and workshops for the duration of the conference so that we can accommodate such potential extra programs. All workshops will take place classroom style in the Phipps room, which is able to hold 40 people. All panels will occur theater style in the Frick room, which is able to hold 165 people. Two workshops and a movie screening will take place Thursday afternoon, six will occur on Friday, and the last seven will occur on Saturday. The overall message from these panels and workshops will follow the theme of the conference exposing current controversies in the technical field and in the professional life.

#### **Resume Building and Mock Interview Workshop**

The first workshop will occur on Thursday afternoon from 1 - 3 P.M. and focus on resume building for conference attendees who arrive early. We will have nuclear industry professionals come in and help students create a powerful resume, review current resumes, and offer tips and tricks for how to handle interview questions. Our section has hosted a similar event before with Bettis Atomic Power Laboratory as well as Westinghouse Electric Company, and both were successful. This workshop will have pre-allocated time slots of 15 minutes to ensure the attendees have face time with a professional. This will give students more confidence going into the career fair and networking during the conference. If we cannot secure a sponsor or exhibitor to coordinate this event, we will ask the University of Pittsburgh engineering career services to do so.

#### Pandora's Promise

From 3 – 5 P.M. Thursday afternoon there will be a showing of Pandora's Promise, a documentary filmed in 2013 about the nuclear power debate. The documentary argues that nuclear power is a relatively safe and clean energy source that could alleviate industries' attribution to global warming. It was given the name Pandora's Promise for at the bottom of the box of evils there was hope. The University of Pittsburgh owns the showing rights for this movie. We believe it is a simple and appropriate way to begin a conference on dispelling nuclear myths. It will available for viewing, but no formal discussion will follow the screening. This session will take place in the Frick room set aside for panels since it is larger and set up theatre style.

#### **Fusion and Plasma Reactors Panel**

The first technical panel of the conference will take place 9 – 10 A.M. Friday morning and discuss a prominent future asset to nuclear power: fusion and plasma reactors. It is scheduled at the start of the day since it tends to be a popular session. Recent publicity of tokamak ITER and stellarator Wendelstein 7-X have generated massive interest and hope for the future of fusion reactors. However, the majority of work conducted in this field is still produced by researchers. This is a common and popular panel at student conferences, so we plan to reach out to the Fusion Division of ANS or an industry leader in fusion technology. This discussion will show how nuclear fusion is a promising source of reliable electricity production, dispelling fears many may have with nuclear technology.

#### Writing a Proposal and Hosting a Student Conference Panel

This workshop is scheduled for 10 - 11 A.M. Friday morning focusing on training ANS chapters from around the country to organize a proposal for future national conferences. Writing a proposal is an arduous task that historically lacks guidance. By encouraging more ANS student chapters to accept the challenge of writing a proposal, the competition will generate superior future national student conferences. This panel is generally hosted by past conference chairs and is organized by the Young Members Group and the Student Sections Committee.

#### Life after University Panel

The panel will occur on Friday morning from 11 - 12 P.M. and will focus on the various paths a student could take within the nuclear field. The panel will host professionals from academia, industry, and research/governmental branches to address the transition from being a student to a full time professional, the difference between undergraduate and graduate careers, and the opportunities available at research labs around the country. Each panelist will be given 5 – 10 minutes to talk about their path after their college education before the audience can ask questions and interact with the panel with help from a moderator. We have chosen not to split this session into three panels, but instead have a discussion on the pros and cons of each path. Since some students have not yet decided where they would like to go, this will allow them to hear from all three. Then, we will end the panel early to allow students to speak with the person from their track of interest. This is a very appropriate panel for the ANS student conference since many of the attendees will be looking for career advice.

#### **Nuclear Policy Workshop**

Public policy is a practical way to influence the way society responds to nuclear science and technology, so we plan to have a policy workshop on Friday from 1 - 3 P.M. It is important for technically minded people to step up and voice their concerns to our representatives. The Nuclear Engineering Student Delegation may be interested in hosting this event to promote their program. We will also reach out to past ANS congressional fellows, organizations such as NEI, and the ANS Nuclear Policy Division.

#### **China Syndrome Panel**

This 1979 disaster thriller is the epitome of bad nuclear publicity for the sake of the media. The movie exposes a number of public image challenges that our field faces. For instance, acronyms such as SCRAM sound very jolting but could be routine procedures. We envision this panel to feature clips of the movie and promote a discussion about what makes the film a sensational and irrational depiction of nuclear power.

#### **Fukushima Fables**

University of Pittsburgh adjunct professor and Bettis employee Dr. David Griesheimer has travelled to Fukushima and has previously given lectures on the current state of the area for our student section. Therefore, we believe he would gladly accept the opportunity to host a discussion on "Fukushima Fables." There is so much hear-say about the 2011 natural disaster that the theme of our conference would not be complete without an educated discussion on the events that occurred in Japan.

#### **Non-Proliferation and Policy Panel**

This panel will take place from 9 – 10 A.M. Saturday morning. Government regulation within the nuclear power industry is one of the most important facets when discussing past, present, and future nuclear technology. As reactors continue to evolve, so does regulation, such that to be a professional in the field means understanding the political significance and background of nuclear based government regulations. We have again noticed that this is a reoccurring panel, so we plan to include it in our technical program and will reach out to the Non-Proliferation

Division and national laboratories. These panelists will help us understand the importance of nuclear regulation and address conceptions of it as either unimportant or too radical.

#### Linear No Threshold Debate

The nuclear field faces a great challenge in that radiation effects are not well known at low doses. While some scientists hold to a Linear No Threshold view of low-level radiation, others embrace the hormesis theory which claims that low-dose irradiation is beneficial to human tissue. In this case, it is not clear which side is the "myth" due to lack of data and technical disagreements among researchers. This discussion will promote debate and explore the consequences of each point of view.

#### Software Package Workshop

This workshop will take place 10 - 11 A.M. Saturday morning, focusing on teaching students a practical software code. Those who are interested will be required to sign up before the conference in order to download system software onto their personal computers. Students will then bring their computers to the workshop in order to learn the code first hand as well as walk through a tutorial. Computational physics and mathematics are growing areas of research in nuclear engineering. The ability to program is a necessary skill, especially for a competitive resume. We plan to reach out to the Mathematics and Computation Division as well as the Reactor Physics Division to help us find a host for this workshop. Dr. Rachel Slaybaugh has previously chaired sessions called "Cacophony of Codes" and might be interested in helping us plan this program.

#### **Medical Physics and Radiation Panel**

This panel will take place from 11 – 12 P.M. Saturday morning. Many members of the public are unaware of the lifesaving benefits of nuclear science and technology in the field of medicine. Radiation provides non-invasive means of detection and treatment for cancer. We believe this topic is very important for addressing nuclear myths, and we plan to reach out to UPMC (University of Pittsburgh Medical Center), as well as other leaders in the field of medical physics to suggest panelists for this session.

#### **Diversity Panel**

The Diversity panel is scheduled for 1 - 2 P.M. Saturday, and consists of a broad group of professionals focusing on their experiences in nuclear. The panel is meant for speakers to relay a personal message to the ANS audience with the hope of kindling excitement and motivation for new students and experienced professionals alike. Tying in with our conference theme, professionals will address nuances and controversies they have previously faced and discuss their successes or failures in those situations. Past conferences have hosted ANS members like Rita Patel, Lisa Marshall, and Samuel Brinton.

#### **Tell Your Story Workshop**

This panel takes place from 2 – 3 P.M. on Saturday and will be hosted by a University of Pittsburgh ANS chapter student or Pittsburgh Local Section member. Attendees will be led to draft a personal anecdote of their passion for nuclear science and technology that can effectively communicate the reasons they chose this field. Such a story equips students with confidence to engage more with the public and each other; it can likewise be used professionally. One of our ANS members has attended a similar workshop hosted by the current Pittsburgh Local Section Chair, Tyler Crummy, and saw the practical applications of this workshop to the student conference. Other members of Toastmasters (a public speaking organization) may be interested in holding this workshop.

#### **Myth Busting Panel**

The last panel of the conference is scheduled for 3 – 5 P.M. on Saturday, focusing on the theme of the conference, "Dispelling Nuclear Myths." In all of the technical sessions, we will ask each session chair to prepare a two-minute discussion opener on the field. This will include ideas such as existing controversies, possible myths related to their specific track, and various schools of thought. The goal is to stimulate the audience's thinking during each panel, and address those ideas at the Myth Busting panel on Saturday afternoon. We are confident that by opening a dialogue on controversial topics in each field and advertising the panel at each technical session will generate a great turnout and discussion. Therefore, this culminating panel is not planned concurrent with any other panels.

#### 3.3.3-H: CAREER & UNIVERSITY FAIR

A career fair will be available on Friday and Saturday. The fair will occur in conjunction with the technical sessions, poster sessions, workshops, and panels. Companies, universities, and research laboratories will be assigned booths at the fair based on sponsorship level. Attendees will have the opportunity to peruse the various booths which will be set up in a traditional, exhibit-style setting. At registration, students will have the option to upload their resumes to an online resume book that we intend to give to the certain sponsoring organizations hosting booths at the fair.

The career fair will take place in the Urban Room which can host 400 people in a reception style setup. Therefore, we believe it will have ample space for industry and university booths.

#### 3.3.3-I: ABOUT THE BUILDINGS

#### **Omni William Penn Hotel**

At the time of its opening in 1916, the Omni William Penn Hotel was known as "the Grandest Hotel in the Nation," and the Old World charm that existed then still exists today. Located in culturally vibrant downtown Pittsburgh, this hotel has hosted every president from Herbert Hoover to Richard Nixon other than Franklin D. Roosevelt, and multiple luminaries, including comedian Bob Hope (who proposed to his girlfriend there), and jazz musician Count Basie (who performed there). The hotel consists of 23 floors, three of which are subterranean. The following rooms are those in which we plan to hold programs as described in Appendix A.



Omni William Penn Ballroom



One of the Omni William Penn's 38 Meeting Rooms



Omni William Penn Foyer



Outside of the Omni William Penn

### 3.3.4: DINING

During a full day of sessions, the meals provided at the conference will be organized to promote networking and professional development. Breakfast will be served at the plenary sessions, and dinner receptions will allow students to mingle at their tables and hear from our invited speakers and corporate sponsors. While lunch will not be provided, we encourage students to use this time to go out to eat with colleagues and new professional acquaintances. We will provide lunch for lunch & learn sessions and for the Student Sections Committee meeting.

#### 3.3.4-A: CASUAL MEALS

Breakfast will be provided for the attendees and served in the Grand Ballroom during the plenary sessions. Lunch will be provided only to the SSC committee meeting on Saturday. Since downtown Pittsburgh offers varied food options, both upscale and cheap, students and professionals will be able to enjoy lunch outside of the hotel. We expect lunch & learns to be a popular sponsor item. For any company hosting a lunch & learn session, we will provide a room in the hotel and boxed lunch for 15 people.

#### Breakfast

Breakfast will be served Friday and Saturday morning during the plenary session, in the back of the Grand Ballroom. Having breakfast and a raffle at the plenary session will motivate students to start the day with the rest of the conference body. We plan to raffle off a Samsung Galaxy Tab 4 each morning which can be purchased on Amazon for \$129. The food will be served starting at 7:30 A.M. until 9 A.M., and we anticipate 350 attending students given a history of limited morning participation.

The food will be catered by the hotel as a buffet:

Table 2. Di eaklast Catel nig di eakuown					
Menu Item	Attendance	Price per Unit	Total		
Breakfast buffet	350	\$30.00	\$10,500.00		
22% service Fee			\$2,310		
		Total:	\$12,810.00		

#### Table 2: Breakfast Catering Breakdown

#### Lunch

We will not be providing lunch for the conference guests since there are many restaurants in downtown Pittsburgh with a wide variety of options and price ranges. However, lunch will be provided for the Student Sections Committee meeting and for lunch & learn sessions hosted by the conference sponsors.

Lunch boxes will be available on Saturday for people attending the Student Sections Committee meeting which will take place from 11 A.M. to 1 P.M. We have chosen Subway as our caterer because of close proximity and reasonable prices. At \$6.50 per box, (taking into account our tax-exempt status through the University of Pittsburgh) the price for 70 lunches is \$455.00. Each box includes a 6 inch sandwich, chips or apple slices, and a cookie.

We are planning for ten total lunch and learn sessions, five of which will be hosted on Friday and the remaining five on Saturday. After contacting several restaurants in the vicinity of the Omni William Penn Hotel, we decided to host the lunch and learn sessions in the hotel meeting rooms with catering from Subway. Seating in the fast casual restaurants near the hotel is very limited. Jimmy John's is the only restaurant option that has a private seating area and provides catering. While this would be the ideal place to host a lunch and learn session, we felt that it would be very difficult to host ten lunch and learn sessions in only one restaurant. We are predicting 15 people per session, bring the total for 150 boxes to \$975.00.

Therefore, total lunch costs to cover the SSC meeting and the lunch & learn sessions will be \$1,430.

Table 5. Lunch Catering Dieakuown					
Meal	Attendance	Price per Unit	Total		
SSC lunch	70	\$6.50	\$455.00		
Lunch & learn	15 x 10 = 150	\$6.50	\$975.00		
		Total:	\$1,430.00		

#### **Table 3: Lunch Catering Breakdown**

#### 3.3.4-B: FORMAL DINNERS

We have organized our three dinner receptions to allow attendees to come together at the end of each day, enjoy a meal, and hear from invited guests. We have also designed these meals to bring together students and industry by seating them together and having sponsored speakers.

#### **Thursday: Opening Dinner**



Grand Ballroom of the Omni William Penn Hotel

Thursday night's reception will be held in the Grand Ballroom of the Omni William Penn. This space can accommodate 530 in a banquet setup. Since the hotel is offering to waive all room rental fees, the use of the ballroom is free of charge.

#### Agenda

We have planned the tentative agenda for the opening night as follows in table 4.

