

6th EUROSIM Congress on Modelling and Simulation
September 9-13, 2007
Ljubljana, Slovenia

<http://www.eurosim2007.org>



Announcement of a special session:

Modelling and Simulation in the Vehicle Thermal Management System

Today, thermal management is becoming a more and more important issue in vehicle development. To minimize expenditure and to support rapid development, it is necessary to use efficient simulation tools and methods.

The special session "Modeling and Simulation in the Vehicle Thermal Management System" deals with the whole area of thermal and fluid flow challenges within and surrounding the vehicle. Challenges as coupled simulation (thermal calculation models so that individual component calculations can be combined in a comprehensive thermal and fluid dynamic model) are addressed within this session. From combustion chamber simulation, through cooling system heat dissipation calculations, vehicle airflow impingement, radiator / airflow heat exchange, engine compartment throughflow and flow and cooling conditions beneath the vehicle floor, extreme conditions are evaluated thus allowing thermal optimisation of the affected components. In the thermal management process, topics like the Digital Mock Up (DMU), 0, 1 and 3 dimensional modelling methods are applied and discussed within this special session.

Specific topics include various aspects of modelling and simulation of:

- Underhood flow and Aerodynamics
- Heating, Ventilation and Air Condition (HVAC)
- Climate Comfort
- Thermal Management (energy management within coupled entire vehicle simulation models)

Session organizer:

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Deadlines:

Announcement of a contribution (to facilitate session organization):

1 March 2007 (by E-mail to the session organizer)

Submission of 2 page extended abstract or draft paper:

9 April 2007 (by E-mail to the session organizer)

Acceptance notification after paper review:

30 May 2007

Full paper (camera ready) due to:

30 June 2007 (to the conference server with copy to the session organizer)

See also instructions: <http://www.eurosim2007.org/Instructions.html>

Wolfgang Puntigam