



2023 American Nuclear Society Student Conference Proposal

Passing the Torch

Presented by:
The University of Tennessee, Knoxville
ANS Student Chapter

Letter from the Chairs

September 26th, 2021
Student Sections Committee
ANS Education and Training Division

Dear ANS Student Sections Committee,

The University of Tennessee at Knoxville's American Nuclear Society chapter is pleased to submit this proposal to host the 2023 ANS Student Conference. We thank you for your consideration. Our nuclear engineering department was the first in the United States, founded in 1957, and continues to grow in excellence and prestige with each coming year. Our student section was founded shortly after in 1959, making it one of the oldest chapters in the country. Our chapter continues to make a positive impact on our department, and we are ecstatic at the prospect of hosting the ANS Student Conference at the University of Tennessee.

We have chosen the theme of "Passing the Torch" to pay homage to our University's mascot, the Torchbearer. We want the conference to be a symbol for continuing nuclear sciences from one generation to the next, essentially 'Passing the Torch' from one to another. We hope for attendees to reflect on the revival of the nuclear industry, especially since there is currently a lot of attrition in the industry. We want to inspire our attendees to learn from those around them and strive towards absorbing nuclear knowledge from previous generations. We believe Knoxville is an excellent place to do so since there is a plethora of nuclear history present here.

Our university is in the heart of nuclear industries - we are surrounded by facilities such as Oak Ridge National Lab, Y-12 National Security Complex, Provision Proton Therapy, TVA Watts Bar, and Sequoyah Nuclear Plants, Bechtel, and much more. Our nuclear department is fortunate to have the opportunity to collaborate with these partners on various projects, thus creating strong bonds with them. We believe that due to networking opportunities at the conference, we could bring in students across other departments in the country to attend. Knoxville has been an up-and-coming city, especially over the past few years, and we firmly believe that even though it is a smaller city, it has so much more to offer than just our University's campus. Lastly, the University of Tennessee is weeks away from the grand opening of the Zeenah Engineering Complex, the new home of our nuclear engineering department. With ample meeting spaces and unique laboratory spaces, this brand new building is the perfect location for hosting the 2023 American Nuclear Society Conference.

Thank you again for reviewing our proposal, and we look forward to hearing from you.

Sincerely,



Lance Drouet
ANS Chapter
President
Proposal Co-Lead
Programming Chair

Emma Houston
ANS Chapter Vice
President
Proposal Co-Lead

Sydney Copp
ANS Chapter
Graduate
Representative
Communications
Chair

Katy Worrell
ANS Chapter
Secretary
Logistics Chair

Kenneth Bott
ANS Chapter
Treasurer
Finance Chair

Anthony Tom
DE&I Chair

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American Nuclear Society Conference at the University of Tennessee, Knoxville



“One that beareth a torch shadoweth oneself to give light to others”

Theme: Passing the Torch

The Torchbearer is one of the most iconic symbols of the University of Tennessee. The statue represents lighting the way in our communities, our fields, and our lives. The Torchbearer was unveiled at UTK’s Circle Park in April of 1968, and has been the University’s official symbol ever since.

The statue holds the eternal flame, which represents the light of knowledge, truth, enlightenment, and intellectual optimism reflected in our creed stated above. These characteristics together are meant to create light through the darkness of ignorance. Also featured on the nine-foot-tall statue is the Goddess of Winged Victory, Nike (the symbol for success) standing atop a globe. The globe embodies how the victories over the challenges of the world, during times of both peace and war, are ultimately in the individual’s own hands.

Lastly, it is a unique feature of our University that students get to actively be their school’s symbol. Not many other universities can say the same because you can’t be a wildcat, you can’t be a gator, you can’t be a bear, etc. However, you *can* wake up and make the conscious decision to be a Volunteer and do something every day that improves the betterment of both yourself and those around you.

Logo

The American Nuclear Society Chapter at the University of Tennessee strives to achieve our commitment of “Nuclear in Every Classroom”. Because of this, we want to continue to foster the relationships we have made with the education community in Knoxville by involving K-12 students in this process. Currently, the American Nuclear Society Chapter at the University of Tennessee participates in volunteerism through Tennessee’s Engineer’s Day where we perform experiments and competitions with local high school students, work to build curriculum in local schools, and do a variety of other outreach activities.

To extend this current outreach effort, the University of Tennessee would like to hold a logo competition amongst local public schools to create a finalized logo. This competition would require students to create a logo and write a one-page document that describes their logo and how it represents the University of Tennessee and the history of nuclear sciences in Knoxville. The student that creates the selected logo would be awarded free admission to the conference for a guest and themselves, including all tours.

A preliminary design can be shown below as an example. The competition would state the symbolism and requirements of the logo and would be held immediately after being awarded the conference. We would specify that the logo should include a reference to nuclear and include a torch, as the conference theme is “Passing the Torch.” The logo would be selected based on aesthetic quality and the written portion of the competition. For the written portion, students would be encouraged to discuss Knoxville’s legacy in the nuclear sciences, a representation of science through art, and any personal ties to nuclear. Dates regarding this competition are listed in the milestones section.



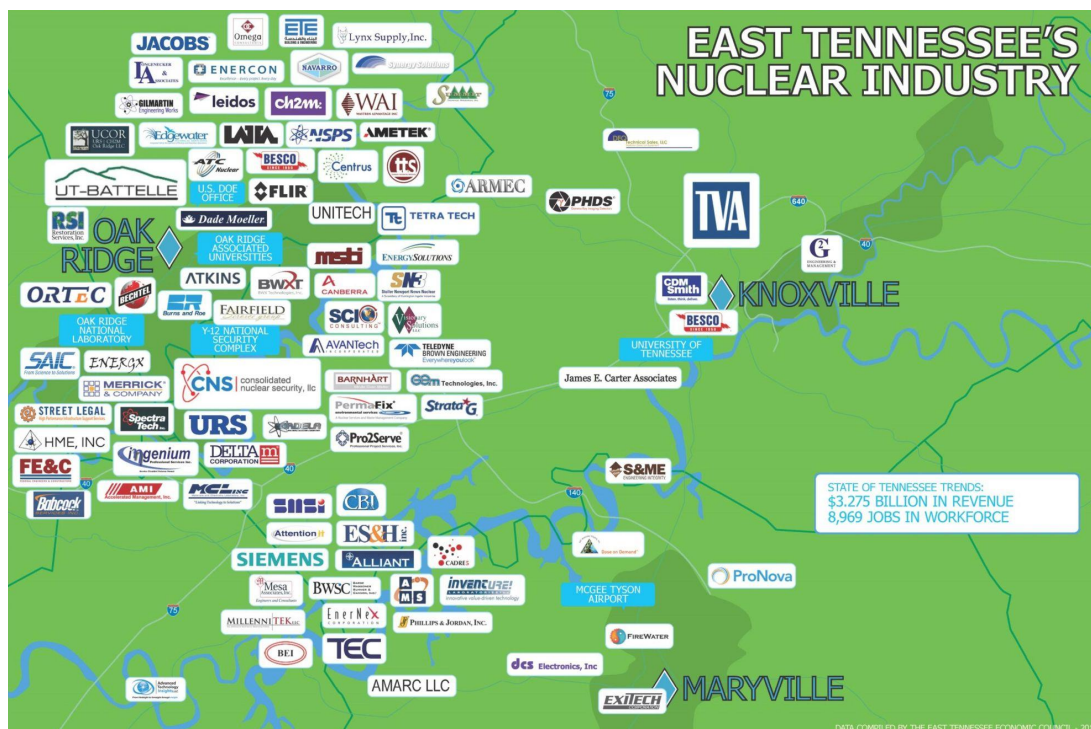
Why Knoxville

Knoxville's abundant nuclear industry, natural wonders, and downtown attractions make it the ideal candidate for the location of the 2023 American Nuclear Society Student Conference. The University is near Oak Ridge National Lab, Y-12 Nuclear Security Complex, UCOR, East Tennessee Technology Park, and more. Oak Ridge, Tennessee was chosen as the center of the Manhattan project due to its rural location, up-and-coming workforce, and abundant natural resources. Since the Manhattan Project, the nuclear industry surrounding Knoxville has blossomed. Now, Knoxville is one of the epicenters of nuclear research and development, technology, and pioneering.

Knoxville has a bustling downtown with many attractions and a unique atmosphere. Knoxville's downtown center, populated with local art and food, is less than a mile from the University of Tennessee's campus. Surrounding the greater Knoxville area are natural wonders including the Great Smoky Mountain National Park. Knoxville's diverse features cater to all interests.

Why The University of Tennessee

The University of Tennessee's Nuclear Engineering Department, founded in 1957, is the first nuclear engineering program in the United States. Tennessee has one of the largest numbers of PhDs enrolled and PhDs granted, with 112 total enrolled for Fall of 2020, and 16 granted in 2021. The graduate program in the department is approximately 17% Masters students and 83% Ph.D. students. The top research focus areas at the the University of Tennessee are nuclear fuels and materials; nuclear security; radiological sciences and health physics; nuclear instrumentation and controls, reliability, and safety; nuclear fusion technology; nuclear fuel cycles; advanced modeling and simulation; and radiation detection and measurement. Many of these directly correlate to the technical tracks chosen for this conference proposal.



The University of Tennessee is surrounded by over 100 nuclear-related companies within 50 miles of campus. The department works with Y-12 National Security Complex, Scintillation Materials Research Center, Provision Center for Proton Therapy, Ion Beam Material Laboratory (IBML), UT/ORNL Joint Institute for Advanced Materials (JIAM), and many more. The diverse research focus areas and the plethora of high-class nuclear facilities make this the ideal location for the American Nuclear Society Conference. The variety of research fields would provide all students attending the conference the opportunity to connect with people who share their technical interests or take the opportunity to explore other career and research interests in Knoxville's surrounding facilities.

Zeanah Engineering Complex (ZEC)

The Zeanah Engineering Complex, alternatively known as the Gateway to Engineering, is the nuclear engineering department's new state-of-the-art research and educational facility. The 228,000 square foot complex will contain 23 research laboratory spaces that stimulate collaboration and innovation. The building will contain a memorial of the University's previous home of the Nuclear Engineering Department, the Pasqua Building. The Zeanah Engineering Complex will host the Engineering Fundamentals program, advanced innovation and collaboration studios (ICS), and advanced engineering research facilities, including a fast neutron source. This brand new building would be heavily utilized for the American Nuclear Society Student Conference.



American Nuclear Society Chapter at the University of Tennessee

The University of Tennessee has a thriving American Nuclear Society Chapter. Our chapter hosts several speakers, social events, and volunteer events throughout the year that engages and develops our members to make meaningful connections outside of the classroom. Our chapter works closely with our other nuclear engineering student organizations including Women in Nuclear, the Diversity Equity Inclusion Action Committee, the Institute for Nuclear Materials Management, the Nuclear Engineering Graduate Student Assembly, and the Health Physics Society to promote networking across the department.

Selection of Dates and Scheduling

Date Selection

Many considerations have been taken into account in selecting the most appropriate dates to hold the conference. These include, but were not limited to, scheduling of other chapters' spring breaks, scheduling of other chapters' exams, and major religious holidays. Our first choice of dates is Thursday to Sunday, **April 13-16, 2023**. This weekend falls between all schools' spring breaks and exam periods, does not overlap with Easter or Eid, and begins the day following the end of Passover. Historically, the weather during this time in April hovers between 50 and 70 degrees Fahrenheit, so it would be a beautiful time to visit Knoxville. The University of Michigan's exams would begin in the week immediately following these dates (Thursday, April 20).

Because Easter and Passover fall on an early date in 2023 and we want to respect the observance of these religious holidays, any second choice of dates would, unfortunately, overlap with at least one school's spring break. An overview of the scheduling for many universities is provided in Appendix A1. The bulk of other chapters' spring breaks falls during the week of March 13, and choosing dates of March 23-26 would likely be an inconvenience to these sections, as they would have to leave campus only a few days after returning from break. Additionally, we believe the weekend of March 9-12 should be avoided because professors often give midterm exams during the week leading up to spring break. Our second choice of dates is therefore **March 30-April 2**. It should be noted that the second preference of dates, unfortunately, overlaps with the spring breaks of Cal Berkeley, MIT, Missouri S&T, and Oregon State.

Both of these selected dates fall in a range of availability for the Hilton Knoxville. They also both coincide with the month of Ramadan, and our committee is prepared to take extra steps in planning to ensure that any attendees who would be observing this holiday are accommodated.

Scheduling Constraints

The schools listed were each considered in good standing by the SSC according to their website, as of June 21, 2021. We expect that selecting dates around these schools would offer a good idea of when most spring breaks across the country would be held.

Key:	Spring Break	Finals	Religious Holiday	First Choice of Dates	Second Choice of Dates	
March 2023						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
26	27	28	1	2	3	4
	University of Michigan					
5	6	7	8	9	10	11
	Pennsylvania State University					
	University of South Carolina					
	University of Utah					
12	13	14	15	16	17	18
	University of Florida					
	University of Idaho					
	University of Illinois					
	Purdue University					
	Iowa State University					
	University of Nevada at Las Vegas					
	University of New Mexico					
	North Carolina State University					
	The Ohio State University					
	University of Wisconsin					
19	20	21	22	23	24	25
	Colorado School of Mines					
	Georgia Institute of Technology					
	Idaho State University					
			Ramadan Begins			

26	27	28	29	30	31	1
	University of California at Berkeley					
	Massachusetts Institute of Technology					
	Missouri S&T					
	Oregon State University					
April						
2	3	4	5	6	7	8
			Passover Begins		Good Friday	
9	10	11	12	13	14	15
Easter			Passover Ends at Sunset			
16	17	18	19	20	21	22
				Ramadan Ends	Eid Al-Fitr	
				University of Michigan		
23	24	25	26	27	28	29
	University of Michigan					
			The Ohio State University			
			University of South Carolina			
				University of Utah		

Attendance Projection

The committee is expecting **450 students and 120 professionals**. As we have been living through a pandemic for quite a while now, it is difficult to pin down how many people would want to attend, and whether or not we assume that our conference would be a “normal” one or not. Because it is unknown whether people would want to travel after the long period of restrictions or remain cautious and not attend a large event such as this, the estimate of attendance follows past projections as listed below.

Attendance Contingency

Due to this being an in-person, post-pandemic ANS Student Conference, our ANS chapter would expect a greater number of attendees than usual. This has been considered in logistics decisions. In the event that the attendance registered is less than 400 people or greater than 600, the ANS conference would execute their hotel and facility contingency plans to accommodate for the change. If there is a greater number than expected, the committee has listed enough hotels to include an additional hotel in proximity to the conference. We have a variety of food options and facilities available to accommodate a greater number of attendees than projected.

The contracts that we have tentatively discussed with hotels and dining have a 20% slippage. This slippage factor is an error margin if the number of expected guests is not met. This would be beneficial if less than 400 people attended the conference. Further contingency plans can be found in Appendix C.

Past Attendance			
Year	Host	Students [Projected]	Professionals [Projected]
2021	NCSU *virtual*	466	121
2019	VCU	305 [450]	103 [100]
2018	Florida	369 [430]	79 [120]
2017	Pitt	441 [450]	127 [150]
2016	Wisconsin	438 [500]	118 [150]
2015	Texas A&M	380 [500]	87 [150]

Proposal Committee



Lance Drouet (he/him/his)
Proposal Co-Lead & Programming Chair

Lance is a senior in Nuclear Engineering with a minor in Physics and plans to pursue a master's degree in the Medical Physics program at UTK. He is involved in undergraduate research developing semiconductor detectors and radiation modeling under Dr. Lukosi. Lance currently serves as the President of the UTK student chapter of the American Nuclear Society.

Lance's responsibilities are to organize and lead student committee meetings along with the vice president. He oversees the planning of panels and workshops, technical sessions, and career fairs in the Programming Committee. Within the Programming committee, he is tasked with establishing a UT NE tour plan and compiling a list of off-campus locations of interest.



Emma Houston (she/her/hers)
Proposal Co-Lead

Emma Houston is a senior majoring in Nuclear Engineering at the University of Tennessee. She is originally from Northern VA. She works as a co-op for Southern Nuclear Company on the Vogtle 3 & 4 Project and as an undergraduate research assistant for the University of Tennessee's Institute for Nuclear Security. Her professional interests lie in nuclear forensics and counter-proliferation. Emma is the American Nuclear Society Vice President and the Women in Nuclear Vice President. She plans to get her master's at the University of Tennessee after graduation.



Katy Worrell (she/her/hers)
Logistics Chair

Katy is a junior in Nuclear Engineering, also seeking a minor in Mathematics. She recently completed her first year in a summer internship with Nuclear Fuel Services in Erwin, Tennessee, working in Nuclear Criticality Safety. This is her second year serving as secretary for the UTK ANS Student Section, and she attended the virtual ANS National Meeting in 2021. In her free time, she enjoys listening to music and anything car-related.

Katy is responsible for overseeing logistics areas including transportation, facilities, hotels, date selection, and more. She works with other chairs and directors in general conference planning to ensure all events flow together.



Sydney Copp (she/her/hers)
Communications Chair

Sydney graduated from the University of Tennessee in May 2021 with a major in nuclear engineering and a minor in materials science and engineering. Starting Fall 2021, Sydney will be starting graduate school at UTK to pursue her doctorate in nuclear materials! She is looking forward to working with the proposal committee and serving as the graduate student representative of UTK's ANS chapter this year.

Sydney is in charge of the communications committee. She helped with creating the letterhead for all of our partnership letters, contacting our ANS chapter members for support, as well as creating the merchandise and award packages for the conference. Lastly, Sydney helped to create the main outline for the Communication section of the proposal and will help with final edits and formatting.



Anthony Tom (he/him/his)
Diversity, Equity, and Inclusion Chair

Anthony came down to Knoxville to study nuclear engineering from Orange, Connecticut. He is interested in power generation, especially using micro-reactors for disaster relief and cogeneration. Outside of class, he is a member of Phi Beta Sigma Fraternity Incorporated and a member of the National Society of Black Engineers.

Anthony has written statements on diversity and inclusion at the conference. He has written about the importance of vendor's business practices and the importance of DEI when choosing panelists.



Kenneth Bott (he/him/his)
Finance Chair

Kenneth is a senior studying Nuclear Engineering. He currently works for the Navy as a Nuclear Reactor Engineer and is the treasurer for ANS. Kenneth is involved in research with Dr. Brown on HTGRs and with Dr. Sobes on nuclear cross-sections. He is also a teaching assistant for the Engineering Fundamentals department.

His role in the ANS student conference is to work with the finance committee to create the conference budget by coordinating with the other groups on their various costs.

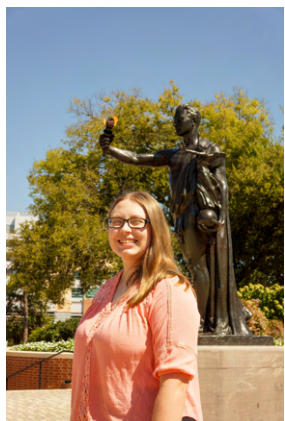


Alyssa Hayes (she/her/hers)

Logistics Committee: Hotels Coordinator and Advisor

Alyssa is a Ph.D. candidate in the NE Department here at UT, working on impurity transport simulations for magnetically confined fusion applications. She earned her B.S. in the same field from the University of Illinois in 2019. Alyssa continues to be an active member of ANS and WIN, and she aspires to become an ANS Congressional Fellow in the future.

Alyssa is the primary coordinator for hotels. She has identified and toured every hotel near possible convention center locations, and she interviewed each sales manager to collect accurate and detailed information. After conferring with the Proposal Committee on final decisions, she secured all tentative contracts with preferred and backup hotels. Building on her experience as the Lodging Coordinator for the initial UIUC proposal, and as an attendee of 3 prior ANS Student Conferences and 3 prior WIN National Conferences, Alyssa also acts as a graduate advisor for the committee.



Megan Whittle (she/her/hers)

Logistics Committee: Transportation Coordinator

Megan is a junior in Nuclear Engineering and she is pursuing a second major in Modern and Foreign lang/lit. with a Russian concentration, and a minor in concepts of cybersecurity. She is a member of SWE, WIN, and ANS, and the vice president of UTK's Vols en Pointe sports club.

Megan would book transportation to the different tour sites as well as transportation to any dinner venues and socials. She would also be coordinating transportation from the airport to the different hotels, and potentially booking a shuttle to run between the convention center and the hotels during the conference.



Edward Duchnowski (he/him/hims)

Logistics Committee: Facilities Coordinator

Edward is a nuclear engineering Ph.D. student at the University of Tennessee, Knoxville. Edward received a bachelor's degree in nuclear engineering from Penn State in 2019 and a master's degree in nuclear engineering from the University of Tennessee, Knoxville in 2020. He has been involved with ANS since 2019, attending multiple conferences to present his research on nuclear reactor design and safety.

Edward assisted with reaching out to venues in the Knoxville area for dinner events and technical workshops. He also gathered pricing information on catering.



Landry Wells (he/him/his)
Communications Committee: Marketing Coordinator

Landry is a sophomore in the nuclear engineering program at the University of Tennessee. Nuclear thermal propulsion and nuclear pharmaceuticals are his current interests in the field. He is the sophomore representative for the ANS student chapter and the treasurer of the Institute for Nuclear Materials Management student chapter at UT. Outside of the classroom Landry enjoys playing bass, longboarding, and hiking.

The online presence of the conference was mostly what he led. The conference has a website, mobile app, and social media profiles that let attendees see a live schedule, get notified about events, submit papers, and even learn more about Knoxville. Each of those items needed to be built from the ground up, so he ensured they all had helpful features and intuitive UI.



Jackson Cagle (he/him/his)
Communication Committee: Sponsorship Coordinator

Jackson Cagle is a sophomore here at UTK. He loves the promise of nuclear engineering and is so excited to be a part of something outside of pure classes. Some of Jackson's interests include playing the banjo and guitar, going on hikes, thrifting with friends, and reading high fantasy books!

As the sponsorship coordinator, his role involves the organization and communication between sponsors and the conference. His responsibilities include reaching out to sponsors and creating a framework that encourages companies to advertise and partner with our conference. Jackson's role is vital in producing revenue to fund the conference.



Dean Forrest (he/him/his)
Communication Committee: Web Developer and Technology Consultant

Dean is an undergraduate majoring in Nuclear Engineering, with a focus on nuclear security. His background consists of data analysis, proficiency in high-level programming languages like Java, Python, PHP, MATLAB, as well as experience in neutronics modeling and simulation.

Dean is developing the website templates, and potentially the backend for the ANS conference website if we are chosen. He is also assisting with the technical programming committee to provide input into the types of focus areas that attendees can upload their papers to.



James Carnal (he/him/his)
Communication Committee: Student Engagement

James is a Sophomore majoring in nuclear engineering with a minor in applied music. He is from Pennsylvania and lives west of Philadelphia. James plays the Bassoon in the UTK wind ensemble and the Saxophone in the Pride of the Southland Marching Band. Some of his other interests are bowling, skiing, and hiking.

For the ANS Proposal James is a member of the communications committee with a focus on the ANS chapter support signatures. Apart from the signatures, his responsibilities include providing support to the other members of the committee when needed.



David Anderson (he/him/his)
Communications Committee: Partnership & Media Coordinator

David is a junior studying Nuclear Engineering while participating in the Cook Grand Challenge Honors Program. David intends on pursuing his Masters in Nuclear engineering through the Accelerated M.S./B.S. program here at UTK. He is interested in utilizing advanced nuclear reactors to decarbonize our electricity sector and industrial processes.

As the Partnership Coordinator in the Communications Committee, David's primary objective is to facilitate support for the student conference. His responsibilities include compiling letters of support and signatures from UTK faculty and facilitating the headshots at the torchbearer.



Gregory T. Dye (he/him/his)
Programming Committee: Technical Tours Coordinator

Gregory Dye is a graduate student who previously worked for more than a decade in Tennessee Valley Authority Nuclear Power Group and other companies involved in the nuclear sector. He holds a Master's in Electrical Engineering and two undergraduate degrees (Electrical Engineering and Physics & Mathematics). He is registered as a professional engineer in Tennessee.

Gregory is tasked with contacting outside TVA & NRC connections for potential tours & reviewing the proposal documentation.



Tyler Steiner (he/him/his)
Programming Committee: Panels Coordinator

Tyler Steiner is a nuclear engineering Ph.D. candidate at the University of Tennessee, Knoxville. Tyler is using the In-Pile Experiment Set Apparatus (INSET) to serve two primary research functions. The first use of INSET is to provide a high temperature, subscale, steady-state, in-pile experimental testbed for nuclear thermal propulsion. Tyler is also using this high-temperature environment for computational thermal radiation heat transfer solution method verification. He received his B.S. in Nuclear Engineering with a minor in Astronomy from Penn State in 2017.

Tyler is responsible for assisting in the development of the technical program by identifying the desired technical tracks and panels.



Robert Kile (he/him/his)
Programming Committee: Technical Session Coordinator

Robert Kile is a Ph.D. student at the University of Tennessee, where he studies design and safety analysis of advanced reactors. He earned a bachelor's degree in nuclear engineering from Purdue University in 2018 and a master's degree in nuclear engineering from the University of Tennessee in 2020. In 2018 he was part of the winning team for the ANS Undergraduate Design Competition and has been involved in ANS at all levels since 2017.

On the programming committee, he helped with developing the set of tracks for the submitted papers.



Kyndal Biladeau (she/her/hers)
Programming Committee: Events Coordinator

Kyndal is a senior in the Nuclear Engineering department. She worked as an undergraduate research assistant for the University of Tennessee's Institute for Nuclear Security, in which she assisted in radiation detector design and the development of algorithms for unmanned aircraft systems. After graduating, Kyndal will obtain her master's degree in Nuclear Engineering from the University of Tennessee, Knoxville. Currently, she is the Senior Representative for UTK's American Nuclear Society chapter.

Kyndal is a part of the programming committee and is responsible for planning tours and excursions.



Emily Hutchins (she/her/hers)
Programming Committee: Events Coordinator

Emily is a nuclear engineering Ph.D. student at the University of Tennessee, Knoxville. Her research is focused on adding hydrogen flow to the In-Pile Experiment Set Apparatus (INSET), which is used as a subscale testbed for nuclear thermal propulsion materials and instrumentation. Emily earned her B.S. in Nuclear Engineering with a minor in Reliability and Maintainability from the University of Tennessee, Knoxville in 2019. She has been an active member of the UTK student section of ANS since her freshman year in 2015.

Emily is part of the programming committee. She assists in choosing and planning both on-campus and off-campus tours.



Annie Berens (she/her/hers)
Programming Committee: Career Fair Coordinator

Annie Berens is a senior majoring in nuclear engineering with a minor in materials science and engineering from Shakopee, Minnesota. In the past, Annie has interned at both the NRC and Framatome, and currently works in the Fuels Lab, and with the Engineering Fundamentals department. Outside of ANS, Annie also serves as the President of Women in Nuclear and Industry Chair for Tau Beta Pi.

