

## **CNTAware**



Fall/Winter 2018

#### **Points of Interest:**

- Educational Outreach during NSW
- New Mini-Grant Program for Teachers
- 2019 Nuclear Blitz
- 2019 HS Essay Contest
- 2nd Annual Young Professionals Fundraiser
- 2018 Distinguished
   Scientist Award
- CNTA's Event Series doing well
- Savannah River
   Safety Summit
- 2018 Teller Lecture & Banquet
- SRS Contractor Team Earns Cybersecurity Award
- First SMR Makes
   Pivotal Advancement
- Centerra Celebrates 35 years
   Protecting SRS
- SRS Museum Holds Ribbon Cutting
- CNTA Business Members
- Mission of CNTA
- CNTA Committee
   Descriptions
- CNTA Calendar of Events



## **Update from our Executive Director**

CNTA had a very busy Fall 2018! In the pages that follow, you will see many of the events that we conducted or supported. It all started with exhibiting at the Science Enrichment Education Day (SEED) held October 6 at USC Aiken. CNTA was a sponsor of the event. The event attracted almost 4000 students, parents and educators! A "prize wheel" was used to ask students questions and award candy for correct answers. A spinning wheel and candy is a sure-fire attractor!

The Young Professionals Committee hosted a Halloween Costume Ball on Friday, October 12, at the Aiken Center for the Arts to kick off Nuclear Science Week. The event helped raise funds to offset membership fees for young professionals to join CNTA and to support future "Tap into Nuclear" mentoring events and future educational outreach. The event was again a great success with some very innovative costumes – anyone ever seen a cow  $\pi$  before?!!

As always, Nuclear Science Week itself was jam packed with events. Details on CNTA's participation in the many educational activities are on pg. 2. Nuclear Science Week would not be complete without the annual Teller Lecture. Dr. Jose Reyes, Jr. provided an electrifying presentation (pun intended) as our 2018 Lecturer. Congratulations to all the award winners that were recognized. A special "thank you" goes to Allison for all her hard work in organizing the event.

Nuclear Science Week culminated with the Atoms in the Alley event on October 20. The hit of the exhibit was a Nerf target game to demonstrate the principles of nuclear reactor physics! Thanks to Juan Rios and David Boyce for their hard work in developing the game. Feel free to stop by the office to learn about nuclear physics and do some target shooting – it is a great stress reliever!

The following week we conducted a "Nuclear Blitz" throughout Aiken County High School chemistry classes. Presentations were made to 63 classes in 7 schools reaching over I 200 students! Thanks to the more than 25 CNTA members and friends who supported the teach-ins.

During this season of thanks, we are especially thankful for our CNTA members and friends who volunteered and supported these many activities. It is the efforts of our members that make all these things go! Happy Holidays, Jim

## Note from our Board Chair

As we move rapidly toward 2019, it is time to thank our Board of Directors for their service and especially Adm. Wayne Rickman who is stepping down effective December 31, 2018. It has been my privilege to work with Wayne for almost a decade during which he served as Vice Chair, Board Chair and Immediate Past Chair. In addition to providing wise counsel, he has been a frequent volunteer at education outreach and fundraising events. I shall personally miss his balanced approach and strategic thinking. The organization will miss his energy. We wish him good health and happiness for the future. We also thank our Treasurer, Joshua Booth, and our last Board Chair, Michael Zustra, and board member Lauryn Jamison, all of whom stepped down due to work responsibilities.

I am delighted to welcome two new members to the 2019 Board, namely Karl Lutterloh of Security Federal Bank and Matthew McCoy of SRR. In addition, Jeff Allender will move from an Ex-Officio position to voting member and Charlie Hansen has agreed to assume the duties of Treasurer. Thank you also to all members who have agreed to continue serving their current terms.

The primary function of the Board of Directors is the oversight of all CNTA's mission activities and operations. It is important that CNTA have a diverse Board membership and that there is a direct communication path to all our major sponsors. I look forward to working with the Board as we launch outreach events for a very busy 2019.

Happy Holidays to everyone! Susan Wood, Chair, CNTA Board of Directors Page 2 CNTAware

## **Nuclear Science Week Educational Activities**



• CNTA kicked off Nuclear Science week/month by participating in SEED at Ruth Patrick Science Education Center on October 6th.

• On October 16, CNTA supported a Safety Conference at the Savannah River Rapids Pavilion in Martinez, GA (article on page 11).

- The STEM Career Connections event for high school students was held on October 18 at the Kroc Center. The 2019 Essay Contest was promoted and due to demand extra copies were needed!
- That same day we exhibited information on nuclear technologies and CNTA membership at the SRNS Aspiring Mid-career Professionals (AMP) event at USCA.





