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## Update from our Executive Director

Where has the summer gone?! It seems like just yesterday we were awarding scholarships and educator grants to deserving recipients. In this newsletter, you will meet the student scholarship award winners. We had a great number of applicants for both the essay scholarship and Maher scholarship this year and I personally congratulate our winners! Also, as a new initiative this year, we awarded grants to areas educators to support innovative uses in their classrooms. In June, we held a reception to honor the teachers at the SRS Heritage Museum. The educators that attended were thrilled to be recognized and excited to bring new opportunities to the classroom!

Speaking of the Heritage Museum, renovations are nearing completion and the museum looks great! If you have never been to the museum or have not been for a long time, I encourage you to visit. Lauren Miller is the new Director of the museum and she brings extensive experience and vision to the position. Through a generous grant from the DOE Office of Legacy Management, the museum **will soon open an exhibit titled "6000 Voices."** This exhibit will chronicle the very beginnings of the site and the stories of the residents that were relocated from the site. The museum is also looking for volunteers. If you have interest, please visit their website: [www.srsheritagemuseum.org](http://www.srsheritagemuseum.org).

With the coming of hopefully cooler weather, we are looking forward to our many fall events. Planning for the Teller Lecture is in full swing. We will also be hosting an Oyster Roast/Low Country Boil event to raise funds for young professional memberships and additional education initiatives. The fall also brings a number of STEM events that we regularly support. More information on these events is inside this newsletter. Look forward to seeing you this fall!

Jim

## Update from our Board of Directors

As I approach a twenty-five year involvement with CNTA, which includes more than ten years as Board Chair, I had cause to reflect upon why I support and give my time to this organization. The reason is simply that I am committed to the valuable societal contributions which nuclear science **and technology can make in today's world. The opportunities for positive impact are many but** there are certainly three that rise above all others in importance. They are:

- The contribution nuclear energy can make in the reduction of global warming.
- The importance of our nuclear deterrent in ensuring national security and contributing to world peace.
- The enormous and continuously growing role of nuclear science in medicine.

These factors are also the foundation of all that CNTA does. As dogma continues to battle fact regarding nuclear issues, it is even more important to educate all age groups about these positive and very necessary results of nuclear science. Indeed if we truly care about the future of our children and grandchildren, how can we not all give time to the mission of this organization? I rest my case.

Susan Wood,  
Board Chair

## Education Committee Updates

### Note on Education Programs

Our Education Committee constantly evaluates our educational programs and deliberates on changes to existing programs or new initiatives. While very successful, the Southeastern Summer Nuclear Institute (SSNI) had seen declining participation in recent years. It was decided to not conduct the SSNI session in 2019; however, we may offer the program in future years.

With this decision, we reached out to Aiken County Public school administrators to identify areas where teacher support is lacking. The administrators indicated that high school science teachers are in desperate need of funding to augment classroom teaching with demonstrations and hands-on activities. To address this need, our Education Committee developed a high school level educator grant initiative.

In 2019, we launched the CNTA High School Educator Grants Program. Grants in an amount of \$500 were awarded for winning applications. The grants could 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.

**The Education Committee will continue to evaluate CNTA's educational programs and welcomes input and suggestions from the membership. Or better yet, if you have interest, please join our committee!**

### Educator Grant Winners & Reception

In its inaugural year, the CNTA Educator Grants Program awarded 3 grants for \$500 each. These grants will be used to fund projects that promote an increased understanding of atomic and nuclear fundamentals, radiation and nuclear materials safety, and applications of nuclear technology.

The 2019 grant winners are:

Jack Overholser, 10<sup>th</sup> and 11<sup>th</sup> grade chemistry, South Aiken High School;  
Kacee Poppy, Honors & AP Chemistry I, South Aiken High School; and,  
Andrie McFadden, 9<sup>th</sup>-12<sup>th</sup> grade welding, TW Josey High School/MEB Career Center.



**Overholser's project, "Irradiated Salt Demonstration," will exemplify radioactive decay through an experiment that compares irradiated salt and normal salt. Students will use a Geiger counter to compare the radioactivity readings of both salts, as well as background radiation.**

**With Poppy's project, "Using Cloud Chambers to Visualize Ionizing Radiation," students will get to experience ionizing radiation at an up-close and personal level. From this lab activity, students will make drawings of what they observe in the cloud chamber and determine the difference between the visible tracks of alpha and beta radiation.**

**McFadden's project, "Stand & Support," will give students hands-on experience in fabricating and welding as they design and build welding stands for new welding machines. Currently, welding machines sit on the floor, according to McFadden.**

In addition to CNTA, sponsors of the CNTA Educator Grants Program are Huntington Ingalls Industries, Savannah River National Laboratory, SRS-Community Reuse Organization, plus a private foundation and an anonymous donor.

