VPPC'09 – The 5th IEEE Vehicle Power and Propulsion Conference

September 7-10, 2009, Dearborn Michigan, USA

Special Session on

Fuel Cell Vehicles: Modeling and Design

Organized by

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Call for Papers

A clear understanding of how fuel cells can be integrated in automotive application is crucially important in order to advancing a cost effective application of such technology. Fuel cells are expected to have a significant impact in many sectors during the next few years, and automotive application will be one of them. Because of the interdisciplinary nature of fuel cell systems they can only be optimized through a system integration perspective.

There are many research subjects on modelling, design, and control of fuel cell systems that make such a field important to discuss, bringing together the expertise of a very broad range from industrial applications to academic studies. The following potential topics approach the general thematic area of modelling and control of fuel cells:

- Fuel cell vehicle topologies;
- Fuel cell vehicle system design;
- Multi-scale and multi-domain stack modelling;
- Simulation and real-time applications;
- Fuel cell auxiliaries integration and design;
- Fuel cell vehicle energy storage systems;
- Battery and ultra-capacitor based storage systems;
- Fuel cell vehicle drive train efficiency analysis;
- Well-to-wheels perspective;
- Fuel cell vehicle energy management strategies.

Submission procedure: The same as for regular papers.

Submission deadline: March 13, 2009.