As the Career Fair Coordinator, Annie's primary responsibility is recruiting employers and universities to attend the career fair.



Thomas Ensley (he/him/his)
Finance Committee: Banking Coordinator

Thomas is a sophomore studying Nuclear Engineering. In his free time, he enjoys doing just about anything outdoors, especially hiking, fly fishing, and camping. Thomas also enjoys playing soccer, tennis, and swimming.

He is a member of the Finance Committee. This committee is responsible for drafting a comprehensive budget for the proposal. In addition, banking and financial responsibility factors would be addressed and proposed.



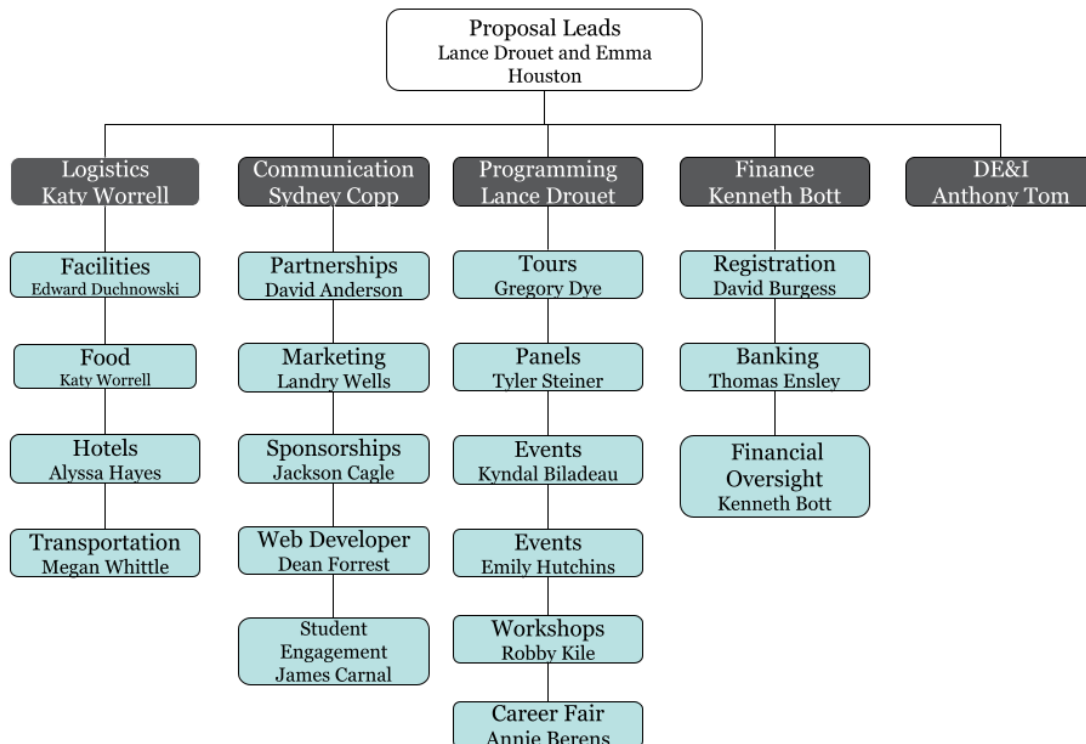
David Burgess (he/him/his)
Finance Committee: Registration Coordinator

David is a senior studying Nuclear Engineering. He is currently researching fission gas bubble evolution. David currently serves as the Webmaster of the UTK student chapter of the American Nuclear Society.

His role in the ANS student conference is to work with the finance committee to draft and finalize the budget with revenue and attendance projections.

Responsibilities

Below is the organizational chart for conference proposal planning. This would be the same structure utilized for the conference committee if the UTK ANS student chapter is awarded the conference. These committees were carefully selected based on their responsibilities, and the roles of each have been listed below.



Logistics

The Logistics Committee is responsible for all logistical details of the conference, from the broad scope of selecting a venue, all the way down to constructing a minute-by-minute plan for the weekend. The Facilities Coordinator worked with the Student Union event services team to ensure that the Student Union has adequate space and resources to provide for the conference. This individual also looked at possible dinner venues that would be capable of hosting the large group we would have. The Hotels Coordinator worked with many hotels in the Knoxville area to devise how we should host each attendee to best fit their needs, as well as working to plan all of the other events we have envisioned at the Hilton. The Transportation Coordinator worked with a handful of transportation companies in the area to ensure there is sufficient transportation offered between the airport, hotels, conference events, tours, and more. Finally, the Logistics Chair oversaw and assisted with all of these efforts, as well as led the date selection and attendance projection processes.

Communication

The Communication Committee is in charge of organizing outreach efforts to obtain partnerships and sponsorships, as well as promoting the conference through social media; and organizing merchandise, student awards, and speaker gifts. The Partnership Coordinator reached out to members of the UTK system to ask for letters of support to host the 2023 conference at UTK. They also reached out to student members of our ANS chapter for their signatures of support, as well as to faculty in our department. The Marketing Coordinator helped to design both the website and the app to advertise the conference as well as to keep the agenda of the conference organized and accessible. Lastly, the Sponsorship Coordinator organized the sponsorship tiers and would be the point of contact with potential sponsors when the time comes.

Programming

The Programming Committee oversees the technical experiences of the conference, organizing tours, technical sessions, panels, speakers, local activities, and the career fair. The Technical Session Coordinator formulated the technical tracks and posters sessions for the program. The Panels Coordinator compiled panels and developed the technical tracks for each session. The Technical Tours Coordinator served as the connection between the proposal committee and the nuclear industry. The Events Coordinators collaborated to organize tours of nuclear facilities and local Knoxville excursions. The Career Fair Coordinator provided professional development opportunities by collaborating with the Engineering Professional Practice Office to plan the career fair.

Finance

The Finance Committee is in charge of overseeing the budget and keeping records of any purchases made for the proposal. The Registration Coordinator is in charge of tracking registration income and discussing registration estimates with other committees to determine the projected cost and budget. The Finance Committee also coordinated with the Communication Committee to find the number of sponsors and the revenue from these sponsorships. The Finance Director was responsible for reaching out to the Communication and Logistics Committees to receive these numbers.

Diversity, Equity, and Inclusion

This representative ensured that the values of diversity, equity, and inclusion are ingrained throughout the conference. While all members of the conference committee are expected to keep these values at the forefront of their decisions, this representative would be an additional, dedicated advocate on all matters, from speaker selection, to facilities, to financial aid, and everything in-between. This representative would work closely with university faculty dedicated to diversity, equity, and inclusion and their impact on student organizations.

For example, this representative would be involved in the selection process for panelists, workshop leads, and speakers. Additionally, they have worked with the registration and selection committee to create need-based scholarships that ensure we provide equitable opportunities to attend the conference. In the proposal, this representative has helped steer us away from inadvertently selecting locations that have previously been a plantation or choosing vendors that do not represent the values of the American Nuclear Society, the University of Tennessee, or our student chapter.

Decision Making Process

Our chapter anticipates having to make difficult and frequent decisions if we are to be awarded the conference. While writing the proposal, our chapter has considered diversity, equity, and inclusion requirements; financial impacts; and how these decisions impact all committees. In this way, clear communication on decisions is crucial and would continue to be emphasized to ensure that all committees are aware of crucial decisions, should we be awarded the conference. These decisions would be discussed during weekly meetings. During proposal weekly meetings, each committee would share updates, open questions, and needs from other committees. We used an action items register to keep track of this information. We would continue to do so if we are awarded the conference.

Additionally, the decision-making process would utilize a vote when at all possible. Our meetings would use the officer meeting and general body meeting structure which consists of frequent voting and discussion. At any point, members can motion to vote on topics. Decisions of contention would be escalated and use conference lead and committee chair input.

Conflict Resolution

If a member is conducting their duties in a way that is no longer conducive to the planning of the event, a document regarding the handling of the situation has been written by the officers. If it is felt that a member of the committee needs to be removed from their position, a series of actions should be taken. The reason for removal should be presented to the chairs and appropriate department faculty by the member(s) that feel it is necessary. If the case is then recognized by those individuals, it would be brought before the entire planning committee. A replacement member must be identified, and the removal vote must pass by a $\frac{2}{3}$ majority, as well as being approved by the faculty advisor.

When a member of the committee leaves due to graduation or otherwise, there is a procedure to replace that member. If the member holds a high position, someone else in their committee may step up to resume their responsibilities. If the position is a member of a committee, the ANS student section would be consulted to ask for volunteers. The position should be filled based on availability, previous

involvement, and faculty recommendation. The chair overseeing the position should offer guidance to the new member to help them get acquainted with the planning effort.

To replace a chair of the committee, a similar process to these would be followed. Members of the committee would first have the opportunity to step up, followed by members of the ANS student chapter. Voting should take place, with the prospect of the highest number of votes moving on to approval by the faculty advisor. A new chair can seek help from the members of their committee to get accustomed to their new role.

Committee Transitions

Currently, there is a committee responsible for the creation of this proposal. These members, shown above, are members of the student chapter of the American Nuclear Society at the University of Tennessee. These members are also leaders in other student organizations on campus as well. Many of these members, however, are seniors or graduate students. Therefore, careful consideration has been taken to ensure that we have developed leaders within our organization that can hold leadership positions should our chapter be awarded the conference.

First, we have placed underclassman undergraduate students in each of the committees to ensure there is someone to transfer knowledge from each committee when the chairs of this proposal graduate. Additionally, a Google Drive of information is being used to ensure that all documentation of plans, partnerships, and communications with outside organizations is kept in one centralized location. As a part of the turnover process, the new chairs would be required to read through all of the documentation left behind by the chair of the corresponding committee. Lastly, turnover meetings would be utilized, before the graduation of the proposal committee chair.

Staffing Requirements

The American Nuclear Society chapter has over 50 active members that would be highly encouraged to volunteer at these events and work to help run the conference. Volunteers would be utilized to run panels, guide guests, work with vendors, and much more throughout the conference. Each conference committee is responsible for staffing events as described in the scheduling table below. The nuclear engineering department would also accept volunteers from our Women in Nuclear Chapter, Health Physics Society Chapter, and Institute for Nuclear Materials Management Chapter. These students would receive volunteer hours through the university for their participation in our conference. For the career fair, the College's Office of Professional Practice has volunteers that are well suited for events of this type.

Scheduling Table

Below is a table estimating the staff required for many of the events planned for the weekend. This does not include volunteers needed for setup or takedown of the events throughout each day. Some of these services would be covered by facilities employees at the Hilton or Student Union, but we would have additional volunteers on hand each day to ensure all needs can be met should anything come up. The table also includes a designation of whether each staffing number is in total or in individuals per shift, as some of these tasks would be going throughout the day and would be split into two or three shifts.

Task	Location	Estimated Staff	Per Shift	Total	Committee Responsible
Thursday					
Greeting	McGhee-Tyson Airport	2	X		Logistics
Registration	Hilton Knoxville	4	X		Finance
Tours and Excursions	Knoxville Area	30		X	Programming
Wellness Events	Hilton Knoxville	3	X		Programming
Dinner	Hilton Hotel	10		X	Logistics
Social	Zeanah Engineering Complex	15		X	Communications
Friday					
Registration	Student Union	3	X		Finance
Breakfast/Plenary	Hilton Knoxville	4		X	Logistics
Workshops/Panels	Student Union	3	X		Programming
Career Fair	Student Union Ballroom	4	X		Programming
Headshots	Student Union Room 260	1	X		Communications
Dinner	Dolly Parton's Stampede	10		X	Logistics
Social	Hilton Suwanee	1		X	Logistics
Saturday					
Breakfast/Plenary	Hilton Knoxville	4		X	Logistics
Workshops/Panels	Student Union	3	X		Programming
SSC Meeting	Student Union Room 169	1		X	Programming
Poster Session	Student Union Ballroom	2	X		Programming
Employer Interviews	Student Union Ballroom	2	X		Programming
Dinner/Awards	World's Fair Park	10		X	Logistics
Social	Picture a Scientist	4		X	Communications
Social	Old City Carousel	15		X	Communications
Social	Hilton Suwanee	1		X	Logistics

Preliminary Program

We've taken a good look at Knoxville and the surrounding area, as well as examined our theme and what it means to us, and feel we have developed a thorough program that would keep students engaged without being overwhelming. The technical and non-technical programs are laid out in-depth in this proposal, and an overview of what each day would hold is shown below. A room-specific schedule can also be found in Appendix A2.

Following tradition, several off-site tours would be offered throughout the day on Thursday, as well as a couple of activities on campus for those not attending the tours. Friday and Saturday are filled with career growth opportunities, technical sessions, panels, workshops, and more. At the recommendation of the SSC, we have been careful not to schedule too many panels in conjunction with one another. Panels that are expected to draw many listeners have been allotted extra meeting space.

Appendix A2 also shows that we have planned space for multiple lounge areas and a quiet space. The quiet space, in particular, would be available throughout the day. Large crowds such as the ones expected during this conference can become overwhelming for many of us. Conference guests observing Ramadan are welcome to use this space for prayer.

	Thursday			Friday			Saturday		
7:00 AM	Registration	Tours	Wellness Events	Breakfast/Plenary			Breakfast/Plenary		
8:00 AM									
9:00 AM									
10:00 AM				Workshops, Technical Sessions, Panels	Career Fair		Workshops, Technical Sessions, Panels	Employer Interviews	Poster Session
11:00 AM						Headshots			
12:00 PM									
1:00 PM									
2:00 PM									
3:00 PM									
4:00 PM									
5:00 PM									
6:00 PM	Dinner			Dinner			Dinner		
7:00 PM									
8:00 PM	Social @ Zeanah Engineering Complex			Social			Social		
9:00 PM									
10:00 PM									

Speakers

DE&I Requirements

The nuclear industry has relied on the principles of diversity, equity, and inclusion for the better part of a century. Eisenhower's *Atoms for Peace* speech in 1953 petitioned those present at the United Nation to harness the power of the atom for peaceful purposes. Since then, the nuclear industry has become a truly global one. Besides electricity production seen widely in North America, Asia, and Europe, the applications of nuclear power are seen around the world in places like Ghana's research reactors and Colombia's industrial sector. The amazing effects of diversity and inclusion can be seen half an hour to our west in Oak Ridge where the Manhattan project relied on immigrants' global expertise to succeed. We chose to extend these principles to our keynote speaker selection by selecting speakers that represent a diverse range of experiences, fields, and identities.

Potential Candidates



Katy Huff, Acting Assistant Secretary and Principal Deputy Assistant Secretary for the Office of Nuclear Energy

Before her current role, Dr. Kathryn D. Huff was an Assistant Professor in the Department of Nuclear, Plasma, and Radiological Engineering and a Blue Waters Assistant Professor with the National Center for Supercomputing Applications at the University of Illinois at Urbana-Champaign. She was previously a Postdoctoral Fellow with both the Nuclear Science and Security Consortium and the Berkeley Institute for Data Science at the University of California - Berkeley. As a Ph.D. student, she helped to reimagine the GENIUSv2 fuel cycle simulator and became the primary developer of the Cyclus simulator in its initial phase. In addition, she collaborated with the Systems Analysis group at Idaho National Laboratory to develop the Fuel Cycle Simulator Software Requirements that defined the goals and expectations for the Next Generation Fuel Cycle Simulator. She received her Ph.D. in Nuclear Engineering from the University of Wisconsin-Madison in August 2013 as a student of Professor Paul P.H. Wilson. Her undergraduate degree was in Physics from the University of Chicago. She is particularly interested in robust modeling and simulation of advanced reactors emphasizing scientific software engineering best practices.



Kathryn McCarthy, Associate Laboratory Director for Fusion and Fission Energy and Science

Kathy McCarthy, Associate Laboratory Director for the Fusion and Fission Energy and Science Directorate, joined the Oak Ridge National Laboratory (ORNL) after three years as Vice President for Science and Technology and Laboratory Director for the Canadian Nuclear Laboratories, where she oversaw a staff of 650 and grew the labs' commercial work. She previously held a variety of engineering and leadership roles at Idaho National Laboratory (INL), including Director of Domestic Programs in INL's Nuclear Science and Technology Directorate, Director of the Light Water Reactor Sustainability Program Technical Integration Office, and National Technical Director for the Systems Analysis Campaign for DOE Office of Nuclear Energy's Fuel Cycle R&D Program.



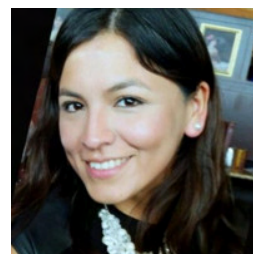
Lisa M. Marshall Bedward, Director of the Outreach, Retention & Engagement Program|Lecturer|Adviser

Lisa Marshall is the founding director of NC State Nuclear Engineering Outreach, Retention & Engagement Program and is responsible for pre-college through graduate-level initiatives. She teaches 2 first-year courses – Introduction to Engineering & Problem Solving as well as Engineering in the 21st Century. And she has developed and teaches an upper-level Energy Geographies course. She is a scholarship/fellowship reviewer at the national through department level as well as the departmental alumni relations and global student experiences lead. Ms. Marshall's research work is in the areas of energy geography, (nuclear) engineering education, (inter)national co-curricular scholarship, geographic information systems (GIS), as well as STEM education for women and underserved populations. She is the recipient of the 2020 ANS Young Members Advancement Award, 2020 NC State Engineering Champion for Women Award, 2019 NC State Outstanding Engagement Award, 2009 ANS Landis Public Communications & Education Award, and was inducted into Sigma Xi, a scientific research society. She currently holds executive positions in the American Nuclear Society (ANS), the American Society of Engineering Education (ASEE) & the American Association of Geographers (AAG).



Julie G Ezold, RadioIsotope Production & Operations Section Head

Ms. Ezold has over 25 years of experience in the nuclear sciences and is currently the Radioisotope Production and Operations Section Head. She is responsible for managing the Bethel Valley Radiochemical Processing, Melton Valley Radiochemical Processing, and the Technical Services, Finishing, and Dispensing Groups that form the section. This section has responsibility for performing and optimizing the production of all radioisotopes that are in a continuing and sustained state of demand and production beyond the research and development phases. Previously, Ms. Ezold was the Californium-252 Program Manager and was responsible for the technical aspects as well as the program management activities of each curium target campaign. Typical campaign activities include target fabrication, target approval for insertion into the High Flux Isotope Reactor, chemical processing of irradiated targets, and final source fabrication. Campaign products include, but are not limited to Californium-252, Berkelium-249, Einsteinium-253, and other trans-curium products. These trans-curium products have recently been used in the discovery of a new element, Tennessine (Element 117). In addition to her responsibilities as the Californium Program Manager, Ms. Ezold was responsible for planning and overseeing nuclear material processing R&D work safely and effectively for other nuclear isotopes such as Nickel-63, Selenium-75, Iridium-192, and Neptunium-237.



Shirley Rodriguez, Lead Mechanical Systems Engineer at GE Hitachi

Shirley Rodriguez is currently the Lead Mechanical Systems Engineer for GE Hitachi Nuclear Energy. Despite not having a place to pursue her passion in nuclear engineering in her native Peru, she found herself at the University of Florida where obtained a Master's in nuclear engineering. At GE Hitachi, she supports the Versatile Test Reactor and power plants in the American nuclear fleet. She also works with the development of small modular reactors such as the Sodium and BWRX-300 reactors. Currently, she serves as the Co-Vice Chair of the Diversity and Inclusion Committee at ANS.



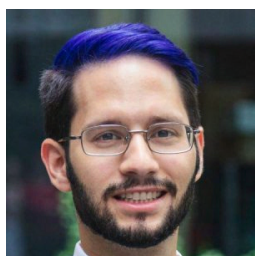
Travis Tate, Chief, Division of Advanced Reactors and Non-power Productions and Utilization Factors

Travis Tate is currently a branch chief at NRC since 2016. Previously, he served in supervisory positions in NRR, including branch chief in the Division of Operating Reactor Licensing (DORL) 2013-16; chief of the Accident Dose Branch, Division of Risk Assessment 2009-13; and chief of the Program Operations Branch, Division of License Renewal, 2008-09. He joined the NRC in 2001 as an NRR Project Manager (PM) and served until 2006. He became a technical assistant (TA) in the Division of Component Integrity, NRR, in 2005 and he was TA to the Associate Director for Engineering and Safety Systems, NRR, in 2006. Before joining the NRC, Travis was a staff nuclear engineer with Science Applications International Corporation in Oak Ridge, where he provided nuclear facility safety, transportation package safety, and nuclear criticality safety analysis support for U.S. DOE facilities. Mr. Tate was selected to the NRC Leadership Potential Program class of 2009 and received the Meritorious Service Award for EEO Excellence in 2012. He received his B.S. in Nuclear Engineering from UT in 1992.



Edward Blandford, CTO and Co-Founder of Kairos

Dr. Edward Blandford is a Co-Founder & Chief Technology Officer of Kairos Power. He is responsible for technology development, experimental testing, modeling and simulation, as well as fuels and materials activities at Kairos Power. Before co-founding Kairos Power, he was at the University of New Mexico where he was an assistant professor in the Department of Nuclear Engineering. Dr. Blandford was also a Stanton Nuclear Security Fellow at the Center for International Security and Cooperation at Stanford University. He also worked for several years as a project manager at the Electric Power Research Institute focusing on steam generator thermal-hydraulics and material degradation management. Dr. Blandford has a B.S. in Mechanical Engineering from UCLA and an M.S. and Ph.D. in Nuclear Engineering from UC, Berkeley.



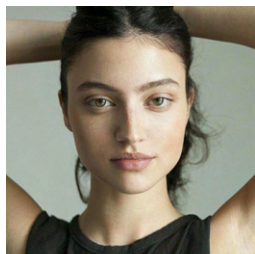
Lane Carasik, Virginia Commonwealth University Professor

Lane Carasik is an associate professor at VCU in the Department of Mechanical and Nuclear Engineering. He is the Director of the Fluids in Advanced Systems and Technology (FAST) research group, which focuses on computational and experimental thermal hydraulics for the development of advanced energy systems. Dr. Carasik is a Vol for Life, graduating from the University of Tennessee in 2012. He also received the American Society of Mechanical Engineers Lewis F. Moody Award in 2020 for his work with elliptical tube heat exchangers. He currently Chairs the Diversity and Inclusion Committee at ANS.



Cavanaugh Mims, Founder and President of Visionary Solutions

A University of Tennessee alumnus who founded Visionary Solutions, LLC. The company has grown into a group to include a collection of five companies that work in the fields of nuclear material deposition, transportation and logistics, and environmental services. All this was accomplished with just a bachelor's which shows the success one can have in this field without a decade of secondary education. He also retains relations with the University of Tennessee to this day.



Isabelle Boemeke, Nuclear Advocate and Social Influencer

Isabelle Boemeke is a nuclear advocate, model, and social media influencer. She uses her platform on various social media accounts to educate her audience about nuclear power and climate change, with behind-the-scenes help from other experts in the field. She created the character, i_sodope, to stand out as an influencer and intrigue younger followers. Now, her educational videos about nuclear energy have garnered over 500,000 views on Tiktok alone. The 2021 Nuclear Innovation Bootcamp recently featured Ms. Boemeke for a keynote workshop, entitled, “How to Win Trends and Influence People.” Isabelle is modernizing the way we talk about nuclear energy in online spaces and she is Passing the Torch to new generations of environmentalists.

Panels

A list of potential panelists has been prepared to expedite the future execution of securing speakers for the panels. This list has been kept internal due to the fluidity and uncertainty surrounding the timeline and approval of this conference bid. Once the University of Tennessee is awarded the bid, these potential panelists would be contacted to inquire about participating. There are about six potential candidates identified per panel, with the expectation that not all candidates may be available.

Diversity, Equity, and Inclusion

Diversity, equity, and inclusion have recently become buzzwords, but remain so much more than that. With the rising generation of new nuclear engineers, it is of extreme importance that when the Torch is Passed, these pillars are implemented in the new era.

This panel would discuss what steps the nuclear field is taking to become more diverse, offer more equity, and be more inclusive. The impacts of these ideas would also be discussed as they pertain to the field of nuclear engineering.

Potential Panelists

- | | | |
|-------------------------|----------|------------------|
| • Lisa Marshall Bedward | she/her | NC State |
| • Cathleen Fry | she/they | LANL |
| • Kalin Kiesling | she/her | UW |
| • Nicholas Brabson | he/him | Southern Company |
| • Kristy Spencer | she/her | INL |
| • Lane Carasik | he/him | VCU |
| • Shirley Rodriguez | she/her | GE Hitachi |

Research and Test Reactors

The future of nuclear engineering is enabled by the agility, breadth, and availability of research and test reactors. As we Pass the Torch to the next generation of nuclear workers, research and test reactors are essential to advancing the next generation of nuclear power. Research reactors, such as those at universities, do not only educate rising nuclear engineers. They also support technical investigations at the forefront of various nuclear fields. Test reactors, such as the High Flux Isotope Reactor (HFIR), the Transient Reactor Test (TREAT) Facility, and the Fluoride Salt-Cooled, High-Temperature Reactor (KP-FHR) complement smaller research reactors by providing a broader scope of testing capabilities.

This panel seeks to provide a discussion that would offer insight into the various roles and capabilities of modern research and test reactors. Experts from different facilities would weigh in on the potential each respective reactor offers.

Potential Panelists

- | | |
|-----------------------|--------|
| • Lou Qualls | ORNL |
| • Richard Howard | INL |
| • Julie Ezold | ORNL |
| • J. Wesley Hines | UTK |
| • Lou Martinez Sancho | Kairos |
| • Livia Casali | UTK |

Nuclear Policy

Policy is vital to the success of nearly every scientific endeavor and often dictates the direction fields move in – nuclear engineering is no exception. Policy sets the stage for what work would be done in the coming years. It also determines how projects and missions conclude. The influence policy has on the ending of work as well as the beginning of it, makes a panel on nuclear policy a great fit for the Passing the Torch theme.

This panel would offer a discussion on how nuclear policy is made by showcasing the motivation behind decisions made by policymakers. We would be hearing from various offices and departments within the United States Government to glimpse into the realm of policymaking.

Potential Panelists

- | | |
|---------------------------------|--|
| • Susannah Howieson | DoE-NE Office of Science |
| • Kimberly Petry | DoE-NE Office of Integrated Waste Mgmt. |
| • Tom Sowinski | Doe-NE Office of Nuclear Reactor Deployment |
| • Aaron Miles | White House Office of Science & Tech. Policy |
| • Jessica Lovering | Good Energy Collective |
| • Chris Griffin or Aaron Thiele | Energy Aide for Senator Murkowski (AK) |
| • TBD | 2022 or 2023 ANS Congressional Fellow |

Innovation and Entrepreneurship

There are several sectors in the nuclear industry that benefit from the work done by entrepreneurs and start-ups. Such sectors include, but are not limited to, space-nuclear projects, fusion reactors, thorium reactors, and small modular reactors. Innovation and entrepreneurship are plentiful in the nuclear industry and would continue to be as the Torch is Passed.

This panel would bring together employees from smaller companies of various sizes and backgrounds. The goal of this panel is to generate a discussion surrounding the work performed by these companies and how they can secure funding, build a team, and find their place in their respective sector to accomplish this work.