**"These grant awards are just the beginning of a continued 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," Marra said.**

A reception honoring the three teachers was held at the SRS Heritage Museum in Aiken on Tuesday June 11, 2019.

**Representatives from the grant sponsors, recipients' schools, as well as CNTA board members and education committee members attended.**

**CNTA plans to launch the 2020 Educator Grants Program in October 2019.** Teachers at Middle & 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 will be invited to submit proposals.

## 2019 Maher Memorial Scholarship Winner & Special Merit Award

Citizens for Nuclear Technology Awareness (CNTA) and Savannah River Remediation (SRR) announced South Carolina State University student Amelia Manhardt as the winner of the 2019 Robert Maher Memorial Scholarship.

The scholarship is sponsored by SRR, the liquid waste contractor for the U.S. Department of Energy at the Savannah River Site (SRS).

Manhardt, who is from Eutawville, S.C., is a nuclear engineering student at S.C. State University. CNTA Executive Director Jim Marra said CNTA is proud to award this \$5,000 scholarship to such an ambitious, enthusiastic, and deserving student.



2019 Maher Memorial Winner  
Amelia Manhardt (USCS)

**“Amelia has a great passion to pursue nuclear research, continue her education, and grow her knowledge and experience in the field,” Marra said. “All these go-getter qualities make Amelia the ideal candidate to award this scholarship. No doubt she will be an exemplary addition to the nuclear industry.”**

**“I was fascinated by how the fields of land surveying and nuclear engineering overlapped,” she said. “Because my late mother was a land surveyor, this field is of interest to me. Seeing these two fields coincide opened my eyes to how there is more to nuclear engineering than just the inner workings of a reactor – it made me interested in the infrastructure encapsulating the technology within.”**

**After graduating with a bachelor’s degree, Manhardt plans to go to graduate school to study materials then eventually on to receive her Ph.D.**

**“No matter where my research takes me, I want to eventually spread my knowledge to others, and help more student rise to the challenges faced in the field of nuclear engineering,” she said.**

CNTA also awarded Kennesaw State University student Alisa Machiwalla a Special Merit Award. Machiwalla is studying mechanical engineering with a minor in nuclear engineering.

The Robert Maher Memorial Scholarship is a joint project of CNTA and SRR. Maher, Vice President and General Manager for Strategic Mission Development at SRS, passed away in 2002 after a 48-year career at the Site. **A visionary with a broad view of the Site’s potential, Maher helped shape SRS.**



2019 Special Merit  
Award Winner  
Alisa Machiwalla

## 2019 Essay Contest Winners

Winners of the 2019 Essay Contest joined CNTA members at Up & Atom breakfasts in May and June to receive their awards.



We also took a special trip out to Greenbrier High School to present the award to Ms. Zanadiki.

**The 2020 Essay Contest will launch in October 2019!**

Area Juniors & Seniors in High School are eligible to participate.



## CNTA Holds Nuclear Technology Workshop for SRS Interns

Citizens for Nuclear Technology Awareness (CNTA) and Dr. David Gattie, associate professor at the University of Georgia, recently held a nuclear technology mini-workshop for Savannah River Site (SRS) interns. The interns, most of whom had no experience with nuclear technology before coming to SRS, were educated on nuclear fundamentals and nuclear power.

CNTA is an Aiken-based nonprofit organization dedicated to educating the public about the value of nuclear technology through factual, objective information.

Every year, CNTA provides SRS interns with a nuclear-technology mini-workshop, which introduces young professionals to current nuclear matters and the wide range of job opportunities in the industry. For the more-than 300 interns across the Site, this workshop gives invaluable insight into the missions they support through their work with SRS contractors.

Aaron Derr, Savannah River Nuclear Solutions (SRNS) Process Control and Automation Engineering intern, and Computer Science major at the University of South Carolina Aiken, was excited for the developmental opportunity that the CNTA workshop provides.

