

CNT AWARE

SPRING 2014

CITIZENS FOR NUCLEAR TECHNOLOGY AWARENESS



AIKEN TECHNICAL COLLEGE STUDENTS RECEIVE HIGH-DEMAND NUCLEAR INDUSTRY CERTIFICATION

Four Aiken Technical College Radiation Protection Technology (RPT) students recently received a distinguished nuclear industry certification that will make them more marketable to potential employers.

Richard Austin, Allison Cunningham, Colby Kight, and David Roberts were recognized with Nuclear Uniform Curriculum Program (NUCP) certificates during a ceremony on campus recently. The NUCP certification can allow qualified students to be exempt from portions of required initial job training at any nuclear power plant in the country because of the specialized training that the student has received through training with a partner college.

“The NUCP certificate is acknowledgement of the students’ achievements in the core classes of their degree programs, and assures the nuclear power industry that they have satisfied the fundamental requirements for an entry-level radiation protection technician position,” said ATC Department Chair for Nuclear and Skilled Trades Programs Dave Deal.

Students who successfully complete the requirements and receive the NUCP certification could skip more than 12 weeks of required initial training and proceed to site-specific training, which would mean a significant savings of cost and time for a potential employer.

ATC partnered with industry sponsor SCANA to develop and certify ATC’s program, awarding its first NUCP certificate in 2011. Since then, ATC has awarded a group of students with the specialized NUCP certification each year.

Students were joined at the ceremony by Paul Mothena, SCANA Manager for Nuclear Training and New Nuclear Deployment; Moses Coleman, SCANA Manager of Health Physics and Safety Services; and William Barber, Health Physics Operational Superintendent for Plant Vogtle Units 3 and 4.



PHOTO CAPTION: (From left to right) – William Barber, Health Physics Operations Superintendent for Plant Vogtle Units 3 and 4; Paul Mothena, Manager for Nuclear Training and New Nuclear Deployment at SCANA; Colby Kight, NUCP recipient; Moses Coleman, Manager for Health Physics and Safety Services for SCANA; Allison Cunningham, NUCP recipient; Richard Austin, NUCP recipient; and Dave Deal, ATC Department Chair for Industry and Skilled Trades. Not pictured is RPT student David Roberts.

INTRODUCING CNTA'S 2014 BOARD OFFICERS

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Chuck Munns, Board Chair



Don Bridges, Board Vice Chair



Joshua Booth, Treasurer

Wayne Rickman
Immediate Past Chair

NEW BOARD MEMBERS



Rick Ford



Mike Zustra

Chuck Munns serves as a Commissioner on the SC Commission for Higher Education. Munns served as president and chief executive officer of Savannah River Nuclear Solutions, LLC (SRNS) from 2007 through 2009. Prior to joining SRNS, Munns served for 34 years in the U.S. Navy's most high-profile and challenging positions, attaining the rank of Vice Admiral. His most recent Navy position was commander of the U.S. Submarine Force, which included all U.S. submarines worldwide.

Donald Bridges is past Chairman of the SRS Citizens Advisory Board and has been a member since 2008. He retired from the Department of Energy SRS in 2002. In 30 years at SRS, he served as DOE Program Manager for SRS Nuclear Reactor Production Program, Tritium Program, and Nuclear Materials Disposition Program for cleanup of DOE complex. He retired in 1992 from Naval Reserve Civil Engineer Corps with the Rank of Captain with 35 years of service.

Joshua Booth is an Assistant Vice President/Mortgage Lending Officer at Security Federal Bank in Aiken, SC. He has been with the bank since 2005. He received a B.S.B.A. with a Major in Finance from the University of Florida in 1999. He is currently the Past Chair of Aiken Young Professionals, a member of the American Bankers Association and Aiken Chamber of Commerce.