Student & Teacher Comments "Thank you so much for allowing my students "A fun way for this opportunity. It was great: us to learn about STEM & all the jobs Very good variety of that are open "Wonderful careers presented. event, Really helped put career searching into perspective. "I finally know for sure where "Got me interest in STEM" "This was very helpful. I felt like "This event is amazing! I gained a lot of knowledge at "I learned many things talking to exhibitors today. It helped me pick a college major." this event. "Very informative This was amazing. It makes me want to think about different things I could do. and fields of study. "I was extremely interested in the amount of diverse technological & scientific

occupations. It has inspired me to consider new careers."

Above: Comments from participants at STEM.
Far Left: CNTA Volunteers Paul Ebel & Wayne Rickman display the CNTA board.
Left: Wayne speaks with students about career opportunities

## **Educational Mini-Grant Pilot Program**

CNTA is proud to announce a pilot program for 2019 which seeks to provide needed educational funds to area teachers. This partnership with area educators to provide innovative instruction to high school students on principles of radiation, fundamentals of radioactive materials and applications of nuclear technologies.

CNTA is establishing a mini-grant program to facilitate this educational outreach. Mini-grants in an amount of up to \$500 will be awarded for winning applications. The mini-grants can be used to fund a project in any area of science or technology that promotes an increased understanding of atomic and nuclear fundamentals, radiation and nuclear materials safety, and applications of nuclear technology.

High Schools in the South Carolina counties of Aiken, Allendale, Bamberg, Barnwell, Edgefield, and Orangeburg; and in the Georgia counties of Columbia, Richmond, and Burke are eligible to apply. Teachers who are members of CNTA are also eligible to apply regardless of school location. Applicants must provide a list of supplies to purchase with the grant money and report on deliverables. These include a list of the top three learning objectives/curriculum concepts which will be enhanced by this grant, how many students will be impacted, how those students will be involved, and how effectiveness will be evaluated.

Grant application deadline is March 15, 2019. Contact CNTA at <a href="mailto:cnta@bellsouth.net">cnta@bellsouth.net</a> for more information.

## 2018 Nuclear Blitz Reaches over 1200 Students

Citizens for Nuclear Technology Awareness (CNTA) reached over 1200 Aiken County High School students through this year's Nuclear Blitz.

CNTA's Nuclear Blitz occurs during Nuclear Science Week in October. The week itself seeks to provide activities and factual information to the community about nuclear topics in a variety of ways, with one being teach-ins at area high schools.

During the Nuclear Blitz, 25 volunteers from CNTA and the American Nuclear Society – Savannah River Chapter visited 63 classrooms in 7 high schools across Aiken County providing instruction on nuclear science to high schoolers.



This year's lesson included class demonstrations. One demonstration illustrated how radiation is measured and how exposure is safely controlled by using the principles of time, distance, and shielding. Another demonstration involved the applications of radiation and how people are exposed to radiation in their everyday lives at levels that are considered very safe.

The instruction provided by the volunteers was well received. One of the CNTA young professional volunteers, Nico Karay, taught lessons in 4 classes and thought the whole experience was very positive. "I enjoyed the blitz," he said. "I volunteered in 4 classes at Midland Valley. There was interest from each class and I thought the demonstrations were a great way to get the students engaged." A chemistry teacher from Midland Valley responded stating "the guests were great - they had the ability to share with students in a meaningful way and to engage them!"

## **Announcing the 2019 Essay Contest**

The 2019 CNTA Essay Contest is officially underway! The goal of the contest is to increase high school student awareness of nuclear technologies and their impact on society. Successful essays require students to integrate science, technology, social understanding and language arts. Researching a technical topic, relating the information to society, and effectively communicating the information in writing are great skills for any high school student to practice and demonstrate.

Participation is open to high school juniors and seniors in Aiken, Allendale, Barnwell, Burke, Columbia and Richmond County. CNTA members' children are also eligible to participate regardless of where the student attends school. The winning students each receive a \$1,000 scholarship with an additional award of \$500 to each winner's teacher to be used towards educational science advancements.

To apply, students must submit a 1,000-1,500 word essay on one of the following topics:

- •The application of nuclear science and technology in modern medicine
- Nuclear career opportunities
- •Sustainability and the future of nuclear energy

Essays must be to CNTA by February 28, 2019.

The rules and submission information are available at: <a href="http://c-n-t-a.com/eventmain\_files/zessay/essay19.htm">http://c-n-t-a.com/eventmain\_files/zessay/essay19.htm</a>

Page 4 CNTAware

## Young Professionals 2nd Annual Fundraiser- Costume Ball

CNTA's Young Professionals committee held their 2nd Annual Charity fundraising event on October 12, 2018. The Costume Ball was the official kickoff to Nuclear Science Week in the CSRA.

Over 100 people attended the event, which raised funds for free young professional membership to CNTA, helps pay for the communication intern, funds our educational outreach etc. Many thanks to all our sponsors and raffle item donors.



In 2019 the committee will host the 3rd Annual Charity Fundraising event; however, they are hard at work deciding on the theme and format of this event. If you want to help organize the 2019 event email us at







CNTA's Communications Committee again partnered with the Aiken Standard to write, edit, and publish the Nuclear Science Week Insert.