**“I was interested in seeing what kind of information they would introduce us to and how they’ll approach the common misconceptions about nuclear materials,” said Derr.**

Executive Director of CNTA Jim Marra hosted the workshop. He started the event with a presentation on the basics of radioactivity, explaining that many household items can be radioactive. One of the instruments used to detect radiation is a Geiger counter, which Marra used to demonstrate the radioactivity of an older piece of **dishware. He then showed how materials such as stainless steel can “shield”, or block, the radioactive particles emitted from the dishware.**

**“I hope the SRS interns learned about nuclear materials and the different job opportunities this field offers,” said Marra. “We also want them to bring a little bit of this information to their families, friends, and peers and educate them on how radioactivity is all around us.”**

**Dr. Gattie gave an engaging lecture on the influence of nuclear power and discussed America’s nuclear leadership on the global stage.** Part of his lecture analyzed the geopolitics of nuclear policy in the 21<sup>st</sup> century. The interns were also given time to break-out into sessions and network with young professionals in the nuclear industry.



Dr. David Gattie spoke to SRS interns about the geopolitics of nuclear policy.

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## CNTA Committee Descriptions

More information is available online at: <https://cntaware.org/committees/>

### Communications Committee

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.

### Education Committee

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.

### Young Professionals Committee

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.

### Membership Committee

The Membership Committee aims to create innovative initiatives to provide and promote value to members, retain current membership, and attract new members.

## Young Professionals Committee Update

### Assisting with Recruitment & Retention

CNTA is actively recruiting Young Professionals to be members of our group. We now have over 150 members age 40 and below who are contributing significantly to achieve our missions of educating citizens on the importance of nuclear technology to the United States, the local community and themselves.

Our Young Professionals Committee has conducted bi-monthly Tap into Nuclear events at the Aiken Brew Pub with the aim of having CNTA mentors available to discuss subjects that our Young Professionals consider important. In addition, our Young Professionals have joined forces with mentors to run successful fund raising events for the past 2 years which will support our mission to educate students on the importance of nuclear technology to their lives.

Our Up and Atom breakfasts each month keep all of our members apprised of important issues with regard to nuclear technology and our Young Professionals are expanding horizons and developing their careers as a result.

### Tap into Nuclear



#### July 25, 2019– Tap Into Nuclear Co-Hosted with Women in Nuclear- Savannah River Chapter

The panel featured speakers Elise Fox, Fellow Engineer for the Savannah River National Laboratory, Holly Watson, Savannah River Nuclear Solutions (SRNS) HB Line Operations Support Manager, and Barbara Smoak, Director, SRNS Business, Technical and Employee Communications.

The event began with networking and was attended by approximately 30 people.

The panelists offered perspectives from different points in their career and family lives and gave advice on how to best navigate work/life balance.

Fox, a mother of twins whose husband also works at SRNL, encouraged parents to take advantage of the benefit of being able to work part time.

**“I have changed my hours as the kids have gotten older to be able to be there when they aren’t in school,” she said. “I make sure to work to my full capacity when I am at work, so I am able to get the work done but also able to be there for my kids, which is the most important thing to me.”**

Watson stressed the importance of open communication with both family members and your management.

**“You are never going to maintain balance. You will constantly reassess and reallocate your attention based on level of urgency and importance. Have those crucial conversations with your family and your boss about where your limits are and evaluate if you are meeting the needs of both sides,” Watson said.**

When asked how to keep from being distracted by home at work, Smoak, a 30 + year employee at SRS and mother of five adult children, offered this advice.

**“You have to be in the moment where you are,” she said. “Set a landmark on the way to and from work. When you reach that landmark on the way home, stop thinking about work. When you reach it going into work, stop thinking about home. It doesn’t always work but it lets you be conscience about turning certain things on and off.”**

**“We really appreciate the panelists for taking time to talk to us,” said Hayley Williams, CNTA Young Professional and Coordinator of the event. “It’s great for our young professionals to get tips and tricks to help them be successful in their career and their personal lives.”**

#### August 22, 2019– Night at the Ballpark

Approximately 35 young professionals went to see the Greenjackets play for an August Tap into Nuclear!

The next Tap into Nuclear is scheduled for September 26, 2019!



# CNTA CHARITY GOLF TOURNAMENT!



“Besides being a fun event and a great networking opportunity for participants, this tournament is one of CNTA’s most important annual fund-raisers,” said Marra. “With so many nuclear related activities in our community, this event helps CNTA promote and educate the public on nuclear technologies.”



The 17th annual CNTA Charity Golf Tournament was held at Houndslake Country Club on May 10, 2019.