Wayne Rickman served 31 years in the U.S. Navy, commanded the USS Henry Clay (SSBN-625) and commanded the commissioning crew of the USS Michigan (SSBN-727), the second Trident submarine. He served as Special Assistant to the Director of Naval Nuclear Propulsion DOE, and was selected to the Rank of Rear Admiral (LH). He commanded the Naval Submarine Group NINE, and completed his Naval Service at Commander Training US Atlantic Fleet. Upon his retirement in 1990, he became Vice President for Nuclear Operations at Sonalysts, Inc. where he consulted with DOE on various phases of management. Ten years later, he formed Rickman Group and continued with similar work assignments.

MEET OUR NEW BOARD MEMBERS

Rick Ford is the owner and principal of Palmetto Partnership Consulting Services, LLC, which provides public relations consulting in the areas of news media relations; corporate communications (both internal and external); technical writing and editing; governmental relations, ranging from the National to the State and local level and including nongovernmental organizations; crisis and risk communications; and personal communications. Based on his long association with the Savannah River Site (SRS), he also advises clients seeking to do business with the Department of Energy and its contractors and counsels senior managers on leadership skills and strategies with a focus on communications and trust and organizational effectiveness. He retired with more than 30 years of federal service.

Mike Zustra has over 30 years of experience as a safety professional. He currently serves as the Vice President of Environmental Safety & Health for Shaw AREVA MOX Services, LLC where he is responsible for industrial safety, environmental management, waste management, radiation safety and emergency preparedness. Prior to MOX, Mike served as an officer in the US Coast Guard. He has held senior management positions in the government and commercial market sectors, and has experience in construction, environmental remediation, emergency response and operations management.

CERN OPEN DAY EVENTS — JUSTIN SWANSON

CERN (the European Organization for Nuclear Research) opened their doors to the World this past September 28-29th. A 2-day event called Open Days gave the public a rare glance at the inner workings of this leading particle physics research laboratory. An estimated 70,000+ people flooded the event for this unique opportunity. In the months prior to Open Days, a select few people were awarded area specific passes to travel up to 568 feet underground to see the various experiments and equipment housed along the Large Hadron Collider's (LHC) 16.9 mile circumference track that straddles the France-Switzerland border. Each tour was led by a Physicist who would try to answer any questions you may have had and would offer their unique insights into this global achievement. Luckily I have been a member of CERN's online community for some time and was able to get my hands on 2 passes. My first pass was for visiting the Compact Muon Spectrometer (CMS) experiment, and the other was to view the LHC's Accelerator Systems.

Of CERN's many contributions to the World (e.g. birthplace of the World Wide Web, discovery of W and Z bosons, creation of antihydrogen, etc.) the discovery of the Higgs boson is arguably one of the most significant- but why? To better understand this we must look to the Higgs field. The Higgs Field is an invisible energy field that pervades the Universe. This field is responsible for assigning mass to particles. Without the Higgs field particles would not have the mass required to attract one another and would fly apart in every direction at the speed of light. The belief of a Higgs field existing has been the fundamental foundation of all quantum physics and quantum field theory research done, so verifying or disproving the existence of such a field would undeniably impact our understanding of particle physics and the Universe. The only way to prove the existence of this field was by finding what it uses to interact with particles- the elusive Higgs boson particle. On July 4th, 2012 CERN announced that they believe that have done just that. By colliding beams of hydrogen protons that have been accelerated in opposite directions at 99.9999 percent the speed of light, CERN captured a new particle in the CMS consistent with that of the postulated Higgs Boson.

My elevator ride underground to visit CMS was slow and full of anticipation. The doors opened and a well-lit cylindrical hallway presented itself. After a short walk through a few more futuristic looking corridors the CMS came into view. Housed in a cathedral sized room, the CMS detector was on full display and separated into its various sections making this opportunity even more unique.

Half a billion particle collisions or more happen every second within this detector. CERN's scientists use supercomputers along with 3 dimensional models to determine which of these collisions produces something of interest. These collisions produce temperatures up to 100,000 times hotter than our sun. By cooling things with super chilled liquid helium CERN reaches temperatures as low as -456 degrees Fahrenheit inside the collider which is lower than temperatures found in deep space. This gives CERN the unique accolade of being one of the hottest and coldest places on Earth.