Table 4: Thursday Night Agenda			
Time	Planned Activity		
6:00 - 6:15 P.M.	Attendees arrive/sit, are served salad/bread		
6:15 - 6:25 P.M.	Pitt ANS gives welcome speech		
6:25 - 6:45 P.M.	Dinner served		
6:45 - 6:50 P.M.	Thursday night speaker introduced		
6:50 – 7:20 P.M.	Thursday night speaker presents		
7:20 – 7:30 P.M.	Dessert served		
7:30 – 7:35 P.M.	ANS National President introduced		
7:35 - 8:00 P.M.	ANS National President speaks		
8:00 - 8:05 P.M.	SSC Chair announces 2018 conference winner		
8:05 - 8:10 P.M.	Pitt ANS closes dinner		

#### **Table 4: Thursday Night Agenda**

#### Catering

The hotel offers platted dinners at \$50 per plate. The proposal from the Omni William Penn Hotel requires a minimum expense of \$70,000 on food and beverage throughout the conference (including breakfasts and dinners). We have assumed that 450 students and 80 of our professionals will attend the first dinner.

Table 5: Thursday Night Catering Cost						
Thursday night cost	<b>Price/Person</b>		Estimate Quantity	Total		
Plated price	\$	50.00	530	\$ 26,500.00		
22% service charge				\$ 5,830.00		
			Total:	\$32,330.00		

#### Table 5: Thursday Night Catering Cost

#### Friday: Industry Networking Dinner

Friday night is our industry networking dinner. We expect that 100 professionals will attend since we plan to invite as many as possible to stay and be seated at their certain tables for students to sit with them.



Figure 3 shows the proximity of Heinz Field to the Omni William Penn Hotel. We will encourage students to take the public transit "T" (Pittsburgh's underground rail system) since Steel Plaza is located right across from the hotel and stops in the North Side of the city directly next to Heinz Field. Additionally, it is free for this distance, so the trip would not cost attendees anything. The T will take about eight minutes to ride from Steel Plaza to Allegheny Station

University of Pittsburgh

which is right next to Heinz Field. After leaving Allegheny Station, students will see gate C. The Entrance for the dinner will be over at gate B, so students will walk along Reedsdale Street passed gate C to make it to gate B. Following the dinner, a social will be held at McFadden's which is down the street from Heinz Field. It can be located on the corner of North Shore Drive and Mazeroski Way, right next to PNC Park. We will post student volunteers along the way to Heinz Field to direct the attendees to the correct location.



Figure 3: Travel Route to Heinz Field

#### Agenda

The agenda for Friday night includes travel time as shown in table 6.

Table 6	5: Frida	v Night A	Agenda
IUDIC		J	Benada

Time	Planned Activity		
5:30 – 5:45 pm	Travel from Steel Plaza to Gate B of Heinz Field		
5:45 – 6:00 pm	Enter UPMC Club at Heinz Field		
6:00 – 6:10 pm	Chair welcomes students, explains professional interaction		
6:10 – 6:55 pm	Buffet dinner served, dismissed by table		
6:55 – 7:00 pm	Friday night speaker introduced		
7:00 – 7:30 pm	Friday night speaker presents		
7:30 – 7:45 pm	Pitt ANS closes Friday dinner		
7:45 – 8:00 pm	Students and professionals depart for Friday social		

#### Catering

The dinner menu we have selected is the North Shore Buffet Dinner.

Friday Night Menu	"North Shore Buffet Dinner"
Side Dishes	Seasonal Field Greens
	Herb Roasted Fingerlings
	Local Seasonal Vegetables
	Assorted rolls with Butter
Main Courses	Slow Roasted Tri Tip Beef with Sautéed Mushrooms & Bleu Demi-glace
	Pan Seared Herb Chicken with a Natural Jus
Vegetarian Option by Request	Mushroom Strudel with Butternut Squash Puree and a Balsamic Reduction
Dessert	Dark Chocolate Torte
Drinks	Soda Bar
	Cash Bar with two drink tickets for 21+ individuals
	Iced Tea
	Freshly Brewed Hot Tea
	Regular and Decaffeinated Coffee

#### Table 7: Friday Night Menu

Table 8 shows the total catering cost for this event, table 9 provides additional cost information, and table 10 summarizes the total cost for the Heinz Field dinner.

Table 8: Friday Night Catering Cost							
Friday Night Catering Cost	Pri	Price/Person Estimate Quant		Total			
North Shore Buffet	\$	38.00	500	\$19,000.00			
Vegetarian Option	\$	26.00	50	S 1,300.00			
Soda Bar	\$	3.00	500	\$ 1,500.00			
			Total:	\$21,800.00			

### Table 8: Friday Night Catering Cost

With 450 students, 100 professionals, we assume that 50 people will request the vegetarian option.

#### **Table 9: Friday Night Additional Costs**

Package and Package Details	Cost
<ul> <li>Corporate Meeting Package</li> <li>Large LED Screen Above Bar (16' x 9')</li> <li>12'-high Black Drape Across Bar</li> <li>Wireless HH Mic on Podium Gooseneck</li> <li>(2) Wireless Lavaliere Microphones</li> <li>Show Laptop Computer</li> <li>Presentation / Seamless Switcher</li> <li>40" Confidence Monitor</li> <li>Wireless Presenter / Laser Pointer</li> <li>8 hrs. Tech. Labor – additional labor @ \$40 / hr</li> </ul>	\$1,820.00
Total Charge	\$1,820.00

#### **Table 10: Friday Night Final Costs**

Item	Cost
UPMC Club Rental	\$3,000.00
AV Services	\$1,820.00
Catering	\$21,800.00
20% Service Fee	\$5,324.00
Total Cost	\$31,944.00

#### Saturday: Awards Dinner

Saturday night's closing ceremony will again be held in the Omni William Penn Grand Ballroom, for a total cost of \$32,330. During this dinner, instead of company-specific tables, we will have ANS division-specific tables. Since it is the awards dinner, and technical track awards will be divided by division, we believe this will be very appropriate. We estimate 530 total in attendance.

#### Agenda

#### Time **Planned Activity** 6:00 - 6:15 pm Attendees arrive/sit, are served salad/bread Saturday night speaker introduced 6:15 - 6:20 pm 6:20 - 6:50 pm Saturday night speaker presents Dinner served 6:50 - 7:15 pm 7:15 - 7:20 pm Chair introduces Technical Director and SSC Chair 7:20 - 8:00 pm Awards and commendations announced 8:00 - 8:15 pm Dessert served

Chair formally closes conference

#### **Table 11: Saturday Night Agenda**

8:15 - 8:30 pm

### 3.3.5: SOCIALS

Evening socials are a great way to promote informal networking among students and professionals. We have chosen to host socials on Thursday and Friday night at venues in Pittsburgh, and then let Saturday night be an informal outing in the Strip District. Each one of our socials will have two volunteer supervisors to offer any help to our guests and ensure that everything goes smoothly.



#### Thursday Night: Buckhead Saloon

Following dinner on Thursday night, we will depart for Buckhead Saloon located in Pittsburgh's Station Square. Here anyone at the conference is welcome and those that are 21+ will be able to enjoy drinks from a tab up to \$3,000 that will be set up for the event. Buckhead

Saloon features ample space to accommodate everyone and allow them to socialize. Buckhead Saloon is also very near to

the iconic Monongahela Incline which may be used to transport attendees to the top of Mount Washington. Mount Washington is a must see for people that come to Pittsburgh as it provides an absolutely breathtaking view of the city. Station Square is just a short ride on the T away from downtown Pittsburgh.



#### Friday Night: McFadden's

After we conclude our formal dinner at Heinz Field, we will head over to McFadden's Restaurant and Saloon just a half mile down the road. McFadden's is one of the most beloved bars on the North Side of Pittsburgh and is the ideal location for a Social following our dinner. Everyone at the conference will be welcome at McFadden's starting at 8 and all attendees that are 21+ will be able to enjoy alcoholic drinks. At 9:00, those that are under the age of 21 will be required to leave McFadden's because of legal constraints but there are many activities that they will be able to partake in. There are many memorials on the North Shore that they can visit and also they can hop on the T and head back to downtown for free and explore the sights. Another option for anyone to enjoy is taking a stroll across the Fort Duquesne Bridge to Point State Park, allowing all to enjoy the view of the river and the iconic fountain at the Point in Pittsburgh.

This venue costs only \$500 to make private, and there is no minimum spend. We will open a tab of \$3,000 like for the Thursday night social bringing the cost of this social to \$3,500. If there is a home Pittsburgh Pirates game the evening of this social, the venue will become unavailable to us.



#### Saturday Night: Strip District

On Saturday, our social will be an informal outing to Pittsburgh's Strip District, a mere 15 minute bus ride away. Below are the bars and restaurants we will suggest to our guests. As we go from place to place, we will use our twitter account to keep late comers up to date on our location. Since this is informal, attendees will cover their own expenses for entertainment on Saturday night

**Primanti Bros** 46 18th St, Pittsburgh, PA 15222 (412) 263-2142

Stop in and have one of Pittsburgh's signature sandwiches in its original location! Primanti Bros is open 24/7 for great food and a nice selection of beers.





#### The Altar Bar

1620 Penn Ave, Pittsburgh, PA 15222 (412) 263-2877

Catch some live music and a drink in a converted church! The altar bar provides amazing acoustics and two fully stocked bars over three floors. Here you can find anyone from big name established artists to up and comers from the Pittsburgh area.

**Xtaza Nightclub** 1620 Smallman St, Pittsburgh, PA 15222 (412) 720-1396



2117 Penn Ave, Pittsburgh, PA 1522 (412) 904-4502

The BeerHive is your one stop shop for quality food and craft beer. With 7 rotating taps and over 100 selections of bottles, the BeerHive has something for all tastes.

**Mullaneys Harp and Fiddle Irish Pub** 2329 Penn Ave, Pittsburgh, PA 15222 (412) 642-6622

Quaint Irish pub with an ample whiskey selection plus a varied menu of grub & occasional live music.



In the interest of accommodating attendees and providing a comfortable experience, Pitt ANS has carefully planned attendance logistics such as dates, hotels, and transportation. This section discusses attendance projection and our preferred conference dates. We then lay out the cost of attendance by first choosing a hotel venue, calculating travel costs, and estimating a travel reimbursement rate.

## 4.1: ATTENDANCE PROJECTION

We project that roughly 450 students and 150 professionals will attend the 2017 ANS student conference based on our analysis of past attendance and projections tabulated below. The number is a reasonable estimate considering previous conference attendance. Pitt's program is smaller, but we are in a great industry location which will balance to about 450 student attendees. Seven other sections are within an eight hour drive, and most are within a reasonable flight.

The number of professionals matches previous numbers. Pittsburgh has a wealth of industry professionals in western Pennsylvania from companies such as Bechtel, FirstEnergy, Rolls Royce, General Electric, and Westinghouse, so the professional attendance will be just as strong as at past meetings. The projected numbers include professional attendees from outside the immediate area including attendees from Exelon-operated plants, and individuals from Washington D.C. and the associated naval nuclear facilities in that area.

Host School	Year	Students	Professionals
University of Pittsburgh	2017 (Projected)	450	150
<b>University of Wisconsin - Madison</b>	2016 (Projected)	400	150
Texas A&M University	2015	375	137
Pennsylvania State University	2014	350	150
Massachusetts Institute of Technology	2013	536	101
University of Nevada, Las Vegas	2012	400	200
Georgia Institute of Technology	2011	425	150
University of Michigan	2010	482	183

#### **Table 12: Past and Projected Attendance**

## **4.2: DATES**

We have chosen April 6<sup>th</sup>-8<sup>th</sup> as the preferred date for the 2017 ANS Student Conference. This weekend is conveniently open for all schools and clear of University of Pittsburgh events. Our second choice is April 13<sup>th</sup>-15<sup>th</sup>; however, the Sunday following the conference will be Easter Sunday. These conference dates also take place during the middle of Passover. Additionally, this weekend is close to final exams for a few major schools, which is likely to reduce attendance. Our proposed dates are based on Figure 4 featuring holidays, spring breaks (blocks in orange), and also the final exam weeks (blocks in red) for major schools involved in ANS.

## March 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
5	6	7	8	9	10	11
Spring Brea	k For: Florida	, NC St, Penn S	t, Pitt, South (	arolina, Utah	St	
12	13	14	15	16	17	18
Spring Brea	k For: Ohio St	, Purdue, RPI,	TAMU, UNLV,	USNA, UT Aus	tin, UT Knoxv	ille, Utah
19	20	21	22	23	24	25
Spring Brea	k For: Ga Tecl	n, Idaho St, Illi	nois-UC, Kans	as St, New Me	xico St, Wiscor	nsin
26	27	28	29	30	31	Apr 1
Spring Brea	k For: Berkele	y, MIT, MS&T	, Oregon St			

## <u>April 2017</u>

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
2	3	4	5	6	7	8
				Preferred	Conference W	eekend
9	10	11	12	13	14	15
				Possible C	onference We	ekend
	Passover Begin	S				
16	17	18	19	20	21	22
Final Exam	ıs For: Michiga	in				
Easter		Passover Ends				
23	24	25	26	27	28	29
Final Exam	s For: Florida	, Michigan, Oh	io St, Pitt, Sou	th Carolina, Ut	ah	

**Figure 4: Summary of Pertinent and Proposed Dates**
# **4.3: COST OF ATTENDANCE**

In this section, we will detail our plans for lodging attendees and lay out transportation to the conference location including travel details and estimated costs. On page 39, there is a summary table with the total attendance cost which takes into account registration, average travel cost, student reimbursement, and lodging.

## 4.3.1: STUDENT LODGING



In accommodating an estimated 450 students, we have looked at various conference centers and hotels in Pittsburgh. Through VisitPittsburgh, we submitted a request for proposals that was distributed to local hotels. After reading through several responses, we have decided to write this conference proposal based on the Omni William Penn hotel's meeting proposal which can be read in full in Appendix A. It is not a contract, and it can be further negotiated before any agreements or payments are made. Its main features include \$149/night room rates, free Wi-Fi for attendees, meeting room fees waived, and a minimum \$70,000 food and beverage spending.

Given the ample size of the Omni William Penn, we are confident it can comfortably and professionally accommodate the ANS student conference. This hotel has recently won the Gold Key Award from Meetings & Conventions Magazine and is a Pittsburgh landmark. In addition to complimentary Wi-Fi in

guest rooms, the hotel offers four on-site laundry and dry cleaning service and a bank. The Mellon Square parking garage is a four minute walk from the hotel lobby with rates of \$18.00 on weekdays and \$5.00 on weekends.

The room rates are \$149/night, and they are able to block off 50 rooms for Wednesday night and 125 for Thursday, Friday, and Saturday nights. Assuming four people to a bedroom, this can accommodate 500 guests. The conference in College Station, TX blocked off 225 rooms but only used 91, and the conference in State College, PA blocked off 100 rooms and needed an addition 15. Therefore, we believe that a 125 room block should be sufficient for our event. Additionally, our website will have a form to request a roommate. The Hospitality Coordinator will be able to pair people based on their needs and the length of their stay.