30 teams (120 golfers) participated in this captain's choice format.

**Approximately \$17,000 was raised to support CNTA’s educational mission.**

Thank you to our volunteers, players, and sponsors!

Mark your calendars to join us next year on May 8, 2020 for the 18th Annual CNTA Charity Golf Tournament!



## Up & Atom

May 9, 2019– Dr. David Gattie, UGA- “National Security Implications of U.S. Nuclear Power in the 21st Century”

June 12, 2019– “Nuclear Research at South Carolina Universities”  
Organized by SCUREF  
Featured: Dr. Musa Danjaji (SCSU), Dr. Travis Knight (USC), Dr. Brian Powell (Clemson), & Craig Williamson (SCUREF)

July 24, 2019– SRR– Phil Breidenbach “Recruiting & Retaining Top Talent Engineers” & Summer Interns

August 28, 2019– SRNS- Stuart MacVean “SRNS-Leaning Forward”



### Savannah River Remediation Chief Engineer, Interns Present at CNTA Up & Atom Breakfast Submitted by SRR

Savannah River Remediation (SRR) Chief Engineer Phil Breidenbach and two SRR summer college interns were keynote speakers at the most recent Up & Atom Breakfast hosted by Citizens for Nuclear Technology Awareness (CNTA).

SRR is the liquid waste contractor at the Savannah River Site (SRS). As Chief Engineer, Breidenbach manages, plans, and integrates all engineering services required to support the liquid waste work scope. He implements and manages programs for a broad range of subjects, including systems engineering and nuclear safety, alongside providing engineering oversight for operations support.

During his presentation, Breidenbach spoke about how SRR recruiting young engineers is important to the company and the community because of insights and talents valuable to both. In addition, to retain new engineers, **Breidenbach discussed putting engineers into the company’s Reaching Engineers at the Development Years (READY) program.** The mission of the READY program is to foster personal and professional growth of early **career professionals using the program’s six pillars: job rotation, training and development, mentoring and coaching, professional development, site visibility, and social networking.**

All 45 SRR summer college interns attended the breakfast, and two of them gave presentations on their experiences for the group. Interns Brittany Brush and Noah Garabedian discussed their summer projects at SRR.

**Brush hails from Savannah, Georgia, and is currently pursuing a master’s degree in civil engineering at Florida State University with an emphasis in geo-environmental engineering.** She is working with the SRR Waste Disposal Authority to do a performance assessment of engineered cover systems for the site’s Saltstone Disposal Units.

Garabedian is a native of Frederick, Maryland. A student at the University of Maryland, Garabedian studies fire protection engineering. At SRR, he performs code review analyses to ensure that buildings onsite are maintained to National Fire Protection Association Codes and Standards. He inspects, tests and maintains fire protection systems in the Defense Waste Processing Facility (DWPF).



Left to Right: Brittany Brush, Phil Breidenbach, & Noah Garabedian

## Advocacy/ Public Outreach Activities

**“SRS is ideally suited for the vitally important, enduring Pit Production mission. SRS was built as a nuclear production facility and continues today operating as a nuclear production facility! We welcome NNSA’s efforts to perform a thorough environmental impact assessment of siting a Pit Production Facility at SRS.” Jim Marra, CNTA Executive Director**

In June, a public meeting was held to start the EIS process on potential plutonium pit production at SRS. At this meeting community leaders, supporters & opponents spoke.

CNTA was represented by Dr. Marra and several members.

One conservative estimate put the number of CNTA members in the room at 35!

### Plutonium Pit Production – Crucial to our National Defense

Published in *The Aiken Standard*  
June 26, 2019

The defense of our nation relies on a nuclear deterrent. Our nuclear weapons systems while powerful, credible and long lived still must be serviced or replaced.

According to the 2018 Nuclear Posture Review completed by the Department of Defense, the nuclear weapons deterrence will require modernization. Part of that modernization will include the manufacture of new plutonium pits. Plutonium pits have not been produced in the U.S. since 1989. The Nuclear Posture Review reported a need for the production of 80 pits per year by 2030.

The Savannah River Site is ideally suited for the pit production mission. For almost 70 years, SRS has supported the defense of the country.

Tritium operations currently conducted at SRS support maintenance of the nuclear weapons stockpile. In its entire history, the SRS Tritium Enterprise has not missed a deliverable date or milestone.