After a 45 minute bus ride from CMS access point 5 I arrived at access point 6- LHC Accelerator Systems. After verify my info and credentials, I lined up to take yet another descent underground. This time I was greeted by two physicists as guides. One of the guides, Dr. Robert Apsimon, shared an amusing personal fact with me after seeing how in awe I was after seeing the LHC for the first time. "I know how you feel. I have worked here for 5 years and today is the first time I have seen it too!" he said.

Section after section of massive dipole magnets make up the LHC which disappears out of view down a never ending curving corridor. This amazing creation is responsible for steering protons and led ions around a massive 16.9 mile loop and also for concentrating the particles to allow for a greater chance of successful collisions.

Roughly 1 week after my visit with CERN, the Nobel Prize was awarded jointly to François Englert and Peter Higgs "for the theoretical discovery of a mechanism that contributes to our understanding of the origin of mass of subatomic particles, and which recently was confirmed through the discovery of the predicted fundamental particle, by the ATLAS and CMS experiments at CERN's Large Hadron Collider." CERN's fundamental goal is to benefit the World through science and to help us better understand our Universe. From my perspective they are doing exactly that.



(A rare look inside the CMS)

CNTA LEADERSHIP TOURS THE SRS SALT WASTE PROCESSING FACILITY CONSTRUCTION SITE

Clint Wolfe, Chuck Munns and Don Bridges toured the SWPF SRS Construction site on February 5, 2014. SWPF was designed and is being built and managed by Parsons with support for Commissioning from subcontractor EnergySolutions and technology development from General Atomics. SWPF is a key component to reduce risk at the Savannah River Site by removing, treating, and disposing of the radioactive liquid waste stored in underground tanks. Construction is approximately 70% complete with final completion scheduled to occur before the end of calendar year 2016, followed by approximately two years to Commission the facility. Once on line the SWPF will significantly accelerate the ongoing removal of radioactive liquid waste from the SRS radioactive liquid waste tanks.

In CY-2013 Parsons met key milestones including completion of the Central Processing Area roof and permanent electrical power to the medium voltage switchgear.

Clint, Chuck and Don were impressed by the progress and the professionalism and dedication of the SWPF Project personnel they interacted with.



PARSONS



PLANT VOGTLE MODULE WEIGHING 1100 TONS MOVED INTO PLACE

Georgia Power announced Monday the completion of another major milestone in the construction of Plant Vogtle units 3 and 4 near Waynesboro, Ga. On Saturday, the project team successfully placed the CA20 module into the Unit 3 nuclear island. Weighing more than 2.2 million pounds, or 1,100 tons, and towering more than five stories tall, the module is the heaviest "lift" of the project to date. With a footprint of approximately 67 feet long by 47 feet wide, the critical module will house various plant components, including the used fuel storage area.

Including assembly activities at both CB&I's Lake Charles facility and onsite at Plant Vogtle, the module was assembled from prefabricated wall and floor sections and transported to the site by rail and truck for placement. It was lifted into place using a 560-foot tall heavy lift derrick, one of the largest cranes in the world.

Visible progress continues to be evident for both units 3 and 4, which use Westinghouse's state-of-the-art AP1000® technology and are among the first new nuclear units to be built in the United States in 30 years. Since Jan. 1, the project has marked several other major milestones including the February placement of the 460-ton CR10 module (or cradle) into the Unit 4 nuclear island. The CR10 module, which resembles a concave bowl with a hollow center, is the structure upon which the unit's containment vessel bottom head (CVBH) will rest.

