

Technical Vitality Seminar

ALTERNATIVE ENERGY FOR HYBRID TECHNOLOGY

By UVM AERO Team

Monday, April 27, 2009

6:00 pm - 7:00 pm EST

Location: UVM Campus, Votey 107

The UVM Alternative Energy Racing Organization prepares for its second Formula Hybrid SAE competition. With continued financial and technical support from the Green Mountain Section, students at the University of Vermont are preparing to bring two vehicles to the 2009 Formula Hybrid SAE competition in Loudon, NH in May. At the competition, the students will compete against approximately 30 teams from as far away as India and Russia. In the 2008 competition the UVM team won several awards for their innovative hybrid electric race car design. With significant help from engineers in the IEEE community, the team has made substantial improvements to the energy storage (using A123 Lithium Polymer batteries) and control systems. The students have designed a heads-up display system that should provide valuable information to the driver. On the mechanical side the team has nearly completed a major redesign of the mechanical systems that will unify the drive train into a single “transaxle,” allowing the team to bring a car that is lighter and handles better on the turns. The result is a vehicle that, from preliminary road tests, shows real promise to be a race-winner this year.

The AERO team is particularly grateful to its financial and technical sponsors including IEEE, VELCO, the Vermont National Guard, Vermont Space Grant, Hazelett Strip Casting, Anderson Power Products, iTherm, MicroStrain, CTS Corp., and PowerStream.



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