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# 4.3.2: TRAVEL

#### Travel to Pittsburgh: Airfare & Ground Travel

Government rate: 57.5 cents/mile, tolls excluded. Round trip for both ground and air travel.

Table 13: Projected Travel Cost						
School	Departure City	Ground Travel Time from Campus/Cost (round trip, per car)	Airfare to Pittsburgh International (round trip, per person)			
Georgia Tech	Atlanta, GA		\$188			
Massachusetts Institute of Technology	Boston, MA		\$132			
North Carolina State	Raleigh-Durham, NC		\$160			
Ohio State	Columbus, OH	3h/\$216	\$261			
Purdue University	Indianapolis, IN	6h45min/\$486	\$310			
Rensselaer Polytechnic Institute	Albany, NY		\$337			
Texas A&M	Houston, TX		\$230			
University of California, Berkeley	San Francisco, CA		\$315			
University of Cincinnati	Cincinnati, OH	4h 15min/\$334	\$180			
University of Florida	Orlando, FL		\$210			
University of Illinois	Chicago, IL		\$231			
University of Michigan	Detroit, MI	4h 15min/\$329	\$290			
University of New Mexico	Albuquerque, NM		\$400			
University of Tennessee	Knoxville, TN		\$263			
University of Wisconsin	Madison, WI		\$451			
University of Nevada, Las Vegas	Las Vegas, NV		\$320			
Pennsylvania State University	State College, PA	2h 22min/\$156	\$70			

#### Travel from arrival point to the Omni William Penn Hotel: Public Transportation, Car Rentals

The public transportation bus 28X runs to and from the Pittsburgh International Airport every 30min according to the schedule in Appendix D. This bus route lasts 45 minutes and begins at the Public Transportation exit of the airport. Attendees should get off at the intersection of Seventh Avenue and Smithfield Street in downtown Pittsburgh, which is a five minute walk from the hotel. The fare is \$3.75 one way, and requires exact change. The attendees will pay their bus fare as a cost of travel, and they can include this as part of their reimbursement request. Additionally, the Super Shuttle airport service costs between \$26 and \$49 round trip.

In order to make transportation as easy as possible, we will be sending volunteers to the airport to provide any assistance necessary. These volunteers will hold signs saying "ANS Student Conference" and will be able to help with directions, finding transportation, and answering any other general questions about the conference and Pittsburgh. These volunteers will be Pitt students and very familiar with the city and surrounding areas.

#### **Miscellaneous Travel Methods**

Additionally, if a section took a Greyhound or a MegaBus to Pittsburgh, their stations are both located within an 8 minute walk of the hotel. Figure 5 below shows exact walking routes.

- 10 minute walk from David Lawrence Convention Center (MegaBus)
- 8 minute walk from Greyhound Station
- 6 minute walk to 28X Pick Up
- 7 minute walk to 28X Drop Off



Figure 5: Travel Routes to the Omni William Penn Hotel

# 4.3.3: SUMMARY: PROJECTED STUDENT COST

From table 14, the average travel cost per student, choosing driving where noted, assuming 4 people per car, and counting \$23 in parking for the duration of the conference is \$212. As for the lodging cost, the rooms are assumed to be booked for 3 nights and split among 4 people.

Each section will submit one reimbursement request form by the end of the conference detailing the total number of students in attendance and the amount of money spent on travel that was not funded by another source such as the section's university or another sponsoring organization. We can guarantee a reimbursement of up to \$150/student attendee, but that number is subject to being increased if the finalized budget permits. One check will be mailed to each section after the conference. In order to also accommodate individuals who submit travel reimbursement requests, a student section will have to provide the names of the students included in their travel reimbursement request. Only attendees who stayed at the conference hotel will be eligible for reimbursement.

Table 14: Total Attenuance Cost				
Item	Cost			
<b>Registration Fee</b>	\$35			
Transportation	\$215			
Travel Reimbursement	- \$150			
Lodging	\$112			
TOTAL ATTENDANCE COST	\$212			

#### **Table 14: Total Attendance Cost**

Our budget details the expenses for our conference plan. It is organized by category. For detailed cost breakdown, please refer to:

- Dining (page 27) and Socials (page 33) for the Dining and Socials category.
- Technical Program (page 16), Dining (page 27), and Socials (page 33) for the Facilities category.
- First Day Activities (page 11) and Cost of Attendance (page 37) for the Transportation category.
- Registration Logistics (page 10) for the Package category.
- Judging (page 22) for the Awards category.
- Media & Advertising (page 44), Fundraising Plan (page 43), and Casual Meals (page 27) for the Miscellaneous category.
- Items to be removed from the budget if necessary are discussed in the Contingency Plan (page 55).

# **5.1: EXPENSES**

#### **Table 15: Projected Expenses**

Dining and Socials							
Item		Price	Thursday	Friday	Saturday	Tot	al
Breakfast	\$	12,810.00		Х	Х	\$	25,620.00
SSC lunch	\$	455.00			Х	\$	455.00
Lunch & learns	\$	143.00		5	5	\$	1,430.00
Thursday dinner	\$	32,330.00	Х			\$	32,330.00
Friday dinner	\$	31,944.00		х		\$	31,044.00
Saturday dinner	\$	32,330.00			Х	\$	32,330.00
<b>Buckhead Saloon</b>	\$	3,000.00	Х			\$	3,000.00
McFadden's	\$	3,000.00		х		\$	3,000.00
					Total:	\$	130,109.00

		racinues			
Item	Price	Thursday	Friday	Saturday	Total
<b>Meeting Rooms</b>		Х	Х	Х	
<b>Dining facilities</b>	Included above				
Thursday social		Х			
Friday social	\$ 500.00		Х		\$ 500.00
				Total:	\$ 500.00

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#### Transportation

Item	Price	Thursday	Friday	Saturday	Total
Professional development tour bus (per bus)	\$ 695.00	7			\$ 4,865.00
Student reimbursement (per student)	\$ 150.00			450	\$ 67,500.00
				Total:	\$ 72,365.00

Package							
Item		Price	Thursday	Friday	Saturday		Total
Tote bag	\$	576.00	Х			\$	576.00
Conference T- shirts	\$	2,484.00	х			\$	2,484.00
USB with paper submissions	\$	4,782.00	X			\$	4,782.00
Give-away items	\$	5,178.00	Х			\$	5,178.00
Programs and nametags			X				
					Total:	\$	13,020.00

#### Awards **Price/Unit** Saturday Item Thursday Friday Total Best paper (per \$ \$ 880.00 44.00 20 track) Best undergraduate paper (per track) if \$ 44.00 10 \$ 440.00 applicable\* **Best graduate poster** \$ \$ 110.00 1 110.00 Best undergraduate \$ \$ 110.00 1 110.00 poster 1,540.00 \$ Total:

\*Track has at least 3 undergraduate and 3 graduate papers

Misc.							
Item	Price/Unit	Thursday	Friday	Saturday		Total	
Promotional business cards	\$ 80.24				\$	80.24	
Sponsorship information packages	\$ 180.00				\$	180.00	
Website	\$ 192.00				\$	192.00	
Mobile app	\$ 5,500.00				\$	5,500.00	
Raffle items	\$ 129.00		х	Х	\$	258.00	
				Total:	\$	6,210.24	

Total: \$223,744.24

# 5.2: REVENUE

Taking into account the revenues of past student conferences, we have estimated our sponsorship revenue to amount to \$175,500. Additionally, we have chosen to set our registration fees at \$35 for students and \$250 for professionals. Therefore, we expect \$53,250 from registration. In total, our revenue is expected to be \$228,750 which we believe is reasonable and conservative in light of past revenues. In addition, our estimates provide a difference with our expected expenditures. In this way, we are less likely to have to cut things from the budget or raise registration fees if our sponsorship goals are not met.

-By setting the highest sponsorship level to be \$20,000 which is lower than in the past, we hope to attract three top sponsors to name the three conference dinners. This causes our overall revenue to be at a reasonable medium between Penn State and Texas A&M's.

-Lunch & learns have become very popular. Through advice from past chairs, we are requiring at least a \$10,000 contribution to host a lunch & learn so that we might attract more funding. Therefore, we anticipate that this might encourage otherwise \$5,000 or \$7,500 level sponsors to be \$10,000 sponsors. We hope to have more \$10,000 sponsors but then perhaps fewer \$5,000 sponsors.

-ANS Divisions tend to donate \$1,000 to \$2,500.

School	University Las V	of Nevada Vegas	Massachusetts Institute of Technology		ania State ersity	Texas A&M University		
Sponsorship	Quantity	Funding	Quantity	Funding	Quantity	Funding	Quantity	Funding
\$25,000	1	\$25,000	2	\$50,000	1	\$25,000		\$0
\$15,000	1	\$15,000	3	\$45,000	2	\$30,000	1	\$15,000
\$10,000	4	\$40,000	5	\$50,000	6	\$60,000	4	\$40,000
\$5,000	9	\$45,000	11	\$55,000	12	\$60,000	9	\$45,000
\$2,500	11	\$27,500	3	\$7,500			8	\$20,000
\$2,000			2	\$4,000	18	\$36,000	7	\$14,000
\$1,000							3	\$3,000
TOTALS	26	\$152,500	26	\$211,500	39	\$211,000	32	\$137,000

#### **Table 16: Past Sponsorship Revenues**

#### Table 17-A: Projected Revenue (Sponsorship)

Sponsorship	Quantity	Funding
\$20,000	3	\$60,000
\$15,000	1	\$15,000
\$10,000	6	\$60,000
\$5,000	3	\$15,000
\$2,500	3	\$7,500
\$2,000	6	\$12,000
\$1,000	6	\$6,000
TOTAL	26	\$175,500

Table 17-B: Pro	jected	Revenue	(Registration)
Registration	0		×

Fees	Quantity	Income
\$35	450	\$15,750
\$250	150	\$37,500
TOTAL	600	\$53,250



# 5.3: FINANCIAL OVERSIGHT

Our student chapter has a bank account through the Pitt Student Organization Resource Center. This account has been sufficient for all our funding thus far, but all donations and purchases made through this account must be conducted with University approved organizations. This means that any school, company, or organization that requests a transaction involving the conference would need to go through the approval process before the transaction is complete. Since this is a very cumbersome process, we have decided to use the ANS headquarters banking facility for all conference related transactions. Additionally, banking through the headquarters will grant us tax-exempt status, which will in turn help lower the cost of attendance. We will maintain our chapter account through the Student Organization Resource Center and use this account for small transactions, such as paper costs or cheap last minute items. All banking transactions and account information will be handled by the Financial Chair and at the discretion of the Conference Chair.

# 5.4: FUNDRAISING PLAN

The conference committee plans to cover the cost of the conference through the patronage of various sponsors. This list identifies possible contributors and related help:

**Office of Development and Alumni Affairs (ODAA):** The Swanson School of Engineering's ODAA is the office that handles the school's donors and sponsorships. They have agreed to partner with us to gather sponsorships by offering professionally designed sponsorship information packages for a reduced cost of \$180 for 100 packages. Extensive work has been done on the content of these information packages, as can be seen in Appendix E. They will also aid us by facilitating our contact with companies that already donate to Pitt.

**Engineering Student Council (ESC):** The ESC has constant fundraisers and is willing to include ANS as recipients of these fundraising events. The ESC will also be important for supplying volunteers to help run the conference events.

**Local Company Sponsors:** Local companies that have previous affiliations with the University of Pittsburgh, specifically the Pitt ANS Chapter, will be contacted first to ask for support. Companies such as Bettis Atomic Power Laboratory, Bechtel Marine Propulsion Corporation, FirstEnergy Corporation, and Westinghouse Electric Company will be the first contacts because they have a good history of hiring Pitt ANS student members as interns and co-ops, and have collaborated with our ANS chapter.

**Regional Company Sponsors:** In the past, Pitt ANS has had students travel to regional plants for internships and full-time jobs. Through these individuals, Pitt ANS has developed relationships with several companies in central Pennsylvania and Ohio. These companies will be contacted and asked for donations.

**Past Sponsors:** Previous donors to the ANS Students Conference will be asked to donate for 2017. Pitt ANS will begin searching through past donors in order of geographic proximity and stretch outwards as dictated by funding needs.

**ANS Divisions:** ANS Divisions are consistent contributors to the ANS Student Conference, and they will be among the first groups we contact for support. For the conference held at Texas A&M, 15 ANS Divisions donated, with an average donation amount of over \$2000. In addition to monetary support, conference involvement and support will also be sought from the divisions to foster interest across various divisions in ANS. A working letter geared specifically toward ANS Divisions for their support can be found in Appendix F.

**Annual Meetings:** Our members will attend annual meetings to request funding from each ANS division and attending companies and to promote the student conference.

**National ANS**: National ANS has confirmed that they will contribute to our budget by printing the conference programs, negotiating contracts, and donating nametags and lanyards.

Sponsorship and fundraising will be managed chiefly by the Marketing Director, Erick Bittenbender, while working closely with the Financial Director, Peter Tancini. The Conference Chair, Brendan Stack, will have oversight. University of Pittsburgh Page 43

# WEB DESIGN

In order to have a reliable platform where attendees can obtain information pertaining to the conference, our website will be hosted on Wix for \$13.00/month for two years with a refresher fee of \$20.00 for the second year. This comes out to approximately \$190.00 including tax. Once the need for the site is confirmed we will start a subscription to Wix and begin construction and population of the sites pages. When completed, hosting and domain acquisition will be covered under our subscription allowing for seamless operation for the extent of the conference.

The <u>first page</u> seen will be a home page where visitors are welcomed and the conference's theme expanded upon. From here a visitor can browse to any page on the site through a navigational bar across the top of the page. Each page will be shortly described below:

The <u>Contact</u> page will contain a listing of the various conference board members with a short description of each to allow proper routing of questions. There will also be a feedback form for the website at the bottom of the page for giving input on the website's operation.

The <u>Schedule</u> page will be posted as it is finalized. Any updates or changes to the schedule will be posted on this page as well.

The <u>Travel</u> page will contain information regarding air travel, travel reimbursement, and parking information. A section will also be dedicated to travel from the airport to the city.

On the <u>Location</u> page information pertaining to Pittsburgh including maps, landmarks, museums, etc. will be provided.