The Vogtle 3 and 4 expansion is part of Georgia Power's long-term, strategic plan for providing safe, clean, reliable and affordable energy for Georgians over the next 60 years. On Feb. 28, the Company filed the combined 9th and 10th Vogtle Construction Monitoring (VCM) Report with the Georgia Public Service Commission (PSC) which reports that the construction of the new units is progressing well with both units scheduled to begin commercial operation by the end of 2018. The report also recapped 2013 project milestones including the placement of nuclear concrete for both units 3 and 4 and the placement of the CVBH and reactor vessel cavity (CA04) for Unit 3. Once the units enter service, fuel efficiencies from nuclear generation combined with ongoing customer benefits such as the recently finalized federal loan guarantees, are expected to put downward pressure on customer rates – cementing the project's status as the most economic choice for meeting Georgia's future energy needs.



WSI-SRS GENERAL MANAGER TO RETIRE

WSI-SRS, the security contractor at the Department of Energy's Savannah River Site, has announced that Randy Garver, Senior Vice President and General Manager since September 2008, will retire effective May 15, 2014. Mark Bolton, currently the WSI-SRS Vice President and Deputy General Manager, will be elevated to the position of Senior Vice President and General Manager.



Mr. Garver joined WSI-SRS in May 2004 as Director of Training and was promoted to Assistant General Manager in February 2008, and subsequently to Senior Vice President and General Manager in September 2008.

"We have had great success at SRS because of our employees," said Mr. Garver. "We have an exemplary record of conducting our mission at the site, and that is directly attributable to our team of security professionals that are unparalleled in the DOE complex."

Under Mr. Garver's leadership, the WSI-SRS team has enjoyed a string of successes. Most notably, WSI-SRS transitioned to a more tactical model for site security and modernized the firearms training capabilities at the site to enhance abilities of site protective force personnel to defend against evolving threats in today's world.

Employee safety has been a priority under Mr. Garver's leadership, as WSI-SRS implemented Behavior Based Safety, Integrated Safety Management, and Safety Conscious Work Environment principles.

WSI-SRS security professionals also captured first place in six of the nine DOE Security Protection Officer Training Competition (SPOTC) events that were held since Mr. Garver joined WSI-SRS in 2004. DOE teams from all over the Nation compete against each other to test skills and abilities in the SPOTC events.

"I'm also very proud of our work in the community," added Mr. Garver. "Our employees, and the Company, fully understand we have a responsibility to our surrounding communities and we have played a large role in helping those in need."

Mr. Garver retires with over 40 years of experience in security management. Prior to joining WSI-SRS, he served 28 years in the U.S. Army and served four years in the U.S. Marine Corps. During Mr. Garver's distinguished military career, he served in a variety of troop and staff assignments that included leadership positions from squad leader to brigade commander.

Although he is retiring from WSI, Mr. Garver intends to continue serving our military veterans and plans to work with wounded warrior programs.



In his new capacity, Mr. Bolton will lead nearly 700 employees, including support contractors with Westech, Dade Moeller, Inc., and Critique Resource Consulting. WSI-SRS is a paramilitary organization that provides total security services, a Special Response Team, access control, property protection, law enforcement, criminal investigations, traffic control, canine explosives and drug detection, aviation support, river patrol, and alarm equipment monitoring.

Mr. Bolton has over 30 years of experience with WSI-SRS, holding progressively responsible positions including Security Inspector, Central Alarm Station Sergeant, Emergency Operations Center Specialist, Security Analyst, Security Planner, Security Planning Team Leader, Manager of the Security Programs and Projects Department, Director of the Security Planning and Infrastructure Division, Director of the Security Support Division, and Vice President and Deputy General Manager. He has a Bachelor of Science degree from the University of South Carolina.

"I'm very thankful and honored to have the opportunity to lead our great Company," said Mr. Bolton. "WSI-SRS has some of the most caring, committed employees that I have ever been associated with and together we'll continue to meet the SRS security mission in a quality and professional manner. I plan to build on the excellent legacy that was started over 30 years ago at SRS."

