



1<sup>st</sup> International Conference  
**AUTOMOTIVE POWER ELECTRONICS**  
21 & 22 June 2006 – Paris

***Power electronics: a challenge for tomorrow's automobiles***

The first SIA conference dedicated to Automotive Power Electronics was held on 21 and 22 June 2006, with active support from the Massachusetts Institute of Technology (MIT), the European Center for Power electronics (ECPE), INRETS (The French National Institute for Transport and Safety Research) and the Paris Region Economic Development Agency.

This unique event brought together over 180 participants within the pleasant facilities of the Salons de l'Aveyron, coming from Japan, the US, Germany, Korea, Denmark, Italy ... The foreign contingent thus represented 40 % of all attendees, a figure which confirms the international success of this event.

Also worthy of note: this was the first time that a community of automobile engineers worked side by side with specialists in the field of power electronics.

The quality of the presentations, the relevance of the topics which were dealt with, the active involvement of all players in the field concerned and the quality of the discussions undertaken were the main strong points in the course of this conference, which provided both an update and a prospective outline in the field of tomorrow's automotive power electronics.

In the course of the 25 presentations different problems were taken up, such as mission profiles, costs, packaging, reliability, cooling, electromagnetic compatibility (EMC), which all stand as the major challenges on the way to integrating power electronics within the automobile sector.

At this point in time, power electronics are central to automotive innovation and to its constantly more visible applications in the vehicle field: hybridization and fuel cells to reduce emission levels, power actuators to satisfy ever increasing requirements in both comfort and safety...

Numerous innovation topics which were dealt with in the course of this conference will be developed in the very near future through the projects of the MOV'EO cluster.

Alongside the presentations, an exhibition was set up to introduce the latest solutions proposed by Valeo, Arcotronics, dSpace, Danfoss, Ansoft.....

The proceedings are available in CD-Rom format from the SIA  
Ref : CD-2006-03 – Price : 80 € ex VAT