The <u>Accommodations</u> page will define the procedure for acquiring a proper room at the selected hotel. Information on rates, roommate requests, and specific booking instructions will also be provided.

The <u>Programs</u> page will be in an extended page format with links at the top allowing navigation more easily throughout the site. There will be sections on technical sessions, poster session, workshops & panels, and career & university fair.

Through the website, attendees will be able to <u>register</u> for the conference, <u>submit summaries</u>, and sign up to be <u>judges and reviewers</u>.

# **MOBILE APPLICATION**

We plan to provide an app through Guidebook for owners of iOS and Android devices. A subscription to the service was first enacted by Penn State and renewals were done by Texas A&M and Wisconsin for their respective conferences. Renewing this subscription for our conference will bring back a familiar medium for attendees. Although 2017 pricing is not yet listed, it should be approximately \$5,500.00.

The app will allow attendees to download our guide and access the information without the need for a constant internet connection. We will provide maps, multi-track schedules, presentation information, and connections to the conference's social media accounts. The app also includes push messaging, allowing for another means to update attendees of any time sensitive information.

## TWITTER AND FACEBOOK

The conference Facebook and Twitter accounts will be created to provide information to attendees, to acknowledge sponsors, and to display our contact email and the conference website.

Prior to the conference, social media posts will include previews of the conference, such as social activities and keynote speakers. Tweets will recognize sponsors of various levels to thank them for the contributions that made the conference happen. We will announce where our board members will be for national ANS conferences and encourage members and professionals to reach out to us in person. This will create opportunities for networking face-to-face and for interested parties to ask questions.

Similar to what the University of Wisconsin did this year, we will create a Facebook event for the Call for Summaries to encourage students to remember to submit their work and see who else is also submitting research. These pages may also include requests to register as a judge or reviewer and forms to sign up for roommate pairings.

Closer to the travel dates, there will be packing suggestions in order for attendees to be prepared for Pittsburgh weather. There will be various posts that disclose bus fares and link to bus schedules, as well as links to cab services in the city. Media will include pictures of maps that have highlighted locations in the conference schedule. Maps will be posted of the entire city, the Pittsburgh International Airport, and area around the hotel.

During the conference, subjects will comprise of thank-yous to company sponsors, attendee features, evening activities, and links to bios on keynotes speakers. Overall, Twitter and Facebook will encourage more participation and enthusiasm regarding the conference.

Questions will be fielded through Facebook and email. This creates enough diversity in communication so that many people can reach out to our board members in the method of their choice. Limiting the avenues of questions to these two avenues will eliminate confusion regarding who has seen what question and will avoid accidentally ignoring questions.

# **BUSINESS CARDS**

Business cards are a simple way to promote the 2017 student conference. Although corporations will receive full information packets, our basic contact information can be distributed easily to students considering registering for the conference, to the professors who want to stay in touch with us, or to professional contacts who wish to discuss further at a later date when we can present the full information package. This is a design we are considering for the business cards. We can order 1,000 cards for \$80.24 including shipping and handling.



The conference management section introduces the conference board and its structure. These individuals have each contributed to the writing of this proposal, and are therefore very familiar with the conference plan and are ready to undertake its execution.

This section also includes our staffing plan, liability, and special steps to demonstrate our preparedness to host the 2017 ANS Student Conference.

# 7.1: ORGANIZATIONAL STRUCTURE

#### **Brendan Stack: Chair**

Brendan Stack is a junior majoring in Mechanical Engineering and is working towards completion of the Certificate in Nuclear Engineering. He is also a current co-op for Curtiss-Wright EMD working as a member of the Small Modular Reactor CRDM Design Team. In the past, Brendan has worked in the Instrumentation and Controls Laboratory under Dr. Daniel Cole.

Last year, Brendan attended the ANS student conference held at TAMU. Furthermore, he has been heavily involved with writing this proposal, so he is familiar with all aspects of the conference planning, and he plans to attend every student and national ANS meeting leading up to the 2017 student



conference. Therefore, he will be well equipped to be Chair of the Pittsburgh conference. Brendan will be the coordinator of all the conference activities and the main point of contact with national ANS and with the Student Section Committee.



#### Miriam Rathbun: Technical Director

Miriam is a senior majoring in Engineering Science – Nuclear Track. She was president of Pitt ANS during the 2013-14 academic year and has attended five ANS conferences, both student and national. She presented research at the 2015 winter meeting.

Although she will graduate with a B.S. from Pitt in December 2016, she will continue to conduct research in Dr. Jorg Wiezorek's laboratory and TA an undergraduate engineering class until she selects a graduate school in April 2017. Therefore, she will be affiliated with the university to the extent of a regular graduate student, and she will not yet be affiliated with any other institution.

Miriam will be the conference Technical Director. Having attended many ANS conferences, she is very familiar with the typical professional development activities that occur and will coordinate a quality technical program. Since she is not a graduate student, she will delegate to the Summary Review and Judging Coordinator and his board who are more qualified than herself to critique

research. Additionally, both the Workshop Coordinator and the Sessions Coordinator will work under the Technical Director.



#### Chris D'Angelo: Summary Review and Judging Coordinator

Chris graduated from Rensselaer Polytechnic Institute in 2009 with a B.S. in Mechanical Engineering. After earning this degree, he worked at Curtiss Wright Flow Control Company, and Rotork Fluid Systems, both with applications in nuclear power. Chris joined the Nuclear Instrumentation and Controls Laboratory at the University of Pittsburgh in 2013, where he is pursuing a Ph.D. in Mechanical Engineering with a focus on control theory and dynamical systems. Chris was awarded the Admiral Hyman G. Rickover Fellowship in Nuclear Engineering in 2015 and is also a recipient of the Rensselaer Polytechnic Institute Leadership Award.

As a senior graduate student, Chris has the background and experience needed to review research. Chris will gather a board of reviewers for submitted summaries.

These will be graduate students, post-docs, and faculty from Pitt and Carnegie Mellon, and professionals from Pittsburgh ANS and NAYGN. He will use each reviewer's technical field to delegate summary reviews based on the submission track. Chris will also coordinate judges and appoint them to each technical session to evaluate the poster and podium presentations.

#### **Charlie Hansen: Workshop Coordinator**

Charlie is a junior Chemical Engineering student working towards completion of the Nuclear Engineering Certificate. He has worked in the Instrumentation and Control Laboratory under Dr. Daniel Cole and coauthored a conference paper on pattern recognition in nuclear power plants. Charlie also serves as the Treasurer and Fundraising Chair of Pitt ANS. When he attended the 2015 student conference held at TAMU, Charlie won best paper in the Instrumentations and Control track.

The Workshop Coordinator works under the Technical Director to organize and secure professional development activities for the conference, specifically workshops and panels.





#### Liz Chaffin: Sessions Coordinator

Elizabeth is a junior majoring in Chemical Engineering. She is also a training reserve officer in Carnegie Mellon's Naval Reserve Officer Training Corps interested in a future with submarine technology. This has guided her to join the Pitt Chapter of ANS as a member of the Executive Board.

This position was created to alleviate the Technical Director of heavy logistical work. The Sessions Coordinator will book rooms, secure easels, check room setup, and perform duties as needed in relation to the technical program. Liz will also coordinate volunteers to help her in these tasks

#### Erick Bittenbender: Marketing Director

Erick is a sophomore majoring in Electrical Engineering with a concentration in Electric Power and plans to complete the Nuclear Engineering Certificate. He currently leads outreach events with Pitt ANS, primarily focused on high school students and younger children.

The Marketing Director will solicit sponsorship from companies and organizations to fund the conference. Erick will be responsible for offering tiered levels of contribution and ensuring that each company receives proper representation in our advertising and sponsorship benefits.





#### Peter Tancini: Finance Director

Peter is a junior at the University of Pittsburgh, majoring in Chemical Engineering and getting his Nuclear Engineering Certificate. Nuclear Science has always been an interest of Peter's and has brought him to the Pitt Chapter of the ANS, where he is currently the President. In addition to his work with Pitt ANS, Peter works with the Computer Aided Nano Energy Lab where he has received multiple publications and an award from the American Institute of Chemical Engineers.

As Finance Director, he will oversee the budget and be the primary contact with our bank. He will also coordinate the travel reimbursement process.

#### **Steven Lotinsky: Finance Liaison**

Steven is a sophomore majoring in Mechanical Engineering and is working towards a Certificate in Nuclear Engineering. He is a member of Pitt ANS, Pitt ASME and the Pennsylvania National Guard. He plans on working in the nuclear energy field after graduation.

The Finance Liaison will provide support to the Finance Director by processing paperwork and receipts. This position will be a major help during the travel reimbursement phase post-conference.





#### Matthew Lawrence: Merchandise Coordinator

Matthew is a sophomore majoring in Electrical Engineering with a concentration in Power, minoring in French, and is currently working towards completing the Certificate in Nuclear Engineering. He has always been interested in the generation of energy, which led him to pursue the Nuclear Engineering Certificate, and ultimately brought him to the Pitt Chapter of ANS.

As Merchandise Coordinator, Matthew will order all of the registration packet items, including logo products, T-shirts, and the lanyards and nametags provided by ANS.

#### Nathan Harlich: Hospitality Coordinator

Nathan is a non-graduating senior Mechanical Engineering student and has been a member of Pitt ANS since September 2015. He is pursuing the Nuclear Engineering Certificate and plans to enter the nuclear energy field when he graduates.

The Hospitality Coordinator is the primary point of contact with the conference hotel. He will work with National ANS to negotiate hotel pricing, receive updates about filling the room block, and help students and professionals book their stays if necessary.





#### **Thomas Anthony: Transportation Coordinator**

Thomas is a sophomore Mechanical Engineer that is pursuing the Nuclear Engineering certificate, and he currently serves on the ANS Programs Committee. He will work as an intern at Bechtel Marine Propulsion Corporation at the Bettis Atomic Power Laboratory during the summer of 2016.

Thomas will book transportation for all the tours that will take place on Thursday as well as transportation needed to reach dinner venues and socials should the need arise. Additionally, he will coordinate student arrival and departure logistics. The Transportation Director will take into account the needs of handicapped students and professionals and have a team of volunteers willing to direct and possibly accompany attendees to various locations throughout the city.

#### **Robbie Thacker: Professional Tours Coordinator**

Robbie is a junior majoring in Mechanical Engineering and is working towards completion of the Nuclear Engineering Certificate. He is a current Co-op at Honeywell Scanning and Mobility where he works with the mechanical research and design team for new product development. Robbie has been a member of Pitt ANS since January 2016 and plans to enter the nuclear energy field upon graduation.

The Professional Tours Coordinator will contact our local companies to organize tours for our guests who pre-registered for site visits. Robbie will be the main point of contact for each site and will work closely with Tommy, the transportation coordinator, to book buses for the trips. He will also appoint Pitt ANS volunteers to attend each tour to make sure everything goes smoothly.



#### **Maninder Singh: Activities Coordinator**

Maninder is a junior majoring in Mechanical Engineering and is working towards receiving his Certificate in Nuclear Engineering. Ever since his sophomore year he has been an engineering co-op with FirstEnergy Nuclear Operating Company and has worked at the Beaver Valley Power Station. With this work he has been involved in three refueling outages, two at the Beaver Valley Power Station and one at the Perry Nuclear Generating Station.

Maninder is a Pittsburgh native and has a lot of enthusiasm for all the city has to offer. He will plan suggested cultural activities for the Thursday of the conference and be the coordinator for our evening social activities.





#### John Courter: Webmaster

John Courter is currently a sophomore at the University of Pittsburgh majoring in Electrical Engineering. He is obtaining the Nuclear Engineering certificate and is a member of the Pitt ANS programs committee. John also works with the collegiate YMCA of Pitt as a general volunteer and college positive volunteer at the Milliones University Preparatory school.

As Webmaster for the ANS conference, John will create a website which will be used to communicate conference information such as schedules, forms, maps of relevant locations, local activities, and contact information for the board. In addition, the Webmaster will reach out to universities with accredited nuclear programs to advertise the conference through various media channels.

#### Tom Harrington: Social Media Coordinator

Tom is a sophomore at Pitt in the Mechanical Engineering and Materials Science Department. He plans to pursue the Nuclear Engineering Certificate and is also an active member of the American Society of Mechanical Engineers and Pitt Judo Club.

As the conference Social Media Coordinator, Tom plans to document the events of the 2017 American Nuclear Society Conference and share the experience with everyone. News, images, announcements, and conversation regarding the conference will be shared using tools including LinkedIn, Twitter, and Facebook.





# 7.2: CONFLICT RESOLUTION

In the case of a conflict on the Pitt ANS conference board, there are procedures in place to work toward resolution with little or no interference in the programming of events. The process for removal of a conference committee member will be differentiated between the removal of the Chair and the removal of other members of the committee.

In either case, the entire committee will convene, and both parties (that is, the party in question and the party suggesting the removal) will present their arguments to the board. A discussion will ensue after which a vote will be taken, for which the entire board must be present. It is required that the individual to be discussed attends. However, the individual in question will not vote, nor will the accusing party. All other voters will have equal standing (i.e. the Chair does not have a stronger vote than a Director.)

In the scenario that the Chair might be removed, a replacement must be chosen by the impeaching party and be present for the discussion. The replacing candidate may not partake in the vote. Additionally, the department chair, who is also the ANS faculty advisor, Dr. Daniel Cole, must be present, and he may choose to vote or not. The discussion and argumentation will touch on both why the current Chair is unfit and why the proposed new Chair is a better candidate. The new Chair must be able to pick up where the old Chair left off and execute the conference without losing momentum. After each party presents their arguments and the discussion has taken place, the vote to remove the Chair must be won by 2/3 majority. If the Chair is replaced, then one transition meeting including the entire board will be held.

For the removal of a Director, a replacement must also be chosen and brought. Dr. Daniel Cole does not need to attend, and the vote will be won by majority.

Transition sessions will be set up between exiting and entering parties under the supervision of the Chair, who claims all responsibility for the work performed by and under the Directors.

All other positions such as coordinators or volunteers do not need to bring a replacement to the meeting but the effort to find a replacement and have a transition plan will be taken into account in the decision making. The board will vote to remove the individual from their responsibilities, and the vote will be won by majority. Dr. Daniel Cole will not need to attend. The Director to whom the removed party reported will take responsibility for of all the work performed by or lacking from their coordinator or volunteer. It is their duty to oversee the transition of information if a replacement is secured.

