

Electromobility+ Information Event

Brokerage Session

13 January 2011

Partner Profile ***LMS International***



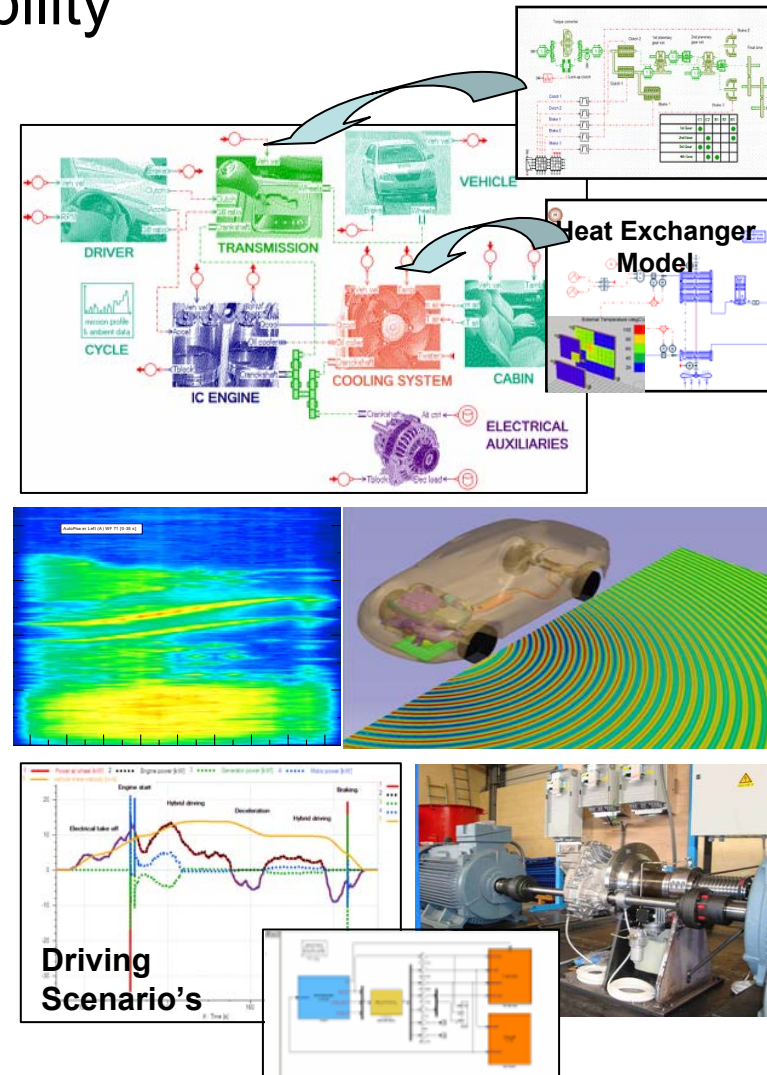
- Partner Profile **LMS International**
 - Private industry
 - Belgium
 - Research Department
 - Contact:
 - Herman Van der Auweraer
 - Corporate Research director
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 - <http://www.lmsintl.com>
 - Expertise of the department:
 - Testing and simulation solutions for mechanic & mechatronic systems
 - Model based design engineering of vehicles and vehicle subsystems
 - Addressing critical vehicle performances: NVH, energy management, cabin comfort, driveability, active and passive safety
 - From component optimization to full vehicle integration and architecture design
 - Large expertise in national and transnational RTD projects
 - Main interest in KD5: Technology Based innovation

Electromobility+

LMS Expertise supporting electromobility



- **Energy Management & Modeling:**
 - Component energy modeling
 - Vehicle level energy modeling
 - Smart Grid & traffic integration
 - Link to real drive cycles
 - Concept & architecture design engineering
- **Addressing new performance challenges**
 - Driveability, performance & comfort
 - Cabin comfort linked to energy management
 - Component heat management and lifetime
 - NVH: Electric motors, gears, cooling ...
 - Brand sound engineering
 - Exterior sound design for pedestrian safety
 - Integration of Lightweight Materials
- **Intelligent systems integration**
 - Real-time models integrated with controls
 - Model-in-the-loop to Hardware-in-the-loop



- **ESTOMAD (EC FP7):** energy optimization in drivetrain systems
- **VECOM (EC FP7):** vehicle concept level design optimization methodologies
- **EMBOCON (EC FP7):** Embedded optimization of mechatronic systems
- **Eurosylib & Modelisar (ITEA2):** modeling platform for complex mechatronic systems
- **RepMep (Flanders' DRIVE):** Research Platform for Modular Electrified Powertrain
- **HYPER (Flemish region):** Hybrid Drive CVT gearbox development
- **SR Motif (Flemish region):** EV integration of Switched Reluctance electric motor
- **SURAL-HY (French FUI):** Hybrid turbocharger development
- **SIMSTOCK (French FUI0):** Battery & SuperCap modeling & model based optimization
- **SIMCAL (French FUI):** Battery calendar ageing modeling
- **HY-HIL (French FUI):** Evaluation of hybrid vehicle control strategy
- **SIMPA2-C6E2 (French RNTL):** Simulations for design of electrical systems

