

Office of Research

University of South Carolina

Energy

Revolutionary approaches generate ideas to power the world.



USC Research Focus Area: Energy

As the demand for energy continues to grow, innovating new energy sources and enhancing the way we use existing ones is more important than ever. USC researchers are working to meet this growing need by taking energy innovation to the next level, investigating new possibilities in renewables, nuclear and more. Our researchers are developing energy technologies that will power the Palmetto State, the nation and the globe into the future.

Solid Oxide Fuel Cell Center

www.sofccenter.com

The Solid Oxide Fuel Cell Center (SOFC) at USC is a world leader in solid oxide fuel cell and energy systems research. In 2014, SOFC researchers were awarded one of only 13 Department of Energy Advanced Research Projects Agency – Energy, or ARPA-E Reliable Electricity Based on Electrochemical Systems (REBELS) grants. Researchers Kevin Huang, Ralph Edward White and Jason Hattrick-Simpers and their collaborators will use the \$3.2 million grant to create an intermediate-temperature fuel cell that functions a bit like a battery, generating and distributing electrical energy when needed, and storing energy for later use when demand for power is low.

Energy Leadership Institute

cec.sc.edu/eli

Directed by SmartState Chair and chemical engineer, Dr. J.R. Regalbuto, the Energy Leadership Institute (ELI) at USC is leading groundbreaking energy research across the state and region. The interdisciplinary research team covers the technical, economic and environmental aspects of energy production, distribution and utilization. The ELI is a collaborative effort including more than 125 faculty members from six of the university's colleges—Engineering and Computing, Arts and Sciences, Mass Communications and Information Studies, the Darla Moore School of Business, School of Law and Arnold School of Public Health—each of whom brings a unique perspective to bear on virtually every facet of energy research.



UNIVERSITY OF
SOUTH CAROLINA

For more: sc.edu/research/research_focus_areas/energy