# 7.3: STAFFING

In this section, we have outlined the estimated number of volunteers needed to staff our events throughout the conference weekend.

Staffing for the conference is organized in Table 18 by specific event. The point of contact listed will coordinate volunteer staffing for each event.

The volunteer pool will consist of the students who signed the proposal support (Section 9) as well as additional volunteers recruited later in the year. All volunteers will be assigned tasks ahead of time based on responses to a survey similar to what is shown in Appendix G. Should some drop out or become unavailable, the point of contact will send out an email to the entire volunteer pool. The email will have a Google document attached where students can sign up for unfilled positions. A GroupMe will be set up in advance in order to contact the volunteer pool via text message in the case of an urgent need for extra help.

#### **Table 18: Estimated Staffing Needs**

Point of Contact	Specific	Staff Required/Shift			
Thursday					
Transportation Coordinator	Airport greeters	2			
Hospitality Coordinator	<b>Registration/Information</b>	3 x 3			
	Total:	11			
	Professional tours	8			
	Resume workshop	1			
Professional Tours Coordinator	Mock interviews	1			
	Pandora's Promise	1			
	Total:	11			
Chair	Welcome Dinner	5			
Activities Coordinator	Social	2			
Activities coordinator	Total:	7			
	Friday				
	Breakfast	1			
Hospitality Coordinator	Plenary Session	2			
Chair	Registration/Information	2 x 3			
Chan	Dinner	5			
	Total:	14			
	Career Fair Setup	2			
	Technical Sessions	1 x 11			
Technical Director	Poster Session	2			
	Panels and Workshops	1 x 6			
	Total:	21			
Transportation Coordinator	Transportation	4			
Activities Coordinator	Social	2			
	Total:	6			
	Saturday				
	Breakfast	1			
	Plenary Session	2			
Hospitality Coordinator	Registration/Information	1 x 3			
Chair	Lunch	1			
	Dinner	5			
	Total:	12			
	Career Fair Tear-down	2			
	Technical Sessions	1 x 9			
Technical Director	Poster Session	2			
	Panels and Workshops	1 x 7			
	Total:	20			
Chair	Awards Dinner	5			
Activities Coordinator	Social	2			
	Total:	7			

At registration, there will be three shifts throughout the day. On Thursday, the registration table will be manned by three volunteers at a time, and then two on Friday, and one on Saturday.

Professional tours will be accompanied by one volunteer to ensure everything goes smoothly. They will be able to quickly contact the Professional Tours Coordinator if needed.

Each technical session, workshop, and panel will have one volunteer to handle logistics and attend to the presenters' needs.

Dinners will each have five volunteers stationed to take care of anything such as late-comers or technical difficulties. Breakfasts will have one volunteer.

For each venue requiring transportation, we plan on sending a few volunteers to the bus and T stations to help ANS members find the correct destination.

At socials, we will provide two people to oversee the group and step in if anything goes wrong.

In addition to the listed volunteers, we will reach out to the Pitt Photography Club to find a photographer for our dinners and possibly some of our technical sessions as well.

# 7.4: LIABILITY

The Pitt ANS student section acknowledges the risks associated with hosting a conference of this proportion. In order to protect all organizations involved in the conference proceedings, our board has established that the foreseeable liabilities are as follows:

Transportation:

• World Prestige Limos has a very high insurance coverage and assumes responsibility for automotive accidents. Public transportation governed by the Port Authority of Pittsburgh assumes all liability for the safety of its passengers.

Dining:

• Catering services from all companies we make agreements with are liable for any health related accidents (e.g. food poisoning) as ruled by Allegheny county policy.

Alcohol:

• All attendees must provide a valid identification card proving they are at least 21 years of age in order to purchase an alcoholic beverage or receive drink tickets.

Expenses

• ANS claims liability for all unpaid expenses. Therefore, they will carefully review all contracts before we can sign anything.

Attrition:

• In the case of nuclear fallout, we will all be in loving company.

# 7.5: SPECIAL STEPS

In addition to meeting the requirements for the information held within this proposal, our team has collected additional information looking forward to conference execution. Among these proactive actions were interviewing past conference chairs, meeting with the University's Office of Development and Alumni Affairs, and creating detailed lists of our company contacts. Fundraising presentations are already prepared, and we have already requested samples of certain promotional materials. We believe that these steps will aid us in rapidly starting the execution of the conference if we are selected as hosts.

# 7.6: CONTINGENCY PLAN

In this section, we have detailed a number of back-up plans in case our estimates are not met.

#### Attendance

If the number of attendees were to vastly exceed the projected 600 total, the large hotel space of the Omni William Penn and surrounding hotels will be able to handle the influx of personnel. If the room block at the Omni William Penn were to become filled, other hotels in the area such as the Hilton Double Tree, the Westin, and the Wyndham will be able to accommodate the overflow. In the case that a student were to stay in a different hotel because of this, we would still be able to process a travel reimbursement form, but it would need to be shown that there were no longer rooms left in the Omni William Penn block at the time of booking. Alternatively, the Omni William Penn may allow us to increase the block.

On the other hand, if attendance appears to be significantly lower than our proposal indicates, we would first reach out to the other student chapters and the industry professionals and offer our assistance in any difficulties they may be facing. If the numbers are finalized as lower, then the facilities may be modified to make more efficient use of the resulting available space. Where possible, depending on cancellation policies, venues and catering decisions may be changed as a method of cost reduction. A very low attendance may incur expenses to purchase the minimum number of rooms required by the hotel contract.

Depending on the state of the attendance, the Pitt student body will be encouraged to register or asked to refrain from attending.

#### **Technical Program**

In the event that a panel or workshop needs to be cancelled due to an unexpected absence of the main speaker or coordinator, a Pittsburgh professional may be sought out as a replacement. A page will be included in the program with any schedule changes, and last-minute changes will be announced during dinners and via the website.

#### Sponsorship

If more than three companies wish to be top tier sponsors, we may face a difficulty because there are only three conference dinners to host a keynote speaker. We will address this by offering the plenary sessions to be sponsored by additional top tier donors. The plenary sessions are one hour long and we plan to invite outside speakers for this. Therefore, if they were to become company sponsored, we would have a half an hour dedicated to the invited speaker and the other half hour dedicated to the company.

#### Budget

Should the budget be inadequate for the conference plans, we plan to cut items in the following order.

Table 19: Budget Cuts					
Budget cuts	Savings		Cumulative savings		
Raffle items p. 27	\$	258.00	\$	258.00	
Expensive gift bag items: umbrella, microfiber rag p. 10	\$	3,630.00	\$	3,888.00	
Plaques instead of trophies for poster winners p. 22	\$	132.00	\$	4,020.00	
Friday social p. 33	\$	3,500.00	\$	7,520.00	
Thursday social p. 33	\$	3,000.00	\$	10,520.00	
T-shirt p. 10	\$	2,484.00	\$	13,004.00	
Mobile app p. 44	\$	5,500.00	\$	18,504.00	
Heinz field dinner: hors d'oeuvres, Appendix H	\$	7,220.00	\$	25,724.00	
Breakfast attendance to 300 p. 27	\$	3,660.00	\$	29,384.00	
Undergraduate/graduate awards p. 41	\$	440.00	\$	29,824.00	
Student reimbursement (lowered to \$100) p. 39	\$	22,500.00	\$	52,324.00	

Raffle items: the breakfast buffet will be enough motivation to attend the plenaries.

Expensive gift bag items: we will remove the umbrellas and microfiber rags as options for company-sponsored giveaways. We will therefore expect the two following most expensive items to be chosen, namely adhesive card holders and pens which are each significantly less expensive than the cut items but still just as popular.

Trophies: since the trophies are more expensive than the plaques, we could replace the poster session prize with plaques to match the technical sessions.

Business cards: the price for these is very low. Therefore, if we choose to cut them but a board member would still like to get them, they may volunteer to pay out of pocket for them.

Friday social: in the past, a group within ANS has sometimes sponsored a social. For instance, if we were to cancel the Friday night social, Young Members Group, Nuclear Pride, or Professional Women in ANS may offer to hold one instead. Therefore, deleting this event may go unnoticed.

Thursday social: this social could be replaced by an informal outing downtown. At the 2013 ANS student conference hosted by MIT, there were no formal socials, and the conference was still a success. Therefore, we do not believe that cancelling this event, and thereby not having any formal socials during the meeting, will detract from the quality of the conference.

T-shirts: although this will be noticeably missing, it saves a significant amount of money. In order to satisfy the company sponsor agreement to have their logo on the T-shirt, the logos will be featured on the tote bag instead.

Mobile app: if this is deleted, the program provided at registration still contains all of the information needed to navigate the conference.

Heinz Field dinner hors d'oeuvres: by replacing a meal by an hors d'oeuvres reception, we may incur dissatisfaction from the attendees, but it provides a lot of savings. Therefore, it has been placed as one of the final budget cuts. The contingency menu has been placed in Appendix H and costs \$13,080.00.

Breakfast: if needed, we will cut the amount of breakfast served to reduce cost. This is not our preferred budget cut because we are attempting to boost attendance at the plenary.

Honorary awards: there will only be one winning paper per technical track, regardless of the number of graduate and undergraduate presenters.

Student reimbursement: it is important to keep this as high as possible in order for students to receive the money they need to attend the conference. Therefore, it is our final budget cut. By looking at Texas A&M's expenses, by covering all of the travel reimbursement requests, they spent an average of \$100 per person. Therefore, we believe that the actual expense of travel reimbursement may be lower than the anticipated amount set aside, so this budget cut may not be a large detriment to the student attendees.

# **7.7: TIMETABLE OF KEY DATES FOR EXECUTION**

	Table 20: Key Dates & Deadlines	
Deadline	Task	Responsibility
Manah 21st	March 2016	N / A
March 51 <sup>ss</sup>	Announcement of 2016 Conference	N/A
	April 2016	
April 8 <sup>th</sup>	Confirm conference committee and finalize dates	General
April 15 <sup>th</sup>	Reserve hotel rooms and conference facilities	Hospitality
April 22 <sup>nd</sup>	Set up banking through associated bank and ANS	Finance
April 29 <sup>th</sup>	Order promotional business cards for distribution	Publicity
	May 2016	
May 6 <sup>th</sup>	Launch conference website & social media	Publicity
May 13 <sup>th</sup>	Create sponsor letters and begin fundraising	General
May 20 <sup>th</sup>	Invite guest speakers	General
May 27 <sup>th</sup>	Prepare tour opportunities	Non-Technical
	June 2016	
June 3rd	Prenare initial working budget	Finance
June 17 <sup>th</sup>	Send delegates to ANS Annual Meeting	ANS
-		
	July 2016	
July 15th	Contact judges for technical program	Technical
July 29 <sup>th</sup>	Follow up with sponsors	General
	August 2016	
August 5 <sup>th</sup>	Begin conference program design	Publicity
August 12 <sup>th</sup>	Finalize technical program categories	Technical
August 19 <sup>th</sup>	Website up to date with call for abstracts	Publicity
August 26 <sup>th</sup>	Follow up with sponsors	General
	September 2016	
September 2 <sup>nd</sup>	GOAL: Secured speakers and 60% of funds	Finance
September 9th	Inform SSC of current status of conference	General
September 30 <sup>th</sup>	Follow up with sponsors	General
	October 2016	
October 7th	Have registration page of website ready	Publicity
October 28th	Follow up with sponsors	General
000000120	renew up man openeere	General
	November 2016	
November 4 <sup>th</sup>	Get ANS–HQ materials	Publicity
November 11 -	Send delegates to ANS Winter Meeting	ANS
November 18 <sup>th</sup>	Inform ANS sections of registration and deadlines	Publicity
November 25 <sup>th</sup>	Registration begins	General
	Follow up with sponsors	General

# Deadline

# Task

# Responsibility

	December 2016	
December 9 <sup>th</sup>	Finalize all awards for conference	Technical
December 23rd	Inform SSC of current status of conference	General
December 30 <sup>th</sup>	Follow up with sponsors	General
	January 2017	
January 6 <sup>th</sup>	Launch Abstract Submission	Technical
January 13 <sup>th</sup>	Finalize all tours and workshops	Non-Technical
January 20 <sup>th</sup>	Post tentative program to website	Publicity
January 27 <sup>th</sup>	Begin recruiting student volunteers	Non-Technical
	GOAL: Secure 100% of funds	Finance
	February 2017	
February 3rd	Finalize catering menus and transportation	Hospitality
February 10 <sup>th</sup>	Finalize conference budget	Finance
February 17 <sup>th</sup>	Order gift bag items according to sponsorship goal	Finance
February 24 <sup>th</sup>	Abstract submission deadline	ANS
-	Complete Program Booklet Design	Publicity
	March 2017	
March 3rd	Registration deadline	General
March 10 <sup>th</sup>	Abstract Review	Technical
March 17 <sup>th</sup>	Print tags, signs, banners, and award certificates	Publicity
March 24 <sup>th</sup>	Finalize staffing / volunteer schedule	Non-Technical
March 31st	Print conference programs and assemble gift bags	Publicity
	April 2017	
April 6 <sup>th</sup> - 9 <sup>th</sup>	2017 ANS STUDENT CONFERENCE	ANS
	May 2017	
May 5 <sup>th</sup>	Send thank you letters	General and Publicity
May 12 <sup>th</sup>	Return seed money to ANS	Finance
May 19 <sup>th</sup>	Send travel reimbursements	Finance
-	Publish Conference Report to SSC	Committee
May 26 <sup>th</sup>	Publish Conference Story to Website	General

# 8: CONCLUSION

The University of Pittsburgh ANS Student section would be pleased to host the 2017 ANS Student Conference, and we are honored to be considered as a potential host. Our expanding Student Section and the continual growth of our Nuclear Engineering program both indicate that there is a high demand for nuclear expertise in Pittsburgh. This, among other things, leads us to believe that we are a logical choice to host a distinctive and memorable student conference. Pittsburgh's nuclear industry has flourished over the past half century, and the resulting wealth of the nuclear industry in the greater Pittsburgh area will provide students with many resources as they prepare to join the nuclear industry themselves. Student attendees will learn about controversial topics and myths in the technical field as well as in public policy and communication issues. This will equip them to be more professionally and socially aware in regards to nuclear science and technology. The conference committee is a highly motivated and hardworking group. If selected, we will work eagerly throughout the next year to ensure we host the best possible conference. Again, thank you for considering our proposal to host the 2017 ANS Student Conference.