The insert was included in the Aiken Standard's Sunday October 14th edition which reached over 30,000 households!

Articles included: "Why I am CNTA", "We're all radioactive: A millenial's perspective on nuclear", "Man of Year for Aiken County; Man of Decades for CNTA", "Young professionals take off at CNTA", and "Augusta, Aiken schools qualify students for nuclear industry".

The complete insert can be viewed online at: <a href="http://c-n-t-a.com/edumain\_files/tabloid.htm">http://c-n-t-a.com/edumain\_files/tabloid.htm</a>



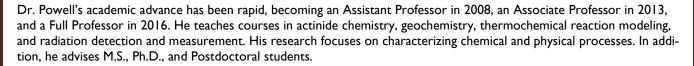
## 2018 Distinguished Scientist Award Winner Announced

Citizens for Nuclear Technology Awareness (CNTA) is pleased to announce that the winner of the 2018 Fred C. Davidson Distinguished Scientist Award is Dr. Brian A. Powell.

The prestigious award was presented at the recent Edward Teller Lecture in Aiken. CNTA sponsors the Teller Lecture as a public outreach, which is named for the famed nuclear pioneer who played a key role in advancing nuclear science during World War II.

Dr. Powell is the Fjeld Professor of Nuclear Environmental Engineering and Earth Science at Clemson University. He received his M.S. in Environmental Engineering and Science at Clemson University in 2001, and his Ph.D. in Environmental Engineering and Science at Clemson University in 2004.

He was a Postdoctoral Fellow at the Lawrence Livermore National Laboratory in both the Chemical Sciences Division and the Actinide Chemistry Group.



Dr. Powell is a prolific author and researcher and is widely recognized in his field. He has published over 60 refereed journal publications, 16 research reports, and made over 100 technical presentations on these topical areas. He is the winner of the 2014 South Carolina Governor's Young Researcher Award for Excellence in Scientific Research, the 2013 Department of Energy Early Career Research Program Award, and the 2011 Clemson University Sigma Xi Young Investigator of the Year. He also serves on the Radiation Safety Committee of the USEPA Scientific Advisory Board and is a member of the National Council on Radiation Protection.

Dr. Powell has conducted sponsored research in nuclear forensics, evaluation of nanoparticle behavior, sorption and environmental transport of plutonium, development of radiation detection laboratory courses, iodine, radium, strontium geochemistry in wetland and subsurface sediments, radionuclide geochemistry of saltstone and solid waste performance assessments at the Savannah River Site (SRS), and the measurement of thermodynamic parameters supporting advanced fuel cycle chemistry. He has received over \$16 million in funding from numerous federal departments and agencies.

Dr. Powell has a long-standing relationship with the Savannah River Site (SRS). He first came to SRS in 2000 to gain experience at the Savannah River National Laboratory (SRNL) working with plutonium and in the environmental aspects of radioactivity. This past May, Dr. Powell was named to a joint faculty position at SRNL and Clemson University to advance research on environmental remediation and radioactive waste disposal.

"Dr. Powell has made outstanding achievements in support of nuclear technologies, extending back to his days as a doctoral student," according to Dr. David L. Freeman of Clemson University. "There is a good reason for Dr. Powell's accelerated promotion: His performance has been nothing short of stellar."

Likewise, Dr. Daniel I. Kaplan of SRNL wrote that, "Dr. Powell is an outstanding scientist, who has brought national recognition to his research program. This excellence stems from his disciplined approach to the scientific process and his critical thinking skills. He can gather and identify germane facts about a problem and then create elegant experiments or solutions to address the problem."

The Distinguished Scientist Award is presented annually to recognize regional scientists and engineers who have made exceptional lifetime scientific achievements. The award is in honor of Dr. Fred C. Davison who was Chairman of CNTA's Board of Directors from 1994 until his death in 2004.

Davison was President of the University of Georgia for 19 years where he encouraged math and science education and managed the doubling of graduate enrollment. Davison was also President and Chief Executive Officer of the National Science Center Foundation, President of the Georgia-Carolina Boy Scouts Council, an elder at Reid Memorial Presbyterian Church, and an active Rotarian.



Page 6 CNTAware



## August 22, 2018 Michael D. Budney

Manager, U.S. Department of Energy Savannah River Operations Office



September 20, 2018
Michael McCracken
Southern Nuclear/Plant Vogtle



November 14, 2018
Dr. Rodney L. Miller
Senior Leader Executive & Chief
Scientist for Air Force Global
Strike Command

## **Up & Atom Breakfast Speakers**



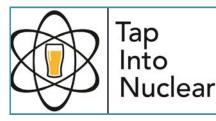
## Tap into Nuclear

September's Tap into Nuclear was on Effective Communication. CNTA members Bryan Wilkes & Dean Campbell shared their years of experience with our young professionals. Held at Aiken Brewing Company, over 20 people came out to the event.