Potential Panelists

• Christine King	GAIN	Nuclear Innovations
• Paolo Venneri	USNC	Space Nuclear
• Bob Mumgaard	Commonwealth Fusion Systems	Fusion
• Kirk Sorensen	Flibe Energy	Thorium Reactors
• TBD	TerraPower	Nuclear Innovations
• H.M. Hashemian	AMS	I&C
• Tracy Radel	SHINE	Medical Isotopes and Fusion

Navigating Nuclear's Future

The nuclear industry is changing and navigating its future is daunting. This panel is intended for industry leaders with large-scale projects ahead, to give insight into the changes we should anticipate in the nuclear industry. These panelists were chosen based on their pioneerism in nuclear energy during the 21st century. They would share their experiences, what new nuclear professionals should look for while entering the job market, and their expertise on where they think the future of nuclear power is headed.

Potential Panelists

• Dan Ingersole	NuScale	SMRs
• Russel Daniel	Bechtel	Nuclear Construction
• Travis Tate	NRC	Advanced Reactors Regulations
• Mark Santschi	Sargent & Lundy	Nuclear Modernization
• Edward Blanford	Kairos	Advanced Reactor Technology

Workshops

Professional Development

A Critical Perspective on Inclusive Leadership Skills

Dorian McCoy, UTK

This interactive workshop focuses on leadership skills that promote social justice and inclusivity. Both social justice and inclusivity would be defined and participants would engage in dialogue that promotes the development of socially just leaders committed to inclusive leadership. Leadership that leads from an asset-based perspective (and not a deficit perspective).

Nuclear in Every Classroom

ANS Communications and Outreach

One of the first steps to Passing the Torch to the next generation of engineers and scientists is by igniting their interest in nuclear energy. This workshop would focus on the importance of outreach to young scientists and engineers and promoting nuclear science in general. We would focus on K-12 teachers and students, undecided students at the undergraduate and graduate level, and the general public as target audiences. We would cover common outreach ideas, methods of classroom interaction, hands-on experiment ideas, and potential conversation starters.

Resume Building

UTK Center for Career Development and the Engineering Professional Practice (EPP)

The American Nuclear Society chapter at UTK has recently collaborated with the EPP office to bring a resume workshop to our members. Now, the chapter wants to bring these resources to other ANS chapters across the country. This would be an interactive session where students can actively work on their resume/CV and receive feedback. This workshop would focus on how to make your resume applicable to the nuclear industry. Recruiters would share the dos and don'ts of resumes and how to make your resume stand out.

Connecting on LinkedIn

UTK Engineering Professional Practice (EPP)

Networking is a key way to find new opportunities in the nuclear industry. Making new connections and leveraging current connections can be challenging and requires practice and skill. This workshop would teach students crucial skills to improve their networking abilities. Some of these skills include creating a brand for yourself, being an active listener, and using apps like LinkedIn. A combination of these skills would improve students' chances of landing a job or advancing in their careers. Students would leave this workshop with the tools to build their network.

Technical Workshops

OpenMC Workshop

This workshop would be focused on an interactive training session for introductory modeling with OpenMC. The effort would engage OpenMC developers and modelers to the extent possible to lead an introductory training workshop. Because the code is open-source, all potential attendees can participate interactively without export control concerns.

High-Performance Computing and Modeling

This workshop would focus on the evolution of High-Performance Computing (HPC), its enabling capabilities in artificial intelligence (AI), and its effects on nuclear applications. Topics would include advances in HPC, challenges in the hardware-software ecosystem, and strategies entering the Exascale supercomputing era. This workshop would highlight the multi-disciplinary synergy between engineering, applications in domain sciences, scientific computing, and computational science concerning nuclear needs.

Instrumentation and Controls, Machine learning

The current fleet of nuclear power plants is moving from legacy analog instrumentation and controls (I&C) systems to digital systems. The future fleet, including Gen III/III+, SMRs, and advanced reactors, would employ largely digital systems. Digital I&C systems introduce new opportunities to employ enhanced data analytics for process and equipment monitoring, greater situational awareness, and optimized operations and maintenance planning; however, these systems also introduce additional regulatory burdens. This workshop could focus on the implementation of digital I&C systems and the additional opportunities they provide. An introduction to machine learning would be given with a particular focus on applications in the nuclear industry.

Reactor Safety / Human Factors

Human factors engineering and human-machine interface (HMI) have emerged as key technologies, particularly for small modular and micro-reactors where multiple units would be monitored through a single control panel interface. Researchers at Idaho National Laboratory explore new concepts for HMI that support multi-unit operation and advanced operator support systems. This workshop may highlight the current research and developments in HMI and human factors, implementation of advanced HMI technologies at existing and planned plants (e.g., TVA or Southern Nuclear Company), and regulatory considerations.

Advocacy and Outreach

Leadership in Grassroots Atomic Advocacy

Eric Meyer, Generation Atomic

We know that the world needs nuclear power to ensure energy access and address climate change. Whether it's through defending existing reactors from early closures or laying the groundwork for the reactors of tomorrow, it doesn't happen by itself, overnight, or with the efforts of a single person. In this session, attendees would get a grounding in how to build a campaign around their issues of interest, including how to build a team, develop a strategy, and deploy effective tactics to win a better world for the future.

Letters to the Editor

Jim Hopf, Generation Atomic

As nuclear professionals, we have a responsibility to speak factually about nuclear power. In the coming years, the nuclear community must be advocates for nuclear power. One way we can do this is to write "Letters to the Editor" (LTEs) or publish an opinion piece in a local newspaper. This workshop would focus on how to effectively communicate technical concepts with a less technical audience. It would also help attendees find LTE opportunities and maximize their chances of getting their LTE published. This workshop would teach young professionals how to represent ideas clearly and concisely in writing, represent the industry, and champion nuclear power.

Keep your Torch Burning

Work-Life Balance

UTK Center for Health Education and Wellness

Striking the right balance between work and home can be hard, and has become increasingly difficult with the accessibility of work and more things are done virtually. This workshop would focus on self-reflection of our time allocation, managing expectations, and identifying ways we can be more successful at home and work. This workshop would dive into signs of poor balance, like burnout, stress, and absenteeism. It would cover time management skills such as the urgent/importance matrix and the 80/20 rule.

Mindfulness and Navigating Stress

UTK Center for Health Education and Wellness

Stress is the body's response to a demand or challenge when we feel overloaded and are struggling to cope with the pressures placed upon us. Common stress triggers are perceived obstacles to achieving goals, a change in environment, and life transitions. Some stressors can be positive and motivate you with an extra burst of adrenaline needed to finish a final paper or perform well in sports. However, too much stress can be negative and may go unnoticed until a physical or emotional side effect presents itself.

We must recognize the physical and psychological warning signs of stress to manage and maintain stress at relatively healthy levels. This workshop would provide tools to recognize and manage stress, specific techniques for stress management, and tips to be more successful without sacrificing health.

Technical Program

The technical program would consist of presentations from students who have submitted papers for review according to the ANS Transactions template. Students would have the opportunity to select a submission category under which they want their paper to be considered. Papers would be reviewed by graduate students or by experts in the industry, academia, or national laboratories when graduate student reviewers lack the necessary expertise. After review, papers would be sent back to the authors with comments and suggestions. Presentations should be 15 minutes in length with up to 5 minutes for questions and answers at the end (for a total of 20 minutes).

Submission Tracks

We have developed a set of 14 submission categories which are grouped into 3 major tracks. The goal of classifying specific categories into broader tracks is to help more junior students select categories for their research or to select sessions they would like to attend based on their technical interests. These broad tracks also provide a path for easing planning. Sessions in the same track can be held in geographic proximity to one another and use some of the same volunteers. The major tracks and categories within them can be seen in the table below. Estimates of the number of technical sessions in each category are indicated in parentheses. Each technical session would have enough time for 5 students to present.

Technical Program Summary		
Power Reactor Track	Radiological Science Track	Advancing Future Technologies Track
Reactor Physics (1)	Radiation Protection and Medical Physics (2)	Advocacy, Politics, and Policy (1)
Nuclear Fuels and Materials (3)	Isotope Production (1)	Computational Methods, Artificial Intelligence, and Machine Learning (2)
Thermal Hydraulics (2)	Radiation Detection, Imaging, and Security (2)	Fusion and Plasma Physics (2)
Instrumentation, Control Systems, and Cybersecurity (2)	Criticality Safety (1)	Space Nuclear Power and Propulsion (1)
Fuel Cycles, Waste Management, and Nonproliferation (2)		
Power Reactor Operations, Safety, and Reliability (1)		

We developed the specific categories by examining the UT Nuclear Engineering research focus areas (advanced modeling and simulation, nuclear fusion technology, nuclear instrumentation and control, reliability, and safety, nuclear reactor fuels and materials, radiation detection and measurement, and radiological science and health physics), ANS professional divisions, and sessions from previous ANS Annual Meetings and Student Conferences.

Technical Divisions

The partitioning of the 14 technical submission categories was inspired by the ANS professional divisions.

Reactor Physics

The Reactor Physics category closely aligns with the Reactor Physics ANS professional division. Submissions to this category would pertain to research in areas such as, “nuclear data, particle interactions and transport, reactor and nuclear systems analysis, methods, design, validation, and operating experience and standards.”

Nuclear Fuels and Materials

The Nuclear Fuels and Materials category would encompass work on the development of nuclear fuels and materials for a variety of interests. One such interest is the fuel fabrication aspect of the Fuel Cycle & Waste management ANS professional division. The Materials Science & Technology division also shares common goals with the work being performed that would be relevant to this technical category.

Thermal Hydraulics

The Thermal Hydraulics category seeks work that advances the fields of heat transfer and fluid mechanics as it relates to nuclear energy. The goals of this category are to reflect those of the Thermal Hydraulics ANS professional division.

Instrumentation, Control Systems, and Cyber Security

The Instrumentation, Control Systems, and Cybersecurity overlaps with interests across multiple ANS professional divisions. Instrumentation, control, and cybersecurity are essential for many fields such as those related to the Aerospace Nuclear Science & Technology, Operations and Power, and the Human Factors, Instrumentation & Controls professional divisions.

Fuel Cycles, Waste Management, and Nonproliferation

The Fuel Cycles, Waste Management, and Nonproliferation category also shares interests with multiple ANS professional divisions. This category seeks work aligned with the goals of the Fuel Cycle & Waste Management, Decommissioning & Environmental Sciences, and the Nuclear Nonproliferation Policy professional divisions. This category seeks to portray the life cycle of nuclear fuel.

Power Reactor Operations, Safety, and Reliability

The Power Reactor Operations, Safety, and Reliability category would accept work related to the longevity and safe operation of nuclear sites. The goals of this category are shared by the goals defined by Nuclear Installations Safety, Operations & Power, and the Human Factors, Instrumentation & Controls ANS professional divisions.

Radiation Protection and Medical Physics

The Radiation Protection and Medical Physics category overlaps with the missions of the Accelerator Applications, Isotopes & Radiation, and Radiation Protection & Shielding ANS professional divisions. This category would offer opportunities for work related to the radiological sciences for the safe use and implementation of nuclear sources in and beyond medical physics.

Isotope Production

The Isotope Production category would primarily follow the goals of the Isotopes & Radiation ANS professional division. As stated by the Isotopes & Radiation ANS professional division, the goal of this category is to capture work related to, “applying nuclear science and engineering technologies involving isotopes, radiation applications, and associated equipment in scientific research, development, and industrial processes.” The Isotope Production category may also accept work related to the Accelerator Applications professional division.

Radiation Detections, Imaging, and Security

The Radiation Detection, Imaging, and Security category seeks to collect work related to advancements in detector technology and radiation imaging techniques as it may pertain to nuclear security. This category shares interests with the Accelerator Applications, Isotopes & Radiation, and Radiation Protection & Shielding ANS professional divisions.

Criticality Safety

The Criticality Safety category is strongly aligned with the Nuclear Criticality Safety ANS professional division. Work in this area relates to advances in the safe and controlled handling and storage of fissionable material.

Advocacy, Politics, and Policy

The Advocacy, Politics, and Policy technical category would present work focused on the politics surrounding nuclear interests. Policy can play a role in every nuclear field, such as those related to the Aerospace Nuclear Science & Technology or the Decommissioning & Environmental Sciences ANS professional divisions. As captured by the Nuclear Nonproliferation Policy professional division, this category is primarily concerned with the peaceful use and development of nuclear technology.

Computations Methods, Artificial Intelligence, and Machine Learning

The Computational Methods, Artificial Intelligence, and Machine Learning category follows the criteria established by the Mathematics & Computation ANS professional division - the advancement of computational methods for nuclear fields. This category also encompasses artificial intelligence and machine learning as they pertain to nuclear uses, topics commonly covered by the Human Factors, Instrumentation, and Control Division.

Fusion and Plasma Physics

The Fusion and Plasma Physics category would present work from various disciplines as it relates to fusion energy and plasma physics. This category aligns with the Fusion Energy ANS professional division.

Space Nuclear Power and Propulsion

The Space Nuclear Power and Propulsion technical category seeks to collect work related to advancements in nuclear applications for space use. This category was inspired by the Aerospace Nuclear Science & Technology ANS professional division.

Paper Review

Submitted papers would be reviewed by graduate students with expertise in the relevant subject areas. This process would be spearheaded by UT graduate students, but if we are unable to identify reviewers with sufficient expertise within the UT nuclear engineering program, we would reach out to graduate students at other institutions for assistance. ANS divisions will be solicited for reviewers to complement the expertise from graduate student reviews. We may also reach out to partners in industry, academia, and the national labs. Papers would be reviewed for technical accuracy, completeness, and readability. A paper would first be evaluated for the category under which it was submitted, but reviewers may suggest it be placed in another category, particularly if the original category has an abundance of submissions. Many divisions offer "best paper" prizes, and these will be coordinated with those divisions and their reviewers.

Poster Session

The poster session would be an opportunity for both undergraduate and graduate students to present their work in a separate format from the technical sessions. All posters presented would be considered for awards based on the novelty of the research, the importance of the work, the organization of the poster, and the presenter's ability to answer questions about their work. Undergraduate and graduate students would be judged separately for the poster session, and posters need not be categorized using the tracks or categories required for technical papers.

Appendix A1: Graphical Schedule shows that the poster session is divided into 3 separate sessions. Poster session 1 is a non-mandatory viewing session. It occurs during lunch and allows for attendees and judges to browse posters at their leisure.

Poster sessions 2 and 3 ensure an opportunity for students to present their posters to judges and other attendees. Each person presenting their poster would choose *either* poster session 2 or 3 during the poster session setup. Once a presenter chooses their presentation session, they *must* attend the full session or be disqualified from judging.

Career Fair

The career fair would take place on Friday, and it would occur simultaneously with technical sessions, workshops, and panels. In coordination with the conference theme of "Passing the Torch", the career fair would focus on getting the next generation of nuclear connected to both industry and academics that would allow them to continue blazing their way as the future of the field. On Saturday, in conjunction with the poster sessions, both mandatory and non-mandatory, interviews would be conducted. The career fair would feature both employers and universities, with companies paying a fee to reserve a booth. Employers would be sourced from both the local Knoxville area and around the country, and the Engineering Professional Practice Office would be assisting in employer outreach.

The career fair and subsequent interview day would take place in the Union Ballroom. The career fair on Friday would use the entirety of the ballroom space, while the Saturday interview session would take place in section C of the ballroom.

Tours

Disclaimer

Concerning COVID-19 restrictions and the availability of host facilities, the following tours have been tentatively selected for this conference.

Major Tours

Oak Ridge National Laboratory (ORNL)

Oak Ridge National Laboratory is located in Oak Ridge, Tennessee, addressing national needs through impactful research, world-leading research centers, and partnerships with other U.S. Department of Energy laboratories and programs, universities, and industry. The tour would cover three facilities at ORNL, lasting the entire day. Two buses carrying up to forty people on each bus would leave Knoxville at 10 AM and arrive at ORNL's Visitor Center around 10:45 AM. Attendees would check-in and receive their visitor badges at the Visitor Center, and they would be met by ORNL employees who would give tours for each group. The students would visit the Summit Supercomputer, High Flux Isotope Reactor, and



Spallation Neutron Source. Each tour would last roughly an hour, with a break around 12:30 PM to purchase lunch in the on-site cafeteria. Students will then rotate tour groups to visit each facility. Students will return to the buses and arrive at the ORNL Manufacturing Demonstration Facility at 3:45 PM. At the MDF, students would see the various advanced manufacturing systems they have to offer, including the Transformational Challenge Reactor. Students would return to Knoxville at 5:00 PM. Read more below about each of the facilities mentioned.

High Flux Isotope Reactor (HFIR)



Operating at 85 MW, HFIR is the highest flux reactor-based source of neutrons for research in the US. It provides one of the highest steady-state neutron fluxes of any research reactor in the world. The thermal and cold neutrons produced by HFIR are used to study physics, chemistry, materials science, engineering, and biology. The neutron flux, power density, and constant-length fuel cycles are used by over 500 scientists for neutron scattering research on fundamental properties of condensed matter.

Spallation Neutron Source (SNS)

SNS produces neutrons with an accelerator-based system that delivers short proton pulses to a steel target filled with liquid mercury through a process called spallation. Those neutrons are then directed toward state-of-the-art instruments that provide a variety of capabilities to researchers across a broad range of disciplines, such as physics, chemistry, biology, and materials science. SNS is available to researchers around the world with varying degrees of experience. Submitted research proposals are reviewed by independent scientists from within the neutron scattering community to ensure the most promising ones are chosen.



Summit Supercomputer

Summit is the next leap in leadership-class computing systems for open science. With Summit we would be able to address, with greater complexity and higher fidelity, questions concerning who we are, our place on earth, and in our universe. Summit, launched in 2018, delivers 8 times the computational performance of Titan's 18,688 nodes, using only 4,608 nodes. Like Titan, Summit has a hybrid architecture, and each node contains multiple IBM POWER9 CPUs and NVIDIA Volta GPUs all connected together with NVIDIA's high-speed NVLink. Each node has over half a terabyte of coherent memory (high bandwidth memory + DDR4) addressable by all CPUs and GPUs plus 800GB of non-volatile RAM that can be used as a burst buffer or as extended memory. To provide a high rate of I/O throughput, the nodes are connected in a non-blocking fat-tree using a dual-rail Mellanox EDR InfiniBand interconnect.



Manufacturing Demonstration Facility (MDF)



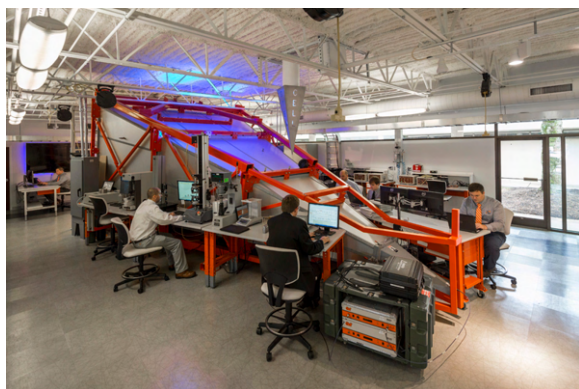
The Manufacturing Demonstration Facility (MDF), established in 2012, is one of the Department of Energy's designated user facilities focused on performing early-stage research and development to improve the energy and material efficiency, productivity, and competitiveness of American manufacturers. Research focuses on manufacturing analysis and simulation, composites and polymer systems, metal powder systems, metrology and characterization, machine tooling, large-scale metal systems, and robotics and automation.

American Museum of Science and Energy (AMSE) Bus Tours

The AMSE tour includes a bus tour that visits sites such as the Y-12 New Hope Center, ORNL's Graphite Reactor, and the K-25 History Center. Students would leave Knoxville at 8:00 AM to arrive at AMSE by 8:30 AM. A bus with up to 30 students would depart at 9:00 AM, stopping first at the Y-12 New Hope Center. The New Hope Center includes displays about historical projects such as the Manhattan Project and the Cold War. The tour would continue to the Graphite Reactor at the Oak Ridge National Laboratory where guests would be able to observe and learn about the world's oldest nuclear reactor. After this, the tour would go to the K-25 history center to learn about the gaseous diffusion process that was used for the first atomic bomb. Once the tour is finished, the party would be able to return and tour the American Museum of Science and Energy. Students would return to Knoxville by 2:00 PM.



Analysis and Measurement Services Corporation (AMS)



AMS is a recognized market leader in providing the worldwide nuclear power industry with equipment, training, and services to verify the performance of process instrumentation and control (I&C) systems. Attendees would leave Knoxville at 1:30 PM and arrive around 2:00 PM. AMS CEO Dr. Hash Hashemian would begin the tour with an introduction to his company, followed by some time to hear from AMS engineers on their everyday activities and involvement in the nuclear industry. Finally, students would tour their materials and EMC testing laboratories. Students would return to Knoxville by 5:00 PM.

Y-12 National Security Complex

The Y-12 National Security Complex plays a vital role in the Department of Energy's Nuclear Security Enterprise, providing a safe and effective U.S. nuclear weapons deterrent, nuclear material storage, fuel for our nation's naval reactors, and more. For this tour, up to 30 students would leave Knoxville at 8:30



AM and arrive at the New Hope Center at 9:00 AM to fill out paperwork and check-in. Then, a Y-12 employee would escort the tour throughout the site. Possible visit locations include the Test and Demonstration Facility, laboratories that support the disassembly and assembly of components for the nation's nuclear stockpile, Radiological Field Training Center, and Purification Prototype Facility. Attendees can expect to arrive back in Knoxville around 4:30 PM.

Provision

Provision CARES Proton Therapy Knoxville is the only proton therapy treatment center in East Tennessee. Since 2014, they have treated more than 3,500 patients using one of the world's most advanced cancer treatments. A bus of up to 30 students would leave Knoxville at 7:30 AM and arrive at



Provision by 8:00 AM. A Provision employee would meet and lead the group through their facilities. Attendees would have the opportunity to see the ProNova SC360 Proton Therapy System, the first and only superconducting compact proton therapy system. Students would also see their radiation effects testing beamline and learn about the Center for Biomedical Research, a multi-functional clinical research site-management organization. The tour would conclude at 10:30 AM, and the bus would arrive back in Knoxville at 11:00 AM.

Plant Tour Conflict Statement

TVA Watts Bar and Sequoyah Nuclear Plants

The TVA Watts Bar and Sequoyah Nuclear Power Plants are two nuclear power plants operated by the Tennessee Valley Authority's Nuclear Power Group. While both Watts Bar and Sequoyah would be valuable tours, both sites have scheduling conflicts during the proposed dates due to their Spring 2023 plant outage schedules. If the proposed dates are no longer accepted, the committee would revisit this option.

Excursions

UT Campus Tours



During this tour, attendees would get an overview of campus, academics, and student life—all presented from a student's perspective. The University of Tennessee's campus is home to landmarks such as Neyland Stadium, The Hill, Ped Walkway, and The Rock. Campus tours would be from 8:00 AM to 5:00 PM. Students would lead tours of up to 6 people at a time. Tours of campus would begin and end at the Zeanah Complex, lasting about 45 minutes.

Ijams Nature Center



Located three miles from downtown Knoxville, Ijams Nature Center is an environmental education center visited annually by more than 160,000 people from around the world. With 315 acres of forests, meadows, wetlands, and creeks, Ijams is perfect for students, families, and nature lovers of all ages. A group of up to 40 people would leave UT Campus at 8:00 AM to enjoy a peaceful morning adventure through the heart of Knoxville's Urban Wilderness. Guests would return to campus at 11:00 AM.

Knoxville Art Museum



The Knoxville Museum of Art celebrates the art of East Tennessee. Conveniently located near World's Fair Park, the Knoxville Museum of Art is one of the things to do in Knoxville. The museum hosts concerts, painting events for kids, and much more. Moreover, Knoxville's iconic scenery gives artists the chance to create aspiring work without having to leave their backyard. The museum is a brief 9-minute walk from the Hilton, and there would be a bus available if needed, for the tour attendees to arrive at the museum at 11:00 AM. Guests would return at 2:00 PM.

Knoxville Zoo



The Knoxville Zoo is an exquisite experience that features a wide array of adventures and educational opportunities for everyone to enjoy. Some of the wonderful experiences feature the Tiger Forest, Red Panda Village, and the Gorilla Valley. The Amphibian and Reptile Conservation Campus just opened in 2021. The bus of up to 40 passengers for this excursion would leave Knoxville at 2:00 PM and return at 5:00 PM on Thursday.

Knox Brew Tours



This brewery tour features a wide array of local breweries. Guests would be able to stop at the designated breweries and try provided tastings while learning about each brewery's history and brewing process. This excursion would include guided tours to multiple breweries that include craft beer tasting, a souvenir tasting cup, and exclusive access to multiple breweries.

Downtown Knox 5K

Knoxville has a large community of runners who enjoy and take advantage of the many scenic trails the city has to offer. Join our chapter at 8:30 AM on the Thursday of the conference for a 5K through the heart of Knoxville and the other outdoor wonders of this piece of East Tennessee! This is a great opportunity to see more of Knoxville while connecting with other students and attendees. The 5K welcomes runners of any level and would start downtown.

UT Yoga

We have discussed with the Hilton scheduling a yoga class from 3-5 PM on Thursday of the conference to give attendees the chance to relax and unwind between a busy day of tours. Yoga is an excellent way to manage stress and keep your body active throughout the day. This workshop would be available for everyone of all fitness levels, and it would take place in the Hilton taught by an instructor from a local yoga studio.

Dining

Breakfast

Breakfast would be served at the Hilton on Friday and Saturday morning, with all attendees encouraged to grab a plate and sit for a Breakfast Plenary. Breakfast would be served from 7:45-9:45, and the plenaries would occur from 8:30-9:30. A handful of the breakfast options presented by the Hilton are included in Appendix B1. We would choose two breakfast stations to serve per day. These are budgeted by calculating the total cost per person for both stations combined, then multiplying this cost by 80% of the expected attendance of each breakfast session. This is because we do not expect every student to partake from both stations.

For those not wishing to attend these events, there are complimentary breakfasts offered at the Hampton, Hyatt, and Embassy Suites for any guests staying there. Breakfast is also available for purchase for guests staying in the Graduate.

Lunch

Overview

Students are encouraged to take a lunch break at their convenience during the programs each day. Lunch would not be provided by the conference at the Union, but the facility is within a very short walking distance or trolley ride to any option a student could wish for. Along Cumberland Avenue are many choices that guests could walk to. These include, but are not limited to, chains such as Chipotle, Firehouse Subs, Zaxby's, and Panera Bread, and also local spots such as Gus' Good Times Deli and Copper Cellar. The Orange Line trolleys can also be taken over to the downtown area; it is a 5-10 minute ride, completely free, and they run every 15 minutes. In those areas can be found the many restaurants in Market Square, along Gay Street, or spots scattered about such as Yassin's Falafel House (a must-try!). There are over 90 restaurants and 25 breweries within one square mile of downtown Knoxville!