A NEW STEM PROGRAM AT USC AIKEN

A new, innovative program is coming soon to the University of South Carolina Aiken. The University will soon offer a Master of Business Administration degree designed exclusively for students with a background in one of the STEM fields (science, technology, engineering, mathematics) or Liberal Arts. This will become one of only three MBA programs in the nation designed for students who did not major in business as undergraduates.

Offering this degree will help develop the next generation of managers for companies in our community such as URS, Savannah River Remediation (SRR), and Savannah River Nuclear Solutions (SRNS). It is an ideal opportunity for engineers, chemists, and those working with technology that didn't take business undergraduate courses in business to get a business degree.

Because all of the admitted students will hold non-business degrees, the typical foundation or leveling courses that would normally be required before beginning an MBA program will be fully integrated into the 36 hour curriculum. There will be two separate tracks within the MBA: Option I is for any non-business major, with required coursework in accounting, finance, economics, quantitative skills, management, information systems, marketing, business communication and leadership, followed by a capstone course. Option II will be an alternative track for STEM majors who possess substantial quantitative skills and wish to focus on modern business skills more applicable to technical organizations, such as manufacturers. The STEM option will involve substitute coursework in supply chain management, and product and project management, with a separate two-semester capstone course sequence. In either case, the total number of required courses is the same: 12 courses totaling 36 credit hours.

"This curriculum is designed to introduce non-business students to basic business skills that will allow them to be successful either within their current organization or as an entrepreneur starting their own small business," states Dr. Clifton Jones, Dean of the School of Business Administration.

The MBA will be offered on a part-time basis in the evenings. All classes will be taught in a standard face-to-face delivery format on the campus of USC Aiken, and will be offered during the spring, summer and fall. Students may enter the program in either the fall or spring semester. Consisting of 12 graduate courses involving 36 credit hours of instruction, the program is designed to be completed in two years, assuming the student completes at least two MBA classes each semester.

"One exciting aspect of this new degree program is that the curriculum and overall design of the program was developed in consultation with business and industry professionals within the Central Savannah River Area (CSRA) over the course of the last several months," states USC Aiken's Chancellor, Dr. Sandra Jordan. "With the growth of the nuclear industry within the University's 60-mile region as well as manufacturing companies near our campus like Bridgestone, we feel this degree will offer a unique degree to the many STEM undergraduates in our region that will also be beneficial for the companies employing them."

The Commission on Higher Education has approved the STEM MBA. Pending final approval from the University's regional accrediting body, SACS-COC, USC Aiken anticipates classes will begin in spring 2015.



NEW SALTSTONE DISPOSAL UNITS UNDER BUDGET, AHEAD OF SCHEDULE WITH NEXT GENERATION UNITS TARGETED FOR EVEN LARGER SAVINGS

The U.S. Department of Energy (DOE) Savannah River Site (SRS), has completed construction of the next two Saltstone Disposal Units (SDU) ahead of schedule and under budget, and has begun construction of the next generation SDU, that will result in even greater savings.

Construction of SDUs 3 and 5, the newly built set of circular disposal units, began in late 2010 and was targeted for completion in July 2014. They were completed seven months earlier and for \$8 million less than the anticipated total cost of \$76.5 million. Construction has now begun on the next generation SDU 6. The unit will also be circular in shape but approximately 10 times larger.

Salt waste in SRS tanks makes up about 90 percent of the waste volume. The Saltstone facility receives the low-level salt waste from the Interim Salt Disposition Process (ISDP) and mixes it with cement powders to form grout. This grout is then pumped into SDUs for permanent disposal at SRS.

Removing the waste from the tanks is essential to the mission of cleaning and operational closing tanks.

"The new circular technology for Saltstone Disposal Units have proven successful in the dispositioning of low-level radioactive salt waste and to construct the next series of SDUs under budget and ahead of schedule is significant for the SRS liquid waste mission," said Terrel Spears, Acting Deputy Manager, DOE - Savannah River Operations Office. "The use of larger tanks, like SDU 6, proves SRS's commitment as a good steward of taxpayers' money in that we always pursue the latest, most cost-efficient technologies to assist us in safely performing our mission."