November's Tap into Nuclear was sponsored by SRNL and allowed young professionals to mingle and network with senior CNTA members who have volunteered for our mentoring program. Hosted at USCA's Pacer Alley location about 40 people attended and swapped contact information for future conversations.

The 2019 Tap into Nuclear events are in planning. If you want to volunteer to help with this program please email us at <a href="mailto:cnta@bellsouth.net">cnta@bellsouth.net</a>! If you want to be a mentor just let us know!









## Savannah River Safety Summit

One of the many area activities that took place during Nuclear Science Week was the inaugural Savannah River Safety Summit. On Tuesday, Oct 16, area safety professionals, technicians, managers and others from commercial and government organizations attended the summit to learn about the safety culture at the Savannah River Site as well as other regional commercial nuclear and DOD facilities.

The day-long summit was held at Savannah Rapids Pavilion in Martinez, Georgia, and featured panel sessions focused on nuclear safety, a safety expo and prize giveaways. Guest speakers included Matt Moury, DOE's Associate Undersecretary for Environment, Health, Safety and Security; Mike Budney, Manager of DOE's Savannah River Operations Office, and featured keynote speaker Terry Hagen, Chief Operating Officer for Jacobs.



One notable highlight from the summit was the session titled "From the worker's perspective." Strata -G's Jenny Freeman did an amazing job of hosting an interactive panel discussion that featured four workers from across the Site, each giving their personal perspective on the nuclear safety culture in their own workplace. Another one of the many highlights was SREL's PJ Perea who gave a fascinating talk on snake safety, which included two live snakes!

The event was organized by members of the Central Savannah River Area (CSRA) community alongside event partners the Energy, Technology, and Environmental Business Association (ETEBA) and Citizens for Nuclear Technology Awareness (CNTA).

Tim Griffin, ETEBA Executive Director and a member of the summit's planning committee said, "This is a great way for the CSRA community to become more aware of safety practices at Savannah River, learn how area nuclear facilities maintain a healthy safety culture, and enjoy learning about some of our local companies that provide safety products and services."





DOE-SR's Mike Budney, who provided the opening remarks at the event, said "I'd like to thank CNTA and ETEBA for helping to bring the community perspective to the summit. It emphasizes the notion that's safety on the site extends throughout the community, and that we all have to work together to achieve it."

The event's organizers hope to sponsor similar safety related events in the future.

Page 8 CNTAware

## MANY THANKS TO OUR FALL EVENT SPONSORS

## 2018 Young Professionals Fundraiser- Costume Ball

## **SILVER**

JACOBS
SOUTHERN COMPANY
SRSCRO

## **BRONZE**

ASCO
CENTERRA-SRS
CHARLIE & LYDDIE HANSEN
JASON CRANE OF EDWARD JONES
PARSONS
SAVANNAH RIVER REMEDIATION
USC-AIKEN

## **2018 Edward Teller Lecture & Banquet**

## **PLATINUM**

## FLUOR SAVANNAH RIVER NUCLEAR SOLUTIONS



### **GOLD**

ATKINS
BECHTEL
CB&I AREVA MOX SERVICES

HUNTINGTON INGALLS INDUSTRIES
SOUTHERN COMPANY



#### **BUSINESS**

AECOM
CENTERRA-SRS
NUCLEAR ENERGY INSTITUTE
NORTHWIND GROUP
SCE&G
SAVANNAH RIVER REMEDIATION

#### **NON-PROFIT**

AIKEN COUNTY COUNCIL
AIKEN TECHNICAL COLLEGE
AMERICAN NUCLEAR SOCIATEY-SRS
ARC & EDP
NUCLEAR WORKFORCE INITIATIVE
RICKMAN GROUP

SCUREF SRSCRO USC-AIKEN



## 27th Annual Edward Teller Lecture & Banquet



### 2018 Teller Lecturer

Dr. José N. Reyes, Jr. — Co-founder and CTO of NuScale Power
Dr. Reyes is the co-founder of NuScale Power and co-designer of the NuScale passively-cooled small nuclear reactor. He is an internationally recognized expert on passive safety system design, testing and operations for nuclear power plants. He has served as a United Nations International Atomic Energy Agency (IAEA) technical expert on passive safety systems. He is a co-inventor on over 110 patents granted or pending in 20 countries. He has received several national awards including the 2013 Nuclear Energy Advocate Award, the 2014 American Nuclear Society Thermal Hydraulic Division Technical Achievement Award and the 2017 Nuclear Infrastructure Council Trailblazer Award. He is a fellow of the American Nuclear Society and a member of the National Academy of Engineering.