Starting with DuPont, SRS operations contractors have set the global standard for nuclear safety and security. SRS has demonstrated the ability to conduct production-scale nuclear operations in a safe, secure and environmentally responsible manner.

This includes all phases of plutonium processing, material handling and accountability. Further, the Savannah River National Laboratory has core competency in actinide chemistry and has a long history of directly supporting plutonium operations. SRS has the geography, infrastructure, facilities, proven processes, skilled workforce and nuclear culture to safely conduct this mission.

The preferred alternative proposed by NNSA includes pit production at both the Los Alamos National Laboratory and SRS. It should be noted that SRS has an established history of working with Los Alamos and other weapons design laboratories in tritium research and development.

These relationships could be expanded to plutonium pit production. This would result in a national partnership that leverages talent across the DOE complex.

Opponents to a pit production mission at SRS have indicated environmental concerns and waste management challenges. On the contrary, wastes that are generated from plutonium pit production will have established disposition paths.

Meanwhile, the environmental cleanup at SRS will continue in parallel under the direction of other skilled site workers. The NNSA has announced its intent consistent with environmental law to prepare an environmental impact statement (EIS) for plutonium pit production at SRS. We welcome the consideration of the Savannah River Site for the plutonium pit production mission by the NNSA. We also support the efforts of the NNSA to conduct a thorough environmental impact assessment for this vitally important mission.

**CNTA**  
Citizens for Nuclear  
Technology Awareness

**THE VOICE OF TRUTH  
ON NUCLEAR MATTERS**

**What CNTA does for you**

- Advocates for the advancement of nuclear missions, sustaining and ensuring your career.
- Spreads the truth about nuclear technology—especially past, present, and future nuclear processes and missions, of which you are an important part.
- Facilitates the discussion of safe and effective use of nuclear technology in energy, research, and medicine.
- Provides factual answers to the questions “What do you do at SRS/ Plant Vogtle?” or “Why is your nuclear job important?”

Above: New CNTA Brochure focusing on what we do for Nuclear Workers.



## Proposed New Plutonium Pit Mission Submitted By SRNS

Since the National Nuclear Security Administration (NNSA) announced their proposal to locate a pit production mission at the Savannah River Site (SRS), site personnel have been busy making preparations.

Last spring, NNSA Administrator Lisa E. Gordon-Hagerty announced the preferred alternative for producing the plutonium pits required for the U.S. nuclear deterrent: a two-site strategy that would re-purpose the unfinished Mixed Oxide (MOX) facility at SRS to produce 50 pits per year by 2030, with Los Alamos National Laboratory producing another 30 pits per year.

Pit production is a capability the United States has not had for several years – nearly all current stockpile pits **were produced between 1978 and 1989. Restoring this capability has been deemed imperative in the nation's** 2018 Nuclear Posture Review. This two-site strategy would provide the flexibility and resilience necessary for this important mission.

The proposed re-purposed facility would be known as the Savannah River Plutonium Processing Facility (SRPPF), and would represent an enduring mission for SRS, continuing for decades into the future. It would join another **crucial effort that supports the nation's nuclear deterrent: the SRS tritium mission. Since the early 1950s, SRS** has provided the products and services related to the radioactive form of hydrogen used in nuclear weapons.

**Immediately after NNSA's announcement, SRS management and operations contractor Savannah River Nuclear Solutions (SRNS)** began assembling a staff for the proposed pit mission. That staff is preparing the conceptual design for the facility and other plans that will make it possible for NNSA to make a final decision. In January, the company provided NNSA with the first major document, which included a schedule for meeting the upcoming milestones.

**"SRS has a long heritage of stepping up to meet these big national needs," said Dave Olson, SRNS Mission Director for the proposed pit mission. "This proposed mission already represents a significant effort for the site,** with a large number of people working on the conceptual design and related efforts. That number would go up as we move toward startup of operations, and on-going operations would require hundreds of people for at least **the next 50 years."**

SRNS learned very quickly that close cooperation with LANL is essential as the two sites develop plans for successfully achieving the two-site strategy. The two sites participate in regular collaboration as they work toward the upcoming milestones.

SRNS staff will complete the conceptual design package for the SRPPF and submit it in time for NNSA to make **Critical Decision-I by the end of FY 2020. "CD-I" is the determination that the selected alternative** – in this case, the proposed re-purposing of the MOX facility– is the optimum solution.

