



# Seminar Experience

ELECTRICAL & COMPUTER ENGINEERING

Friday, October 31

10:00—11:00 am

FIU Engineering Center

EC Room # 1107

[www.ece.fiu.edu](http://www.ece.fiu.edu)



## *“25 Years of Experience with Electric Vehicles—a Journey”*

**Pritpal Singh, Ph.D.**

Villanova University

ECE Professor & Chair

### ABSTRACT

Dr. Pritpal Singh has been working on electric vehicles for the last 25 years including building a ground up solar car in 1989/1990 for a transcontinental solar car race to more recent work on autonomous electric boats for long term Naval missions. Over these years he has supervised the development of battery monitoring systems based on a patented fuzzy logic approach and has worked with students to design power systems combining solar panels, fuel cells, and batteries for autonomous boats. In this talk, Dr. Singh will describe the research that he has performed on these different electric vehicle platforms over the last 25 years.

### BIOGRAPHY

The holder of six patents, Dr. Singh is an innovator in the area of solar and renewable energy. His breakthrough research in electric vehicle modeling, environmental energy harvesting, and the development of battery monitoring and management makes him a preeminent environmental technology source. Singh was instrumental in guiding a student solar energy research initiative that resulted in the installation of 24 solar panels on the roof of the College of Engineering's Center for Engineering Education and Research (CEER). The project, conducted through the Villanova Center for the Environment (VCE), is the first of many renewable energy systems planned for the campus.