SDUs 3 and 5 consist of four individual 2.9 million gallon capacity cells. They follow the successful operation of SDU 2, the first unit to use the new circular technology. When completed, SDU 6 will hold approximately 30 million gallons of low-level waste and will take up most of a 2 ½ acre location next to the SRS Saltstone Facilities.

The SDU 6 design was developed by SRR in coordination with one of its partners, CH2M Hill. A similar design has been used in previous commercial water applications. The larger SDUs will be used for the permitted landfill disposal of radioactive waste called saltstone, which will be produced in the Site's Saltstone Production Facility (SPF) for disposal in an industrial solid waste (non-hazardous) disposal unit.

Instead of 40 pairs of the smaller Saltstone disposal cells, SRS will need only seven of the larger units, which will result in substantial cost savings by requiring less space to design and build.

"The cost to construct the larger SDUs will result in a significant savings over the life of the project. I congratulate SRR for bringing this new innovation to SRS and committing to its development," said Ken Reuter, Savannah River Remediation (SRR) President and Project Manager.

The construction contract was awarded to BRADY and Associates of Matthews, N.C. This is the largest contract awarded by SRR to a small, disadvantaged business since becoming the liquid waste contractor at the site in July 2009.

The Savannah River Site, located near Aiken, S.C., is owned by the U.S. Department of Energy. The SRS Liquid Waste contract is managed by Savannah River Remediation, a team of companies led by URS Corporation, with partners Bechtel National, CH2M Hill and Babcock & Wilcox. Critical subcontractors for the contract are AREVA, Energy Solutions and URS Professional Solutions.



Construction is under way on Saltstone Disposal Unit 6 with the pouring of the initial mud mat. The mud mat provides a solid surface for the concrete tank to be placed on.

MOX SERVICES ACHIEVES 18 MILLION CONSECUTIVE SAFE WORK HOURS

NATIONAL SECURITY PROJECT IS ONE OF THE COUNTRY'S SAFEST CONSTRUCTION PROJECTS

MOX Services achieved another monumental milestone today as the MOX project surpassed 18 million consecutive work hours without a lost workday due to injury and illness during the construction of the National Nuclear Security Administration's Mixed Oxide (MOX) Fuel Fabrication Facility in Aiken, South Carolina.

"This is a remarkable achievement for our project, and it is all due to our employees and staff recognizing the importance of safety on the work site," said Kelly Trice, president and CEO of Shaw AREVA MOX Service, L.L.C. "Our safety record shows the commitment that our employees and subcontractors have toward our safety culture. Surpassing 18 million consecutive work hours is a milestone we can take a tremendous amount of pride in for the work that is being completing on the project. It's a credit to our employees, whether in the construction or administrative divisions, that their personal safety, and the safety of those around them, is an important aspect of the work we are undertaking every day."

The MOX project has a comprehensive safety management system that includes management leadership, employee involvement, worksite analysis, hazard prevention and control as well as safety and health training. According to the U. S. Bureau of Labor Statistics (BLS), a typical construction site in the U. S. experiences one lost workday case for every 125,000 hours worked. In the span of 18 million hours worked, the typical site would have 126 lost workday cases.

Additionally, in the most recent annual data, the MOX project had an Occupational Safety and Health Administration (OSHA) recordable injury rate of only 0.66 per 200,000 work hours, far below the industry average as measured by the BLS. Recordable injuries are injuries that require reporting to OSHA, such an injury requiring stitches.

Safety on the work site has always been a priority with the MOX Project. In 2011, the MOX project launched a new safety incentive program to increase safety awareness and encourage safety performance. The MOX BUX reward program recognizes and rewards individual and team achievements in safety performance. The tokens awarded can be collected and redeemed for a variety of apparel and merchandise items.

The project has also maintained the Occupational Safety and Health Administration's top safety designation, Voluntary Protection Program (VPP) Star status, for the past year. The VPP program recognizes excellence in worksite safety and health management.