At the same time, NNSA is preparing an Environmental Impact Statement (EIS), specific to the proposed pit mission at SRS. As part of preparing that document, NNSA opened up a public comment period, which included a very well-**attended public scoping meeting to seek the community's input on the range of issues that should be** considered in the EIS. After the Draft EIS is issued in 2020, there will be another public comment period before NNSA issues a Record of Decision.

**SRS is owned by the DOE Office of Environmental Management, but 29 percent of the site's work is in support** of NNSA missions. NNSA is a semi-autonomous agency within the U.S. Department of Energy responsible for enhancing national security through the military application of nuclear science. NNSA maintains and enhances the safety, security, and effectiveness of the U.S. nuclear weapons stockpile without nuclear explosive testing; works to reduce the global danger from weapons of mass destruction; and responds to nuclear and radiological emergencies in the United States and abroad.

## Georgia Power's New Vogtle Units Approximately 79% Complete

Submitted by Southern Nuclear

August 30, 2019-

The target in-service dates for Georgia Power's Vogtle 3 & 4 nuclear expansion project near Waynesboro, Ga., remain unchanged at November 2021 for Unit 3 and November 2022 for Unit 4, the company announced today in its project update filed with the Georgia Public Service Commission (PSC). The company also cited it expects the project will remain within the current cost forecast.

Georgia Power filed today its combined 20th and 21st Vogtle Construction Monitoring (VCM) Report for the period July 1, 2018 through June 30, 2019, with the PSC. A link to the filing can be found [here](#).

Significant progress continues to be made at the construction site, with the project now approximately 79% complete.

The project met all major milestones in 2018 and met all first and second quarter major milestones for 2019. Recently, the site completed a major step in the Integrated Flush process by successfully testing a portion of the Spent Fuel Pool Cooling System (SFS), a key safety component for Vogtle Unit 3. In addition, the company ordered the first nuclear fuel load for the unit, the first nuclear fuel order to be placed in more than 30 years for a newly-designed reactor in the U.S., marking a major milestone in the project's transition to operations.

Other milestones include:

- setting of all four reactor coolant pumps inside the Unit 3 containment vessel
- setting of the Unit 3 containment vessel top head
- completion of Unit 3 initial energization and the start of the integrated flush process for Unit 3
- placement of both accumulator tanks, both steam generators and the pressurizer inside Unit 4 containment
- setting the second ring of the Unit 4 containment vessel

The project workforce remains at an all-time high with approximately 8,000 workers on site. With more than 800 permanent jobs available once the units begin operating, Vogtle 3 & 4 is currently the largest jobs-producing construction project in the state of Georgia.

### VCM process

The company files a VCM report to provide the PSC a detailed update on progress and other information related to the construction of the nation's only new nuclear units. The VCM process includes public hearings held at the PSC, as well as reports filed by the PSC staff's independent construction monitor.

### New construction time-lapse video highlights progress since groundbreaking

Georgia Power has released a new [video](#) of the nation's only new nuclear units currently under construction. From the removal of four million cubic yards of soil, to historic module and concrete placements, **the video includes milestones throughout the project's history. Once completed, units 3 & 4 will generate enough electricity to power approximately 500,000 homes and businesses.**

Follow the progress being made at the site with the [Plant Vogtle 3 & 4 Online Photo Gallery](#).



## SREL Outreach Educator Leads an After-School Program to a National Win

Submitted by SREL

**Amanda Hurst, the outreach educator for UGA's Savannah River Ecology Laboratory, coached a team of students to win the American Farm Bureau Foundation for Agriculture's spring Purple Plow Challenge: Protect the Pollinators.**

The winners, Jasmine Coleman, Tamara Corley, Shawn **Butler, Crystasia Williams, Zy'Kesia Johnson, Rayshawn James, Avery Trottie, Gabriel Hosey, Ivan Jamison and Namair Anderson**, are middle-school students in the Dreams Imagination & Gift Development Program, a non-profit organization in Williston, South Carolina.

The students chose Team Marigold as their name after they distributed the flower in their community to educate residents about pollinators, including bees, butterflies and mosquitos.

According to the U.S. Fish and Wildlife Service, many pollinators are threatened or endangered due to habitat loss, degradation and fragmentation.

SREL began conducting pollinator education at the non-profit at the invitation of Shelby Broomfield, **DIG'S** director. **Hurst said she was teaching the students about pollinators when she discovered the competition.**

**"The students decided to address what they could to improve the well-being of pollinators," Hurst said. "They hypothesized that natural pesticides would act as a pest repellent allowing the pollinators time to work.**

The team planted several tomato plants and created a natural pesticide from essential oils, garlic powder and water to protect them from insects and mold. A control plant was left untreated while another plant was treated with a chemical pesticide.