At Oregon State University, Dr. Reyes served as head of the Department of Nuclear Engineering and Radiation Health Physics. He directed the Advanced Thermal Hydraulic Research Laboratory (ATHRL) and was the co-director of the Battelle Energy Alliance Academic Center of Excellence (ACE) for Thermal Fluids and Reactor Safety in support of the Idaho National Laboratory mission. Additionally, Dr. Reyes was the OSU principal investigator for the AP600 and AP1000 design certification test programs sponsored by the U.S. Nuclear Regulatory Commission (NRC), the U.S. Department of Energy and Westinghouse. He currently serves as a Professor Emeritus in the School of Nuclear Science and Engineering.

Prior to joining the faculty at OSU in 1987, Dr. Reyes worked nearly 10 years as a thermal hydraulics research engineer in the Reactor Safety Division of the U.S. Nuclear Regulatory Commission. He holds Ph.D. and Master of Science degrees in nuclear engineering from the University of Maryland, and a Bachelor of Science degree in nuclear engineering from the University of Florida. He is the author of numerous journal articles and technical reports, including a book chapter on SMRs for an ASME B&PV Codes and Standards handbook. He has given lectures and keynote addresses to professional nuclear organizations in the U.S., Europe and Asia.

## CNTA hosts annual Edward Teller Lecture at USC Aiken Published in the Aiken Standard

By: Colin Demarest

The 27th annual Edward Teller Lecture, hosted by the <u>Citizens for Nuclear Technology Awareness</u> nonprofit, was a widespread hit Thursday night.

More than 200 people, representing about two dozen companies, converged on the USC Aiken Convocation Center that night for dinner, awards, some surprise videos and nuclear-oriented discourse.

The crowd heavily comprised Savannah River Site staff as well as Aiken County business and education leaders.

Thursday night's guest speaker was Dr. Jose N. Reyes Jr., the co-founder and chief technical officer of NuScale Power. NuScale Power is a company founded on nuclear power research and related products. Reyes is the co-inventor of the <u>NuScale</u> small modular reactor: a futuristic, progressive take on nuclear energy generation.

Reyes has more than 110 patents pending or granted in his name, as well.

On Thursday night, Reyes discussed the next age of energy and nuclear power's applications, drilling down on how the NuScale product could drive that future.

His keynote presentation – well-received by the crowd – included mockups of a NuScale power plant, its "first responder" capabilities, and indications as to where his small modular reactors could have the most impact.

The <u>Edward Teller Lecture</u>, CNTA's big event, is named after Dr. Edward Teller, a native of Hungary who was a pivotal figure – colloquially known as the father of the hydrogen bomb – during the Manhattan Project era.

CNTA was formed in 1991. Today, CNTA operates as a nuclear-focused public education, information and interaction outlet.

Page 10 CNTAware

## Savannah River Site Contractor Team Earns Cybersecurity Award

AIKEN, S.C. (October 25, 2018)— From offering lunch-and-learn programs to mentoring future professionals, the cybersecurity team at Savannah River Site liquid waste contractor Savannah River Remediation (SRR) embodies the themes of National Cyber Security Awareness Month (NCSAM) 2018, earning SRR the title of NCSAM Champion for the fourth consecutive year.

The team promotes a NCSAM theme focusing on online safety by encouraging employees to maintain security measures at work and at home. SRR Principal Cyber Security Specialist Steve Lape said it's important to educate employees with ways to stay safe while using the Internet.

"We believe our employees are taking cybersecurity awareness home to their families and personal lives, helping everyone stay safe online," Lape said.

Another theme of NCSAM 2018 is the idea that it is everyone's job to ensure online safety at work. SRR is furthering this idea throughout the company through weekly articles with cyber protection tips and monthly lunch -and-learn programs on topics such as artificial intelligence and cryptocurrency, a digital currency in which encryption techniques are used to regulate the generation of units of currency.

"We encourage our employees to be always be cyber-conscientious," Lape said. "Users are the first line of defense when it comes to averting cyber scams, so when everyone is educated on how to spot potential scams and threats and how to mitigate those risks, everyone wins."

The team also promotes educating students for careers in cybersecurity, another theme of NCSAM. The team has so far mentored three area high school students aspiring to enter the growing cybersecurity field.

"Mentoring our youth on the importance of securing our networks is how we pass the torch to the younger generation," Lape said. "Guiding these students through this crucial turning point in their lives and seeing their innovative ideas come to life through projects at school makes me excited for the future of the cybersecurity industry."

A fourth theme of NCSAM is safeguarding the nation's critical infrastructure.

Savannah River Remediation Principal Cyber Specialist Sean Nixon, left, mentors high school student Colleen Harmon on cybersecurity applications.

"A disruption to the cyber system could have a significant consequence on the SRS liquid waste mission," Lape said. "It is our job to make sure that doesn't happen."

Cybersecurity is critical to DOE missions, according to Lewann Belton, DOE cyber and information technology division manager.

"It is imperative for contractors to support the Department's robust cybersecurity strategy," Belton said. "Savannah River Remediation earning the champion status of National Cyber Security Awareness Month, among many other accolades, is further proof the contractor is committed to safeguarding DOE information systems."

