



Goswami

Goswami Awarded Two Grants For Concentrated Solar Power

Tampa, Fla. (November 23, 2010) – Two prestigious grants were recently awarded for thermal energy storage (TES) research to Prof. Yogi Goswami, director of the USF arm of FESC, and co-director of the USF Clean Energy Research Center (CERC). USF Co-PIs include CERC Director Prof. Lee Stefanakos and Mechanical Engineering's Prof. Muhammad Rahman.

Both awards address the groundbreaking science of concentrated solar power (CSP). CSP technology can be used to focus the sun's rays so as to generate heat, and later on, electricity. CSP plants combined with heat stores can then produce climate-friendly electricity around the clock as and when needed, even when the sun is not shining.

- E-On International granted \$814,108 for "Innovative Latent Thermal Energy Storage System for Concentrating Solar Power Plants." This project will produce encapsulated phase change material capsules of different sizes and melting ranges of use in several energy storage applications such as space heating and cooling, solar cooking, solar water heating, industrial process heat, greenhouse and waste heat recovery systems. Joining the Goswami-led USF research team, this project includes a research team from IMDEA Energía in Madrid headed by Prof. Manuel Romero.
- US DOE granted \$1.03M for "Development and Demonstration of an Innovative Thermal Energy Storage System for Baseload Solar Power Generation." The objective is to research and develop a thermal energy storage system based on encapsulated phase change materials to meet the utility-scale base-load CSP plant requirements at much lower system costs compared to the existing TES concepts, making it competitive with fossil fuels.

About Clean Energy Research Center (CERC)

CERC's mission is scientific research, technical and infrastructure development, and information transfer. CERC is involved in fundamental investigations into new environmentally clean energy sources and energy conversion, and biomass – energy sources that met the needs of industry and the public. http://cerc.eng.usf.edu/.

The University of South Florida is one of the nation's top 63 public research universities and one of only 25 public research universities nationwide with very high research activity that is designated as community engaged by the Carnegie Foundation for the Advancement of Teaching. USF was awarded \$394.1 million in research contracts and grants in FY 2009/2010. The university offers 232 degree programs at the undergraduate, graduate, specialist and doctoral levels, including the doctor of medicine. The USF System has a \$1.8 billion annual budget, an annual economic impact of \$3.2 billion, and serves more than 47,000 students on institutions/campuses in Tampa, St. Petersburg, Sarasota-Manatee and Lakeland. USF is a member of the Big East Athletic Conference.

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