Hurst said the team quickly noticed the chemically treated plant grew much slower than the other plants.

**According to Alix Ambriz, education specialist for the AFBFA, the team's approach caught their attention.**

**"Team Marigold had an innovative approach to saving the pollinators by using natural pesticides," said Ambriz. "In the agriculture industry, we are always looking for better ways to produce a safe and healthy food supply, and Team Marigold is doing their part in helping us on this mission."**



*Back row, Amanda Hurst, Jasmine Coleman, Gabriel Hosey, Namair Anderson, Chrystasia Williams, Charlette Epps and Shelby Broomfield. Front row, Rayshawn James, Shawn Butler and Tamara Corley*

# 28th Annual Edward Teller Lecture & Banquet

## October 16, 2019

### USCA Convocation Center

### Aiken SC



## 2019 Teller Lecturer

### Michael Shellenberger, Founder & President of Environmental Progress

Michael is considered one of the world's leading pro-nuclear environmentalists. He is a leading energy, security, and environmental expert. He advises policymakers around the world, including in the U.S., Japan, Taiwan, South Korea, the Philippines, Australia, United Kingdom, the Netherlands, and Belgium. He is co-founder of Breakthrough Institute, where he was president from 2003 - 2015, and served as an advisor to MIT's "Future of Nuclear Energy" task force.

Michael is a regular contributor to *Forbes*, *The New York Times*, *The Wall Street Journal*, and *The Washington Post*. His TED talks — "How Fear of Nuclear Hurts the Environment," "Why I Changed My Mind About Nuclear Power" and "Why Renewables Can't Save the Planet" — have been viewed over three million times.

His research and writing have appeared in *The Harvard Law and Policy Review*, *Democracy Journal*, *Scientific American*, *Nature Energy*, *PLOS Biology*, *The New Republic*, and cited by the *New York Times*, *Slate*, *USA Today*, *Washington Post*, *New York Daily News*, *The New Republic*.

## Tickets Required

### RSVP By October 2nd

### Reception starts at 6pm

- Private Speaker Reception-Invite Only
- Cash Bar- included with ticket

### Dinner starts at 7pm

**Cost: \$50 per person (\$65 if attending Private Reception)**

*Benefactor and Member+ CNTA Members receive one complementary ticket to event and private reception*

Buy online at: [cntaware.org/teller/](http://cntaware.org/teller/) or email CNTA.

For Table Sponsorship information contact CNTA.

### Business Attire



### CONTACT CNTA

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*CNTA is a 501(c)3 non-profit organization; ID #57-0953103*

# OYSTER ROAST

CITIZENS FOR NUCLEAR TECHNOLOGY AWARENESS

## AND LOW COUNTRY BOIL



Enjoy oysters and a low country boil  
Live music by Keith Gregory plus  
raffles and more!

**TICKETS at [CNTAWARE.ORG](http://CNTAWARE.ORG)  
\$30 includes first drink**



**SRR** Savannah River  
Remediation

AECOM | BECHTEL | JACOBS | BWXT

JASON CRANE OF EDWARD JONES, SAVANNAH RIVER  
NUCLEAR SOLUTIONS, CENTERRA, EMERSON ASCO,  
CHARLIE & LYDDIE HANSEN, HONEYWELL,  
SAVANNAH RIVER ECOLOGY LAB



**Saturday  
October 5  
Palmetto Golf  
Club 6:30pm**



Tickets available online, or email CNTA! RSVP Deadline September 27th.

# Thank You Business Members!

## PLATINUM

SAVANNAH RIVER NUCLEAR SOLUTIONS  
SAVANNAH RIVER REMEDIATION

## GOLD

ARTHUR RICH  
CENTERRA-SRS  
FLUOR GOVERNMENT GROUP  
HUNTINGTON INGALLS INDUSTRIES



## SILVER

JACOBS

## BRONZE

APPLIED RESERCH CENTER (ARC)  
ATKINS  
BECHTEL  
BWX TECHNOLOGIES INC.  
ORANO  
SCUREF



## BUSINESS

ECONOMIC DEVELOPMENT PARTNERSHIP  
MUNNS ADVISEMENT, LLC  
NORTH WIND GROUP  
SECURITY FEDERAL BANK  
SRS COMMUNITY REUSE ORGANIZATION