A collaboration of the U.S. Department of Homeland Security and the National Cyber Security Alliance, NCSAM is observed every October to educate Americans on safe and secure online practices. The NCSAM Champion program highlights companies dedicated to promoting a safer Internet.

SRR is the liquid waste contractor at the Savannah River Site for the U.S. Department of Energy. SRR is composed of a team of companies led by AECOM with partners Bechtel National, CH2M, and BWX Technologies. Critical subcontractors for the contract are Orano, Atkins, and AECOM N&E Technical Services.

# America's First SMR Makes Pivotal Advancement With Selection of Manufacturer

Selection marks transition to manufacturing phase and represents major progress in bringing NuScale's advanced nuclear technology to market

PORTLAND, Ore. – NuScale Power selects Virginia-based BWX Technologies, Inc. (BWXT) to start the engineering work to manufacture NuScale's small modular reactor (SMR). The decision follows a rigorous 18-month selection process, with expressed interest from 83 companies based in 10 countries, to determine the best company to refine NuScale's design for manufacturability, assembly, and transportability – the first phase in bringing NuScale's pioneering design to life. NuScale's technology is the world's first and only SMR to undergo Design Certification review by the U.S. Nuclear Regulatory Commission and is the country's frontrunner to compete in the global SMR race, a market estimated by the Nuclear Energy Agency to be more than \$100 billion by 2035.

"BWXT's established industry experience was important for us, and so was choosing an American company," said John Hopkins, NuScale Power President and Chief Executive Officer. "Our technology will bring immense economic prosperity for people here at home, while improving the quality of life for those all across the world by providing resilient, carbon-free electricity."

BWXT will immediately start work on this first manufacturing phase of NuScale's SMR, which we expect will continue through June 2020. NuScale will contract for the remaining two phases, preparation for fabrication then fabrication, at a later date. BWXT is a leading supplier of nuclear components and fuel to both the U.S. government and commercial nuclear power industry. It expects to use Pennsylvania-based Precision Custom Components as a component manufacturing contractor on this project.

"Innovation is a core value at BWXT, and that's why we are incredibly proud to be selected as a manufacturer for NuScale's revolutionary technology," said Rex Geveden, BWXT President and Chief Executive Officer. "NuScale's unique SMR design can be factory-made and offers scalable power based on need. We are excited to work with NuScale to help make their groundbreaking design a reality."

NuScale is competing with other countries, including Russia and China, in the global commercialization of SMRs. According to the U.S. Department of Commerce, every \$1 billion of exports by U.S. companies represents at least 5,000 jobs. The sale of NuScale SMRs would have a significant impact to both the American economy and manufacturing jobs market.

The U.S. Nuclear Regulatory Commission is scheduled to approve NuScale's Design Certification application in September 2020. NuScale's first customer, Utah Associated Municipal Power Systems, is on track to deploy the country's first SMR plant in the mid-2020s.

#### About NuScale Power

NuScale Power is developing a new modular light water reactor nuclear power plant to supply energy for electrical generation, district heating, desalination, and process heat applications. This groundbreaking small modular reactor (SMR) design features a fully factory-fabricated NuScale Power Module  $^{\text{TM}}$  capable of generating 60 MW of electricity using a safer, smaller, and scalable version of pressurized water reactor technology. NuScale's scalable design – a power plant can house up to 12 individual power modules – offers the benefits of carbon-free energy and reduces the financial commitments associated with gigawatt-sized nuclear facilities.

The majority investor in NuScale is Fluor Corporation, a global engineering, procurement, and construction company with a 60-year history in commercial nuclear power.

NuScale is headquartered in Portland, Oregon and has offices in Corvallis, Ore.; Rockville, Md.; Charlotte, N.C.; Richland, Wash.; Arlington, Va.; and London, UK. Follow us on Twitter: @NuScale\_Power, Facebook: NuScale Power, LLC, and Instagram: nuscale\_power. NuScale has a new logo, brand, and website. Watch the short video.

Page 12 CNTAware

## Centerra Celebrates 35 Years Protecting Savannah River Site

Centerra, the Savannah River Site security contractor, is celebrating 35 continuous years of protecting SRS security interests. Centerra, formerly known as Wackenhut Services, Inc., has been providing security services at the 310-square-mile Department of Energy nuclear facility since 1983. Wackenhut was founded by former Federal Bureau of Investigation Special Agent George Wackenhut in 1954, and purchased by Centerra Group, LLC, in 2014. Centerra is owned by Constellis, a leading global provider of risk management, security, humanitarian, training and operational support services to government and commercial customers, with over 24,000 employees worldwide.



Paul Donahue, Chief Operating Officer for Constellis and Chief Executive Officer for Centerra

"It has been a rewarding 35 years and we have been fortunate to have a great team of employees and leadership at Savannah River," said Paul Donahue, Chief Operating Officer for Constellis and Chief Executive Officer for Centerra. "You have always represented the best of what we do and how we do it and the Corporation is proud of your work and accomplishments. I want to thank each of you for your hard work and dedication to our mission, and also express my appreciation to our client for their guidance and oversight."