Note: There are dining options in the Union, but in following with our choice to avoid Aramark services, students would be more heavily encouraged to seek food outside of the facility.

Lunch and Learn Sessions

Within our sponsorship packages would be the opportunity for companies to host one of 8 lunch-and-learn sessions, which would be held in various conference rooms in the Zeanah Engineering Complex and the John D. Tickle Engineering Building, both on the southeast side of campus. Students would be encouraged to walk to these locations from the Student Union- it is a 5 to 10-minute walk- but a shuttle would also be provided for those who are unable to walk there. Box lunches from a local business or a chain such as Jimmy John's would be catered to these events.

Dinner

Presented below are a host of dinner options we have looked into; quotes have been obtained for some but not all of them. We would choose which of these seems the most suitable for the conference once we get into more detailed planning.

Thursday: Hilton Knoxville

We would be holding dinner at the Hilton Knoxville on Thursday night. Their Cherokee ballroom can be filled with rounds to seat up to 570 guests, and food would be served buffet style. There would also be a riser in the front of the room for a guest speaker. Our many options of what to serve are shown in Appendix B1.



Friday: Dolly Parton's Stampede

Dolly Parton's Stampede is our top pick for a Friday night combined dinner and social. It is located in Pigeon Forge, Tennessee, approximately a one-hour drive from campus. The Stampede provides "a mouth-watering four-course feast complete with a delicious dessert," including options for a full four-course vegetarian feast or a four-course gluten-free feast. The venue can accommodate up to 1,000 guests, and this would be an opportunity to show off the charm of east Tennessee. Additional information about the Stampede can be found in the "Socials" section of this Proposal below.



Saturday: World's Fair Park Lawn

We would love to host the Saturday awards dinner in this historic outdoor space. Knoxville was the host of the 1982 World's Fair, and the site of this event is nestled between the Downtown area and the UT campus. The park is made up of two large event lawns, many walking paths, multiple fountains, creeks, and the iconic Sunsphere. We hope to host a tented, catered dinner on one of the park's lawns. This event would be either a chance to welcome a speaker to Knoxville, and organize tables by area of industry and offer guests a networking opportunity during dinner. The space would be booked through the park, and all of the necessary supplies for the dinner would be rented through a third party.



Contingency 1: Knoxville Convention Center

Dinner at the Knoxville Convention Center would serve as a contingency plan dependent on the availability of our preferred dinner venues during the conference. This facility has a large and elegant ballroom which could easily accommodate all of our guests. Additionally, due to their ability to handle audiovisual equipment in-house, this would serve as another opportunity to invite a speaker for dinner and present awards.



Contingency 2: The Mill & Mine

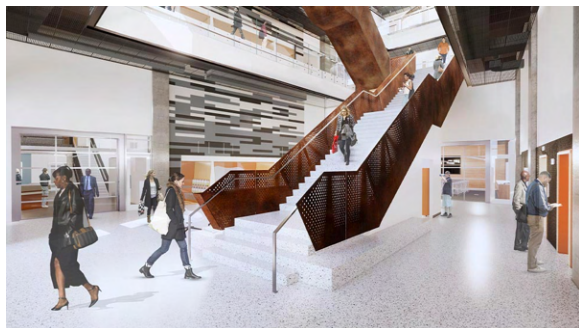
The Mill and Mine is an additional backup location for dinner. It is a combined indoor/outdoor event venue located in Historic Knoxville. It boasts more than 8,000 square feet of usable space, including a concert hall with large barn doors that open onto a lawn - these spaces combined can seat up to 600 guests banquet-style. Additional tables and chairs would be rented for this event.



Socials

Thursday

Zeanah Engineering Mixer



We plan to host a first-night social in the Zeanah Engineering Complex. The building's central staircase winds through an atrium that stretches up to six floors. We have envisioned staging cocktail tables and serving hors d'oeuvres on a couple of these floors, then offering different activities on the landings of other floors. These activities might include games, a photo booth, trivia, and more. The University's alcohol policy now allows for serving alcohol at special events. More information on this can be found in our Liability section under Alcohol.

Friday

Dolly Parton's Stampede

Dolly Parton's Stampede is an iconic highlight of Pigeon Forge, featuring "an extraordinary dinner show with thirty-two magnificent horses and a cast of top-notch riders." They can easily accommodate up to



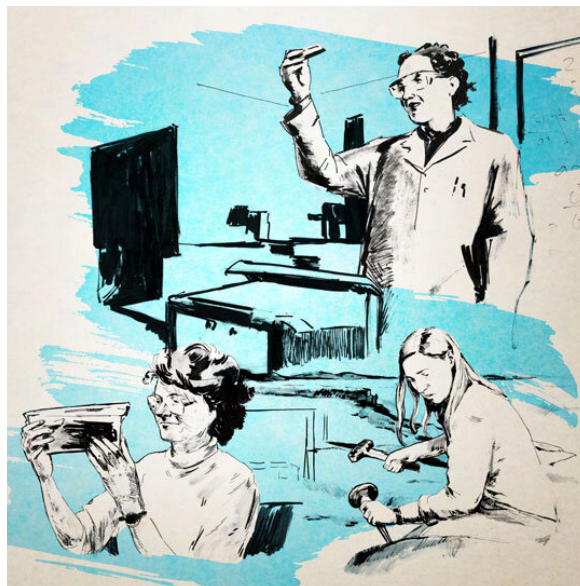
1,000 guests. The excitement begins before you even set foot in the door. Attendees can take a stroll down the Horse Walk and get an up-close look at the stars of the show, a beautiful variety of horse breeds. The Stampede itself is filled with friendly North and South competition, thrilling horse riding stunts, spectacular special effects, and phenomenal musical productions. Afterward, conference attendees would be free to enjoy other attractions in Pigeon Forge until midnight, as bus rounds back to the hotels would be provided throughout the night.

Under-21 Social

We would reserve the Hiwassee room in the Hilton on both Friday and Saturday nights for students under the age of 21 to have the opportunity to socialize after returning from the primary socials. This would be a casual setting and would be left open until the late hours of the night for students to come and go as they please. Snacks and beverages would be provided, as well as games and other activities.

Saturday

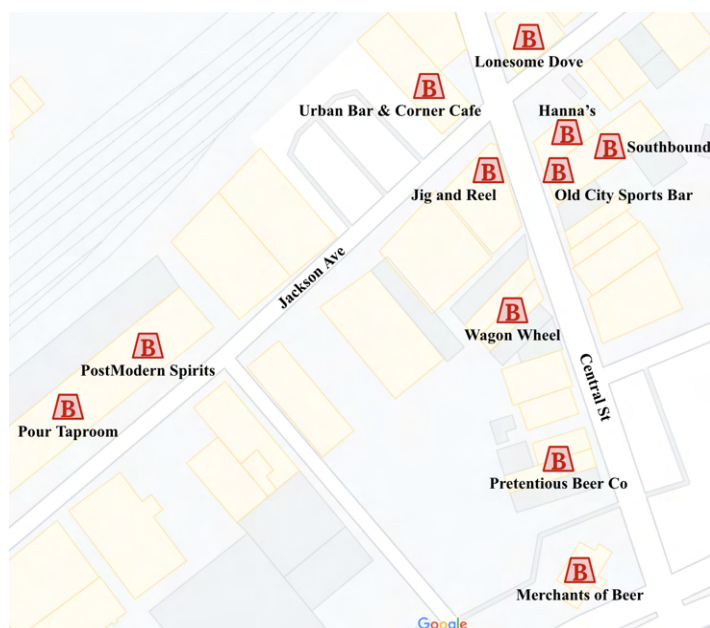
Picture a Scientist Movie Night



After dinner at World's Fair Park, we want to take advantage of the outdoor A/V setup and Knoxville weather to host an outdoor movie night. Our first choice for a movie is, "Picture a Scientist", a 1.5-hour documentary released in 2020 about sexual harassment and gender inequality in STEM. The movie follows molecular biologist Dr. Nancy Hopkins, analytical chemist Dr. Raychelle Burks, and geomorphologist Dr. Jane Willenbring. The movie takes care to provide additional perspectives that offer ways to make science more diverse, equitable, and inclusive to all. The next generation of nuclear engineers would be the most diverse yet, so as current ANS members Pass the Torch, we must do so in a way that is equitable and inclusive. The trailer can be viewed here: <https://www.pictureascientist.com/>. A contingency plan for this social would be to host the movie in the Knoxville Convention Center instead.

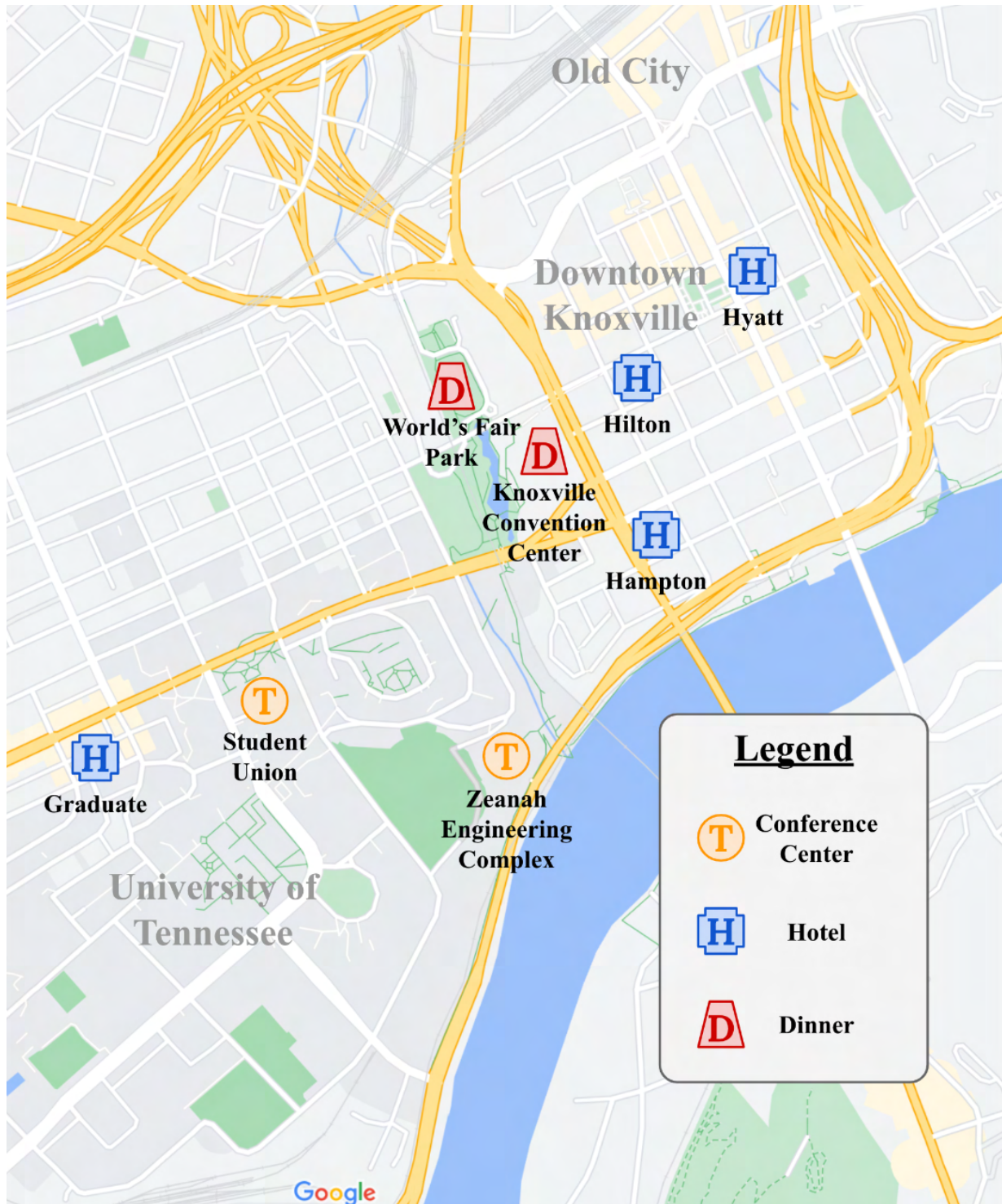
Old City Carousel

After the movie night, we want to guide attendees who are 21+ along a 15-minute walk to Knoxville's Historic Old City, where 9 bars line 1 block of Central St. A bus would be provided for attendees that cannot walk that distance or would prefer not to walk. The projected attendance for this late-night social is 300. All 9 of the bars are less than a 2-minute walk from one another. We would not book space in any of these bars because we expect attendees to dissipate between them at their leisure without sacrificing networking opportunities due to the bars' proximity. We would still alert the bars of our projected attendance several weeks in advance to give managers enough time to schedule additional shifts.



A contingency plan for this social is needed if most of the 9 bars on Central St reach capacity before a majority of conference attendees arrive. In this case, we would redirect the remainder of the conference attendees to Pour Taproom, located 2 minutes west along Jackson Ave. Pour Taproom has a large indoor and outdoor space for people to gather and it is next door to PostModern Spirits. In general, we want to avoid renting out bar space if it is not necessary due to the high density of options nearby.

Facilities



University of Tennessee Student Union

Location

The University's Student Union, which began construction in 2012 and opened fully in January 2019, is located in the heart of campus and along Cumberland Avenue, known to students as "The Strip." Above the entryway, visitors can marvel at a glass Torch sculpture blazing two stories tall. The Union is located only a mile west of downtown Knoxville, and a 7-minute walk from the Zeanah Engineering Complex. Next door is the Haslam College of Business and the Stokely Management Center, and across the street is Hodges Library. The Union is also located 0.7 miles from the Hilton and the Hampton Inn, 0.9 miles from the Hyatt or Embassy Suites, and only a quarter-mile from the Graduate Hotel. All hotels are located in the downtown area to the east, while the Graduate is located to the west on Cumberland Avenue.



Space

The Student Union boasts ample meeting space, including the 12,000 square-foot Pilot Flying J Ballroom. Meeting spaces ranging from capacities of a handful up to 999 are spread across three floors. Maps of the space held in the Union can be found in Appendix B2.

Ballroom

The Pilot Flying J Ballroom is 12,000 sq. ft. total, with three sections A, B, and C. We plan to use two or all sections of the ballroom for a career fair on Friday, then dividing the space to hold our poster session and interviews on Saturday. Combined, sections A and B make up 8,000 square feet; posters can be spaced generously and many guests and judges can explore the space comfortably. Section C would consist of the remaining 4,000 square feet, which we expect to be more than enough to accommodate booths for employers to conduct interviews with students from the career fair.

Meeting Spaces

Excluding the ballroom, the Student Union has 14 rooms with ample meeting space for every aspect of the conference- technical sessions, workshops, panels, and break spaces for the students and professionals that would be performing many different duties throughout the weekend. An itemized chart of each room, its purpose, and its space is provided in Appendix B2. In summary, multiple rooms can seat 50+ attendees in a theater-style setup, as well as some rooms which can accommodate over 100 people; these would be the rooms which we plan to use for larger meetings such as workshops and panels which are expected to garner the most interest, or the SSC meeting.

Hilton Knoxville



The Hilton Knoxville would be utilized to hold yoga on Thursday, while off-site tours are also occurring. The layout of the Hilton's meeting spaces and capacities can be found in Appendix B3. The workshops on Thursday would be held in Cherokee Ballroom DE (seats 100 guests classroom-style), and we can also utilize Sequoyah 3 (80 guests classroom-style) if the space is needed.

Knoxville Convention Center

If the committee encounters issues securing the Student Union for our use, we have been in contact with the Knoxville Convention Center, which has more than enough meeting spaces to accommodate our needs, as well as a wonderful staff and the ability to take care of almost all aspects of the conference (dining, A/V capabilities, etc.) in-house. This facility is located immediately between downtown Knoxville and the University of Tennessee's campus, adjacent to World's Fair Park, which is mentioned elsewhere in this document. Visible in this photo is the beautiful Sunsphere and one of the large water features in the



Park. They have a dozen rooms across two floors with classroom-style capacities ranging from 60 to 80 guests, many of which can be combined to form larger rooms. The convention center also includes a 120,000 square foot exhibition hall and a 27,000 square-foot ballroom. It is easily accessible from the Hilton, with a covered pedestrian bridge leading to a set of stairs and an elevator directly in front of the convention center doors.

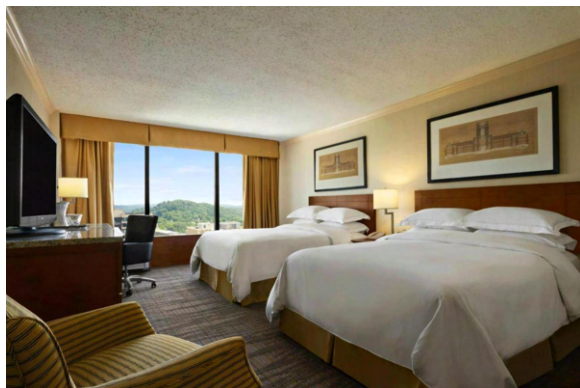
Hotels

Below is a selection of hotels determined by our committee to be feasible based on cost, location, and accommodations. The descriptions below contain the cost per room, room capacities, and justifications for hotel choices.

Hilton Knoxville

The Hilton Knoxville is where we hope to house the majority of student attendees to the conference, as well as the faculty members accompanying them. It is the largest hotel in the Knoxville metropolitan area. All sleeping rooms are scheduled for renovation to be completed before the end of 2022. This hotel is conveniently located on the West end of Downtown Knoxville, a less than 15-minute walk from the main conference activities on Friday and Saturday at the Student Union. ADA accessible shuttles would still be available for transporting attendees between the hotels and conference activities.

The Hilton has offered to block 50 rooms for each night at the CONUS rate, which is estimated to be \$102 for 2023. They offered to block an additional 70 rooms for Wednesday night and an additional 100 rooms for Thursday, Friday, and Saturday nights. The rate for these 70 to 100 rooms would be booked at the market rate, which is \$139 on our preferred date. The CONUS rate rooms would be booked to the attending ANS Student Chapters and their accompanying faculty members on a first-come-first-serve basis. The Hilton Sales Manager drafted a tentative contract to layout room reservation availability on our preferred dates in Appendix B3.



Amenities for guests include:

- Unlimited free wifi in rooms and meeting spaces
- Fitness center
- Discounted YMCA passes, including indoor pool usage
- Printing is available at the front desk
- Emergency laundry services
- Mini fridges in all sleeping rooms
- Microwaves in some sleeping rooms
- Complimentary coffee in sleeping rooms
- Starbucks in the lobby with extended hours for conferences
- Restaurant and lounge in the hotel

Garage parking for standard-sized vehicles is \$24/night with valet and \$20/night with self-parking. The UT ANS Student Conference Proposal Committee may be able to negotiate complimentary garage parking. The outdoor pool is unlikely to be open for our preferred dates.

Graduate Knoxville

Distinguished speakers, sponsorship representatives, panelists, and some industry professionals would be accommodated by The Graduate Knoxville. Located in the heart of the university campus, The Graduate features a distinct Volunteer football theme, immersing its guests in decades of UT lore. Construction for this entire building was completed in August 2020, including Saloon 16, an adjoined restaurant and bar built in partnership with Peyton Manning. It is a 6-minute walk to the Student Union and a 20-minute walk to The Hilton. The shuttles traveling between the hotels and conference activities would still make a stop at The Graduate.

For Wednesday night through Saturday night, The Graduate has offered to block 10 rooms at the CONUS rate, which is estimated to be \$102 for 2023. They offered to block an additional 30 rooms at the market rate, which is \$159 on our preferred date. Once distinguished speakers, major sponsorship representatives, and panelists register for the conference, the UT ANS Student Conference Committee would correspond directly with those attendees to ensure that they receive a room in this block. The CONUS rate rooms would be booked on a first-come-first-serve basis. The remaining rooms in the block would be booked to additional industry professionals on a first-come-first-serve basis. The Graduate Sales Manager drafted a tentative contract to layout room reservation availability on our preferred dates in Appendix B3.



Amenities for guests include:

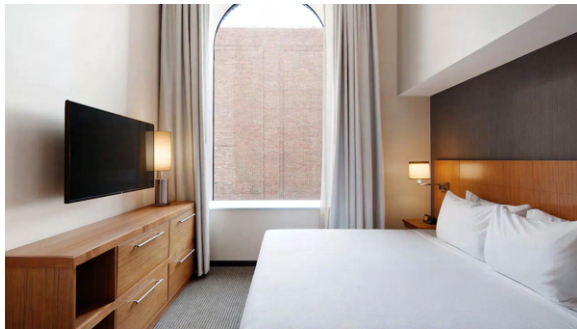
- Poindexter breakfast and coffee bar for-purchase in lobby
- Free wifi in rooms and common spaces
- 24-hour fitness center
- Printing is available at the front desk
- Complimentary coffee in sleeping rooms
- 1 free coffee per guest per day at Poindexter
- Easy access to adjoining Saloon 16 restaurant and bar
- 10% discount to Poindexter and Saloon 16 for ANS Conference attendees
- Knoxville-inspired welcome package

Garage parking for standard-sized vehicles is \$26/day with a valet. The UT ANS Student Conference Proposal Committee may be able to negotiate a reduced valet rate. There is an upper lot for oversized vehicles.

Hyatt Place

The Hyatt would provide lodging to the rest of the attending professionals. Last renovated in 2018, it has the most King Single rooms of every hotel in the Knoxville metropolitan area. On the center of Gay Street, the Hyatt is located directly across from Market Square, a centerpiece of downtown Knoxville. It is a 5-minute walk to The Hilton and a 20-minute walk to the Student Union, so ADA accessible shuttles would be available for transporting attendees to and from conference activities.

The Hyatt Place is not a preferred hotel, so it cannot offer a CONUS rate to conference attendees. For Thursday through Saturday night, the Hyatt Place has offered to block 80 king rooms at the market rate, which is estimated to be \$189 on our preferred dates. The ANS Student Conference Proposal Committee predicts that significantly fewer industry professionals will attend the Thursday tours, so the Hyatt has blocked 50 king rooms Wednesday night. The rooms in the block would be booked to industry professionals on a first-come-first-serve basis. The Hyatt Place Director of Sales drafted a tentative contract to layout room reservation availability on our preferred dates in Appendix B3.



Amenities for guests include:

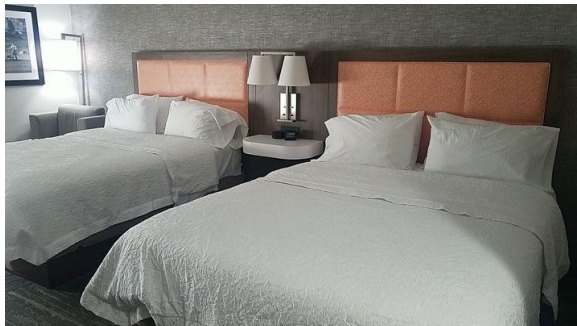
- Complimentary hot breakfast buffet for guests not wishing to attend the breakfast plenaries at the Hilton
- Unlimited free wifi in rooms and common spaces
- Fitness center with yoga room
- 24-hour business center with free grayscale printing
- Valet laundry for-purchase with same-day delivery before 8 am
- Complimentary coffee and tea in sleeping rooms
- Full Starbucks in lobby
- Rooftop lounge open after 5:30 pm

Garage parking for standard-sized vehicles is \$22/night with valet and \$12/night with self-parking. Large vans cost \$50/night to park.

Hampton Inn

We understand that The Hilton would not be able to accommodate our maximum projected student attendance. Due to its proximity to The Hilton, The Hampton Inn is where we hope to house the remainder of our student attendees and the faculty members accompanying them. Our goal is to keep the student chapters together to promote community-building, inclusivity, and friendship. It was last renovated in 2019 and they plan for each sleeping room to have a brand new bed by the start of 2023. It is a 4-minute walk to the Hilton and a 20-minute walk to the Student Union. The shuttles traveling between the other hotels and conference activities would still make a stop at The Hampton.

For Wednesday night through Saturday night, The Hampton has offered to block 4 rooms at the CONUS rate, which is estimated to be \$104 for 2023. They offered to block an additional 16 rooms at the market rate, which is \$134 on our preferred dates. Of those 16 rooms, 11 are queen rooms intended for student chapters, and 5 are king rooms intended for faculty members. The CONUS rate rooms would be booked on a first-come-first-serve basis. The Hampton Sales Manager drafted a tentative contract to layout room reservation availability on our preferred dates in Appendix B3.



Amenities for guests include:

- Complimentary hot breakfast buffet for guests not wishing to attend the breakfast plenaries at the Hilton
- Free wifi in rooms and common spaces
- \$5 additional bandwidth available
- Small fitness center
- \$8 passes to the YMCA
- Small indoor heated pool
- 24-hour business center with free grayscale printing
- Free color printing at the front desk
- Free on-site laundry machines
- Free coffee in sleeping rooms and lobby

Garage parking for standard-sized vehicles is \$10/night. The garage has a 13-foot height restriction. The UT ANS Student Conference Proposal Committee may be able to negotiate complimentary garage parking. The Hampton offers a convenient overflow lot for large vehicles costing only \$10/night.

Travel and Transportation

Travel to Conference

Getting to Knoxville by Air

McGhee Tyson Airport services Knoxville and its surrounding areas. It is located in Alcoa, Tennessee, a 15-minute drive south of UTK's campus. The airport offers nonstop flights to over 20 destinations, making it feasible for students of many universities all across the country to fly straight into Knoxville. A summary of some flight figures for both nonstop flights and flights requiring connections is presented below. Note that flight figures vary greatly between different times of the year.

Summary of Direct Flights				
School	Departure	Travel time to Airport	Round-trip Airfare	Airline
University of Florida	Orlando-Sanford (SFB)	2h 6 min	\$150+	Allegiant
University of Illinois	Chicago- O'Hare (ORD)	2h 20min	\$246	American, United
Purdue University	Chicago- O'Hare (ORD)	2h 30min	\$246	American, United
University of Michigan	Detroit (DTW)	27 min	\$273	Delta
Texas A&M University	Houston- Bush (IAH)	1h 55min	\$381	United
University of Wisconsin – Madison	Chicago- O'Hare (ORD)	2h	\$246	American, United
Colorado School of Mines	Denver, CO (DEN)	49 min	\$385	United
Purdue University	Chicago	2h 30min	\$246	American, United
United States Military Academy at West Point	New York- Lagueardia (LGA)	1h 40min	\$315	Delta

Summary of Indirect Flights				
School	Departure	Time to Airport	Connection(s)	Price Est.
University of California – Berkeley	San Francisco (SFO)	35 min	1	\$400
Louisiana State University	Baton Rouge (BTR)	15 min	1	\$300
Missouri S&T	St. Louis (STL)	1h 40 min	1	\$310
University of Idaho	Spokane (GEG)	1h 30 min	1	\$400
University of Pittsburgh	Pittsburgh (PIT)	25 min	1	\$220
Virginia Commonwealth University	Richmond (RIC)	20 min	1	\$220

Transportation from McGhee Tyson Airport to the Hotels

After arrival at McGhee Tyson Airport, a shuttle company would be used to transport attendees to their hotel. The airport has three different companies that are licensed to work at the airport. The top two choices are Always Ready Transportation LLC and Chariots of Hire. Always Ready has a smaller fleet, consisting of a few small 8 or 15-passenger vans and some SUVs, but they have assured us that they can provide us with a wheelchair-accessible vehicle. Chariots of Hire has a larger capacity, with two 31-passenger buses and three 24-passenger buses, but no guarantee of accessible vehicles. Transportation for individuals needing accommodations can be fine-tuned when we know what the attendees need. Since all Thursday conference-related events would take place in the Hilton, we do not expect these companies to have to shuttle people to any location other than the hotels presented.