## Thank you to our Members Plus 2018!

DON BRIDGES	SHARON RICKMAN
DAVID DEL VECCHIO	WAYNE RICKMAN
EDDIE ESTOCHEN	BOB SINDELAR
FRANK JORDAN	STEVE WILKERSON

## 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.

### BOARD OF DIRECTORS

Susan Wood- **Board Chair**  
 Daren Timmons- **Vice Chair**  
 Charles Hansen -**Treasurer**  
 Mike Zustra- **Immediate Past Chair**

Jeff Allender	Sunny Lunka
Tom Burns	Karl Lutterloh
Byron Bush	Forest Mahan
Dean Campbell	Matthew McCoy
Shannon Cavero	Craig McMullin
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Dara Glass	Joe Ortaldo
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Fred Humes	Fitz Trimble
Sue King	John Veldman

James Corley, Ex-Officio  
 Walt Joseph, Ex-Officio  
 Steve Sheetz, Ex-Officio

#### Directors Emeritus

Clint Wolfe  
 Mal McKibben

#### CNTA Staff

Jim Marra– **Executive Director**  
 Allison Hamilton Molnar– **Office Manager**

### MEMBERSHIP INFORMATION

#### BUSINESS MEMBERSHIP OPTIONS

Platinum: \$10,000 or more

Gold: \$5,000—\$9,999

Silver: \$2,500—\$4,999

Bronze: \$1,000—\$2,4999

Business Member: \$500 to \$999

#### INDIVIDUAL MEMBERSHIP OPTIONS

Member Plus— \$250.00 or more

Benefactor—\$125.00

Patron—\$70.00

Sustaining—\$35.00

Young Professional — Free for 1 year

Membership Information is available online at:

<http://cntaware.org/join-us/>

All membership levels include invitations to breakfasts/dinners, other events, quarterly newsletters and opinion letters/editorials. Benefactor and Member Plus also receive one free private reception ticket and one free Teller Lecture banquet ticket when dues are current.

**YOUR DUES SUPPORT PUBLIC OUTREACH**

Federal ID# 57-0953103



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Aiken SC 29803

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Fax: 803-649-3860

E-mail: CNTA@bellsouth.net

**Visit Us At:**  
[www.cntaware.org](http://www.cntaware.org)  
**Facebook: CNTAware**



## HOW YOU CAN HELP

CNTA as a charitable non-profit organization can ALWAYS use help.

Opportunities include:

- Donate Items for Raffles/Auctions
- Volunteer your time at our upcoming events!
  - Volunteer for S.E.E.D. in October, for the Oyster Roast, or for Teller!
  - Help CNTA conduct or Annual Nuclear Blitz in October!
- Get involved with a CNTA Committee (Information available online and on pg. 4)
- Volunteer to help in our Office
- Consider Sponsoring an Upcoming Event (Tap Into Nuclear, Up & Atom both have spots for 2019 Sponsors still!)

For information email Allison at [cnta@bellsouth.net](mailto:cnta@bellsouth.net)

## CNTA CALENDAR OF EVENTS

September 25, 2019- **Up & Atom. "Mark 18A Project– Turning Nuclear Waste into Valuable Material"** 7:30am at Newberry Hall in Aiken SC.

September 26, 2019- **Tap into Nuclear. "Finances in the Real World"** 5:30pm at Aiken Brewing Company in Aiken SC.

October 5, 2019– **Volunteer with CNTA at Ruth Patrick's S.E.E.D.** <https://rpsec.usca.edu/SEED/> Talk with thousands of children about nuclear science!

October 5, 2019- **"CNTA Oyster Roast & Low Country Boil"** 7pm at Palmetto Golf Club in Aiken SC.

October 14-18– **Nuclear Science Week!** Details on events across the CSRA available at: <https://srscro.org/nuclear-science-week-2019/>

October 16, 2019- 28<sup>th</sup> Annual Teller Lecture & Banquet. Keynote- Michael Shellenberger. Reception at 6pm, Dinner at 7pm at USCA Convocation Center.

October 21-25– **Nuclear Blitz. Volunteer to teach Nuclear Fundamentals in High Schools across Aiken County.**

May 8, 2020- 18<sup>th</sup> Annual CNTA Charity Golf Tournament! Held at Houndslake Country Club in Aiken SC.

**JOIN CNTA AND HAVE THE CALENDAR OF EVENTS EMAILED TO YOU!!**