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## [Dr. Cesmeci Awarded \\$1.1 mil DOE Grant](#)

October 13, 2021

Dr. Sevki Cesmeci, an Assistant Professor in the Department of Mechanical Engineering, was recently awarded a Small Business Technology Transfer (STTR) grant from the Department of Energy (DOE) totaling \$1,100,000. Dr. Cesmeci, the Principal Investigator (PI) will be collaborating with Ultool, LLC from Daluth, GA and Sandia National Lab. The objective of the research is to develop and experimentally and computationally examine the performance of elasto-hydrodynamic seals for supercritical CO<sub>2</sub> (sCO<sub>2</sub>) applications. Supercritical CO<sub>2</sub> power cycles hold great potential for nuclear power production because they are more efficient than traditional water-based, air-breathing, direct-fired, open Brayton cycles or indirect-fired, closed Rankine cycles. For more information about the award, please search for award number DE-SC0020851 in the DOE's [Portfolio Analysis and Management System](#).

Posted in [Awards and Recognition](#), [Graduate Research](#), [Undergraduate Research](#)

## [Dr. Cesmeci Seeking to Student Researchers for DOE Grant](#)

October 13, 2021

Dr. Sevki Cesmeci, an Assistant Professor in the Department of Mechanical Engineering, was recently awarded a Small Business Technology Transfer (STTR) grant from the Department of Energy (DOE) totaling \$1,100,000. Dr. Cesmeci, the Principal Investigator (PI) will be collaborating with Ultool, LLC from Daluth, GA and Sandia National Lab.

To support his work, Dr. Cesmeci is seeking to hire **Undergraduate Research Assistants**, **Graduate Research Assistants**, and a **Post-Doctoral Research Associate**. Interested candidates should contact Dr. Cesmeci directly at: [scesmeci@georgiasouthern.edu](mailto:scesmeci@georgiasouthern.edu)

The objective of the research is to develop and experimentally and computationally examine the performance of elasto-hydrodynamic seals for supercritical CO<sub>2</sub> (sCO<sub>2</sub>) applications. Supercritical CO<sub>2</sub> power cycles hold great potential for nuclear power production because they are more efficient than traditional water-based, air-breathing, direct-fired, open Brayton cycles or indirect-fired, closed Rankine cycles.

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