

#### INVITED SESSION SUMMARY

Title of Session:

Intelligent Transportation Systems

Name, Title and Affiliation of Chair:

**Dr Milan Simic** 

RMIT University, School of Engineering, Melbourne, Australia

### Details of Session (including aim and scope):

This session will present research highlights in the growing area of Intelligent Transportation Systems (ITS). Latest developments in science and engineering will be accompanied with social, ethical and legal issues associated with the technology. In the near future *intelligent vehicles*, traveling on *smart roads* will ensure and deliver *safe journeys*. Modern cars, road infrastructure and the road itself already possess remarkable intelligence. Vehicles are carrying passengers and goods while transporting and processing data as well. Smart vehicles with huge processing power are coupled with a large amount of data from the on board sensors. In addition to that, they are network nodes in a Vehicular Ad Hoc Network (VANET). VANET includes vehicles and communication infrastructure along the road. This technology has potential to marginalise problems such as traffic congestion and accidents.

The list of topics for this session may include:

- Automotive Intelligence
- ITS Modelling and simulations, Design
- ITS applications
- Test, verification and certification
- Legislation and regulations
- Standardisation
- Data Management
- Procurement and Governance
- System Reliability, Safety and Security
- Dedicated Short Range Communications (DSRC) applications
- Real time path planning in dynamic environments
- Multi-agent systems
- The role of Cloud computing
- The role of communications, VANET
- Neural networks application
- Fuzzy Logic application
- Intelligent Infrastructure
- Smart vehicles
- Information services
- Rail ITS travel
- · Various transport modes interfacing
- Roadways surveillance

Other topics in this area are also welcome.

Main Contributing Researchers / Research Centres (tentative, if known at this stage):

# Website URL of Call for Papers (if any):

### **Email & Contact Details:**

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