Shaw AREVA MOX Services, LLC has a contract with the U.S. Department of Energy's National Nuclear Security Administration (NNSA) to design, build and operate a facility to convert surplus nuclear weapon-grade plutonium into reactor fuel for use in commercial nuclear power plants. This work supports NNSA's nuclear nonproliferation program to eliminate nuclear weapon-grade plutonium in the U.S. Under a 2000 agreement, the United States and Russia will dispose of 68 metric tons of surplus plutonium, sufficient for approximately 17,000 nuclear weapons. For more information, visit www.moxproject.com.



CNTA EDUCATION COMMITTEE 2013 REPORT AND PLAN FOR 2014

Background - The CNTA Education Committee and the American Nuclear Society-Savannah River (ANS-SR) section have jointly developed and implemented a workshop for middle school and high school teachers called "Bringing Nuclear into the Classroom". The first teacher workshop was held in March of 2009. Sessions were taught by CNTA and ANS-SR volunteers with diverse and extensive experience in the field and in the classroom.

Since then, the workshop has been improved and updated to include more hands-on activities that teachers could potentially use to excite students in their classrooms. Design of these activities was based on teacher feedback through participant survey results and comments. A workshop was presented to regional teachers in 2011 and two more workshops were conducted in 2012. Summer interns (~50) from one of the primary contractors at SRS, Savannah River Remediation (SRR), participated in additional workshops during the summer of 2012. The current workshop includes hands-on styled presentations featuring the following topics: Atomic Fundamentals, Power Generation Fundamentals, Nuclear Fundamentals, Nuclear Technologies, Risk (Perceived or Real), and Regional Nuclear Technology Uses and Opportunities. Also, CNTA and ANS-SR have partnered with the local Health Physics Society, the Ruth Patrick Science Education Center (RPSEC) at the University of South Carolina-Aiken, Energy Solutions, the SRS- Community Reuse Organization (SRS-CRO), Georgia Regents University Augusta (GRUA), and the Aiken Rotary Club to make this a community-wide effort.

2013 Activities - During 2013, the workshop was presented to a group of 14 Columbia County teachers at Greenbrier High School on February 18th and 21 teachers at the Salkehatchie Learning Institute on May 17. A workshop was also presented under a RPSEC grant from the SC Department of Education on October 18 to 31 teachers from Aiken and Bamberg counties. Dual sessions were necessary to accommodate this larger group of teachers along with additional presenters. Also, some of the topics from "Bringing Nuclear into the Classroom" were included in Southern Company's summer teacher's workshop at the Vogtle nuclear site. In addition, the workshop activities were presented at the ANS Annual Meeting in Atlanta on June 19 as an example of a successful regional partnership to advance the awareness of nuclear technology and career opportunities in the nuclear industry.

During National Nuclear Science Week (NNSW) in October, members of the Education Committee supported the presentation of "Journey to the Center of the Atom" to 20 groups of students from schools in the CSRA at RPSEC, GRUA, and the Salkehatchie Learning Institute. "Journey to the Center of the Atom" was developed by committee member William Wabbersen and has been included in American Nuclear Society teacher's workshops at their national meetings, this year in Atlanta and Washington, D.C.

A sub-committee headed by Dean Sackett reviewed and commented on draft National Science Standards that were issued for review in 2013. Their review was very extensive and time-consuming, but most of their suggestions were included in the recently released National Standards. The sub-committee also reviewed the draft SC science standards for consistency with the national standards and provided comments to the SC Department of Education. Special thanks were extended to Sackett and his sub-committee members (Joe Kelley, Doug Edwards, and Greg MacDougall) at a CNTA Up & Atom breakfast for a job well-done.

Plans for 2014 - A full schedule of teacher's workshops are planned for 2014. Workshops were completed on January 31 at the RPSEC under the grant from the SC Department of Education (25 teachers) and on February 18 at Lakeside High School in Evans, GA (11 teachers).

