

American Nuclear Society Georgia Section

Our new normal...

Here we are in April 2021, after a year of the extraordinary. Life is opening back up and travel is begining to move from a wishlist to a reality. After months of only interacting via video, Many business professionals around the world are getting the opportunity to meet colleagues face to face.

Change and a new vision for the nuclear industry, comes with a new administration at the helm. Some see Biden's re-signing of the Paris Agreement as a nuclear energy victory. For many of the world's climate change-related goals, nuclear energy is seen as a part of the plan. That includes delivering the next generation of carbon-free electric power for cities as well as more specialized usages like process heat and the production of hydrogen. (See **X-energy's** announcement in Recent Nuclear News below.)

Our job at the ANS Georgia Section is to keep you up to date as our industry rolls with these changes. For more details on our Section please go to our website: <u>click here</u>. We appreciate your participation and engagement and look forward to seeing all of you, whether online or in person, in 2021.

Cheers,

Your ANS GA Section Leadership Team: Juan Villarreal, Dom Napolitano, Nick White, Andrew Hummel and Dan Glassic

Upcoming meeting: OPEN100 discussion with Dr. Joshua Tolbert

Our next Zoom meeting is scheduled for Tuesday, May 18, 2021, at noon and will feature Joshua Tolbert, Vice President of



Engineering at the <u>Energy Impact Center</u>. Dr. Tolbert, is a professional engineer with experience in research, design, development, construction and testing of new technologies in the industrial sector. Prior to joining the <u>Energy Impact Center</u>, Dr. Tolbert served as head of R&D for a small- scale steam power generation device for application of decentralized power, cogeneration and power generation from unconventional fuel sources. He holds U.S. patents and worked to develop cloudbased analytical tools for the remote monitoring and analysis of industrial equipment. He received his Ph.D. in Mechanical Engineering from the University of Alabama as a continuation of his master's degrees in Mechanical Engineering and Engineering Science and Mechanics. Stay tuned for a meeting notice closer to the date and join us!

OPEN100 is the world's first open-source platform for nuclear power plant deployment. OPEN100 takes the engineering behind the most successful nuclear energy deployments in history to create the foundation for a new generation of power plants that are faster and more costeffective to build. The OPEN100 online platform serves as a repository for engineering schematics, construction schedules, and financial models, establishing a common framework to align technology startups, engineering firms, utilities, and capital firms. The design prioritizes standardization and speed of delivery, right-sizing project scope to fit today's capital, infrastructure, and supply-chain constraints.

American Nuclear Society Georgia Section recognized by national organization

The American Nuclear Society (ANS) Georgia

Section was recently recognized by the national organization for fifty years of membership and participation. The Georgia chapter (also called a "section") is one of the oldest members of the national organization. Founded in 1971, the chapter was originally named for Atlanta, but was later expanded to include most of the state of Georgia.

At the national level, the American Nuclear



nuclear professionals. Membership ranks include more than 10,000 engineers, scientists, educators, students, and others with nuclear related interests.

ANS members hail from more than 1,600 corporations, educational institutions, and government agencies from over 40 different countries.

Recent Nuclear News: X-energy's two major projects move forward

Xe-100 SMR — **X-energy** has signed the cooperation agreement which officially begins its participation in the US Department of Energy's (DOE) Advanced Reactor Demonstration Program (ARDP), a project the company says will enable it to build a commercial scale advanced nuclear reactor with Energy Northwest in Washington State.

The DOE announced in October 2020 that **X-energy** was one of two awardees — the other being TerraPower - to receive \$80 million each of initial cost-shared funding to build an advanced reactor demonstration plant that can be operational within seven years. DOE selected X-energy to deliver a commercial TRISO fuel fabrication facility and a four-module version of its Xe-100 high temperature gas cooled reactor (HTGR), which the company plans to site at Energy Northwest's Columbia nuclear plant. The DOE will invest approximately USD \$1.23 billion in X-energy's project over the seven-year period.

Project Pele — The Department of Defense (DOD) exercised contract options for two teams led by X-energy and BWXT Advanced Technologies to proceed with development of a final design for a transportable advanced nuclear micro-reactor prototype. The two teams were selected from a preliminary design competition and will each continue development independently under a Strategic Capabilities Office (SCO) initiative called Project Pele.

The prototype reactor will be designed to deliver one to five Megawatts of electrical power for at least three years of operation at full power. To enable rapid transport and use, it will be designed to operate within three days of delivery and to be safely removed in as few as seven days.

Project Pele is a whole-of-government effort, with critical expertise provided by the United States Army, the Department of Energy, the Nuclear Regulatory Commission, the National Aeronautics and Space Administration, and the National Nuclear Security Administration.

ANS National and GA Section Membership

Join the ANS GA Local Section online at Join Us | Georgia Local Section (ans.org). Or, join at the national level at www.ans.org/join/ and add the GA Local Section for no additional cost.