Getting to Knoxville by Ground

Knoxville is centrally located in the southeastern United States, and several student sections would likely be able to make the trip by car. Many of the drive times are shown here:

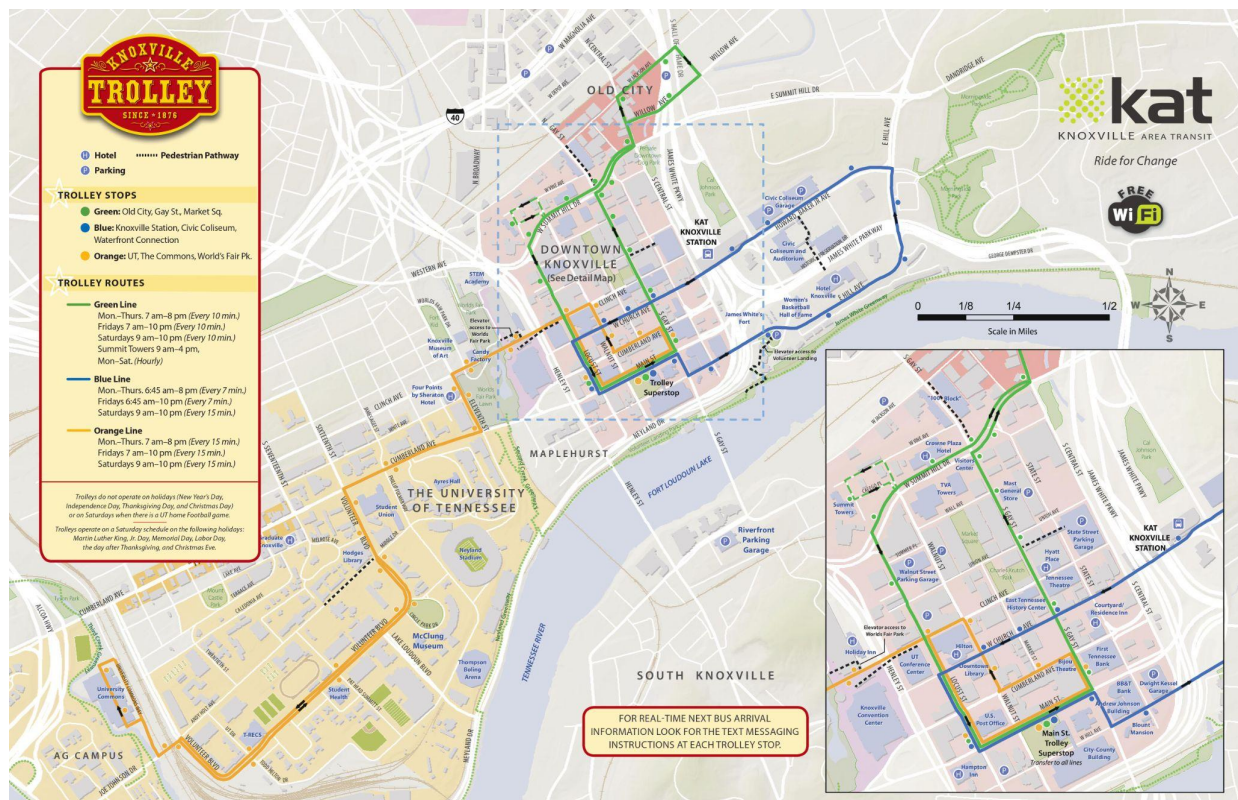
Drive Times	
School	Drive Time to Knoxville
Chattanooga State Community College	1 hr 40 min
Vanderbilt University	2 hr 40 min
Georgia Institute of Technology	3 hr
Virginia Polytechnic Institute and State University	3 hr 30 min
University of South Carolina	4 hr
Ohio State University	5 hr 30 min
University of Illinois	7 hr
University of Michigan	7 hr 30 min
University of Florida	7 hr 30 min
Pennsylvania State University	9 hr

Transportation at Conference

The facility where the conference would be held is within walking distance of the hotels, but a shuttle would be provided for anyone that wants or needs transportation to the facility. These shuttles would be available at specific times during the conference. Shuttles would also be available to transport attendees to lunch and learns, and dinners. The UT ANS Student Conference Committee would work with Visit Knoxville and the shuttle companies to formulate a comprehensive transportation plan on each day.

Premier Transportation has coach buses which would be utilized for transportation to and from the larger tours, such as to ORNL. The University's Event Shuttle Services are what we hope to use for shuttles between hotels and the Student Union throughout the weekend, but Premier has a large fleet that could also be utilized should the University not have appropriate capacity.

Additionally, the free trolley system that runs through the University of Tennessee's campus and downtown Knoxville can also be utilized by attendees as another form of transportation. A map of the different routes the trolleys take is below. The orange line would be very convenient for attendees looking to eat lunch somewhere downtown, and could also be used by some of those looking for a ride back to their hotel in the afternoon.



Website and App

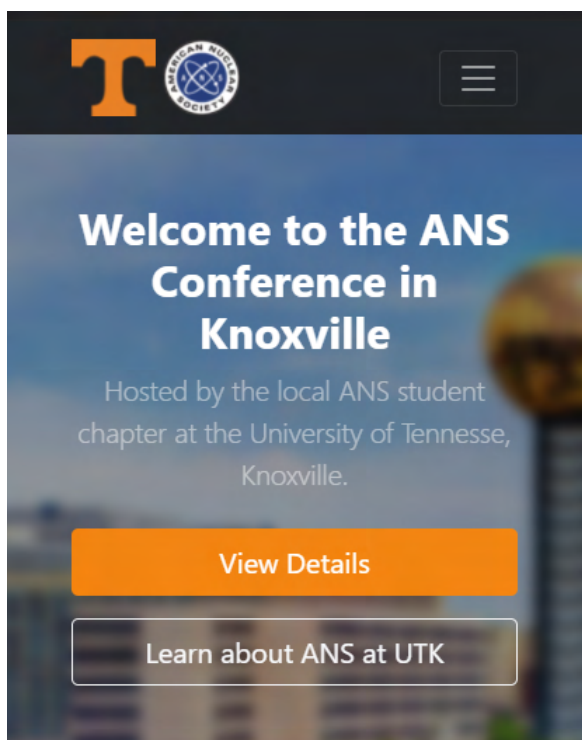
Website Design

The conference website would be used to display both general information about the conference and schedules for the attendees. Such generic information would include information about the local ANS chapter here at UTK, places to visit in Knoxville, and information about the history of the nuclear industry in the Oak Ridge corridor. In terms of conference-related material, the website would host a real-time list of the events happening within the ANS conference, such as talks, and tours -- among other events. Those that visit the website would be able to sign up for notifications or add such events to their calendar via a downloadable .ical file. The website management system would be built in Django, a Python-based framework for web developers, which allows for ease of management (for website admins such as ANS officers), and ease of development due to Django's highly flexible framework. The front end of the website would be built with Django templates and Bootstrap as the CSS framework. Below are previews of both a desktop and mobile view of our website.



Social Media

Twitter and Instagram would both be used to provide information and share interactive content with attendees. Our student chapter already has both Twitter and Instagram accounts with active followings, meaning we can reach other accounts easily. Before the event, we would share helpful tips on experiencing the conference and Knoxville. Photos and videos of conference events would be shared as they occur. After the conference, highlights and recaps would be shared. User interaction data can be shared for future conferences.



Conference App

Our mobile application for both Apple and Android-based phones would better communicate conference events to attendees. The conference schedule, as well as live notifications, would be available all from the attendees' phones. Live polls, surveys, and interactive maps are just some of the app features users can use to better enjoy the conference. We are using GuideBook for our app, and they have been used by past conferences. This would ensure a familiar, intuitive experience.

Potential/Projected Costs

GuideBook would be used to create this mobile app using our schedule and other information. Our total cost would be around \$2,725, using an estimated 550 users. This cost is consistent with past student conferences. GuideBook has been used multiple times in recent years for ANS Student Conferences. This would provide an intuitive experience for both new and returning attendees. The website is planned to be built by students with help from our technology departments. There are no expected fees with this. If any additional costs arise, they would be minor, and accordingly added to our budget.

Conference Swag, Awards, & Gifts

For the 2023 student conference, a budget of **\$10,000** would be issued for student swag, awards, and speaker gifts. This proposed budget would come from student fundraising, as well as from potential sponsors of the conference. The idea behind the budget is to create well-rounded gifts and awards for attendees, while also leaving enough of the budget for unexpected expenses such as additional custom designs and shipping costs.

Swag

Out of the \$10,000 proposed budget, approximately **\$7,748.10** would be used for swag. Each student and guest attending the conference (a projected 570) would receive a 'swag bag' upon check-in. This would consist of a custom canvas bag with a custom conference t-shirt, notebook (with an included pen), water bottle, and torch-shaped stress ball inside. The estimated costs per item, as well as the vendor for each, can be found in the table below:

ANS Student Conference Swag Bags				
Item	Price per Unit	Total Cost	Vendor	Notes
Canvas Tote	\$4.91	\$2,798.70	CustomInk	The price depends on the design.
T-Shirt	\$5.32	\$3,028.40	CustomInk	The price depends on size and design.
Notebook+Pen	\$1.06	\$604.20	4Imprint	---
Water Bottle	\$0.99	\$594.00	4Imprint	Would have to order 600 since 570 is not an option.
Basic Stress Ball	\$1.39	\$792.30	Quality Logo Products	---

TOTAL: \$7,817.60

This leaves approximately **\$2182.40** left in the budget for student awards and speaker gifts. This would be detailed in the following sections.

Student Awards & Speaker Gifts

At the conference, there would be both posters and papers presented by students. For the poster session, there would be two awards distributed: one at the graduate student level, and one at the undergraduate student level. Each winner would receive a prize check valued at **\$150**.

For the papers, there would be an overall best paper award (which could go to a graduate or undergraduate student), and this student would also receive a prize check valued at **\$150**. There would be three main 'tracks' in which the submitted papers would be categorized. The best paper in each of the three categories would receive a prize check of **\$100**.

With each of the 14 sub-categories within the main tracks, the best paper in each would receive a certificate. Each certificate would be created using the Canva software and placed in a certificate holder after being printed on certificate paper via the UTK-NE department printers. The price-breakdown for these are listed in the table below:

ANS Conference Student Awards				
Item	Price per Unit	Units Needed	Total Cost	Vendor
Certificate Paper	\$11.79	3	\$35.37	Staples
Certificate Holders	\$12.79	1	\$12.79	Staples

TOTAL: \$48.16

After student awards have been considered, there is approximately **\$1,384.24** left of the \$10,000 budget. A portion of the remaining funds would go towards speaker gifts. For the 2023 Conference, we are expecting an estimated five keynote speakers to be in attendance. Each speaker would receive either a gift or check valued at **\$50**, making a total of **\$250**. This leaves a projected **\$1,134.24** in the budget to account for unexpected costs such as additional custom designs and shipping costs.

Sponsorships

Potential Sponsors

Many companies and organizations have historically supported not only the ANS conference nationally, but also the University of Tennessee's Nuclear Engineering program. To select sponsors for the 2023 Conference, the conference committee would first look through businesses that are regional to the Knoxville area, and then move up to national sponsors. From there, an email would be drafted to each potential sponsor highlighting the context of our conference, the importance of Passing the Torch, any past support of the University of Tennessee they might have had, as well as the sponsorship tier chart that would be detailed below.

Sponsor Tiers

Given the past information of successful proposals, we have created a sponsorship system in which the more a sponsor is willing to contribute the more they would be rewarded in interactions and incentives in the conference. All sponsors would be included in the sponsor page in the conference program and be invited to the career fair to increase the incentive of all donations regardless of magnitude.

Geier - \$20,000 <ul style="list-style-type: none"> • Full-page ad • Logo on shirt • Entire technical track sponsor • Dinner and award ceremony sponsor • Address a dinner 	Robinson - \$10,000 <ul style="list-style-type: none"> • Waived registrations • Full-page ad in program • Logo on shirt • Entire technical track sponsorship • Dinner sponsorship • Chance to address the crowd at dinner
Fleming - \$5,000 <ul style="list-style-type: none"> • Career table • Waived registrations • Quarter ad page • Logo on shirt • Logo on attendee bag item 	Summitt - \$1,000 <ul style="list-style-type: none"> • Career fair table • Waived registrations • Quarter ad page in the program • 1 workshop or panel sponsorship • 1 session sponsorship or breakfast sponsorship

*incentives and prices subject to change



2023 ANS Student Conference Proposal



While the names of the sponsorship tiers seem unconventional to the nuclear field, they represent a great part of UTK's history. Summitt aside, each name represents an individual who is a part of UTK's Trailblazer series - an honorary award to recognize the accomplishments of African Americans affiliated with the University who are 'Trailblazers' in their disciplines or the fields of diversity, equity, inclusion, and social justice.

Rita **Geier** is the former Associate to the Chancellor and Senior Fellow at UTK's Howard Baker Center for Public Policy, and made efforts to work towards the diversity and intercultural goals of the University. She also worked with faculty and students from Tennessee State University in 1968 to eradicate legal segregation and to create a unitary system of higher education to make it more accessible to African Americans throughout the colleges and universities in the state of Tennessee.

Theotis **Robinson Jr.** was an undergraduate student at the University of Tennessee in 1961, where his application and meetings with President Randy Boyd led to the change in the admissions policy that prevented Black undergraduate students from being admitted as students. Robinson was also actively involved in civil rights demonstrations both in the Knoxville community and the campus community.

Cynthia **Fleming** was the first Black woman to receive a Ph.D. in history from Duke University. In 1982, she joined the history faculty at UTK as one of the first two Black female faculty members of the College of Arts and Sciences. In 1987, Fleming earned tenure and worked to grow the African-American Studies program at UTK over the next 10 years.

Pat **Summitt**, while not a part of the Trailblazer series, is still an integral part of UTK's history. From 1974-2012, she was the head coach of the Lady Vols basketball team, who had 1,098 career wins, making her the winningest coach of all time at that point in her career. Not only did she dedicate a lot of time to developing young women into strong individuals, but she also devoted herself to raising awareness worldwide about Alzheimer's disease through the Pat Summitt Foundation.

Finance

Banking and Financial Oversight

We have elected to do our banking through our local bank. Our chapter uses UT Federal Credit Union which has a branch on campus. This makes it extremely convenient to communicate with the bank. We have used this bank for many years and have built up trust and an open line of communication with the bank. An added benefit is that banking through our chapter bank allows us to get discounts on some of the hotels and our tax-exempt status under 501(c)(3) allows for no sales tax on purchases for the conference. ANS national wouldn't get the discounts but if banking would be simplified by using ANS national, it would be considered to switch. ANS national would have more experience in dealing with large amounts of money and larger transactions, which could simplify the process.

To make sure that oversight is taking place, we would have a system where all purchases must be approved by the co-chairs and then placed through the finance director. All transactions would also be sent to ANS national to be reviewed before purchasing. All records of purchases would be open for review by any of the co-chairs or by anyone at ANS national. This would allow for complete transparency between our chapter and ANS.

Expenditures

	Items	Cost per Item	Number of Items	Total Cost of Item
Promotional	Conference App	2725	1	2725
	Conference Website	200	1	200
	Swag	7817.60	1	7817.60
	Speaker Gifts	50	5	250
	Student Awards	750	1	750
	Photographer for Headshots	1500	1	1500
		Promotional Subtotal		\$13,242.60

	Items	Cost per Item	Number of Items	Total Cost of Item
Food	Hilton Breakfasts			
	Thursday-Parfait Station	8.25	320	2640
	Thursday-Biscuit Bar	6.75	320	2160
	Friday-Hash Brown Bar	5.5	400	2200
	Friday-Pastry Shop	4.5	400	1800
	Saturday-Parfait Station	8.25	400	3300
	Saturday-French Toast	6.75	400	2700
	Box Lunches	12	240	2880
	Hilton one-time setup fee	5000	1	5000
	Hilton Dinner	64	570	36480
	Dessert Bars	20	49.5	990
	Beverages	4	200	800
	Dolly Parton's Stampede	60	570	34200
	World's Fair Park Rental	7425	1	7425
	World's Fair Park Dinner	60	570	34200
		Promotional Subtotal		\$136,775

	Items	Cost per Item	Number of Items	Total Cost of Item
Transit /Tours	Travel Reimbursement	60000	1	60000
	Transportation around Conf	110	40	4400
	Coach buses to tours	2000	4	8000
	Coach buses to Dolly Parton's	1364	11	15004
		Transportation/Tours Total		\$87,404

	Items	Total Cost of Item
Total Cost	Promotional	13,242.60
	Food	136,775
	Transportation and Tours	87,404
		237,421.60

Revenue

	Items	Cost per Item	Number of Items	Revenue Subtotal
Registration	Student Registration	35	450	15,750
	Professional Registration	200	120	24,000
		Promotional Subtotal		39,750

	Items	Cost per Item	Number of Items	Revenue Subtotal
Sponsorships	Geier	20,000	4	80,000
	Robinson	10,000	6	60,000
	Fleming	5,000	10	50,000
	Summitt	1,000	17	17,000
		Promotional Subtotal		207,000

	Sources	Total Cost of Item
Total Revenue	Registration	39,750
	Sponsorship	207,000
	Revenue Total	246,750

Liability

A waiver would be included as a part of registration to encompass all potential liabilities.

Finance

- Any and all purchases made would first have to obtain approval from the conference co-chairs and the chair of the Finance Committee.
- ANS claims liability for all unpaid expenses. Therefore, they would carefully review all contracts and hold sole signature authority.

Dining

- The Conference Committee would not be held responsible for any food-related liabilities.
- Food ingredients would be well-communicated to attendees.
- Alternative meals would be provided for attendees with dietary restrictions.

Alcohol

- As of September 2nd, 2021, the alcohol policy on the University of Tennessee, Knoxville's campus has been revised.
 - With Event Registration, alcohol may be served at on-campus events as long as it is not the main focus of the event.
 - Alcoholic beverages on University-Controlled Property would be approved on a case-by-case basis by the Senior Vice Chancellor for Finance and Administration OR the Vice Chancellor for Student Life.
 - Alcoholic beverages can only be served by University-approved vendors.
 - Alcohol would only be served to attendees ages 21 and older, verified by some form of official photo ID (driver's license, passport, etc.).
- Alcohol served in bars would be distributed by the establishment, so the Conference would not be held responsible.

Transportation

- Premier Transportation is licensed and insured by the US Department of Transportation and as such follows all rules and regulations concerning hours of service, drug and alcohol abuse, and vehicle maintenance.
- Chariots of Hire is covered by a 5 million dollar liability insurance and is in good standing with the Tennessee Motor Coach Association and the National Limousine Association.

Accessibility

- It has been ensured that ADA-compliant buses would be available for us; Always Ready Transportation and campus event services both have appropriate vehicles.
- Registrants would be asked if they need accessibility accommodations so that we can ensure they are placed in the appropriate hotel rooms to meet their needs and that an appropriate shuttle would be available when each of them needs it. Currently, at least one shuttle has been planned to run to and from each main location during each day of the conference.
- All hotels have ADA-accessible elevators and ADA-accessible sleeping rooms and bathrooms available upon request.
- The primary conference facility, the UT Student Union, is an ADA-compliant facility.
- A sign language interpreter will be provided to any attendee that requests one at the expense of the Conference.
- Service animals are allowed at all venues used by the Conference.

Event Insurance

- The Knoxville Convention Center would require us to obtain event insurance if we host a dinner or any conference events at their facility.
- If any other facilities that we are using require Special Event Insurance, we would evaluate the situation on a case-by-case basis.

Milestones

This chart displays the milestones that each committee would achieve in preparation to host the student conference. These deadlines would be tracked at weekly meetings where committee chairs would give updates on the following item's progress. This timeline would also provide us with aid for communicating our goals for completion of each activity to faculty and proposal support staff. This would provide us a way to ensure that committee members and chairs are aligned on the order in which goals must be completed.

Deadline	Task	Responsibility
December 3rd, 2021	Roll out Logo Design Competition	Communications
December 10, 2021	Announce Conference via social media	Communications
December 10, 2021	Confirm conference date in collaboration with facilities	Logistics
December 17, 2021	Bring conference website online	Communications
December 17, 2021	Reserve Student Union rooms and spaces	Logistics
December 17, 2021	Book all hotel rooms and spaces	Logistics
December 17, 2021	Logo is Selected	Communications
January 28, 2022	Confirm all sponsors	Communications
February 18, 2022	Confirm swag and awards vendors	Communications
March 18, 2022	Order swag and awards	Communications
April 15, 2022	All reservations and contracts have been signed	Logistics
April 15, 2022	All speakers have been booked	Programming
April 29, 2022	All tours have been booked	Programming
May 20, 2022	All judges for technical programming confirmed	Programming
May 27, 2022	Finalize and send out sponsorship package information	Communications
September 9, 2022	Goal to receive 25% of funding	Finance
October 7, 2022	Complete registration section on the website	Communications
October 7, 2022	First call for papers/posters	Programming
October 21, 2022	Paper reviews begin	Programming

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November 4, 2022	Open Conference registration	Finance
December 9, 2022	Second call for papers and posters	Programming
December 9, 2022	Goal for 50% funding received	Finance
December 20, 2022	Confirm all workshop events	Programming
January 13, 2023	Update website with events and schedules	Communications
January 13, 2023	Confirm Career Fair companies	Programming
January 13, 2023	Registration closed	Finance
January 20, 2023	Confirm catering arrangements	Logistics
January 20, 2023	Confirm planned events with local businesses	Programming
January 20, 2023	Goal for 75% funding received	Finance
January 27, 2023	Confirm attendance of judges, panelists, speakers, and other special guests	Programming
February 3, 2023	Order materials for swag bags	Communications
February 3, 2023	Confirm transportation services	Logistics
February 3, 2023	Final call for papers and posters	Programming
February 3, 2023	Goal for 100% funding received	Finance
February 10, 2023	Schedule airport shuttles	Logistics
February 10, 2023	Paper reviews due	Programming
February 17, 2023	Paper reviews returned	Programming
March 3, 2023	Print name tags	Communications
March 3, 2023	Receive and organize technical papers into tracks	Programming
March 3, 2023	Return seed money	Finance
April 13-16, 2023	ANS Conference!	
April 18, 2023	Update website with Conference recap	Communications
April 18, 2023	Send travel reimbursements	Finance
May 1, 2023	Finalize Financial Report	Finance



2023 ANS Student Conference Proposal



Conclusion

We believe the University of Tennessee's American Nuclear Society chapter should be the host of the 2023 American Nuclear Society Student Conference because of the breadth of the nuclear industry in Knoxville, the variety of activities in East Tennessee to cater to all interests, and the university values of volunteerism and leadership. Knoxville's history in nuclear science should be showcased at the next ANS student conference through our tours, local industry leaders, and the leaders of our university's research focus areas.

The University of Tennessee's ANS chapter is eager for the potential opportunity to execute this proposal and make the 2023 American Nuclear Society Student Conference a valuable experience for future nuclear leaders and champions. UTK's nuclear engineering department is in the process of unveiling our brand new building (the Zeanah Engineering Complex) that would house state-of-the-art laboratories that would be used for advanced engineering research. Not only this, but our chapter also has strong ties not just amongst our student members, but also with faculty and staff within the department. Due to the collaborative culture and the involvement of our enthusiastic student body, our American Nuclear Society would deliver on all fronts to tackle challenges and plan an outstanding conference.

Thank you for considering the University of Tennessee as your next host of the American Nuclear Society Student Conference.