# **9.1: STUDENT VOLUNTEERS**

I pledge to uphold the effort of hosting the 2017 ANS student conference at the University of Pittsburgh by volunteering my time during the week of the conference (held in March or April)

NAME Zara いうす aail Wezelis Hille Colleer Sinah aning 160 1055 ø Kupik Thacker chromeyer Abigail Kulhanek Kunite Hensler hall inun atthew awrence zsheth Ма JASON PICKEL John Courtei Hann 30 Kino lei (um Vaschler DREW Kirsch ean Shmaph aniel

IGNATURE r mp.

I pledge to uphold the effort of hosting the 2017 ANS student conference at the University of Pittsburgh by volunteering my time during the week of the conference (held in March or April)

NAME Brendan Stack Matt O'CONDOI Kunits Mactar nie 14.00 Grazian: antino σm MUNTZEV Brittom Algeni Abra*hams*en Zach Mura ames rick Bittenbender PAVIS MONIOT Nicholas (DK RATHBUN MIRIAM Hansen arlie Burwell HIU Naan A 100 -HARWaa HAMAB Herrison Nick Kelley Colopietro Gentile Tai Anautavia Nabata MeAndren ٠ Nichold Barnes Bren dan TUDA lein all

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I pledge to uphold the effort of hosting the 2017 ANS student conference at the University of Pittsburgh by volunteering my time during the week of the conference (held in March or April)

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I pledge to uphold the effort of hosting the 2017 ANS student conference at the University of Pittsburgh by volunteering my time during the week of the conference (held in March or April)

NAME SIGNATURE sizoidatora Elisa 121/25012 mon 199 inbottom Qualino hould

# 9.2: LETTERS OF SUPPORT



Swanson School of Engineering Office of the Dean 109 Benedum Hall 3700 O'Hara Street Pittsburgh, PA 15261 412-624-9809 Fax: 412-624-0412

January 29, 2016

Selection Committee Members ANS Student Conference

Dear Committee Members,

As Dean of the Swanson School of Engineering at the University of Pittsburgh, it is my pleasure to support the 2017 ANS Student Conference proposal put forth by our student section of ANS. The conference committee has worked hard to prepare a robust proposal which shows the multiple reasons why Pitt would be an excellent location to host the 2017 Student Conference.

As the students have mentioned, Pitt's Nuclear Engineering Program has a vast network of connections thanks to the strong nuclear industry in the Pittsburgh area. This includes professionals who come to teach our students during the evening, societies that host events on our campus, and many companies who employ our students as interns, co-ops, and full-time employees. Because of these varied connections, attendees will be able to develop both professionally and academically at this conference.

I strongly support the University of Pittsburgh Student Chapter of the American Nuclear Society and their proposal to host the 2017 ANS Student Conference here at Pitt. I believe it will be an excellent event with many opportunities for all who attend.

Sincerely,

Mala

Gerald D. Holder U.S. Steel Dean of Engineering



University Of Pittsburgh

Swanson School of Engineering Department of Mechanical Engineering and Materials Science 636 Benedum Hall 3700 O'Hara Street Pittsburgh, PA 15261 412-624-9720 FAX: 412-624-4846 www.engr.pitt.edu/mems

February 15, 2016

Selection Committee Members ANS Student Conference

To Whom It May Concern:

I am the Director of Nuclear Engineering and the faculty advisor of the ANS Student Section at the University of Pittsburgh. I am writing to offer my support of our ANS Student Section's application to host the ANS Student Conference at our university.

In a short time, I have seen the section grow tremendously under strong leadership and enthusiasm. Pitt ANS is ambitious and undertakes an impressive number of outreach and professional development events, and is able to do so by the strong connections with our Pittsburgh-based local sections of ANS, Women in Nuclear (WIN), and North American Young Generation in Nuclear (NAYGN). Our section has been involved in other national conferences, both student and professional, and our members have participated in nuclear-related activities beyond Pittsburgh.

I strongly support hosting-the ANS student conference at Pitt. The students have worked well with the administration of the Swanson School of Engineering, garnering support from the Department of Mechanical Engineering and Materials Science, the Nuclear Engineering Program, and the Office of Development and Alumni Relations. I have reviewed their proposal, and am impressed with the level of detail and planning they have achieved. Furthermore, I have offered my personal advice for logistics and planning.

If the Pitt ANS proposal wins, I will further support the conference by leveraging my leadership within the Swanson School of Engineering to ensure continued support from our engineering departments, all of which benefit from the Nuclear Engineering Program. Also, because many of our nuclear engineering instructors are adjunct professors who work full time in the local nuclear industry such as Bettis Atomic Power Laboratory and Westinghouse I can serve as a strong liaison between Pitt ANS and these contacts to raise corporate support and sponsorship for the conference.

I have full confidence in the Pitt ANS Conference board because of their commitment, hard work, excellent networking skills, and enthusiasm, and I strongly support their application to host the conference.

Sincerely,

Cole

Daniel G. Cole, Ph.D., P.E. Associate Professor Director of Nuclear Engineering

Pittsburgh Local Section American Nuclear Society 1000 Westinghouse Drive Building 3, Suite 358 Cranberry TWP, PA 16066 412-374-5488

# ANS Pittsburgh Section

February 8, 2016

Selection Committee Members ANS Student Conference

To Whom It May Concern:

The Pittsburgh Local Section of the American Nuclear Society is pleased to support the University of Pittsburgh Student Section in their bid for the 2017 Student Conference. We have collaborated on many events with their Section, both on and off the university campus. These events have included technical panels and lectures, movie and documentary viewings, networking and mentoring events, and public outreach events within the local Pittsburgh community. The University of Pittsburgh has a strong group of committed students whose passion and dedication to the mission of ANS is commendable.

If held in Pittsburgh, we will provide our support of the Student Conference by attending as professionals and volunteering as judges, workshop facilitators, and panel speakers. We will also advertise the conference through our relationships with other professional networks, such as Women in Nuclear and Young Generation in Nuclear. With a strong membership base in historic nuclear industry leaders including Westinghouse, First Energy Nuclear Operating Company, and Bettis Atomic Power Laboratory, we are able to host technical tours of a variety of nuclear facilities.

The Pittsburgh Local Section strongly recommends hosting the 2017 Student Conference in Pittsburgh because of our strong nuclear industry presence, the overwhelming enthusiasm and commitment of the University of Pittsburgh Student Section, and the extensive network of professional societies with which the Student Section is connected. By hosting the conference in Pittsburgh, attendees will be exposed to many major nuclear industry facilities and historical event sites that cannot be accessed otherwise. We look forward to participating in the meeting, and we are confident it will be an excellent experience for all attendees.

Please feel free to contact me with any questions.

Sincerely,

Tyler Crummy, Chair

Pittsburgh Local Section American Nuclear Society Selection Committee Members ANS Student Conference February 1, 2016

Dear Selection Committee,

My name is Peter Tancini, and I am the current President of the University of Pittsburgh's American Nuclear Society Student Chapter. I have full confidence in this conference board for the rigor and detail with which they wrote the document. I have seen them prepare aspects of the proposal beyond the scope of necessity in order to be fully ready to execute for the conference if Pitt ANS should win the right to host.

Our section is very active, and we are making every effort to improve our activities and national involvement. Since becoming an ANS Student Chapter in 2012, we have sent students to every ANS Student Conference both as attendees and also as presenters. We have also sent students to ANS National Meetings, with one of our former members recently co-chairing a session at the 2014 ANS Winter Meeting. Several of our members have also participated in the Nuclear Engineering Student Delegation.

By hosting this conference, Pitt ANS will demonstrate its impressive corporate networking, its strong organization skills, and high ambition. I will support the conference by prioritizing sending our conference board to the 2016 ANS Student conference at the University of Wisconsin. Also, I have increased our networking activities this year to aid in the sponsorship efforts that the Chair will lead over the summer. As president, I will emphasize the need for organization and planning and begin to collect volunteers from our section so that we have a full group of students ready to execute the proposal before the start of the summer.

Some of the members of the conference board are also members of our section's executive committee, so I personally know each member's strengths and commitment to the American Nuclear Society. I believe that their work will be rewarding to all attendees with an excellent, unique conference experience in the city of Pittsburgh.

Sincerely,

Peter Tancini Pitt ANS President 2015-Present

Selection Committee Members ANS Student Conference February 15, 2016

Dear Committee Members,

On behalf of all of the student organizations and clubs within the Swanson School of Engineering here at the University of Pittsburgh, The Engineering Student Council (ESC) gladly supports this proposal to host the 2017 ANS Student Conference. The chair of the conference planning committee has shown us the proposal and explained the efforts which they have put forth, with the aid of his fellow committee members, to ensure that this conference will be a success.

The Swanson School of Engineering is privileged to have an ESC which can help to engage various engineering organizations and chapters of professional societies with each other. This openness and ease of communication allows for our student groups to support each other to create quality events for the entire student body to experience.

The ESC will fully support the University of Pittsburgh Student Chapter of the American Nuclear Society if they are chosen to host the 2017 Student Conference. Due to our ability to communicate across all student groups within the Swanson School of Engineering, ESC will gladly call on those members for volunteers, fundraising, and previous conference experience when necessary.

Regards,

Brandon Contino President, Engineering Student Council Swanson School of Engineering University of Pittsburgh

# **10:** APPENDIX A: OMNI WILLIAM PENN HOTEL PROPOSAL





# PITTSBURGH Mighty.Beautiful.Surprising

The strength of Pittsburgh lies in the friendliness of its people and the beauty of its landscape. Pittsburgh offers a surprising and unexpecting experience, with natural beauty, unique terrain and diverse offerings at every turn. Click here for video

Proposal Prepared Especially for



Home to one of Pittsburgh's finest Hotels ~ Pittsburgh's ONLY Four Diamond Convention Hotel 530 William Pern Place – Pittsburgh, PA – 15219 – www.omriwilliampernhotel.com OMNI W HOTELS william penn | pittsburgh

February 4, 2016

Ms. Miriam Rathbun 2017 Conference Co-Chair ANS Student Sections Committee

Dear Miriam,

We are delighted to be considered as your host hotel for the ANS 2017 Student Conference. The Omni is Pittsburgh's only four diamond convention hotel and our newly renovated property offers an exceptional setting for a memorable meeting experience.

Our central downtown location grants walking access to over 35 restaurants, shopping, major sports arenas and the cultural district.

A proposal follows for your review. If anything keeps us from being your first choice, we welcome the opportunity to address it.

Your attendees will experience the character and charm of a historical hotel with all of the modern day conveniences! We welcome the chance to showcase our JD Power & Associates award winning service.

We look forward to working with you to discuss the next steps to earn your business.

Sincerely, Linda Paris

Voice: 412-553-5226 | email: lparis@omnihotels.com



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# OMNI W HOTELS william penn | pittsburgh

## April 5 - 9, 2017 \$149.00

Luxurious Omni William Penn Accommodations (Click on the link for additional guestroom information!)

Concessions ~ awarded with fulfiliment of guest room performance

One complimentary room for every 50 sold at the group rate

Four upgrades to Premier Rooms at the Group Rate

Five rooms at the prevailing government per diem

Meeting room rental fees waived

Complimentary Wi-Fi in guest rooms

All attendees are eligible for the Omni Select Guest Program. The program is free to join, rewards are immediate and represent a \$45 per day value of services including free Wi Fi.

Omni Select Guest Gold Level Benefits				
	First Stay	Second Stay		
Complimentary 3 MB Internet Access	V	V		
Opportunity to Earn Free Nights	v	v		
Complimentary Morning Beverage Delivery		v		
Complimentary Pressing – 2 Items		v		
Complimentary Bottled Water – Night of Arrival		V		
Complimentary Shoe Shine		v		
Exclusive Member-Only Offers	V	v		
Express Check-In And Check-Out	V	v		

#### Food and Beverage

\$70,000.00 food and beverage minimum for this program. (Food and Beverage Minimums are based on the groups scheduled meal functions, number of attendees and the hotels average pricing.)

Meal	Plated Price	Buffet Price	Tax	Service Charge
Breakfast	\$26.00	\$30.00	7%	22%
Continental Breakfast	-	\$24.00	7%	22%
Lunch	\$35.00	\$38.00	7%	22%
Dinner	\$50.00	\$60.00	7%	22%
AM Break	-	\$10.25	7%	22%
PM Break	-	\$14.75	7%	22%
Reception-Cocktail Only	-	\$16.75	7%	22%
Reception with Food	-	\$30.00	7%	22%

\*Average Food and Beverage Pricing

Omni Select Rewards:

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william penn   pittsburgh				
	Cheve i Hard and the card	Gift Das assure states	<u>ka</u>	
Guest Room Spend	Omni Gift Card' Amount	AMEX Gift Card* Amount	Charitable Donation Amount	Master Account Credit
\$5,000 - \$9,999	\$125	\$100	\$100	\$100
\$10,000 - \$14,999	\$250	\$200	\$200	\$200
\$15,000 - \$19,999	\$375	\$300	\$300	\$300
\$20,000 - \$24,000	\$500	\$400	\$400	\$400
320,000 - 324,888	\$500	0100	*100	

Omni 🐭 Hotels'

\*Distributed at contract signing.

#### Hotel Information

- Sales Tax 7%
- Occupancy Tax 7%
- Service Charge 22% (Taxable)
- Hotel Ratings 4 Diamond

#### Additional Hotel Information

- 4 on-site dining options plus 24 hour room service
- gift shop, laundry and dry cleaning service, business center, shoe shine, bank, jewelry shop
- complimentary 24 hour fitness center
- Check In time begins at 3pm and Check Out at 12 noon
- Complimentary high speed wireless internet access in lobby and in guest rooms for Omni Select Guest members
- In each guest room:; coffee makers, plush robes, Swiss Bath Amenities, lighted make up mirror, flat screen TV, laptop size safe, refrigerator
- Things to do in the city of Pittsburgh!! (Click on the link for more information!)

#### Transportation & Location

- Mellon parking garage \$18.00 weekdays, \$5.00 weekends and valet parking \$33.00
- Airport shuttle service \$26/\$49 round trip (Super Shuttle)
- Major airlines including American, United, US Airways, Southwest flying into Pittsburgh International Airport located 18 miles from downtown Pittsburgh with approximately 30 minute driving time
- Additional parking options within 3 block radius
- Directly across the street from the "T", Pittsburgh underground rail system
- Numerous restaurants, shops and entertainment venues within walking distance
- David L Lawrence Convention center only 3 quick blocks from our front door
- Accessibility Guide (Click on the link for more information!)