George Wackenhut, founder of The Wackenhut Corporation, with an early Special Response Team at SRS.

Wackenhut initially hired approximately 460 uniformed security professionals and 50 administrative support personnel. "The organizational culture was and remains paramilitary, team oriented, with a specific focus on safety and mission accomplishment," said Mark Bolton, the Centerra-SRS General Manager, who was hired as a Security Inspector in 1983.

The Company implemented enhanced security and operational capabilities at the Site, including a dedicated Special Response Team, SRS Aviation Program, Canine Program, and enhanced tactical response capability. In 1984, Centerra won the first of what would eventually become ten National Championships in the DOE Security Protection Officer Training Competition. The SRS firearms ranges transitioned from small, basic training areas to the state-of-the-art Bobby Davis Range that opened in 2011. The enhanced training facilities now provide the capabilities necessary to maintain firearms and tactical proficiency to counter potential security threats.

In the late 1990s, the Company embarked on a journey to embrace and implement policies, practices and a quality management system based on the Malcolm Baldrige National Quality Award criteria, and won numerous local, State and National awards for their commitment to Total Quality. In 1995, the Company's Law Enforcement Department became the first private security agency to receive accreditation by the Commission on Accreditation for Law Enforcement Agencies, and in 2005, the Company achieved CALEA Public Safety Training Academy accreditation.

Centerra has increased security capabilities to address the emerging threat of global terrorism. Part of that initiative included significant enhancements to the Nuclear, Chemical, Biological and Weapons of Mass Destruction response program. Another threat that has emerged is the increasing number of active shooter situations at public and Government facilities. Once again, Centerra led the DOE security contractor complex in training and preparing the Protective Force to respond to and mitigate this type event. Centerra worked closely with DOE, the FBI, SRS Fire Department, the SRS Vulnerability Assessment Group and other Site organizations in developing a comprehensive SRS Active Shooter Plan to ensure a consolidated Site response to any potential active shooter situation.

Centerra has an overarching commitment to safety throughout all organizational operations and every aspect of the contract is managed with a focus on employee safety and health.

The Company also has a strong history of supporting both active duty and reserve components of the military. "Over 60% of the nearly 700-member workforce are military veterans and a substantial number continue to serve in the National Guard or Reserve," said Mr. Bolton. "We recruit military personnel based on their unique skill mix and our Company earned numerous awards for support for veterans, including the Employee Support of Guard and Reserve 5-Star Award, Pro Patria Award for being a top employer in South Carolina for National Guard and Reserve members, and the Veterans of Foreign Wars National Employer of the Year."

For over 35 years, Centerra has recognized an obligation that extends into the surrounding cities, towns and communities of South Carolina and Georgia, contributing time, talent, expertise, and resources to charitable organizations. The Company places high value on employee involvement in activities that positively impact local communities and remains dedicated to community support. Centerra and employees have donated \$4.4 million to United Way charities in combined employee and Company contributions.

"We are extremely proud of our commitment to local communities," said Mr. Bolton. "We remain dedicated to helping meet community needs and the sustained commitment by the Company and our employees will continue to enhance the quality of life for residents, families and neighboring communities in the coming years."

The SRS has experienced many evolutions over the last 35 years, transitioning from a production mission to one now focused on storage and environmental management, and the Centerra mission has evolved to ensure continued protection of Site security interests.

"We appreciate the trust and confidence that DOE has placed in our organization," said Mr. Bolton. "Our employees have been our most important and appreciated resource for 35 years and we are confident they possess the skills, expertise and experience needed to meet future challenges at the Savannah River Site."

# SRS Museum Holds Ribbon Cutting for Environmental Stewardship Gallery

The Savanah River Site Museum held a ribbon cutting ceremony on Saturday, Oct. 20 to reveal the opening of their new environmental stewardship gallery.

The gallery depicts the ongoing roles the University of Georgia's Savannah River Ecology Laboratory and the USDA Forest Service-Savannah River have had in the environmental stewardship of the U.S. Department of Energy's Savannah River Site since 1951.

Walt Joseph, the executive director of the museum, said both entities are an integral part of the site's story, so this was a natural collaboration.

"I wanted to see the museum reflect all aspects of the site. Initially, the museum's focus was on nuclear production and research," Joseph said. "We had nothing to show the vast research that focuses on protecting the environment."



Official ribbon cutters and presenters front row, left to right, SRS Museum Executive Director Walt Joseph, Walt's wife and a museum volunteer, Paula Joseph, and SREL Assistant Director Chris McBride; second row, Ben Henry (Smokey Bear) U.S. Forest Service-SR, Aiken County Chairman Gary Bunker, U.S. Forest Service-SR Assistant Manager for Research Andy Horcher, and Greater Aiken Chamber President David Jameson.