Appendix A: Conference Details

A1: Graphical Schedule

Thursday											
6:30	Breakfast										
7:00											
7:30											
8:00											
8:30	Y-12 Complex Tour		ORNL AMSE Bus Tour	Provision	Campus Tours	Ijams Nature Walk		Knox 5K	Registration		
9:00											
9:30											
10:00											
10:30		HIFR/SNS/Summit/MDF Tour									
11:00											
11:30											
12:00											
12:30											
13:00											
13:30											
14:00			AMS	Knoxville Zoo	Brewery Tour	Yoga: Light Your Torch!					
14:30											
15:00											
15:30											
16:00					Brewery Tour	Yoga: Light Your Torch!					
16:30											
17:00											
17:30											
18:00	Dinner										
18:30											
19:00											
19:30											
20:00											
20:30											
21:00	Social @ Zeanah Engineering Complex										
21:30											
22:00											
22:30											

2023 ANS Student Conference Proposal

Friday																
Room	360	362A	362B	362C	262A	262B	262C	270	169	260	367	383F	Exec Dining	Ballroom	Concourse	
Capacity	24	56	60	60	50	60	70	120	108	24	10	10	15	-	-	
8:00	Breakfast & Plenary															
8:15																
8:30																
8:45																
9:00																
9:15																
9:30										Headshot Setup	Quiet Space	Judges' Lounge	Staff Break Room	Career Fair Setup	Coffee	
9:45																
10:00	Technical Session	Technical Session	Technical Session	Technical Session	Technical Session	Technical Session	Workshop / Panel	Workshop / Panel	Workshop / Panel	Headshots						Career Fair
10:15																
10:30																
10:45																
11:00																
11:15	Lunch Break															
11:30																
11:45																
12:00																
12:15																
12:30																
12:45																
13:00																
13:15																
13:30	Technical Session	Technical Session	Technical Session	Technical Session	Technical Session	Technical Session	Workshop / Panel	Workshop / Panel	Workshop / Panel	Headshots	Career Fair					
13:45																
14:00																
14:15																
14:30																
14:45	Technical Session	Technical Session	Technical Session	Technical Session	Technical Session	Technical Session	Workshop / Panel	Workshop / Panel	Workshop / Panel			Coffee				
15:00																
15:15																
15:30																
15:45																
16:00	Technical Session	Technical Session	Technical Session	Technical Session	Technical Session	Technical Session	Workshop / Panel	Workshop / Panel	Workshop / Panel							
16:15																
16:30																
16:45																
17:00																
17:15																
17:30																
17:45																
18:00	Dinner															
18:15																
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18:45																
19:00																
19:15																
19:30																
19:45																
20:00																
20:15																
20:30	Social Event															
20:45																
21:00																
21:15																
21:30																
21:45																
22:00																
22:15																
22:30																
22:45																
23:00																

2023 ANS Student Conference Proposal

Saturday																				
Room	360	362A	362B	362C	262A	262B	262C	270	169	260	367	383F	Exec Dining	Ballroom AB	Ballroom C	Concourse				
Capacity	24	54	54	54	50	60	70	120	108	24	10	10	15	-	-	-				
8:00	Breakfast & Plenary																			
8:15																				
8:30																				
8:45																				
9:00																				
9:15	Breakfast & Plenary																			
9:30																				
9:45																				
10:00																				
10:15																				
10:30	Technical Session	Technical Session	Technical Session	Technical Session	Technical Session	Technical Session	Workshop / Panel	Workshop / Panel	Workshop / Panel	Headshot Setup	Quiet Space	Judges' Lounge	Staff Break Room	Poster Setup	Interviews Setup	Coffee				
10:45	Technical Session	Technical Session	Technical Session	Technical Session	Technical Session	Technical Session	Workshop / Panel	Workshop / Panel	Workshop / Panel					Headshots						
11:00	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break					Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break
11:15																				
11:30																				
11:45																				
12:00																				
12:15	Lunch Break																			
12:30																				
12:45																				
13:00																				
13:15																				
13:30	Technical Session	Technical Session	Technical Session	Technical Session	Technical Session	Technical Session	Workshop / Panel	Workshop / Panel	SSC Meeting	Headshots	Quiet Space	Judges' Lounge	Staff Break Room	Poster Session 1	Interviews Setup	Coffee				
13:45	Technical Session	Technical Session	Technical Session	Technical Session	Technical Session	Technical Session	Workshop / Panel	Workshop / Panel	SSC Meeting					Headshots						
14:00	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break					Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break
14:15																				
14:30																				
14:45																				
15:00																				
15:15	Technical Session	Technical Session	Technical Session	Technical Session	Technical Session	Technical Session	Workshop / Panel	Workshop / Panel	Workshop / Panel	Headshots				Quiet Space	Judges' Lounge	Staff Break Room	Poster Session 2	Interviews Setup	Coffee	
15:30	Technical Session	Technical Session	Technical Session	Technical Session	Technical Session	Technical Session	Workshop / Panel	Workshop / Panel	Workshop / Panel								Headshots			
15:45	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break								Lunch Break	Lunch Break	Lunch Break
16:00																				
16:15																				
16:30																				
16:45																				
17:00	Technical Session	Technical Session	Technical Session	Technical Session	Technical Session	Technical Session	Workshop / Panel	Workshop / Panel	Workshop / Panel	Headshots	Quiet Space	Judges' Lounge	Staff Break Room				Poster Session 3	Interviews Setup	Coffee	
17:15	Technical Session	Technical Session	Technical Session	Technical Session	Technical Session	Technical Session	Workshop / Panel	Workshop / Panel	Workshop / Panel								Headshots			
17:30	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break								Lunch Break	Lunch Break	Lunch Break
17:45																				
18:00																				
18:15																				
18:30																				
18:45	Dinner & Awards Banquet																			
19:00																				
19:15																				
19:30																				
19:45																				
20:00																				
20:15																				
20:30																				
20:45																				
21:00																	Social Event			
21:15																				
21:30																				
21:45																				
22:00																				
22:15																				
22:30																				
22:45																				
23:00																				

Appendix B: Logistics

B1: Dining Options

Hilton Buffet Dinner:

THE MARBLE CITY

\$53.00 Per Person

Mixed Spring Green Salad with Feta Cheese, Spiced Candied Walnuts, Dried Cranberries, Shallot Vinaigrette

Roasted Swordfish Nicoise with Olives, Haricots Verts, and Roasted Onions

Champagne Chicken with Whole Grain Mustard Sauce

Roasted and Sliced Sirloin with Shallot Cream Sauce

Tri-Colored Fingerling Potatoes

Baby Vegetable Medley

Bread Service

Chocolate Peanut Butter Pie & Salted Caramel Crunch Cake

A vegetarian option would be available upon request. In consultation with the Hotel, we were informed that adding this to our menu for the night would not be likely to change the price of the dinner overall, so the budget simply includes an allotted number of guests for this buffet.

Hilton Breakfast Options:

HASH BROWN BAR

\$5.50 Per Person

Pick Four Toppings from the Following:

Bacon, Sautéed Onions, Sautéed Mushrooms,
Shredded Cheese, Bell Peppers, Ham, Scrambled
Eggs, Crumbled Sausage

PARFAIT STATION

\$8.25 Per Person

Assorted Breakfast Parfaits to Include Greek Yogurt, Granola, Berries, Diced Mango,
Roasted Nuts, Chia Seed Pudding with Almond
Milk, Chia Seeds, Agave Nectar, Seasonal Fruit
Garnish, Overnight Oats

BISCUIT BAR

\$6.75 Per Person

Buttermilk Biscuits, Andouille, Smoked Pork,
and Traditional Country Sausage Gravies, along
with Whipped Butter, Apple Butter, and Honey
Butter

PASTRY SHOP

\$4.50 Per Person

Assorted Muffins, Breakfast Loaves, Bagels,
Breads & Other Pastries

TOP OFF THE FRENCH TOAST

\$6.75 Per Person

Raisin Bread, Brioche, or Challah Bread
Toppings: Seasonal Fruit, Whipped Cream,
Chopped Nuts, Nutella, Candied Nuts, Chocolate
Chips, Maple Syrup



2023 ANS Student Conference Proposal



Catered Dinner Details:

Equipment Rental for World's Fair Park:

Page 1 of 2



5825 Middlebrook Pike
Knoxville, TN 37921
www.aopr.net
865-588-1131 Phone
865-558-8779 Fax

Customer #: 41890

U T DEPT OF NUCLEAR ENGINEERING
1412 CIRCLE DRIVE
306 NUCLEAR ENGINEERING BLDG
Knoxville, TN 37996

Phone 865-974-2525

Job Descr: EDWARD

Status: Quote

Quote #: q29749

Will Call: Wed 4/12/2023 8:30AM

Return: Fri 4/14/2023 5:00PM

Operator: KELLEY, KATELYN

Terms: On Account

Ordered By: EDWARD

Qty	Key	Items	Each	Disc%	Price
TENTS					
600 PEOPLE. WORLDS FAIR PARK					
CHAIRS					
1	CHRSAMBL	CHAIR, SAMSONITE BLACK	\$1.00		\$1.00
1	CHRSAMW	CHAIR, SAMSONITE WHITE	\$1.35		\$1.35
1	CHRGARDBL	CHAIR, BLACK GARDEN	\$3.35		\$3.35
1	CHRGARDFW	CHAIR, FRUITWOOD GARDEN	\$3.95		\$3.95
W/PAD					
CHAIR MUST BE RETURNED IN BAG					
1	4000-1200	CHAIR RICE BAG	\$0.00		\$0.00
1	CHRCCHVWH	CHAIR, CHILD CHIAVARI WHITE	\$4.50		\$4.50
1	CHRPDWHCH	CHAIR PAD, WHITE CHILD CHIAVARI	\$0.00		\$0.00
1	CHRCVFR	CHAIR, CHIAVARI FRUITWOOD	\$8.50		\$8.50
1	CHRPDIVTIE	CHAIR PAD, IVORY CHIAVARI	\$0.00		\$0.00
60	TAB60	TABLE, 60" ROUND	\$10.50		\$630.00
60	L120WHNVSL	LINEN, 120" WHITE NOVA SOLID	\$22.00		\$1,320.00
BISTRO TENT LIGHTING					
TABLE SETTINGS					
600	5700-0300	CHINA, DINNER WHITE	\$0.55		\$330.00
600	5700-0301	CHINA, SALAD WHITE	\$0.55		\$330.00
600	5800-0100	GLASS, ALL PURPOSE GOBLET 11.5 OZ	\$0.55		\$330.00
600	5900-0600	KNIFE, BUTTER HAMMERED	\$0.60		\$360.00
600	5900-0601	KNIFE, DINNER HAMMERED	\$0.60		\$360.00
600	5900-0602	FORK, DINNER HAMMERED	\$0.60		\$360.00
600	5900-0603	FORK, SALAD HAMMERED	\$0.60		\$360.00
600	5900-0604	SPOON, TEA/SOUP HAMMERED	\$0.60		\$360.00

Quote valid for 30 days.

OPEN MON-FRI 8:30-5:30PM, SAT 9:00-1:00PM, CLOSED SUNDAY

Printed On Thu 9/ 9/2021 11:19:38AM

Software by Point-of-Rental Software www.point-of-rental.com

Modification #1

contrad-params.SQL:pt (1)



2023 ANS Student Conference Proposal



Quote

This is a contract. The back of this contract contains important terms and conditions including lessor's disclaimer from all liability for injury or damage and details of customer's obligations. These terms and conditions are a part of this contract - READ THEM!

If equipment does not function properly notify lessor within 30 minutes of occurrence or no refund or allowance will be made.

I certify that I have read and agree to all terms of this contract.

Signature: _____

U T DEPT OF NUCLEAR ENGINEERING

Rental Retail	\$4,762.65
Damage Waiver:	\$476.26
<i>Total Savings:</i>	<i>\$0.01</i>
Subtotal:	\$5,238.91
ENGYSURCHG:	\$142.88
Total:	\$5,381.79
Paid:	\$0.00
Amount Due:	\$5,381.79

OPEN MON-FRI 8:30-5:30PM, SAT 9:00-1:00PM, CLOSED SUNDAY

Printed On Thu 9/ 9/2021 11:19:38AM

Software by Point-of-Rental Software www.point-of-rental.com

Modification #1

contract-params.SQL.rpt (1)



2023 ANS Student Conference Proposal



Zeanah Social Catered Hors D'oeuvres

Rosa's Catering Service, Inc.

7635 Old Maynardville Pike

Knoxville TN 37938

PH: 865 690-5757, FX: 865 925-4241

email:phnusbmnr@comcast.net

Invoice

Date	Invoice #
9/23/2021	89781

Bill To
UT Nuclear Engineering - Worrell Kathryn Worrell Need Phone Number kworrell@vols.utk.edu

P.O. No.	Terms	Project
THUR April 13, 20...		

Quantity	Description	Rate	Amount
	Reception at ??? for 570 Guests from 9:00 PM - 11:00 PM		
	PASSED		
570	Vietnamese Spring Rolls	1.25	712.50T
570	Marinated Shrimp Cocktail	1.50	855.00T
570	Mini Twice Baked Potatoes	1.25	712.50T
570	Italian Sausage, Monterey Jack Cheese Stuffed Mushrooms	0.95	541.50T
570	Spinach Quiche	0.95	541.50T
570	Sweet Tea, Water and Lemonade (Two Beverage Stations)	1.75	997.50T
	Set Up Fee to include food service linens, all buffet equipment, disposable plates, forks, knives, cups, napkins and ice	250.00	250.00T
14	Servers (Two servers passing each food item, two servers kitchen prep, two servers refilling beverage and bussing)	150.00	2,100.00T
		9.25%	620.72
		Total	\$7,331.22

Knoxville Convention Center Plated Dinner



EVENT PROPOSAL

FOR

UTK ANS Student Conference Dinner

600 people

April 13, 14 or 15, 2023

Space Rental for Ballroom ABCD or DEFG is \$3,000.00

We offer a Room Rental credit for Food & Beverage purchased*

\$6,000.00 food and beverage order Ballroom ABCD or DEFG is \$1,500.00

\$9,000.00 food and beverage order Ballroom ABCD or DEFG is \$750.00

\$12,000.00 food and beverage order Ballroom ABCD or DEFG is Complimentary

*Excluding 21% Administrative Fee; Group is Tax Exempt

Plated Dinner*

\$31.50 per person x 600 people = \$18,900.00

*Plated Dinner includes Salad or Hors d'oeuvres Plate, Choice of Entrée (Chicken, Pork or Fish), Starch & Vegetable, Single or Alternating Desserts, Warm Rolls with Butter, Coffee Service, Ice Water & Iced Tea

Cash Bars

There is a \$100.00 bar charge per bar unless each bar produces \$500.00 in revenue ~
If each bar produces \$500.00 in revenue, there is no charge. We provide (1) bar per 100 people

Complimentary: Registration Tables,

(3) 6x8 Riser Sections, (2) 20-Amp Outlets,

(2) Votive Candles per Table, White or Black Tablecloths

& Colored Napkins (based on availability of colors)

Audio Visual

6 Channel Audio Mixer, Podium Microphone, Laptop Audio Interface,

(2) 9x16 HD Fastfold Screens, (2) 7000 Lumens DLP Laser Projectors,

Set/Strike Labor & Show Technician \$3,645.00

Total Estimated Charges

Food \$18,900.00 X 21% administrative fee \$3,969.00 = \$22,869.00

Room Rental Complimentary*

*Based on Food & Beverage estimate above

Audio Visual Equipment & Labor \$3,645.00

Total Estimated Charges including Administrative Fee (Group is Tax Exempt)

\$26,514.00

B2: Student Union Details

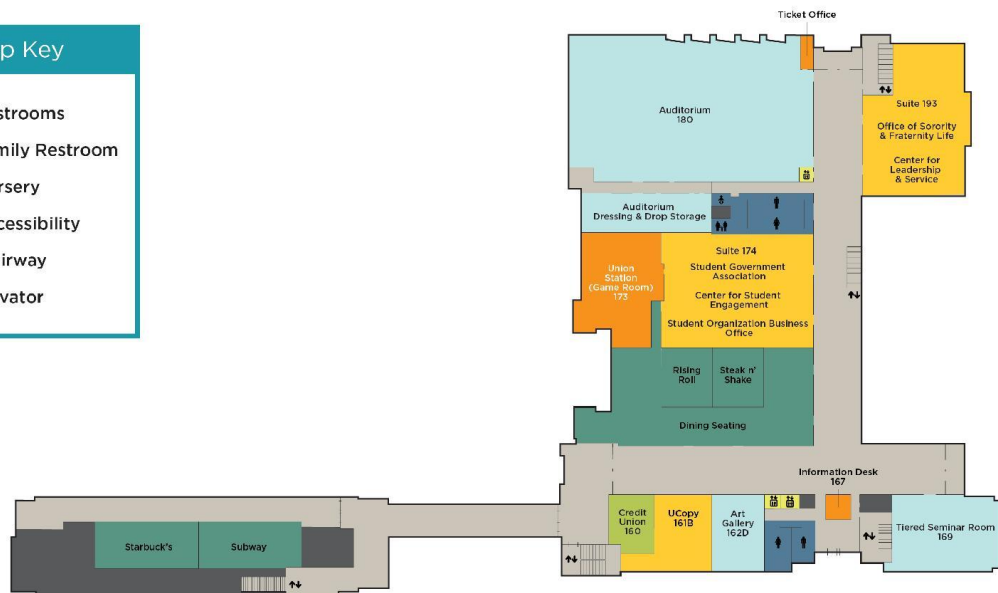
Room Uses and Capacities

Room	Intended Use	Square Footage	Seating Style/Capacity	Seating Style/Capacity	Max Expected # of Guests
169	SSC Meeting/ Proposal Writing		Classroom/108	-	100
260	Headshots		N/A	-	4
262A	Technical Sessions	1333	Theater/70	Classroom/40	60
262B	Technical Sessions	1333	Theater/70	Classroom/40	60
262C	Panel/ Workshop	1333	Theater/70	Classroom/40	70
270	Panel/ Workshop		Theater/140	Classroom/72	100
360	Technical Sessions	600	Theater/24	-	24
362A	Technical Sessions	1333	Theater/70	Classroom/40	60
362B	Technical Sessions	1333	Theater/70	Classroom/40	60
362C	Technical Sessions	1333	Theater/70	Classroom/40	60
367	Quiet Space		Conference/14	-	3
377 Exec Dining	Staff		Theater/80	-	15
383F	Judges' Lounge		Conference/18	-	10
Ballroom ABC	Career Fair	12000	Banquet/600		
Ballroom AB	Poster Session	8000			
Ballroom C	Interviews	4000			

Maps

Student Union

1st Floor

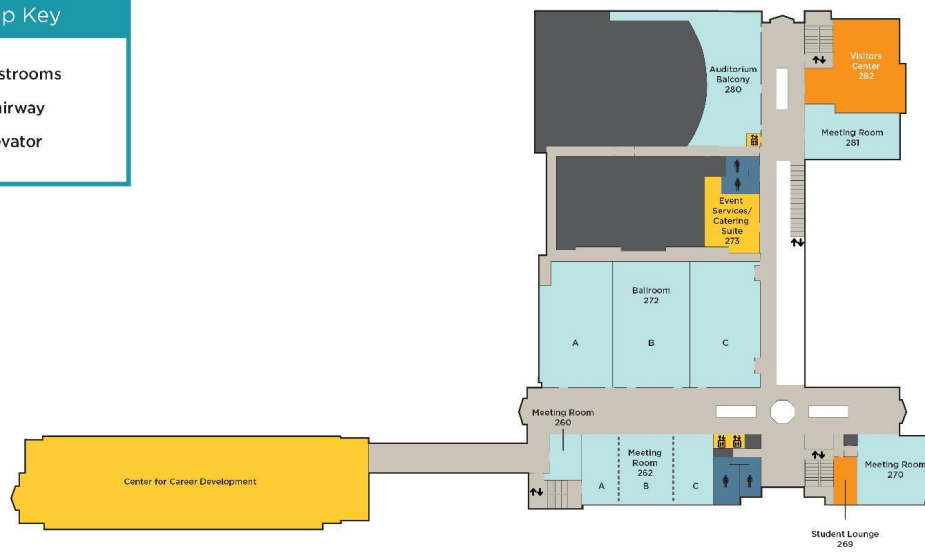


Student Union

2nd Floor

Map Key

-  Restrooms
-  Stairway
-  Elevator



Student Union
3rd Floor

Map Key

-  Restrooms
-  Stairway
-  Elevator

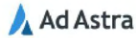




2023 ANS Student Conference Proposal



Space Reservation Proposal



Event Summary

9/9/2021
4:35PM

Comment:

Event Information:

Customer / Contact Information:

Reservation #: 20210909-00252
Event Name: UTK American Nuclear Society Student Conference
Event Type: Student Organization
Date: 4/14/23 - 4/15/23
Status: Scheduled
Est. Attendance: 0

Alyssa Hayes
hayes@utk.edu
American Nuclear society Student chapter

Event Notes:

Meeting Name	Date(s)	Time	Meeting Status	Building	Room	Room Status
Scheduled						
UTK American Nuclear Society Student Conference	4/14/23 - 4/14/23	7:00AM - 5:00PM	Scheduled	SU	272	Scheduled
UTK American Nuclear Society Student Conference	4/14/23 - 4/14/23	7:00AM - 5:00PM	Scheduled	SU	377A	Scheduled
UTK American Nuclear Society Student Conference	4/14/23 - 4/14/23	7:00AM - 5:00PM	Scheduled	SU	383F	Scheduled
UTK American Nuclear Society Student Conference	4/14/23 - 4/14/23	7:00AM - 5:00PM	Scheduled	SU	367	Scheduled
UTK American Nuclear Society Student Conference	4/14/23 - 4/14/23	7:00AM - 5:00PM	Scheduled	SU	260	Scheduled
UTK American Nuclear Society Student Conference	4/14/23 - 4/14/23	7:00AM - 5:00PM	Scheduled	SU	169	Scheduled
UTK American Nuclear Society Student Conference	4/14/23 - 4/14/23	7:00AM - 5:00PM	Scheduled	SU	270	Scheduled
UTK American Nuclear Society Student Conference	4/14/23 - 4/14/23	7:00AM - 5:00PM	Scheduled	SU	262C	Scheduled
UTK American Nuclear Society Student Conference	4/14/23 - 4/14/23	7:00AM - 5:00PM	Scheduled	SU	262B	Scheduled
UTK American Nuclear Society Student Conference	4/14/23 - 4/14/23	7:00AM - 5:00PM	Scheduled	SU	262A	Scheduled
Setup	4/14/23 - 4/14/23	6:30AM - 7:00AM	Setup Window			
UTK American Nuclear Society Student Conference	4/14/23 - 4/14/23	7:00AM - 5:00PM	Scheduled	SU	362C	Scheduled
UTK American Nuclear Society Student Conference	4/14/23 - 4/14/23	7:00AM - 5:00PM	Scheduled	SU	362B	Scheduled
UTK American Nuclear Society Student Conference	4/14/23 - 4/14/23	7:00AM - 5:00PM	Scheduled	SU	362A	Scheduled
UTK American Nuclear Society Student Conference	4/14/23 - 4/14/23	7:00AM - 5:00PM	Scheduled	SU	360	Scheduled
UTK American Nuclear Society Student Conference	4/15/23 - 4/15/23	7:00AM - 5:00PM	Scheduled	SU	272	Scheduled
UTK American Nuclear Society Student Conference	4/15/23 - 4/15/23	7:00AM - 5:00PM	Scheduled	SU	377A	Scheduled




2023 ANS Student Conference Proposal



UTK American Nuclear Society Student Conference	4/15/23 - 4/15/23	7:00AM - 5:00PM	Scheduled	SU	383F	Scheduled
UTK American Nuclear Society Student Conference	4/15/23 - 4/15/23	7:00AM - 5:00PM	Scheduled	SU	367	Scheduled
UTK American Nuclear Society Student Conference	4/15/23 - 4/15/23	7:00AM - 5:00PM	Scheduled	SU	260	Scheduled
UTK American Nuclear Society Student Conference	4/15/23 - 4/15/23	7:00AM - 5:00PM	Scheduled	SU	169	Scheduled
UTK American Nuclear Society Student Conference	4/15/23 - 4/15/23	7:00AM - 5:00PM	Scheduled	SU	270	Scheduled
UTK American Nuclear Society Student Conference	4/15/23 - 4/15/23	7:00AM - 5:00PM	Scheduled	SU	262C	Scheduled
UTK American Nuclear Society Student Conference	4/15/23 - 4/15/23	7:00AM - 5:00PM	Scheduled	SU	262B	Scheduled
UTK American Nuclear Society Student Conference	4/15/23 - 4/15/23	7:00AM - 5:00PM	Scheduled	SU	262A	Scheduled
Setup	4/15/23 - 4/15/23	6:30AM - 7:00AM	Setup Window			
UTK American Nuclear Society Student Conference	4/15/23 - 4/15/23	7:00AM - 5:00PM	Scheduled	SU	362C	Scheduled
UTK American Nuclear Society Student Conference	4/15/23 - 4/15/23	7:00AM - 5:00PM	Scheduled	SU	362B	Scheduled
UTK American Nuclear Society Student Conference	4/15/23 - 4/15/23	7:00AM - 5:00PM	Scheduled	SU	362A	Scheduled
UTK American Nuclear Society Student Conference	4/15/23 - 4/15/23	7:00AM - 5:00PM	Scheduled	SU	360	Scheduled

B3: Hotel Proposals

Hilton Knoxville



CONFERENCE & EVENT PROPOSAL

Hilton
HOTELS & RESORTS

August 23, 2021

Ms. Alyssa Hayes and Ms. Katy Joyce
c/o American Nuclear Student Society

RE: 2023 ANS Student Conference

Thank you very much for considering the Hilton Knoxville for your event. We would be happy to accommodate your attendees!

We are Knoxville's premier hotel defined by Southern hospitality and service!

Conveniently located in the center of downtown Knoxville, our newly renovated property is easily accessible to the Knoxville Convention Center via covered sky bridge, within walking distance to area dining, shopping & entertainment, minutes away from the University of Tennessee, Neyland Stadium, Riverfront development, and only one block from World's Fair Park.

Inviting accommodations feature contemporary décor and luxurious amenities, while our food & beverage outlets offer enticing selections and a casual atmosphere. Start your morning off right in the downtown's only full-service Starbucks, conveniently located on the lobby level. Relax with your favorite cocktail in our new outdoor beer garden, "The Firefly", or visit the Marble City Kitchen and try one of our Southern classics featuring fresh, locally-sourced ingredients. Your guests will have it all without stepping outside!

All of our 320 guest rooms provide spectacular views of the city, including our popular south side rooms, which face the Tennessee River, Neyland Stadium, and the Great Smoky Mountains.

AMERICAS • EUROPE • MIDDLE EAST • AFRICA • ASIA • AUSTRALASIA

Let us pamper your guests with all that we have to offer:

- ⑩ Two blocks from Market Square, featuring numerous local dining options, unique shopping & entertainment venues
<http://www.downtownknoxville.org>
- ⑩ **Complimentary** high-speed wireless internet access in all guestrooms, lobby & meeting space
- ⑩ One block from the Knoxville Convention Center & easily accessible via covered skybridge
- ⑩ Beautiful Guestrooms, Lobby, Marble City Kitchen and The Firefly, our outdoor beer garden featuring a full bar, casual seating & a cozy fire pit
- ⑩ Downtown Knoxville's only full-service Starbucks®, located on the lobby level
- ⑩ Hilton HHonors® Concierge Level
- ⑩ Full service breakfast, lunch & dinner in the Marble City Kitchen
- ⑩ Full-Service Business Center & Gift Shop
- ⑩ Spacious guest rooms offering a king bed with sleeper sofa or two queen beds
- ⑩ 24-hour Valet Parking available
- ⑩ Outdoor swimming pool and sundeck
- ⑩ Over 14,000 square feet of contemporary meeting space



ROOM BLOCK:

We are pleased to offer two sets of room blocks for the conference. The attendee room block and a block at the government rate. The hotel can work with the conference on the logistics of separating the two blocks of rooms and how these reservations will be made.

Attendee Room Block:

2023	April 12 th	April 13 th	April 14 th	April 15 th
Run of House	70	100	100	100

Attendee Room Rate:

Room	Single Rate	Double Rate
Run of House	\$139.00	\$139.00

Government Room Block:

2023	April 12 th	April 13 th	April 14 th	April 15 th
Run of House	50	50	50	50

Government Guest Room Rate:

Room	Single Rate	Double Rate
Run of House	*\$102.00	*\$102.00

All guest room rates are subject to applicable taxes (currently 17.25%).

Rate to extend 2 days pre/post, based on availability. *Prevailing government rate applies

CONCESSIONS:

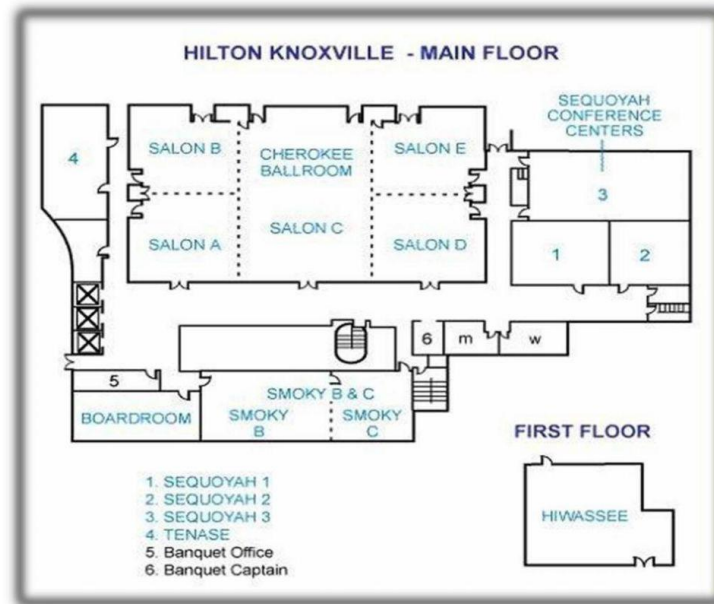
Comp Ratio:	1 per 40 on a daily basis
Attrition:	85%
Executive Upgrade:	3 upgrades to executive level for VIPs
Cut-off Date:	3-weeks prior to arrival
WiFi:	Complimentary throughout entire Hotel and meeting space
Self Parking:	30% off prevailing self-parking rates for overnight guests 5 complimentary self-parking passes for staff or VIPs's

PARKING:

The Hilton Knoxville offers 24-hour valet parking for registered guests. Self-parking is also available for registered guests through Central Parking's covered garage, attached to the Hotel. Please note that parking rates are currently \$24.00 per day for valet, and \$20.00 per day for self-parking, and subject to change without notice.

