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For Immediate Release

Duke University researchers explore the Savannah River Site

AIKEN, S.C. – (November 26, 2024) A research team from Duke University's [Nicholas Institute for Energy, Environment, and Sustainability](#) visited Aiken, South Carolina, to gain a firsthand look at the nuclear industry and history of the Savannah River Site (SRS) on Oct. 24.



Ananya Misra, a sophomore at Duke University, tours the Savannah River Site Museum.

"Each October, SRS celebrates Nuclear Science Week, recognizing the vital role nuclear science plays in the United States and globally," said Kim Mitchell, SRNS Education Outreach Lead. "By connecting Duke University visitors with the Site's history and current missions, this day-long event bridges the gap between academic research and real-world nuclear industry experience."

Part of Duke University's Bass Connections project, "Reexamining Nuclear Power in the Carolinas and Beyond," the group of three faculty members and eight student researchers are exploring the historical context of nuclear power. The team is compiling a grant proposal for a year-long project on the future of nuclear energy in the region and aims to launch an open access portal to bring together unpublished documents currently preserved at Duke.

"We're looking at the history of nuclear power in the Carolinas, but also thinking about the next 50 years of energy generation in the region," said Tom Cinq-Mars, faculty lead for the project. "Our goal is to understand how nuclear power fits into the future energy landscape."

The visit included a tour of SRS, where researchers were able to see firsthand the scale of Site operations. Cinq-Mars emphasized the importance of the experience for students, noting that it allowed them to move beyond textbooks and understand the real-world implications of their research.

"Our students could see that this isn't just a theoretical project," said Cinq-Mars. "It gave them a deeper understanding of the political and funding complexities that come with managing nuclear material."

The research team also visited the [SRS Museum](#) and [Café Scientifique](#), where they learned about the evolution of the nuclear industry. The visit provided insight into environmental challenges of balancing nuclear weapons development with cleanup efforts from the Cold War era.

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Sophomore Ananya Misra, one of the attending students, highlighted the value of her visit, where she was able to connect the dots between the Site's history and her studies. As a public policy major, Misra was particularly interested in the regulatory changes that have taken place over the years at SRS.

"This experience gave me a concrete understanding of how policies and regulations evolve over time," Misra said. "For our project, I have compiled an archive of historical documents and seeing the infrastructure changes firsthand really brought it all together. It's fascinating to see how much significant development occurred in such a short amount of time."

Misra also expressed an interest in the innovative waste glassification technology used to store high-level liquid nuclear waste into a solid glass form suitable for long-term storage and disposal. "It was incredible to learn about the glassification process, especially knowing that it was modeled after volcanic glass. The longevity of the material is impressive," she said.

The day's activities also included a Center for Nuclear Technology Advancement ([CNTA](#))-sponsored Edward Teller Lecture and a Nuclear Technology Expo dinner at the Columbia County Expo Center. The partnership between the Savannah River Nuclear Solutions Education Outreach team and the CNTA was key in organizing the visit.

"This tour provided an invaluable experience for our research group," Misra added. "SRS operations is applicable to so many different fields— science, public policy, national security— there's something to learn here for everyone."



A Bass Connections research team organized by Duke University's Nicholas Institute for Energy, Environment, and Sustainability visited Aiken, South Carolina, to gain a firsthand look at the nuclear industry and history of the Savannah River Site.

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Savannah River Nuclear Solutions, a Fluor and HII partnership company, is responsible for the management and operations of the Department of Energy's Savannah River Site, located near Aiken, South Carolina.

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