The room contain photographs, illustrations and interactive exhibits prepared by the SREL and the USFS-SR. Depictions of the various habitat types, associated wildlife and conservation efforts are just a few of the exhibits that visitors can expect to find in the gallery.

Children can experience hands-on fun with the use of an animal tracking system. The device will lead them to animals hidden in various locations inside of the museum.

Joseph said there will be something for every age group to discover and exhibits will be added regularly.

In addition to Joseph, presenters at the ceremony included Greater Aiken Chamber President David Jameson, Aiken County Chairman Gary Bunker, and U.S. Forest Service-SR Assistant Manager for Research Andy Horcher, and SREL Assistant Director William McBride. Paula Joseph also participated in the ribbon cutting.

USFS-SR and SREL both conduct outreach education to the general public and view their partnership with the museum as an additional opportunity to educate the public about their roles as environmental stewards on the SRS.



Dr. Kurt Buhlmann, senior research associate at UGA's Savannah River Ecology Lab and Charlie Davis, an ecologist at USDA Forest Service-SR with Smokey Bear.

Page 14 CNTAware

## **CNTA Business Members**

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## **Mission of CNTA**

Citizens for Nuclear Technology Awareness, Inc., is an education and advocacy group promoting the safe and effective use of nuclear power, nuclear research and nuclear medicine.

We provide education, networking, and a voice of understanding from a technical perspective in a world often influenced by *inaccurate* and unwarranted fear.

CNTA membership encompasses individuals, families, and businesses who support the use of nuclear science and technology for many applications, including: energy, national security, nuclear medicine and diagnostics, and industrial applications.

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Allison Hamilton Molnar- Office Manager
Jeff Allender- Webmaster
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#### **BUSINESS MEMBERSHIP OPTIONS**

Platinum: \$10,000 or more Gold: \$5,000—\$9,999 Silver: \$2,500—\$,999 Bronze: \$1,000—\$2,4999

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## YOUR DUES SUPPORT PUBLIC OUTREACH

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All Donations to CNTA are Tax-Deductible



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Phone: 803-649-3456 Fax: 803-649-3860 E-mail: CNTA@bellsouth.net





Fall/Winter 2018 Page 16

### CNTA CALENDAR OF EVENTS

**January 23, 2019-** Up & Atom- "Proactive Tactics for Cybersecurity in Complex Facilities" Presented by Jacobs. 7:30am at Newberry Hall in Aiken SC.

February 28, 2019 – CNTA Essay Contest Deadline.

March 26, 2019- CNTA Members' Mixer & Annual Report. 6-8pm at Newberry Hall in Aiken SC.

May 10, 2019- 17th Annual CNTA Charity Golf Tournament!

## Get Involved in CNTA

CNTA is always in need of volunteers. Whether it be a few hours to help judge the essay contest, or being on a decision-making committee—there is a spot where you can be involved!

The committee descriptions are below. If you want to be on a committee, please email the chair. If you want to participate in one-time opportunities just let us know!

#### **Communications Committee**

<u>Description</u>: The Communications Committee is responsible for ensuring accurate and timely information to the media, stakeholders, and the public and to reflect the goals and objectives of CNTA.

Committee chair and contact: Dean Campbell; dean.campbell@srs.gov

#### Speaker's Bureau

<u>Description:</u> The Speaker's Bureau identifies experts on topics in nuclear technology so they can prepare and deliver presentations to members of the public that request speakers (e.g. civic groups, clubs, organizations, schools, etc.).

Contact: CNTA: cnta@bellsouth.net

#### **Education Committee**

<u>Description:</u> The goal of the Education Committee is to educate the public on the benefits, uses, and truths of nuclear technology. This is done through several initiatives: "Bringing Nuclear into the Classroom," Nuclear Blitz teach-ins, Lifelong Learning Academy teaching, and awarding the many scholarships and awards to students and teachers.

Committee chair and contact: Marissa Reigel; Marissa.Reigel@srnl.doe.gov

#### **Young Professionals Committee**

<u>Description</u>: The purpose of the Young Professionals Committee is to recruit and engage young professional members by providing them with mentorship and professional development opportunities as well as raising money to make membership free for those under 40.

Committee chair and contact: Sunny Lunka; sunny.lunka@srs.gov

#### **Membership Committee**

<u>Description</u>: The Membership Committee aims to create innovative initiatives to provide and promote value to members, retain current membership, and attract new members. <u>Committee chair and contact</u>: Lyddie Hansen; lyddiehansen@bellsouth.net

#### **Golf Committee**

<u>Description</u>: The Golf Committee is responsible planning the annual Charity Golf Tournament. This planning includes soliciting sponsors and raffle items, marketing, and food and beverage. The Annual CNTA Golf Tournament is the biggest fundraiser of the year that brings in on average \$16,000. Volunteers are also needed at the tournament!

Committee chair and contact: Allison Hamilton Molnar; cnta@bellsouth.net