

Keynote Address

Transitions to Electrical and Autonomous Vehicles

Continuous innovations in automotive industry and technology, associated with rapid communications and computer science developments, are offering safer, ecologically friendly and more affordable vehicles. Industry, and the whole society, is now facing significant changes and transitions, created by the introduction of various, hybrid powered and just electrical vehicles (EV). We are shifting from fossil fuel powered internal combustion engines (ICE) to clean electrical motors. By reducing all sorts of pollutions and CO₂ emissions, new technology is sustainable and environment friendly. There are still numbers of research, economic and technological questions to be answered, which will be highlighted in the Keynote Address.

At the same time, we have introduction of the higher level of cars' autonomy up to the fully autonomous vehicles (AV). Amalgamation of automotive industry with communications and computer science and technologies, have already reached high level of development, which makes feasible widespread AVs deployment. As in the other transition, from ICE to EV this transition has barriers, like cost of the new technologies, in both cases, then infrastructure changes, up to the government regulations. Autonomous vehicles should provide significant social and community benefits by improving safety on the road and saving lives, reducing fuel consumption, congestion and pollution, improving mobility. Transitions from traditional to electrical and autonomous vehicles are driven by convergence of engineering technologies, resources availability, sustainability, economy, customer and businesses' requirements, and finally, governments. Keynote speak will present various aspects of all of those changes.



Keynote Speaker: Dr Milan Simic

Dr Milan Simic has PhD, Master and Bachelor in Electronic Engineering, from the University of Nis, Serbia, as well as, Graduate Diploma in Education, from the RMIT University Melbourne, Australia. He has comprehensive experience from industry, Honeywell Information Systems, Research Institute and Academia, from Europe and Australia.

Dr Simic is currently with the School of Engineering, RMIT University. He is, also, General Editor for Knowledge Engineering Systems (KES) International Journal, Associate Director of Australia-India Research Centre for Automation Software Engineering, based at RMIT University and Associate Editor for Intelligent Decision Technologies (IDT) International Journal. He has created and managed the first Mechatronics Program at RMIT University. He has also created and managed new Master in Engineering Management Program.

Dr Simic has a multidisciplinary teaching and scientific expertise in the following areas: Information Coding, Mechatronics, Automotive Electronics, Biomedical Engineering, Robotics, Physical Networks, Green Energy and Autonomous Systems, as well as, in Engineering Management and in Education.