

INVITED SESSION SUMMARY

Title of Session:

Recent Advances in Intelligent Transport Systems

Name, Title and Affiliation of Chair:

Dr Milan Simic RMIT University, School Engineering, Melbourne, Australia

Details of Session (including aim and scope):

Intelligent Transport Systems (ITS) research, and the development of advanced digital transport technologies, contribute to the establishment of sustainable, safer, and efficient mobility. ITSs are based on the state-of-the-art advancements in multidisciplinary domains, like Information Communication Technology (ICT), Internet of Things (IoT), Cloud computing, Automotive engineering and other. In addition to infrastructure on the road, edge and cloud computing, systems include Vehicle Ad Hoc Networks (VANET) and Internet. Global transitions to electrical and autonomous vehicles are happening now. Data fusion, computer vision systems, and Artificial Intelligence, play vital roles in the traffic management, but also in business and strategic decisions making. Smart cities, as well as rural and regional infrastructure, are involved in the changes. ITS research gives contribution to the overall efficiency in the energy use and the reduction of CO2 pollution, by lowering greenhouse gases' emissions. ITS will deliver sustainable economic and environmental benefits to the industry and the communities. The list of topics for this session includes, but is not limited to:

- ITS and associated subsystems
- Traffic modelling and management
- The role of Internet of Things
- Could computing support for ITS
- ITS and smart cities, megacities
- Autonomous vehicles and ITS
- Electrical vehicles in ITS and in the power grid
- Approaches in managing traffic congestions
- Computer vision applications
- Artificial Intelligence application in ITS
- Future vehicles and transport technology
- New models of vehicle ownership
- Automated, Connected and Electric Vehicles
- Dedicated short-range communications
- Vehicle Ad Hoc Networks
- The role of social media in ITS

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

Dr Milan Simic, RMIT University, School Engineering, Melbourne, Australia

Website URL of Call for Papers (if any):

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