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# OMNI HOTELS william penn | pittsburgh

	FLOOR	SOUARE FOOTAGE	D MENSIONS L X W	CELING HEIGHT	THEATER	CLASSROOM	BANQUET	RECEPTION	HOLLOW SOUARE	U-SHAPE	CONFERENCE
Grand Ballroom	17	5,930	114'9" x 50'3"	25'	800	400	530	1,200	120	80	70
Ballroom w/Balcony	17	6,705	114'10" x 6'8"	16'	900	-	600	1,300	-	-	-
Urban	17	3,778	72'8" x 51'9"	25'	400	240	330	400	80	65	50
Monongahela	17	2,405	50'10'' x 48'	121"	230	150	200	230	70	52	40
Allegheny	17	1,449	50'3" x 28'8"	12'5"	158	80	110	150	50	44	38
Bedford	17	319	21" × 15'2"	11'	30	12	20	20	10	12	14
Indiana	17	285	2FT" x 13'5"	17	30	-	-	-	-	-	8
Franklin/Green	17	617	29'5" x 20'10"	10'8''	50	20	50	70	20	16	20
Jefferson	17	294	21' x 14'	W.	-	-	-	-	-	-	8
Sky	17	1,810	447" × 40'5"	10'3"	70	32	100	180	-	-	28
Calmont	1	1,046	34'3" × 30'5"	9'	84	50	70	110	40	32	30
Fox Chapel	1	374	19'8" x 18'10"	9/	28	15	10	30	10	9	10
Churchill	1	267	17'10" × 14'10"	9'	24	12	10	20	8	9	10
Mt. Lebanon	1	241	1910" x 12'6"	9/	20	12	10	20	8	8	10
Sewickley	1	231	19/10" × 11'6"	9'	16	8	10	20	8	8	10
Shectyside	1	667	34'9" x 19'10"	8'	72	40	60	70	28	25	20
Carnegie I	CL	291	21'7" × 13'4"	8'	20	12	16	10	-	10	16
Carnegie II	CL	285	17'8" × 16'5"	87	18	12	12	20	-	6	12
Carnegie III	CL	881	36'4" x 15'	8'	58	30	50	80	26	22	30
Parkview West	CL	407	30'6" x 13'3"	8'10''	-	-	-	-	-	-	12
Parkview West Foyer	CL	374	27'10" x 13'4"	8'10''	-	-	-	-	-	-	-
Parkview East	CL	399	30" x 13"3"	11.6.	20	14	18	20	-	14	18
Frick	CL	2,642	59'1" x 44'7"	8'4"	165	112	160	200	60	54	50
Phipps	CL	796	34' x 23'4'	9'	70	40	50	60	20	25	26
Oliver	CL	569	30'6" x 18'6"	97	41	21	30	40	18	20	22
Vandergrift	CL	494	27'9" x 17'7"	9	36	21	30	30	16	20	18
Leughlin	CL	d13	24' × 17'2"	97	-	-	-	-	-	-	6
Heinz	CL	384	20'3" x 18'10"	9'	18	10	10	15	-	-	10
Conference A	CL	1,839	54'1" x 34'0"	8'6"	192	120	180	240	64	52	42
Conference B	CL	1,207	35'1" x 34'4"	8'6"	104	63	90	125	44	32	22
Conference C	CL	704	39'8'' x 17'7"	8.6.	56	33	40	50	32	26	24
Conference D	CL	330	23'1" x 14'3"	8'6"	24	12	20	25	18	15	14
Conference Foyer	CL	815	44'3'' x 18'4"	8.6.	80	49	70	90	40	34	82
Bob and Dolores Hope	Mezz	2,652	78' × 34'	10'4''	180	90	200	284	50	50	60
Lawrence Welk	Mezz	1.751	50'6" x 34'6"	8.8.	190	105	160	200	60	48	38
Lawrence Welk Foyer	Mezz	677	18'3" x 37'0"	97"	36	24	30	40	24	18	20
William Penn Ballroom	WP	5,605	124'6" x 34'2"	12'6"	600	308	460	900	80	70	60
Three Rivers	WP	3,135	58'6" x 50'8"	91"	200	120	200	275	40	34	40
Sternwheeler	WP	3,160	61'6" x 51'3"	12'	120	65	250	300	30	36	30
Riverboat	WP	2,138	50'9" x 42'	12'8"	120	70	160	220	24	35	30
Anchor Boardroom	WP	646	31'8" × 18'6"	8'6"	50	22	40	50	20	16	20

Meeting room capacities are determined by the use of the "Arranger & Comfort Calculator," a standardized meeting room capacity measurement system used by Meeting Professionals International, 60" Banquet capacities based on 10 persons per table.

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# **10:** APPENDIX **B:** PODIUM PRESENTATION JUDGING FORM

Presentation Rubric	
Date: Start	Time: End Time:
Title of Presentation:	
Track:	
Presenter(s):	
University:	
Education:  Undergraduate Grad	uate
Content (42 points)	Delivery (16 points)
/ 7 pts Introduction/Objective	/ 4 pts Business Attire
/ 7 pts Design/Analysis	/ 4 pts Clear/Loud Voice
/ 7 pts Data	/ 4 pts Body Language
/ 7 pts Results	/ 4 pts Transitions
/ 7 pts Relevance/Conclusions	
/ 7 pts References	Interaction (12 points)
	/ 4 pts Engages Audience
Visual Presentation (20 points)	/ 4pts Handles Questions Effectively
/ 5 pts Organized Slides	/ 4 pts Eye Contact
/ 5 pts Slide Design	
/ 5 pts Visual Aids/Graphics	Timing of Talk (10 points)
/ 5 pts Grammar/Content	/ 10 pts
	Total Points (100 points)

#### **Comments for Presenter(s):**

Judge's Name: \_\_\_\_\_

Judge's Affiliation: \_\_\_\_\_

### **Poster Rubric**

Date:	Poster Number:				
Title of Poster:					
Track:					
Presenter(s):					
University:					
Education: 🗆 Undergraduate 🛛 Graduate					
Content (48 points)	Interaction (20 points)				
/ 8 pts Introduction/Objective	/ 5 pts Engaging				
/ 8 pts Design/Analysis	/ 5 pts Handles Questions Effectively				
/ 8 pts Data	/ 5 pts Eye Contact				
/ 8 pts Results	/ 5 pts Use of Poster				
/ 8 pts Conclusions/Relevance					
/ 8 pts References	Delivery (12 points)				
Visual Presentation (20 points)	/ 4 pts Business Attire				
/ 5 pts Design of Poster	/ 4 pts Clear Voice				
/ 5 pts Organization/Flow	/ 4 pts Body Language				
/ 5 pts Visual Aids/Graphics					
/ 5 pts Content	Total Points (100 points)				

#### Comments for Presenter(s):

Judge's Name: \_\_\_\_\_

Judge's Affiliation: \_\_\_\_\_

## **10: APPENDIX D: 28X BUS SCHEDULE**

## MONDAY THROUGH FRIDAY SERVICE

To Downtown Bittaburgh and Oakland						To Robinson Town Centre -								
to bowntown r ntaburgh and Oakland								Pi	ttsbu	rgh In	terna	tional	Airpo	
Pgh Intl Airport Arrivals-Lower Level	Door #6 Robinson Town Cir Park Manor Bivd at IKEA	Carrnegie Bell Station Stop C	Downtown Liberty Ave at Wood St	Uptown Bivd of the Alies at Duquesne University	Daktand Forbes Ave at Awood St	Oakland-CMU Forbes Ave past Morewood Ave			Oakland-CMU Forbes Ave past Morewood Ave	Oakdand Fith Ave at Bigebw Bhrd	Duquesne University Bivd of the Alies at Marion St	Downtown Severith Ave at Smithfield St	Sheraden Sheraden Station Stop B	Robinson Town Cir Park Manor Bivd at IKEA
53	30 5:44	5:55	6:11	6:16	6:22	6:29	Ī		4:25	4:29	4:34	4:38	4:51	5:05
63	00 6:14	6:25	6:41	6:46	6.52	6:59			4:55	4:59	5:04	5.08	5:21	5:35
00	30 0344	0:00	7:14	7:20	7:20	7:33			5:25	5:29	5:34	5:38	5:51	6.05
74	30 7.14	7-56	8-14	8-20	8:26	8-33			6:25	6:30	6:36	6:40	6:54	7:00
81	00 8:14	8:26	8:44	8:50	8.56	9:03			6:55	7:00	7:06	7:10	7:24	7:39
83	30 8:44	8:56	9:14	9:20	9.26	9:33	1		7:25	731	7:37	7:42	7:57	8:12
9:	9:14	9:26	9:44	9:50	9:56	10:03			7:55	8:01	8:07	8:12	8:27	8:42
9:	30 9:44	9:56	10:14	10:20	10:26	10:33			8:25	8:31	8:37	8:42	8:57	9:12
10:1	00 10:15	10:26	10:43	10:49	10.55	11:02			8:55	9:01	9:07	9:12	9:27	9:42
10:	30 10:45	10:56	11:13	11:19	11:25	11:32			9:25	9:31	9:37	9:41	9:56	10:11
11:1	00 11:15	11:26	11:43	11:49	11:55	12:02			9:55	10:01	10:07	10:11	10:26	10:41
113	00 11045 00 40-45	11:50	12:13	12:19	12:25	12:32			10:25	10:31	10:37	10041	10:50	11:11
120	12:10	12:20	1-13	12.48	1:25	1:02			11:25	11-31	11-37	11:41	11:56	12-11
19	00 1:15	1:27	1:44	1:50	1:55	2:03			11:55	12:01	12:07	12:11	12:26	12:41
1:	30 1:45	1:57	2:14	2:20	2:26	2:33			12:25	12:31	12:38	12:42	12:57	1:12
2:	00 2:15	2:27	2:44	2:50	2:56	3:03			12:55	1:01	1:08	1:12	1:27	1:42
2:	30 2:45	2:57	3:14	3:20	3:26	3:33	i		1:25	1:31	1:38	1:42	1:57	2:12
3:	00 3:15	3:27	3:44	3:50	3:56	4:03			1:55	2:01	2:08	2:12	2:27	2:42
3:	30 3:45	3:57	4:14	4:20	4:26	4:33			2:25	2:31	2:38	2:42	2:57	3:12
43	00 4:16	4:30	4:47	4:54	5:01	5:09			2:55	3:01	3:08	312	3:27	3:42
40	35 4:51	5:05	5:22	5:29	5:36	5:44			3:22	3:29	3:38	3:43	4:01	4:21
30 80	10 5:25	5:36	5:35	6:01	6:06	0:15			3:50	4302	4(11	4(10	4:34	4:54
00 60	40 0.00 10 6/25	6-18	6-55	7:01	0.30	7:15			4:23	9.32 5-02	4.41	4:40	5:04	5.54
6.	40 6:55	7:08	7-25	7:31	7:38	7:45			5:25	5:32	5:41	5:46	6:04	6:24
7:	10 7:24	7:36	7:51	7:56	8:01	8:08	1		5:55	6:02	6:11	6:16	6:34	6:54
7:	35 7:49	8:01	8:16	8:21	8:26	8:33			6:25	6:30	6:36	6:40	6:54	7:08
8:	8:14	8:26	8:41	8:46	8:51	8:58			6:55	7:00	7:06	7:10	7:24	7:38
8:	30 8:44	8:56	9:11	9:16	9:21	9:28	i l		7:25	7:30	7:36	7:40	7:54	8:08
9:	9:14	9:26	9:41	9:46	9:51	9:58			7:55	8:00	8:06	8:10	8:24	8:38
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113	30 11:14	11:55	12-10	17-14	1248	12:25	$\{ \mid $		10-25	10:00	10:00	10:39	10:22	11:05
12:1	00 12:14	12:25	12:40	12:44	1249	12:55			10:55	11:00	11:05	11:09	11:22	11:36

Figure A-1: 28X Bus Weekday Schedule

Airport

Arrivals-Lower Level Door #6

5:17

5:47

6:17

6:47 7:22

7:52 8:26

8:56

9:26

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10:24 10:54

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#### SUNDAY AND HOLIDAY SERVICE To Pohincon