Additional workshops are planned as follows:

- April 25 – RPSEC under the grant (30 to 40 teachers) – dual sessions
- May 16 - Salkehatchie Learning Institute (15 to 20 teachers)
- Summer – SRNS and SRR interns; Southern Company if requested
- Fall (tentative) – Richmond County (GA) and RPSEC (under the grant)
- Participate in the ANS National Teacher's Workshops as requested

Planning started in 2013 for an advanced workshop as requested by several teachers. The initial offering is targeted for late summer or early fall. Work with SC Department of Education and the local school boards will continue in the application and support of SC standards to advance STEM topics in the local school systems.

AUGUSTA TECHNICAL COLLEGE NUCLEAR ENGINEERING TECHNOLOGY PROGRAM ACCEPTING APPLICATIONS

Augusta Tech's Nuclear Engineering Technology (NET) program is an innovative approach to addressing the nuclear industry's increasing need for a well-trained nuclear workforce. The program is a planned sequence of courses that meets the defined educational requirements of the Nuclear Uniform Curriculum Program (NUCP) and is sponsored by the Nuclear Energy Institute (NEI) and the Institute of Nuclear Power Operations (INPO). The NUCP standardizes associates degree nuclear training programs with over 35 technical colleges in partnership with local nuclear industries across the nation. With an additional six courses, a graduate of the NET program can also complete a dual degree in the Electrical and Computer Engineering Technology Program (ECET). A graduate with both NET and ECET degrees is highly qualified for cutting edge technology jobs available in instrumentation and control in today's nuclear industry.

The NET Program includes courses in classical physics, chemistry, thermodynamics and heat transfer, and material science; reactor theory, design and operation; nuclear plant protection and safety; electrical and mechanical components, and instrumentation and control.

Graduates of the program are prepared for entry level positions in the nuclear field. The curriculum covers competencies in mechanical maintenance, instrumentation and control, electrical maintenance, and non-licensed operations.

Augusta Tech is currently accepting applications for the next cohort which begins fall term, 2014. For additional information, contact Mr. Bob Collins (706-771-4094, rcollins@augustatech.edu) or Natasha Poleate (706-771-5703, [nbole-
ate@augustatech.edu](mailto:npole-ate@augustatech.edu)).



SCHOLARSHIP AND ESSAY CONTESTS



CNTA High School Essay Contest—This is a \$1500 prize; \$1000 to the winning student and \$500 to the student's school. The purpose of the contest is to promote a better understanding of nuclear technology among high school students. The entry deadline for essay submittals is February 28. Contact the CNTA office at (803) 649-3456 if you'd like to be a scholarship sponsor.

Robert Maher Memorial Scholarship—Initiated by Washington Savannah River Company in 2002 to honor Bob Maher for his 48 years of outstanding contributions to nuclear energy programs at SRS. At the time of his death, he was the Vice President and General Manager of Strategic Planning and Mission Development. He was a tireless and able manager who died September 14, 2002.

The scholarship is now sponsored by Savannah River Remediation. The purpose of the scholarship is to provide an annual \$5,000 scholarship to a student who has demonstrated outstanding college level academic achievement in nuclear science/engineering. Information has been sent out to area universities and colleges. The application deadline is May 31, 2014. Check out the website for additional information if you know a student who is interested in applying.

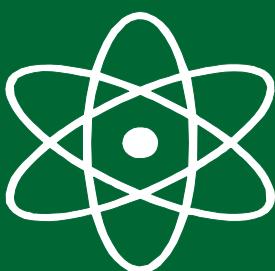




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OUR MISSION

TO PROVIDE EDUCATION AND INFORMATION ON APPLICATIONS OF NUCLEAR TECHNOLOGY INCLUDING:

- ◆ Energy Sources
 - ◆ Medical Applications of Radiation
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 - ◆ Nuclear Production Processes
 - ◆ National Security
- We are "The Citizen's Nuclear Voice"

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