MEETING SPACE LAYOUT:

With over 14,000 square feet of versatile function space, your attendees will be well- accommodated. State-of-the-art technology of PSAV Audio/Visual and the personalized services of our professional catering staff add the finishing touches for success.



	SQ	Theatre	Classroom	Reception	Rounds of 10	Conference	U-Shape
BALLROOM	6,976	700	350	950	600	-	110
SALON A/B/D/E	1,120	95	50	-	70	38	32
SALON C	2,496	255	150	300	200	55	50
SALON AB or DE	2,240	175	100	225	150	-	50
SALON ABC or CDE	4,736	475	250	700	350	-	75
SEQUOYAH 1	720	60	28	50	50	24	28
SEQUOYAH 2	576	50	20	45	30	18	22
SEQUOYAH 3	1,127	100	80	110	70	42	40
GREAT SMOKY B&C	1,495	120	80	140	80	-	
HIWASSEE	1,584	100	64	150	110	30	-
BOARDROOM	600	-	-	-	-	14	-

FUNCTION INFORMATION AGENDA/EVENT AGENDA

Based on the requirements outlined by University of Tennessee Nuclear Engineering Department, the Hotel has identified the following function space as an example of how the meeting requirements can be accommodated.

Please note that all meeting space outlined below is being offered complimentary with a one-time set-up fee of *\$5,000.00 and a per day food and beverage minimum as follows:

Thursday, April 13, 2023 = *\$9,750.00

Friday, April 14, 2023 = *\$15,500.00

Saturday, April 15, 2023 = *\$9,750.00

Date	Time	Event Class	Room	Setup	AGR
Wed, 04/12/23	6:00 PM - 11:45 PM	Hospitality	Hiwassee Room	Reception	100
Thu, 04/13/23	12:00 AM - 11:45 PM	Hospitality	Hiwassee Room	Reception	100
Thu, 04/13/23	7:45 AM - 9:45 PM	Breakfast Buffet	Salon CDE	Round Tables of 10	400
Thu, 04/13/23	8:00 AM - 5:00 PM	Meeting	Sequoyah III Room	Classroom	50
Thu, 04/13/23	8:00 AM - 5:00 PM	Meeting	Salon AB	Classroom	50
Fri, 04/14/23	12:00 AM - 11:45 PM	Hospitality	Hiwassee Room	Reception	100
Fri, 04/14/23	7:45 AM - 9:45 AM	Breakfast Buffet	Ballroom	Round Tables of 10	400
Fri, 04/14/23	6:00 PM - 8:00 PM	Dinner	Ballroom	Round Tables of 10	400
Sat, 04/15/23	12:00 AM - 11:45 PM	Hospitality	Hiwassee Room	Reception	100
Sat, 04/15/23	7:45 AM - 9:45 AM	Breakfast Buffet	Ballroom	Round Tables of 10	400

**All meeting room, food and beverage, and related services are subject to applicable taxes (currently 9.25%) in effect on the date(s) of the event and subject to change without notice. Prior to the application of any taxes, all meeting room, food and beverage, audio-visual, and related services will be subject to a 20% service charge. Please note that the service charge is not a gratuity or tip and, accordingly, is subject to all applicable taxes.*

HOTEL CONTACT:

Tracy O'Connor, Sales Manager

Phone: 865-251-2573

E-mail: toconnor@hiltonknoxville.com

Address: 501 W Church Ave, Knoxville, TN 37902

Website: www.knoxvillehilton.com Catering & A/V Menus:

<http://knoxvillecateringandevents.hiltonmenus.com/index.asp>

Thank you for considering the Hilton Knoxville for your conference! Please let me know if you have any questions or if there is any additional information I can provide to assist in your decision!

We look forward to accommodating you and your guests!

Graduate Knoxville

Graduate KNOXVILLE

Proposal presented for
American Nuclear Society
American Nuclear Society 2023 Student Conference
April 12, 2023- April 16, 2023

On behalf of Graduate Knoxville
Madelyn Pitcher, Director of Sales
mpitcher@graduateknoxville.com
(865) 437-5500

Located just steps from the University of Tennessee campus and the Fort Sanders neighborhood, Graduate Knoxville offers access to both the city's rich cultural and outdoor offerings.

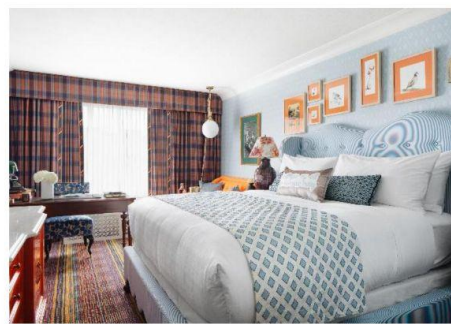
Colorful digs in downtown Knoxville

Whether you're in town cheering on the Vols, strolling through the theatre district or polishing off a slab of ribs at Sweet P's, we're here to make your stay memorable. Settle into spaces inspired by Rocky Top lore and bursting with Big Orange pride.



Rooms worth writing home about

Inside our 112 guestrooms, a palette of orange, blue and white mixes with vintage touches and unique accents honoring the Marble City. Malin & Goetz amenities, complimentary wi-fi and other little luxuries enhance your stay. With warm Tennessee charm and modern finishes, these rooms are a Southern retreat.



SLEEPING ROOMS AND RATES

	Room Type	#	Rate
Wednesday April 12, 2023	King	30	\$159.00
Thursday April 13, 2023	King	30	\$159.00
Friday April 14, 2023	King	30	\$159.00
Saturday, April 15, 2023	King	30	\$159.00

	Room Type	#	Rate
Wednesday April 12, 2023	King	10	\$102.00
Thursday April 13, 2023	King	10	\$102.00
Friday April 14, 2023	King	10	\$102.00
Saturday, April 15, 2023	King	10	\$102.00

Guestroom rates above are exclusive of applicable taxes, currently 17.25%.

Group Room Rates listed above are net non-commissionable.

Rates are exclusive of parking and breakfast.

Due to our campus location, parking is valet only. On-site parking is currently \$26.00 per standard sized vehicle per day. Bus parking is available if arranged in advance for an additional cost.

Our on-site coffee shop, Poindexter, serves café favorites for purchase daily starting at 6:00am.



2023 ANS Student Conference Proposal



Graduate Knoxville is pleased to extend the following special concessions to enhance the group's enjoyment and comfort:

- ❖ Complimentary basic wireless internet in Guestrooms
- ❖ 20% Allowable Attrition (group must pick up 80% of rooms held)
- ❖ Knoxville inspired welcome amenity for all guest in group block at arrival
- ❖ 10% discount at Saloon 16 and Poindexter with ANS Conference ID

Kindly note that the Hotel is not holding guestrooms or meeting space at this time. Should you prefer a first option hold, please let us know.

*** Alternate Date Pricing ***

SLEEPING ROOMS AND RATES

	Room Type	#	Rate
Wednesday March 29, 2023	King	30	\$159.00
Thursday March 30, 2023	King	30	\$159.00
Friday March 31, 2023	King	30	\$159.00
Saturday, April 1, 2023	King	30	\$159.00

	Room Type	#	Rate
Wednesday March 29, 2023	King	10	\$102.00
Thursday March 30, 2023	King	10	\$102.00
Friday March 31, 2023	King	10	\$102.00
Saturday, April 1, 2023	King	10	\$102.00



2023 ANS Student Conference Proposal



Hyatt Place



Rooms Only Agreement

Hyatt Place Knoxville Downtown
530 South Gay Street
Knoxville, TN 37902

Hotel Website: www.hyattplaceknoxvilledowntown.com

Telephone: (865) 544-9977

Sales Fax: (865) 544-2070

This agreement is between Hyatt Place Knoxville Downtown and American Nuclear Society and outlines specific conditions and services to be provided.

Monday, September 20, 2021

Organization: American Nuclear Society
Contact: Kathryn Worrell
Student - Nuclear Engineering
Address: 555 North Kensington Avenue
LaGrange Park, IL 60526

Hotel: Hyatt Place Knoxville Downtown
Hotel Contact: Britt Landkorn
task force sales manager
Hotel Address: 530 South Gay Street
Knoxville, TN 37902

Email: kworrell@vols.utk.edu
Phone: (423) 765-3073

Email: Natalie.branham@whitelodging.com
Phone: 865-770-4068

Name of Event: 2023 ANS Student Conference
Dates: Wednesday, April, 12, 2023 - Sunday, April 16, 2023



2023 ANS Student Conference Proposal



GUEST ROOM COMMITMENT/GROUP ROOM RATES

The Hyatt Place Knoxville Downtown agrees that it will provide, and 2023 ANS Student Conference agrees that it will be responsible for using, 290 room nights in the pattern set forth below (such number and such pattern, the "Room Night Commitment"):

Hyatt Place Knoxville Downtown - 2023 ANS Student Conference - USD			
		Standard King	Total
4/12/2023	Guestrooms	50	50
	Rate	189.00	
4/13/2023	Guestrooms	80	80
	Rate	189.00	
4/14/2023	Guestrooms	80	80
	Rate	189.00	
4/15/2023	Guestrooms	80	80
	Rate	189.00	

Hyatt Place Knoxville Downtown's room rates are subject to applicable state and local taxes currently in effect at the time of check-out.

COMMISSION

The group room rates listed above are net non-commissionable. 2023 ANS Student Conference will advise its agency of these rates and address any resulting agency compensation issues directly with the agency and agrees to indemnify and hold harmless the Hyatt Place Knoxville Downtown from any commissions.

METHOD OF RESERVATIONS

Option A – Individual Reservations

- ☐ Individual attendees will make reservations on-line through a designated website link which will be provided by your hotel contact once the final group sales agreement is signed.

Option B – Rooming List

- ☐ Reservations for the Event will be made by a rooming list. 2023 ANS Student Conference will forward its rooming list by Monday, March 13, 2023.

CUTOFF DATE

Reservations by attendees must be received on or before Monday, March 13, 2023 (the "Cut-Off Date"). At the Cut-Off Date, Hyatt Place Knoxville Downtown will review the reservation pick up for the Event, release the unreserved rooms for general sale, and determine whether or not it can accept reservations based on a space- and rate-available basis at the 2023 ANS Student Conference group rate after this date.

Release of rooms for general sale following the Cut-Off Date does not affect 2023 ANS Student Conference obligation, as discussed elsewhere in this Agreement, to utilize guest rooms.



2023 ANS Student Conference Proposal



ROOMS ATTRITION

2023 ANS Student Conference agrees that it will pay Hyatt Place Knoxville Downtown **\$189** for each room night not used below 232 room nights, plus applicable taxes, as a reasonable estimate of the harm to the Hyatt Place Knoxville Downtown if the rooms are not used and not as a penalty to 2023 ANS Student Conference.

BILLING ARRANGEMENTS

[SELECT ONE OF THE FOLLOWING]:

- ☐ Individual attendees will pay all charges (cash-paying guests may be asked to leave a cash or credit card deposit to guarantee payment)
- ☐ Room and tax charges to Master Account
- ☐ All charges to Master Account

PAYMENT BY CREDIT CARD

2023 ANS Student Conference may pay by credit card.

Hotel uses Sertifi for credit card authorizations. If paying by credit card, you will receive an electronic form from Sertifi where you will sign and enter your payment information.

PARKING

Valet Parking is offered by the Hotel at a rate of \$25 for overnight guests with unlimited in and out privileges. Parking of a commercial vehicle or buses will be \$125 per night. If 2023 ANS Student Conference is planning on parking commercial vehicles or buses, Hyatt Place Knoxville/Downtown must be notified at least one week in advance in order to accommodate.

CANCELLATION

2023 ANS Student Conference acknowledges that if it cancels or otherwise essentially abandons its planned use of the Room Night Commitment (a "Cancellation"), this action would constitute a breach of 2023 ANS Student Conference obligation to Hyatt Place Knoxville Downtown and Hyatt Place Knoxville Downtown would be harmed. If a cancellation occurs, the parties agree that:

- a) It would be difficult to determine Hyatt Place Knoxville Downtown 's actual harm;
- b) The sooner Hyatt Place Knoxville Downtown receives notice of the Cancellation, the lower its actual harm is likely to be, because the probability of mitigating the harm by reselling the space and function is higher; and
- c) The highest percentage amount in the chart (the "Chart") set forth below reasonable estimates Hyatt Place Knoxville Downtown's harm for a last-minute cancellation and, through its use of a sliding scale that reduces damages for earlier cancellations, the Chart also reasonable estimates Hyatt Place Knoxville Downtown's ability to lessen its harm by reselling 2023 ANS Student Conference's space and functions.

2023 ANS Student Conference therefore agrees to pay within thirty (30) days after any Cancellation, as liquidated damages and not as a penalty in accordance with the amount listed in the Chart below.



2023 ANS Student Conference Proposal



Date of Cancellation	Amount of Liquidated Damages Due
Date of Agreement to 365 days prior to arrival	25% of Total Room Revenue*
From 364 days to 90 days prior to arrival	50% of Total Room Revenue*
From 89 days to 30 days prior to arrival	75% of Total Room Revenue*
From 29 days to 0 days prior to arrival	100% of Total Room Revenue*

* "Total Room Revenue" is the dollar amount equal to the number of room nights in the Room Night Commitment multiplied by the 2023 ANS Student Conference average room rate. If applicable, state and local taxes will be added to the amounts listed above.

Provided 2023 ANS Student Conference timely notifies Hyatt Place Knoxville Downtown of the Cancellation and timely pays the above liquidated damages, Hyatt Place Knoxville Downtown agrees not to seek additional damages from 2023 ANS Student Conference relation to the Cancellation.

REWARDS

WORLD OF HYATT

Approximately (10) business days after the conclusion of the Event (provided that the Event is not cancelled and 2023 ANS Student Conference has otherwise complied with the material terms and conditions of this Agreement), the Hyatt Place Knoxville Downtown will either award World of Hyatt points:

CHECK ONE OPTION BELOW:

- ☐ **Award World of Hyatt Points** to the Contact (as identified on page 1 of this Agreement or the Authorized Signer of this Agreement)
Member Name _____
Member Account Number _____
- ☐ **Decline to Award World of Hyatt Points.** The Contact and the Authorized Signer of this Agreement elect not to receive (and hereby waive the right to receive) an award of World of Hyatt points in connection with the Event.

IMPOSSIBILITY

The performance of this Agreement is subject to termination without liability upon the occurrence of any circumstance beyond the control of either party – such as acts of God, war, acts of terrorism, government regulations, disaster, strikes (except those involving the employees or agents of the party seeking the protection of this clause), civil disorder, or curtailment of transportation facilities – to the extent that such circumstance makes it illegal or impossible to provide or use the Hyatt Place Knoxville Downtown facilities. The ability to terminate this Agreement without liability pursuant to this paragraph is conditioned upon delivery of written notice to the other party setting forth the basis for such termination as soon as reasonably practical - but in no event longer than ten (10) days - after learning of such basis.

COMPLIANCE WITH LAW

This agreement is subject to all applicable federal, state, and local laws, including health and safety codes, alcoholic beverage control laws, disability laws, federal anti-terrorism laws and regulations, and the like. Hyatt Place Knoxville Downtown and 2023 ANS Student Conference agree to cooperate with each other to ensure compliance with such laws.



2023 ANS Student Conference Proposal



FORCE MAJEURE:

If Hyatt Place Knoxville Downtown is delayed in its performance, or such performance becomes impossible, due to fire, weather conditions that are extreme or unusual for the season and area, any act of God, any action by the civil or military authorities, war, any labor unrest, any breach of the peace, or from any other cause beyond the reasonable control of Hyatt Place Knoxville Downtown, then, the remedy to 2023 ANS Student Conference shall be that the time for performance shall be extended for such reasonable time as may be agreed upon by the parties, or by rescission by Hyatt Place Knoxville Downtown at its sole option.

DISPUTE RESOLUTION

In the event of dispute resolution, the non-prevailing party will pay the other's costs and attorney's fees.

CHANGES, ADDITIONS, STIPULATIONS OR LINING OUT

Any changes, additions, stipulations or deletions including corrective lining out by either Hyatt Place Knoxville Downtown or 2023 ANS Student Conference will not be considered agreed to or binding unless such modification is initialed or otherwise approved in writing.

ACCEPTANCE

Prior to execution by both parties, this document represents an offer by the Hyatt Place Knoxville Downtown. Unless the Hyatt Place Knoxville Downtown otherwise notifies 2023 ANS Student Conference at any time prior to 2023 ANS Student Conference execution of this document, the outlined format and dates will be held by the Hyatt Place Knoxville Downtown on a first-option basis until **Thursday, September 23, 2021**. If Hyatt Place Knoxville Downtown notifies 2023 ANS Student Conference of another offer, 2023 ANS Student Conference will have 72 hours to either sign this agreement or release the dates. Upon receipt by Hyatt Place Knoxville Downtown of a fully executed version of this Agreement prior to **Thursday, September 23, 2021**, or upon Hyatt Place Knoxville Downtown's acceptance of a fully executed version of this Agreement after such date, it will be placed on a definite basis and will be binding between Hyatt Place Knoxville Downtown and 2023 ANS Student Conference.

Hyatt Place Knoxville Downtown and 2023 ANS Student Conference have agreed to and have executed this Agreement by their authorized representatives as of the dates indicated below.

SIGNATURES

Approved and authorized by 2023 ANS Student Conference

Name: (Print) _____ Signature: _____

Title: (Print) _____ Date: _____

Approved and authorized by Hyatt Place Knoxville Downtown:

Name: (Print) _____ Natalie Branham _____ Signature: _____

Title: (Print) _____ Director of Sales _____ Date: _____

Hampton Inn



618 West Main St. Knoxville, TN 37902
tel: 865-522-5400 fax: 865-522-4100
www.hampton.com

Welcome to Hampton Inn & Suites Downtown Knoxville.

Date: September 8th, 2021

Group Name: 2023 ANS Student Conference
Contact: Alyssa Hayes – Ph.D. Student

Phone: 847-322-7843
Email: hayes@utk.edu

Dear Alyssa,

Thank you for considering the Hampton Inn & Suites Downtown Knoxville to be the overflow hotel for the ANS Student Conference 2023! We are thrilled to potentially welcome them to our property in March or April of 2023. Please review the below offer for your consideration.

GROUP ROOM BLOCK:

Room Type	Rate	WED 4/12	THURS 4/13	FRI 4/14	SAT 4/15	SUN 4/16
CONUS Standard Double Queen (must show school id)	\$104	4	4	4	4	Checkout
Standard Double Queen	\$134	11	11	11	11	Checkout
Standard King	\$134	5	5	5	5	Checkout
		20	20	20	20	

OR

Room Type	Rate	WED 3/29	THURS 3/30	FRI 3/31	SAT 4/1	SUN 4/2
CONUS Standard Double Queen (must show school id)	\$104	4	4	4	4	Checkout
Standard Double Queen	\$134	11	11	11	11	Checkout
Standard King	\$134	5	5	5	5	Checkout
		20	20	20	20	

2023 ANS Student Conference Proposal



RATE INFORMATION:

Above rates do not include lodging tax of 17.25% and parking fees of \$10 per night/per vehicle. These group rates may not be combined with any other discounts. To secure these rates at this discounted price, please return a signed contract to the sales department by 9/15/21. If signed contract is not received at that time-- dates and rate are subject to change based on availability.

RESERVATION PROCEDURE:

Method of Reservation	Individual call in, direct booking link will be provided.
Cut-Off Date	Guestrooms will be held until 03/12/23. Guestrooms not confirmed at that time will be released and space will be subject to availability.
Billing Instructions	Individuals Pay Own. If securing a room at CONUS rate guest MUST have their school id with them upon arrival.
Special Requests	Breakfast included in rate and \$10 parking per car/per night.

EXEMPTION STATUS:

Group Status: _____Tax Exempt ☒Not Tax Exempt

*Valid tax form must be presented for 9.25% State Tax Exemption to apply.

Local City/County tax of 8% does not apply to tax exemption.

CANCELLATION POLICY:

In the event that the entire group should cancel this contract for any reason other than the following: Acts of God, Acts of Terrorists, Government Regulations, Disaster, Civil Disorder or other emergencies making it illegal to hold the meeting/convention; the following will apply: **30 Days or Less Prior To Arrival (1) night room & tax will be charged. Individual reservations may modify/cancel their rooms up to 72 hours prior to arrival.**

CHECK IN/CHECK OUT:

Hotel check-in is 3:00 p.m. and check out is 11:00 a.m. *****Early check in & late check outs are subject to availability and are not guaranteed. ** Extended late check outs will require a fee of half of a one-night stay. Fee is based on the hotels BAR rate and is subject to change and availability. *****

PAYMENT PROCEDURE:

Individuals will pay own way; credit card information will be required for reservation.

Please sign below and return via email or fax if you agree to the terms and conditions of this contract.

Group: ANS Student Conference 2023

Name: Alyssa Hayes – Ph.D. Student

Title:

Signature:

Date:

Property: Hampton Inn & Suites Downtown Knoxville

Name: Nicole Threadgill

Title: Marketing Sales Manager

Signature:

Date:

Appendix C: Contingency Plans

Committee Changes

As discussed in the Committee Transition section, all work would be kept in a shared drive to ensure a smooth transition if a position becomes vacant. When possible, turnover meetings would be encouraged for all vacant positions. Below are the specific requirements for each vacant position.

Proposal Lead Replacement

The proposal lead position would be determined by a vote and nomination of the student body of the American Nuclear Society. The voting process is outlined in the University of Tennessee American Nuclear Society Chapter bylaws. This vote must occur within two weeks of the vacancy of the committee member.

Chair Replacement

A rigorous application process, including faculty and student leader involvement, would be used to determine chairs of the proposal committee. However, if extenuating circumstances occur that require a chair to be removed or replaced, there would be a procedure to maintain the function of the committee. The Proposal Lead would have weekly meetings with the chairs to ensure they would be kept informed of the status and progress of the committee's chairs if a chair is replaced. When a vacancy occurs, the Proposal Lead should refer to the milestone chart to determine if a milestone is due within the next month. The Proposal Lead would nominate an acting chair and discuss milestone requirements within 1 week of the vacancy. The Proposal Lead and acting chair would meet with the rest of the committee to discuss interests and the current standing of the committee within 10 days of the vacancy. Within two weeks, the Proposal Lead would nominate a replacement based on the meeting with the committee and our faculty advisor. The proposal leads with check-in after one month to ensure there has been a smooth transition to a new chair.

Member Replacement

If a member requires a replacement, the chair of the committee would be responsible for selecting a new member to take over the responsibilities left behind. The chair can look in a variety of locations to identify a replacement including the American Nuclear Society student chapter; other University of Tennessee Nuclear Engineering oriented student organizations including Women in Nuclear, Institute for Nuclear Material Management, Graduate Student Alliance, and the Diversity Equity Inclusion Action Committee; and students recommended by peers and faculty. If the committee chair determines that the need for more members is more urgent and a new member can not be identified quickly enough, the chair can work with the chairs of the other committees to send a member over on loan. For this to occur, both chairs and the member have to be in agreement with the projected time frame and need to review all responsibilities.

Hotels

We have a large list of hotels compiled that are within walking distance to the student conference. If we identify challenges to our most ideal options, whether it be due to financial or logistical constraints, we have several options to choose from. We have ranked these options based on their proximity to campus and on how much they impact our budget. Based on this approach, we would continue to go through our list until we identify an acceptable option. Below is a list of our rankings. We have contacted all these hotels and received enthusiastic support.

- Hilton Knoxville
- Hampton Inn
- Cumberland House
- Embassy Suites by Hilton
- Hyatt Place
- Crowne Plaza Knoxville
- Courtyard by Marriott

Travel and Transportation

We hope to utilize the campus event service shuttles for transportation during the conference. We are allowed to use their vehicles anywhere within the Knox County/City of Knoxville area. If they do not have adequate capacity or there is any other issue securing those vehicles for our use, we would refer to Premier Transportation for shuttle services.

Website and Social Media

We are committed to creating an excellent website and mobile app experience. These products would be fine-tuned and continuously improved to meet the conference needs if any situations arise. The same is true for our social media presence. We would work to use our accounts to best fit our attendees' and the conference's needs. All necessary adjustments would be implemented with pace and skill.

Conference Swag, Awards, and Gifts

If the division of the \$10,000 budget becomes infeasible, a few adjustments have been considered and would be made to lower the overall cost of swag, student awards, and gifts. The ultimate goal is to prevent sacrificing the quality of the gifts and awards, while also working towards minimizing the amount spent from the budget.

Swag Cuts

To decrease the overall cost of the attendee swag bags, a few items previously included would be redacted from the swag bag. This way, we can still provide a swag bag of the same quality, just at a decreased cost and size. The new breakdown is listed in the following table:

ANS Student Conference Swag Bags [CONTINGENCY]				
Item	Price per Unit	Total Cost	Vendor	Notes
Canvas Tote	\$4.91	\$2,798.70	CustomInk	The price depends on the design.
T-Shirt	\$5.32	\$3,028.40	CustomInk	The price depends on size and design.
Notebook+Pen	\$1.06	\$604.20	4Imprint	---

TOTAL: \$6,431.30

The backup plan for the swag bag costs **\$1,386.30 less** than what was originally planned. There would also be adjustments to the student awards that would further lower the costs. This would be discussed below.

Student Awards & Speaker Gifts.

For the student awards, the only thing that would change would be the prize check amounts. Each check for the overall best posters and paper would be **reduced by \$100**, and the prize checks for the three best papers would be **reduced by \$75**. Therefore, the overall best poster at both the graduate and undergraduate level, as well as the overall best paper would then receive **\$50** in prize money, and the best papers in the three main tracks would receive **\$25** each. The certificates for best paper in each sub-category of the main tracks would remain the same.

Additionally, the plan would be to keep the speaker gifts at the original **\$50** each. The prize checks, certificates, and speaker awards would add up to approximately **\$523.16**, bringing the total expenses for the swag bags, awards, and gifts to **\$6,954.46**. This leaves **\$3,045.54** leftover out of the original \$10,000, which is **\$1,911.30 more** than what was left over in the previous breakdown.

