

UCF/ FSEC/FESC Program

Presented by

Dr. James Fenton, FSEC Director

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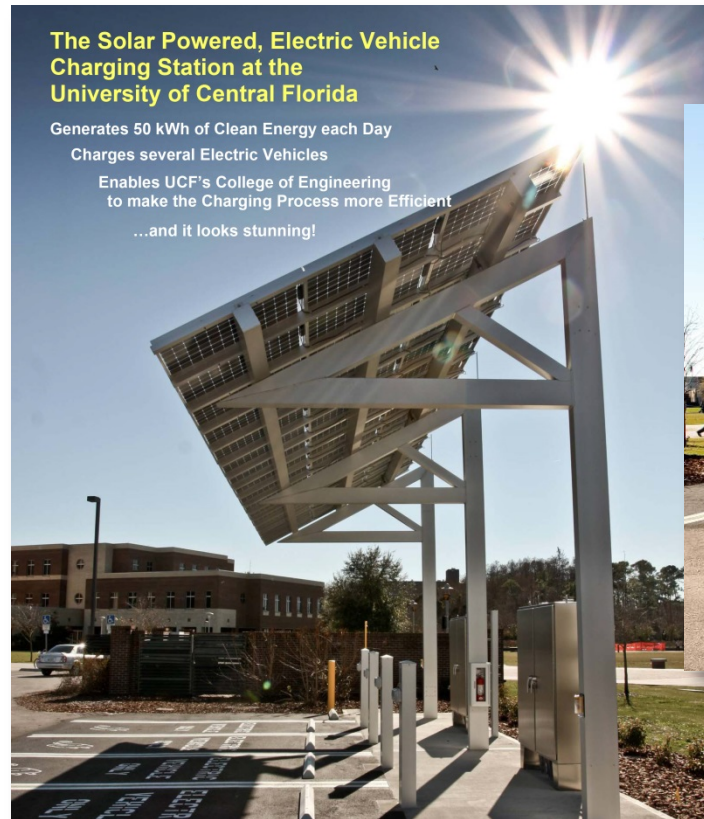
Agenda

- 1. Five FSEC Projects**
- 2. New and Related Projects**



PV Power Generation Using Plug-In Hybrid Vehicles as Energy Storage

PI: J. Shen • I. Batarseh • University of Central Florida, Electrical Engineering



Enhanced and Expanded PV Systems Test Capabilities

PI: Stephen Barkaszi

Description: Provide for the enhancement and expansion of FSEC's PV testing and certification capabilities.



Solar Water Heating Systems Facility

PI: James Roland • David Block

Description: Increase existing laboratory space and to allow for conducting tests on SWH systems and PV inverters.



Enhanced and Expanded Solar Thermal Test Capabilities

PI: Joseph Walters • Robert Reedy

Description: Develop new and improved testing methods, capabilities and equipment that will allow FSEC to meet the increased demand for testing and certification of solar thermal collectors and systems.



Energy Efficient Flexible Research Homes

PI: Robin Vieira • Philip Fairey • Jeff Sonne

Description: Design and build two flexible research homes for the purposes of conducting field experiments and measurements on side-by-side full scale structures under controlled conditions.



New and Related Projects

- *Electric Vehicle Transportation Center* - Established University Transportation Center under funding from the U.S. Department of Transportation at \$1.41 M/yr for 4 years.
- *Foundations for Engineering Education in Distributed Energy Resources (FEEDER)* - Education network funded by the Department of Energy.
- *Southwest Solar Training Network* - Training network funded by DOE as their regional solar training provider for southeast U. S. Five year program in its third year.
- *Photovoltaic Manufacturing Consortium* - \$14.3 M of DOE and industry matching for c-Si In-line/Off-line Metrology and New Feedstock/Wafering Methodologies
- *Central Florida Clean Cities Program* - UCF is DOE coordinator for the Central Florida Clean Cities program that includes all types of alternative fuel vehicles.
- *SunSmart Emergency Shelter School Program* - PV systems installed on Florida schools funded by DOE/DACS