	To Downtown Bittohurgh and Ookland								To Robinson Town Centre -							
									Pi	ttsbu	rgh In	ternat	tional	Airpo	rt	
	Pgh Ind Airport Arrivals-Lower Level Door #6	Robinson Town Ctr Park Manor Bivd at IKEA	Carmegie Bell Station Stop C	Liberty Ave at Wood St	Uptown Bivd of the Alfes at Duquesne University	Oakdand Forbes Ave at Amood St	Daktand-CMU Forbes Ave past Morewood Ave		Oaldand-CMU	Forbes Ave past Morewood Ave	Oakdand Fifth Ave at Bigelow Blvd	Duquesne University Bivd of the Alfes at Marion St	Downtown Seventh Ave at Smithfeld St	Sheraden Sheraden Station Stop B	Robinson Town Ctr Park Manor Bivd at IKEA	Pgh Ind Airport
	5:30	5:44	5:54	6:09	6:13	6:17	6:23	i I	Ī	4:25	4:30	4:35	4:39	4:52	5:06	
	6:00	6:14	6:24	6:39	6:43	6:47	6:53			4:55	5:00	5:05	5:09	5:22	5:36	
	6:30	6:44	6:54	7:09	7:13	7:17	7:23			5:25	5:30	5:35	5:39	5:52	6:06	
	7:00	7:14	7:24	7:39	7:43	7:47	7:53			5:55	6:00	6:05	6:09	6:22	6:36	
	7:30	7:44	7:54	8:09	8:13	8:17	8:23			6:25	6:30	6:35	6:39	6:52	7:06	
	8:00	8:14	8:24	8:39	8:43	8:47	8:53			6:55	7:00	7:05	7:09	7:22	7:36	
	8:30	8,44	8:54	9:09	9:13	9:17	9:23			7:25	7:30	7:35	7:39	7:52	8:06	
	9:00	9:14	9:24	9:39	9:43	9:47	9:53			7:55	8:00	8:05	8:09	8:22	8:36	
	8030	9344	8054	10:09	1013	10:17	10:23			8:25	8030	8:35	8:39	8:52	9306	
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	10:30	10:44	10:50	11:12	11:17	11:22	11:29			9.25	9.31	9030	2040	80-04	10:12	
	44-50	44.44	11:20	45.45	45.47	49.99	42,20			8.00	10:01	10:00	10:10	10:24	44-45	
	12:00	12-14	12-26	12:12	12:17	12:22	12:29			10.20	11:01	11:06	11-10	11-24	41-42	
	12:00	12.14	12-56	1-12	4.47	1-22	1-20			11-25	11-01	11-36	11-40	11-54	12-12	
	1:00	1.14	1-26	1-42	1.47	1.52	1.50			11-44	12-01	12:06	12-10	12-24	12.12	
	1:30	1:44	1-56	2:12	2:17	2:22	2:29			2.25	12:31	12:36	12:40	12:54	1:12	
	2:00	2:14	2:26	2.42	2:47	2:52	2:59			2.55	1:01	1:06	1:10	1:24	1:42	
	2:30	2:44	2:56	3:12	3:17	3:22	3:29			1:25	1:31	1:36	1:40	1:54	2:12	
	3:00	3:14	3:26	3:42	3:47	3:52	3:59			1:55	2:01	2:06	2:10	2:24	2:42	
	3:30	3:44	3:56	4:12	4:17	4:22	4:29			2:25	2:31	2:36	2:40	2:54	3:12	
	4:00	4:14	4:26	4:42	4:47	4:52	4:59	i I		2:55	3:01	3:06	3:10	3:24	3:42	
	4:30	4:44	4:56	5:12	5:17	5:22	5:29			3:25	3:31	3:36	3:40	3:54	4:12	
	5:00	5:14	5:26	5:42	5:47	5:52	5:59			3:55	4:01	4:06	4:10	4:24	4:42	
	5:30	5:44	5:56	6:12	6:17	6:22	6:29			4:25	4:31	4:36	4:40	4:54	5:12	
	6:00	6:14	6:26	6:42	6:47	6:52	6:59			4:55	5:01	5:06	5:10	5:24	5:42	
	6:30	6:44	6:56	7:12	7:17	7:22	7:29			5:25	5:31	5:36	5:40	5:54	6:12	
	7:00	7:14	7:25	7:40	7:45	7:50	7:56			5:55	6:01	6:06	6:10	6:24	6:42	
	7:30	7:44	7:55	8:10	8:15	8:20	8:26			6:25	6:31	6:36	6:40	6:54	7:09	
	8:00	8:14	8:25	8:40	8:45	8:50	8:56			6:55	7:01	7:06	7:10	7:24	7:39	
	8:30	8:44	8:55	9:10	9:15	9:20	9:26			7:25	7:31	7:36	7:40	7:54	8:09	
	9:00	9:14	3:25	9:40	9:45	9:50	9:56			1:55	8:01	8:06	8:10	8:24	8:39	
	9:30	9344	8:55	10:10	10:15	10:20	10:26			0:25	6:31	8:36	6:40	6:54	8:09	_
	10:00	10:13	10:23	10537	19041	10:45	10:51			0:00	9:01	0.00	9:10	9:24	8:58	
	10:30	10343	10:53	11:0/	11:11	11015	11:21			5.23 0-55	9030	9:35	9:36	8:51	10:05	
	11:00	44.49	44-63	12:07	40-44	1040	10:01			0.00	10:00	10:00	10:00	40.64	41.05	
ļ	12:00	1043	10-00	12-07	12-11	12-15	12:21			0.23	10:30	11:05	11:02	14-24	11/00	
	12.00	14.19	6.2.2	16-shi	16.791	16.752	1 March 1				11.499	11295	11786	11.41	l l obi	1 1

Figure A-2: 28X Bus Weekend Schedule

Pgh Ind Airport Arrivals-Lower Level Door #6

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## **10:** APPENDIX E: SPONSORSHIP TIERS

American Nuclear Society Student Conference

April 6-9th 2017

University of Pittsburgh

[CONFERENCE EMAIL HERE]





As the hosts of the 2017 American Nuclear Society Student Conference, the University of Pittsburgh ANS student chapter is honored to have been selected as the next site of the annual conference. Each year, this conference marks an opportunity for both undergraduate and graduate students to present research they have conducted in the field, to network with professionals and fellow students, and to attend workshops to develop their professional skills.

As is common across every conference, the roots of the weekend are firmly planted in the dissemination of information and research to others in the field. In these kinds of environments, individuals are given the opportunity to intellectually grow and contribute even further to expanding the scope of knowledge and information available to nuclear science and technology. We sought to emphasize this role of students and professionals in the field by making the theme of our conference "Dispelling Nuclear Myths." With breakfasts, workshops, and other events focused around this idea, our conference will demonstrate the importance of identifying and counteracting misinformation.

Western Pennsylvania has a long history in the field of nuclear engineering. With the site of the first commercial nuclear reactor, operational nuclear reactors, and businesses at the forefront of nuclear technology just a short drive away, the city of Pittsburgh finds itself in a great position to make a difference in the field. And here at the University of Pittsburgh, work is constantly being done to take advantage of that legacy. With full-time and adjunct faculty that have spent time in the field and are well-versed in advancing nuclear technology, the University of Pittsburgh has fostered the opportunity to groom and prepare students to be contributing members in the field of nuclear science.

The University of Pittsburgh and the greater Pittsburgh area are fertile ground for nuclear research and technology. With the 2017 ANS Student Conference being held here, the concentration of students interested in the field will increase greatly. As described inside, attending this conference provides many avenues through which you can exhibit your company and continue making inroads with ANS students and the University of Pittsburgh. We appreciate you taking the time and we look forward to working with you.

Sponsorships Tiers:

Light Blue: Indicates advertisement size and location in conference program

Pink: Indicates other advertising benefits

Green: Indicates career fair benefits

<u>Tier 1</u>: **Pioneer** Any company that donates at least \$20,000 will:

- Name one of the three conference dinners and provide a speaker (includes covered professional registration and free upgrade to a hotel suite)
- Have the opportunity to host an information lunch
- Receive an ad on the front cover of the conference program
- Have company logo in a prime location on the conference T-shirt
- Have large company logo on gift bag and choice of gift bag item
- Get the largest and most visible booths at the career fair and access to the online resume book

<u>Tier 2</u>: **Trailblazer** Any company that donates at least \$15,000 will:

- Have the option of hosting/naming one of the conference workshops (If there are not enough sponsors in the tier 1 group, tier 2 sponsors may also have the option of naming a joint dinner with another tier 2 sponsor)
- Have the opportunity to host an information lunch
- Receive a full page ad in the conference program
- Have logo well located on the conference T-shirt
- Have medium sized company logo on gift bag and choice of gift bag item
- Receive a large booth at the career fair and access to the online resume book

<u>Tier 3</u>: **Trendsetter** Any company that donates at least \$10,000 will:

- Have the opportunity to host an information lunch
- Receive a half-page ad in the conference program
- Be recognized on the conference T-shirt
- Be invited to participate in the career fair and receive access to the online resume book

<u>Tier 4</u>: **Groundbreaker** Any company that donates at least \$5,000 will:

- Receive a quarter page ad in the conference program
- Be recognized on the conference T-shirt
- They will be invited to participate in the career fair

<u>Tier 5</u>: **Beacon** Any company that donates at least \$2,000 will:

- Be invited to participate in the career fair
- Receive recognition on the conference T-shirt and in the conference program

<u>Tier 6</u>: **Guide** Any company that donates at least \$1,000 will:

• Receive recognition on the conference T-shirt and in the conference program

<u>Tier 7</u>: **Contributor** Any company that donates up to \$1,000 will:

• Be recognized in the conference program

Exhibition Opportunities:

<u>Tier 1</u>: Any contributor of at least \$15,000 will:

- Have the opportunity to hold a recruiting event in the form of a workshop or panel
- Have the opportunity to host an information lunch
- Receive a full page section in the conference program for application information
- Have logo well located on the conference T-shirt
- Have medium sized company logo on gift bag and choice of gift bag item
- Receive a large booth at the career fair and access to the online resume book

<u>Tier 2</u>: Any contributor of at least \$10,000 will:

- Have the opportunity to host an information lunch
- Receive a half-page section in the conference program for application information
- Be recognized on the conference T-shirt
- Be invited to participate in the career fair and receive access to the online resume book

<u>Tier 2</u>: Any contributor of at least \$5,000 will:

- Receive a quarter-page section in the conference program for application information
- Be recognized on the conference T-shirt
- Be invited to participate in the career fair

#### Gift Bag Items:

Select sponsors and exhibitors can choose an item to be included in the gift bag given at registration:

- o USB Drive
- Adhesive ID Holder
- Circle Magnet
- o Lanyard
- Microfiber Rag
- Notepad
- o Pen
- o Umbrella
- Water Bottle

## **10:** APPENDIX F: ANS DIVISIONS PAMPHLET

The ANS Student Conference provides a gathering of some of the most driven and interested students in nuclear science and technology. As a Division of ANS, you represent the community and support for the development of the field. This conference provides a great opportunity to reach out to the next generation of nuclear science. As the hosts of the 2017 ANS Student Conference, the University of Pittsburgh student chapter would like to encourage you to make the most out of this conference and reach more students interested in your tracks.

One great opportunity we want to provide is a spot on our Myth Busting panel which get to the heart of our theme: "Dispelling Nuclear Myths." After having heard from different speakers and seen many presentations, students and professionals will be invited to attend this panel to discuss the common hurdles of the sub-fields within the nuclear sector. By sending a representative from your division to the panel, you can contribute to the conversation and drive home how your area of expertise is achieving these goals. Along with sending a representative for the panel, sponsoring an award for the best paper and/or presentation in your technical track would provide a greater incentive for students to submit papers and draw some of the best research being done across the country.

Another way you can take advantage of the conference is by encouraging paper submissions among your membership. By having more student members presenting their research and work, more interest can be generated across ANS for your division. Additionally, hosting a meeting or social for members of your division can give interested students the opportunity to network and connect with other members of ANS. We would be more than happy to work with you to make something like that happen. Please also consider being an official sponsor of the conference to take advantage of more benefits. See the attached sponsorship document to learn what levels of involvement are available to you.

If you have any questions or concerns, please feel free to contact us at [conference email]. This conference is a great way for students, professionals, and the entirety of ANS to connect and grow. The student chapter at the University of Pittsburgh is excited to work with you to make sure that this conference allows for as much of that as possible.

#### ANS Student Conference Volunteer Survey

- 1. Name:
- 2. Phone number:
- 3. When are you available to volunteer between April 6<sup>th</sup> and April 8<sup>th</sup>?

	Thursday	Friday	Saturday
Morning (before noon)			
Afternoon (noon-5 P.M.)			
Evening (after 5 P.M.)			

- 4. Will you have a vehicle available for transportation?
- 5. What tasks would you prefer? (Check all that apply)
  - Meeting guests at the airport (Thursday only)
  - Giving directions at T stations (evenings)
  - Accompanying site visits (Thursday only)
  - Supervising breakfast (morning)
  - Supervising a technical session (morning/afternoon)
  - Supervising dinners (evenings)
  - Registration/information table
  - Supervising a social (evenings)
- 6. What tracks are you most interested in? (Check all that apply)
  - Materials Science and Technology
  - Reactor Physics
  - Thermal Hydraulics
  - Mathematics and Computation
  - Education, Training, and Workforce Development
  - Nuclear Policy
  - [...]
- 7. Name any companies you have worked for in the nuclear field.
- 8. Would you like to register for the conference?
- 9. Do you intend to submit research to present at the conference

## **10:** APPENDIX H: HEINZ FIELD CONTINGENCY PLAN

Item	Price per order	Quantity	<b>Total Price</b>
Bruschetta Duet - Roma Tomatoes and Basil, Tapenade and Crème Fraîche (orders of 50)	\$ 125.00	3	\$375.00
Chilled Beef Tenderloin with Horseradish Cream Bruschetta Duet - Roma Tomatoes and Basil, Tapenade and Crème Fraîche (orders of 50)	\$ 180.00	3	\$540.00
Chef's Seasonal Deviled Eggs(Bruschetta Duet - Roma Tomatoes and Basil, Tapenade and Crème Fraîche (orders of 50)	\$ 200.00	3	\$600.00
Melon, Prosciutto, Gorgonzola Fork Bruschetta Duet - Roma Tomatoes and Basil, Tapenade and Crème Fraîche (orders of 50)	\$ 200.00	3	\$600.00
Pittsburgh Mini Pierogis with Caramelized Onion and Sour Cream Bruschetta Duet - Roma Tomatoes and Basil, Tapenade and Crème Fraîche (orders of 50)	\$ 160.00	3	\$480.00
Trio of Tartlets— Sweet Onion and Gruyère, Artichoke and Feta with Kalamata Olives, and Peking-Style BBQ Duck with Plum Sauce Bruschetta Duet - Roma Tomatoes and Basil, Tapenade and Crème Fraîche (orders of 50)	\$ 160.00	3	\$480.00

Mini Asian BBQ Chicken on Skewers Bruschetta Duet - Roma Tomatoes and Basil, Tapenade and Crème Fraîche (orders of 50)	\$ 130.00	3	\$390.00
Assorted Pot Stickers with Ginger Hoisin and Sweet Chili Bruschetta Duet - Roma Tomatoes and Basil, Tapenade and Crème Fraîche (orders of 50)	\$ 105.00	3	\$315.00
Mushroom Strudel with Butternut Squash Puree and a Balsamic Reduction	\$ 26.00	50	\$1,300.00
Hand-Carved Mahi Mahi Tacos with Cilantro Lime Slaw, Black Bean and Roasted Corn Mash, Scotch Bonnet Aïoli and Warm Tortillas	\$ 16.00	125	\$2,000.00
Pasta ala Pizzaiola Cavatelli Pasta Sautéed to Order with Mussels and Clams in White Wine Sauce, Garlic Crostini	\$ 16.00	125	\$2,000.00
The Potato Patch Roasted Potatoes, Braised Short Ribs, Arugula, Roasted Red Pepper, Gorgonzola Roasted Potatoes, Grilled Chicken, Spinach, Tomatoes, Three Cheese Sauce	\$ 16.00	125	\$2,000.00
The Steel Town Stack- - Shaved Sirloin, Caramelized Onions & Peppers, Curly Fries, White Cheese Sauce, Italian Bread	\$ 16.00	125	\$2,000.00
		Total:	\$13,080.00