If further budget cuts are required to further reduce the amount spent, the situation would be evaluated on a case-by-case basis depending on the urgency of the matter. In that case, the size of the swag bags would be cut down to include fewer items, and the prize checks would be down-sized once more with the hope of keeping the speaker awards consistent.

Sponsorships

In the case of logistical changes and challenges post-proposal-acceptance, these tables and tiers are subject to change to compensate for either a needed increase or decrease in sponsorship with the flexibility to add or detract incentives and price points for specific tiers. If projected revenue is not met, logistics is prepared to react accordingly to amend the conference program to accommodate a lack in sponsorship or registration.

Budget

In case of more expenditures in the budget, more sponsors may be found to make up the difference. A lack of funding can also be met by accommodations from the logistics department, as they have the largest committee expenses. The cost of the student tickets or professional tickets could be increased slightly to make up for shortcomings in the budget. This would be a last resort, as an increase in ticket price might also affect the projected attendance. In the event of a financial disturbance, the committee will consider budget cuts according to the table below.

Cut Order	Items	Cost Savings	Cumulative Savings	New Grand Total
1	Swag Cut #1	1386.30	1386.30	236035.30
2	Swag Cut #2	3045.70	4432	232989.60
3	Photographer for Headshots	1500	5932	231489.60
4	Under-21 Dessert Bar	990	6922	230499.60
5	AMSE Bus Tour	2000	8922	228499.60
6	Replace Dolly Parton's Stampede with a \$20 Meal Voucher	37804	46726	190695.60
7	Reduce Travel Reimbursement by \$45 Per Student	20250	66972	170445.60

Appendix D: Support

Letters of Support



July 27, 2021

Dear American Nuclear Society Conference Selection Committee,

Thank you for considering the University of Tennessee, Knoxville, to host the 2023 American Nuclear Society Student Conference. As you know, UT is a leader in nuclear engineering, with the expertise, facilities, and partnerships to make our program one of the best in the world. Because of this, I believe UT would make an excellent host for this conference and the university's candidacy has my full, enthusiastic support.

UT's nuclear engineering department was the first to be established in the United States and continues to have the largest student enrollment in the country. This October, the department will move into a beautiful new 228,000-square-foot building with state-of-the-art classrooms, nearly two dozen laboratories, dedicated meeting space and beautiful views of the Tennessee River.

UT's leadership in nuclear engineering and its proximity to and collaboration with Oak Ridge National Lab, along with other key partners like the Y-12 Nuclear Security Complex, UCOR and the East Tennessee Technology park have helped position the region an industry hub. More than 100 nuclear-related companies are located within 50 miles of Knoxville.

For all of these reasons, I believe the University of Tennessee and the Knoxville community would make an ideal location for the 2023 ANS Student Conference.

Thank you,



Donde Plowman
Chancellor
University of Tennessee, Knoxville



2023 ANS Student Conference Proposal



ANS Student Conference Selection Committee:

I am writing to provide my highest recommendation and enthusiastic support for the University of Tennessee (UT) to host the 2023 ANS Student Conference in Knoxville Tennessee. I have been a faculty member at UT for over 25 years and have seen the department and university flourish. We have not made a bid to host the conference for at least two decades because we did not feel we had the student body and facilities to properly support it. That has now changed. We are moving into a new nuclear engineering building in the Fall of 2021 and we have opened a new student union two years ago. The student union is the most expensive building on the UT campus and had excellent conference facilities.

The faculty and student body have also transformed over the last decade. We have double our Nuclear Engineering faculty and have quadrupled our student enrollment. We currently (2019 ASEE data) have the largest nuclear engineering department in the country based on student enrollment with 338 students, 116 who are PhD students. The current group of students are highly talented and diverse. I have full confidence that they will organize and manage a successful conference.

Knoxville is located central to the nation in East Tennessee and is less than one day's drive to over 60% of the US population. The University is 15 minutes from Tyson McGee Airport with service from Allegiant Air, American Airlines, Delta Air Lines, Frontier Airlines and United Airlines.

The Knoxville area is a hot bed for nuclear companies with over 100 nuclear related companies located within 100 miles of the University. The University is located 30 minutes from Oak Ridge National Laboratory, which is the largest National Laboratory. We are equally close to the Y-12 National Security Complex which is considered the Fort Knox of enriched Uranium. Knoxville is also the headquarters of the Tennessee Valley Authority (TVA). TVA has an NRC approved early site permit for an Advanced Nuclear Reactor at the Clinch River Nuclear (CRN) Site. Additionally, Kairos Power has announced plans to build a test reactor at the East Tennessee Technology Park (ETTP) in Oak Ridge. We expect the importance of the Knoxville/Oak Ridge area to advanced reactor technology and demonstration to grow even more between now and 2023.

I am excited about the conference theme "Passing the Torch" which highlights the importance of nuclear technologies and encourages the next generation of nuclear scientists. I do not recall a greater time for change in this country and nuclear is central to that change. The DOE just released the largest budget request in its history and we see a myriad of advanced reactor designers poised to assist in reducing carbon emissions and meeting the nation's power needs. Our department's tag line "Study Nuclear Engineering: Save the World" never seemed as important as it does today.

I think the University of Tennessee is uniquely positioned to host the 2023 ANS Student Conference with new academic and conference facilities on campus, located in the US nuclear hotbed, and with a flourishing student body. I look forward to working with our students, staff, and faculty to support this important event. Please do not hesitate to contact me if I can provide any additional information.

Sincerely,

Dr. J. Wesley Hines
Chancellor's Professor, Postelle Professor and Head



2023 ANS Student Conference Proposal



Kathy A. McCarthy
PO Box 2008
Oak Ridge, TN 37831-6483
(865) 574-3400 | mccarthyka@ornl.gov

September 30, 2021

Dear American Nuclear Society Conference Selection Committee,

I am the Associate Laboratory Director for Fusion and Fission Energy and Science at Oak Ridge National Laboratory (ORNL). I fully support the selection of the University of Tennessee – Knoxville (UTK) American Nuclear Society (ANS) Student Chapter to host the March 2023 American Nuclear Society Student Conference. The UTK Nuclear Engineering department, under the leadership of Prof. Wes Hines, has grown in both stature and size, and is now among the top nuclear engineering departments in the country. The opportunity for the students to organize and host this conference will be a great experience for them, and I know that the UTK Nuclear Engineering department faculty will provide support as appropriate, as will ORNL.

This conference is also important to ORNL, as it is an opportunity for us, and other national laboratories to interact with the students attending the conference and talk with them about the exciting opportunities in the U. S. Department of Energy (DOE) national laboratories. ORNL fully supports the UTK ANS Student Chapter bid to host this conference. The Knoxville area is great place to hold a conference and will provide an enjoyable backdrop for the students that attend. The proximity of ORNL will be a major draw as well.

In summary, ORNL looks forward to UTK ANS Student Chapter's successful bid.

Thank you,

McCarthy, Kathy

Digitally signed by McCarthy,
Kathy
Date: 2021.09.30 18:10:13
-04'00'

Kathryn A. McCarthy, Ph.D.
Associate Laboratory Director
Fusion and Fission Energy and Science Directorate

KAM:tlm

MANAGED BY UT-BATTELLE FOR THE US DEPARTMENT OF ENERGY

*Oak Ridge National Laboratory is managed by UT-Battelle, LLC for the Department of Energy. UT-Battelle is a 50/50 consortium between the University of Tennessee and the Battelle Memorial Institute. Approval was received from Student Sections Committee Chair Katie Mummah on September 21, 2021 to include a letter from UT-Battelle in the proposal.



2023 ANS Student Conference Proposal



August 27, 2021

To the Members of the ANS Student Conference Selection Committee,

I am writing this letter to show my support and commitment to the University of Tennessee-Knoxville (UTK) Student Chapter of the American Nuclear Society (ANS) to host the 2023 ANS Student Conference. I am excited that this ambitious group of University of Tennessee nuclear engineering students are pursuing an important and challenging summit.

There are about twenty-five students currently involved in the planning. They are excited to share with the larger nuclear engineering community our brand new state of the art laboratories for education and research.

Outreach is one of the primary goals of our students in the Nuclear Engineering Department. Our students are involved in many societies that are aligned with this goal. Examples of these societies are Women in Nuclear, Institute for Nuclear Materials Management, and Health Physics Society. Our department is active in these societies with a focus on Diversity, Equity, Inclusion, and Accessibility. The future of the nuclear industry is being developed here in Knoxville making this the ideal location for *Passing the Torch*.

In summary, the Tickle College of Engineering is in full support of our students' ambitious endeavor to host the 2023 ANS Student Conference in Knoxville. I have no reservations about this recommendation as the Dean and Wayne T. Davis Dean's Chair. I know they will create a productive and unforgettable experience for all that attend.

Sincerely,

Matthew M. Mench, PhD
Dean and Wayne T. Davis Dean's Chair
Chancellor's Professor
Condra Chair of Excellence

Office of the Dean
124 Perkins Hall, Knoxville, TN 37996
865-974-5321 tickle.utk.edu

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2023 ANS Student Conference Proposal



Sandra Bogetic, Assistant Professor
Department of Nuclear Engineering
410 Nuclear Engineering Building
Knoxville, Tennessee 37996-2300
(865) 974-8586
sbogetic@utk.edu
September 29, 2021

Dear ANS Student Conference Selection Committee,

I am genuinely pleased to provide my full support to the University of Tennessee-Knoxville (UTK) section of American Nuclear Society (ANS) for their 2023 ANS Student Conference proposal.

I am currently an Assistant Professor and I serve as the faculty mentor for the UTK student chapter of the ANS. In my time as a professor at UTK I have been delighted to see the student members extremely active in outreach, engagement, and recruitment activities through our department, in conjunction with our other student society chapters (Women in Nuclear, Health Physics Society, and Institute for Nuclear Materials Management). Our students regularly participate in and initiate outreach events, including Introduce a Girl to Engineering Day held annually at Y-12 National Security Complex, Engineer's Day hosted annually at UTK by the Tickle College of Engineering, and regular offerings of Girl Scout and Boy Scout Nuclear Science merit badge workshops. As well as participating to the Nuclear Science week, by organizing outreach activities at local schools which often results in an increased number of students that show interest in the nuclear sciences, embodying the spirit of what ANS stands for. In addition, some of the members have worked to build curriculum in local schools.

As a faculty mentor I have had the pleasure of witnessing the tremendous focus, drive and energy of all the officers and members of the UTK student chapter, members that span from sophomores to graduates. I have been very impressed with the outstanding work, the excitement that the student section and its members have put toward organizing the proposal for the student conference. The group has been dedicated to their work, and have clearly showed their ability to collaborate as a team, their resourcefulness and exceptional ability to effectively write the conference proposal. For those reasons I am confident that, by choosing UTK for the 2023 ANS Student Conference, the UTK ANS student section will make of the Conference a huge success. It is therefore with the strongest possible support that I am writing this letter as the current UTK-ANS faculty advisor for the local student chapter to be considered for being awarded to host the student conference in 2023.

Furthermore, the Knoxville-Oak Ridge Innovation Valley includes large government R&D facilities, nuclear utilities, and dozens of companies where the Nation nuclear energy innovation happens. It is the perfect home for the ANS Student Conference to come and embrace the strong nuclear synergies of the area. As well the University of Tennessee is one of the pre-eminent nuclear engineering programs in the country, that has also undergone incredible enhancement in their laboratory spaces

and its campus, in order to support all the needed workshops, research presentations, tours, networking events, and a job fair. Thus, the Knoxville area, UTK campus, and the UTK ANS student organization are the perfect combination that is surely able to deliver an exciting and engaging conference.

If I can provide any additional information, please do not hesitate to contact me. I am extremely excited about the opportunity for UTK ANS to host the 2023 ANS Student Conference.

Thank You,

Sandra Bogetic, Ph.D.
Assistant Professor,
Faculty Advisor of the UTK Student Section of ANS



2023 ANS Student Conference Proposal



Date: July 14, 2021

Dear ANS Student Conference Evaluation Committee,

I write this letter in the strongest possible support of an American Nuclear Society Student Conference at the University of Tennessee, Knoxville. I am an Associate Professor of Nuclear Engineering at the University of Tennessee, Knoxville, the previous faculty advisor for our ANS student chapter, and the Chair of the Nuclear Installations Safety Division of ANS. At the University of Tennessee, we have a brand-new building (the Zeanah Engineering Complex) and one of the pre-eminent nuclear engineering programs in the country (perennially ranked in the top-10 nationally). We also have one of the first nuclear engineering departments in the country.

The Knoxville-Oak Ridge Innovation Valley is like the Silicon Valley of nuclear energy, with large government R&D facilities, nuclear utilities, and dozens of companies. It is, simply put, the place where nuclear energy innovation happens.

As the descendants of an original Manhattan Project facility, our neighboring Oak Ridge National Laboratory and Y-12 National Security Complex are also part of the genesis of nuclear energy. **It is well past time for the ANS Student Conference to come home to the Knoxville-Oak Ridge Innovation Valley.**

Our ANS student section is healthy and robust. However, we have participation in this proposal not just from our ANS student section, but also from our Nuclear Engineering Graduate Student Assembly, Women in Nuclear, and our Nuclear Engineering Department Diversity, Equity, and Inclusion Action Committee.

I am experienced in ANS and conference organization. Conferences I have organized include the 2021 ANS Annual Meeting, 2020 ANS Annual Meeting, 2018 ANS Annual Meeting, and the Advanced ceramics and composites for nuclear fission and fusion energy symposium at the 42nd International Conference and Expo on Advanced Ceramics and Composites (ICACC) in 2018. I have also chaired and organized dozens of sessions at conferences, including my first stint as session chair 15 years ago for *General Two-Phase Flow* at the 2006 American Nuclear Society Winter Meeting. **I know what success looks like: this organizing committee will knock it out of the park!**

Thank you for your consideration. Please address all correspondence regarding this letter to: nbrown49@utk.edu.

Nicholas R. Brown, Ph.D.
Associate Professor
University of Tennessee
Knoxville, TN 37996, USA
Email: nbrown49@utk.edu
Phone: 631-307-2264



2023 ANS Student Conference Proposal



THE UNIVERSITY OF
TENNESSEE
KNOXVILLE

Jamie Coble, Associate Professor
Department of Nuclear Engineering
421 Nuclear Engineering Building
Knoxville, Tennessee 37996-2300
(865) 974-5057
jamie@utk.edu

July 14, 2021

Dear ANS Student Conference Selection Committee,

I am delighted to provide my full and enthusiastic support to the University of Tennessee-Knoxville section of ANS for their 2023 ANS Student Conference proposal and bid. I am currently an Associate Professor, Southern Company Faculty Fellow, and Assistant Department Head for Undergraduate Studies and Service of Nuclear Engineering at UTK. I also serve as our faculty advisor for the UTK student chapter of Women in Nuclear. I am the general chair of the ANS Nuclear Plant Instrumentation and Control and Human Machine Interface Technology (NPIC&HMIT) meeting to be held jointly with PSA in Knoxville, TN in July 2023. In all of these roles, I will provide full support to the student leadership team to ensure a successful ANS Conference.

Our student ANS section is extremely active in outreach, engagement, and recruitment activities through our department and in conjunction with our other student society chapters (Women in Nuclear, Health Physics Society, and Institute for Nuclear Materials Management). Our students regularly participate in and initiate outreach events, including *Introduce a Girl to Engineering Day* held annually at Y-12 National Security Complex, *Engineer's Day* hosted annually at UTK by the Tickle College of Engineering, and regular offerings of Girl Scout and Boy Scout Nuclear Science merit badge workshops.

The location of our campus on the edge of the Tennessee River and near the heart of downtown Knoxville provides many opportunities for social and community-building activities, and the UTK campus is within 50 miles of over 100 nuclear-related companies, industries, and organizations that provide many exciting tour opportunities. Many of these organizations are represented on our department [Board of Advisors](#), including utilities (Southern Nuclear Company, Tennessee Valley Authority), nuclear service providers (Analysis and Measurement Services), decommissioning organizations (UCOR), and research organizations (Oak Ridge National Lab, Y-12), along with more far-flung representation from NuScale Power, US Nuclear Regulatory Commission, Idaho National Lab, NASA, Framatome, and other top NE programs.

With the opening of our new building, the Zeneah Engineering Complex, in fall 2021 and the state of the art facilities therein, UTK ANS well poised to organize and deliver an exciting and engaging conference that covers many aspects of Nuclear Engineering. If I can provide any additional information, please do not hesitate to contact me. I am extremely enthusiastic about the opportunity for UTK ANS to host the 2023 ANS Student Conference.

Sincerely,

Jamie Coble, Ph.D.
Southern Company Faculty Fellow
Assistant Department Head of Undergraduate Studies and Service

The Nuclear Engineering Department
306 Nuclear Engineering Building
865-974-2525 865-974-0668 utne.utk.edu

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2023 ANS Student Conference Proposal



1412 Circle Drive, NEB 408
Knoxville, TN 37996
ne.utk.edu/people/vladimir-sobes
+1 (865) 236-3319
sobesv@utk.edu

July 23, 2021

Dear Student Conference Selection Committee,

In this letter I would like to express my support for the University of Tennessee (UTK) to host the 2023 ANS Student Conference in Knoxville, Tennessee. I strongly support this choice based on 1) a large and active student body in UTK Nuclear Engineering, 2) the volume and vigor of activity in the nuclear sector in East Tennessee and 3) the ease of access and facilities available in Knoxville.

The Nuclear Engineering department at UTK houses one of the largest student populations in the country. The student body is very active and well organized, which makes me believe that the Student Conference will be a success. Furthermore, the student body is supported by a numerous and engaged faculty of the Department of Nuclear Engineering.

East Tennessee is currently, and has been, a hot-bed of nuclear related research and activity. Most notable are the proximity of the University to Oak Ridge National Laboratory and the Y-12 National Security Complex. Notable as well are the research collaboration and joint mentorship of graduate students between ORNL/Y-12 and the University. Further, there is a wide variety of other nuclear related enterprises in the surrounding area.

The final argument for University of Tennessee to host the 2023 ANS Student Conference is the ease of access of the city of Knoxville. This is both for travel and affordable accommodation and conference venue. Knoxville is within 1-day driving distance from most of the Eastern United States. The Knoxville airport has direct flights to many airline hub destinations. Lastly, the prices for accommodation are relatively low in the Knoxville area compared to other metropolitan cities.

In conclusion, I would like to reiterate my support for the University of Tennessee (UTK) to host the 2023 ANS Student Conference in Knoxville, Tennessee.

Sincerely,

Vladimir Sobes
Assistant Professor
Department of Nuclear Engineering

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University of Tennessee System





2023 ANS Student Conference Proposal



THE UNIVERSITY OF
TENNESSEE
KNOXVILLE

Jason Hayward, Ph.D.
UCOR Fellow, Professor, Associate Head
Department of Nuclear Engineering
University of Tennessee, Knoxville
411 Nuclear Engineering Bldg.
Knoxville, TN 37996-2300

Faculty Appointee
Advanced, Radiation Detection, Imaging, Data Science
and Applications group; Physics Division
Oak Ridge National Laboratory
One Bethel Valley Rd, P.O. Box 2008, MS-6010
Oak Ridge, TN 37831-6010

7/14/2021

Dear ANS Committee,

I am the UCOR Endowed Faculty Fellow, Associate Head for Research and Graduate Education, and a Professor in Nuclear Engineering at the University of Tennessee-Knoxville (UTK). I hold faculty appointments in Oak Ridge National Laboratory's (ORNL) Physics Division, in the UTK/ORNL Bredesen Center for Interdisciplinary Research and Graduate Education (CIRE), and at the Y-12 National Security Complex. I am the Director of Graduate Studies for my department, which has the largest PhD program in Nuclear Engineering in the country. I am also the Deputy Executive Director of the recently renewed \$5M/yr UC Berkeley led Nuclear Science and Security Consortium (NSSC) which includes ten academic partners and five national laboratory partners, conducting much of its work in both fundamental nuclear science areas and more applied areas like radiation sensing. I have a research team of nineteen student researchers and four senior researchers who work for me on nuclear instrumentation research, mainly for nonproliferation technologies and imaging. I am a DOE Science CAREER award winner, an Associate Editor for IEEE Transactions on Nuclear Science, and an active IEEE Senior Member. I hold PhD and MSE degrees in Nuclear Engineering and Radiological Sciences from the University of Michigan, and I'm a veteran of the US Navy Nuclear Propulsion Program.

I am writing this letter to express my support for holding the student ANS Conference at the University of Tennessee in 2023. We are eager to bring together students, professors, and professionals in nuclear science and engineering to Knoxville, a very active place in nuclear by all measures, especially now that our [Zeanah Engineering Complex](#) is open. This is a perfect venue to promote the importance of nuclear technologies and host the nuclear community. Recently the campus has \$1B in ongoing construction, most of which is complete, and so we will be capable to host all the needed workshops, research presentations, tours, networking events, and a job fair. [Knoxville's](#) urban areas and nearby wilderness also makes it a very exciting place to stay.

We look forward to receiving your support and hosting the conference!

Best Regards,

Jason Hayward
UCOR Fellow, Professor, Associate Head
Nuclear Engineering
University of Tennessee

The Nuclear Engineering Department
306 Engineering and Science Annex
Phone: 865-974-2525 Fax: 865-974-0668 ne.utk.edu

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2023 ANS Student Conference Proposal



July 16, 2021

To the Members of the ANS Student Conference Selection Committee,

I am writing this letter to show my support and commitment to the University of Tennessee-Knoxville (UTK) Student Chapter of the American Nuclear Society (ANS) to host the 2023 ANS Student Conference. I am excited that this ambitious group of University of Tennessee nuclear engineering students are pursuing an important and challenging summit.

There are about twenty-five students currently involved in the planning. They are excited to share with the larger nuclear engineering community our brand new state of the art laboratories for education and research.

Outreach is one of the primary goals of our students in the Nuclear Engineering Department. Our students are involved in many societies that are aligned with this goal. Examples of these societies are Women in Nuclear, Institute for Nuclear Materials Management, and Health Physics Society. Our department is active in these societies with a focus on Diversity, Equity, Inclusion, and Accessibility. The future of the nuclear industry is being developed here in Knoxville making this the ideal location for *Passing the Torch*.

In summary, the Tickle College of Engineering is in full support of our students' ambitious endeavor to host the 2023 ANS Student Conference in Knoxville. I have no reservations about this recommendation as the Associate Dean. I know they will create a productive and unforgettable experience for all that attend.

Ozlem

Associate Dean
Academic and Student Affairs
101 Perkins Hall, 1506 Middle Drive, Knoxville, TN 37996-2011
865-974-2454 engr.utk.edu

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2023 ANS Student Conference Proposal



American Nuclear Society
Oak Ridge/Knoxville Section

P.O. Box 5075
Oak Ridge, TN 37831-5075
www.orkans.org

23 August 2021

ANS Student Conference Selection Committee

To Whom It May Concern,

I write to support the proposal from the University of Tennessee's American Nuclear Society student chapter Student Conference Proposal Committee to host the 2023 ANS student conference in Knoxville, TN. We support this application by the UTK student chapter. As an organization which has worked with the UTK ANS student chapter, we have seen firsthand their dedication, creativity, and passion in the nuclear field and in support of the ANS mission.

The chapter has proposed a theme of Passing the Torch, which is intended to encourage the next generation of nuclear scientists and nuclear technologies. As East Tennessee is a hotbed for nuclear innovation and power, the UTK chapter is ideally positioned to be able to provide a strong showing of workshop contributors, networking events, and local plant and research tour opportunities.

In conclusion, we strongly support the UTK-ANS student chapter bid to host the ANS student conference in 2023. We are confident in their abilities to put together an enriching and exciting program.

Thank you for your consideration,

Rachel L. Seibert

Rachel L. Seibert
Oak Ridge/Knoxville ANS Local Section Chair

UTK ANS Student Chapter Signatures of Support

Robert Kile

(Robert Kile)

Kenneth Bott

(Kenneth Bott)

Christopher Busch

(Christopher Busch)

Son Quang

(Son Quang)

Karen Hogue

(Karen Hogue)

Lance Drouet

(Lance Drouet)

David Anderson

(David Anderson)

Landry Wells

(Landry Wells)

Ethan Deters

(Ethan Deters)

Sophie Hitson

(Sophie Hitson)

Charles Miller McSwain

(Charles Miller McSwain)

Promise Adebayo-Ige

(Promise Adebayo-Ige)

Gregory T. Dye

(Gregory T. Dye)

Madison Allen

(Madison Allen)

Noah Walton

(Noah Walton)

Megan Whittle

(Megan Whittle)

Kailee Collins

(Kailee Collins)

James Carnal

(James Carnal)

Sydney Copp

(Sydney Copp)

Edward Matthew Duchnowski

(Edward Matthew Duchnowski)

Katy Worrell

(Katy Worrell)

Anthony Tom

(Anthony Tom)

Alyssa Hayes

(Alyssa Hayes)

Thomas Ensley

(Thomas Ensley)

Kyndal Biladeau

(Kyndal Biladeau)

Kaitlyn Butler

(Kaitlyn Butler)

Emily Hutchins

(Emily Hutchins)



2023 ANS Student Conference Proposal



Austin Welsh

(Austin Welsh)

John Leland

(John Leland)

Emma Houston

(Emma Houston)

Annie Berens

(Annie Berens)

Alex Kincaid

(Alex Kincaid)

Logan Coffey

(Logan Coffey)

Tyler Steiner

(Tyler Steiner)

David Burgess

(David Burgess)


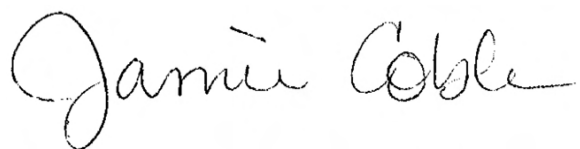

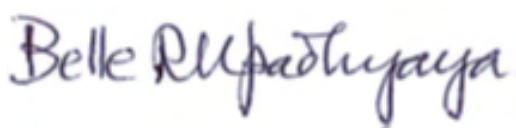



Jackson Cagle

(Jackson Cagle)

Dean Forrest

(Dean Forrest)

Faculty Signatures of Support

Name & Title	Signature
Dr. Eric Lukosi Associate Professor	
Jamie Coble Associate Professor Assistant Department Head of Undergraduate Studies and Service Southern Company Faculty Fellow	
David Donovan Associate Professor Zinkle Fellow	
Belle Upadhyaya Professor Emeritus	
Charles L Melcher Research Professor	
Howard L. Hall Professor Director, the UT Institute for Nuclear Security Senior Fellow Howard H. Baker Jr. Center for Public Policy	
Lawrence Heilbronn John D. Tickle Professor	

Michael Liesenfelt Research Assistant Professor	
Nicholas R. Brown Associate Professor	
Sandra Bogetic Assistant Professor	
Amanda Lovelace, Academic Advisor	<i>Amanda Lovelace</i>
G. Ivan Maldonado Professor	
Livia Casali Assistant Professor Zinkle Faculty Fellow	
Vladimir Sobes Assistant Professor	