

AUTONOMOUS VEHICLE TECHNOLOGY CONFERENCE - APAC21

Harmonising the Future of Mobility
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More specifically papers will be considered in the following topics:

1	Digital Transformation
1.1	Intelligent and smart mobility solutions
1.2	Digitalization of Vehicle Design, Development, and Testing
1.3	Mobility Solutions
1.4	Shared Mobility, Multimodal Mobility, Micromobility
1.5	Internet of Things (IoT) for Transport Industry
1.6	Artificial Intelligence for Future Mobility Concepts
1.7	Cybersecurity
1.8	Digital Services for Transport Industry
1.9	Data Storing and Processing
2.	Electric, Hydrogen, Fuel Cell Technology
2.1	Electric and Hybrid Drivelines
2.2	Hydrogen as a Fuel
2.3	Driveline Design and Simulation Based Optimization and Control
2.4	Renewable and Synthetic Fuel Combustion and Mixture Formation
2.5	Engines for Electrified Vehicle Powertrains
2.6	Battery System Technologies
2.7	New Concepts and Control of Electric Motors and Power Electronics
2.8	Fuel Cells and Fuel Cell Systems, Hydrogen Technologies
2.9	Charging Solutions
3	Emissions and Pollutants Caused by Vehicles
3.1	Environmental impact through complete life-cycle
3.2	After Treatment and Emission Control
3.3	Clean and Efficient Engine Technologies
3.4	Testing Procedures and Cycles
3.5	Alternative Fuels and Propulsion Technology
3.6	Regulations and Future Prospects
3.7	Simulation Approach to Emission Control
3.8	On-Board and Remote Diagnostics of Emission Systems
3.9	New Synthetic Fuels
3.10	Non-Combustion Related Emissions

6	Automated and Connected Mobility
6.1	Automated Driving/Autonomous Driving/ Driverless Vehicles
6.2	Advanced Driver Assistance Systems (ADAS)
6.3	Autonomous and Connected Vehicles Simulation Software
6.4	Sensor Fusion, Object Tracking, and Path Planning
6.5	Voice and Motion Recognition
6.6	Autonomous Vehicle Control
6.7	Urban Air Mobility and Traffic Management
6.8	V2V and V2X Communication
6.9	Cloud-Connected and Teleoperated Vehicles
7	Vehicle Dynamics and Controls
7.1	Vehicle Dynamics, Modelling and Simulation
7.2	Integrated Chassis Control
7.3	Human Machine Interface (HMI)
7.4	Heavy Duty Vehicle Control
7.5	Sensors and Actuators
7.6	Ride Comfort & Handling
7.7	Suspension, Steering & Brakes
8	Vehicle Crash Safety
8.1	Accident Statistics, Analysis and Reconstruction Technologies
8.2	Human Errors and Road Safety
8.3	Occupant, Child and Elderly Safety Protection
8.4	Protection of Vulnerable Road Users
8.5	Vehicle Structure Crashworthiness
8.6	Vehicle Crash Liability
8.7	Crash Avoidance or Mitigation Systems
8.8	Intelligent Vehicle Safety Systems
8.9	Regulations and Crash Safety Standards
8.10	Collision Avoidance System
9	Vehicle Software and Electronics
9.1	E/E Architecture for Future Vehicles

4	Ergonomics and Human Factors
4.1	Driver State Control
4.2	Driver Takeover Performance
4.3	Driver Assistance Systems
4.4	Human Factors and HMI
4.5	Motion Sickness
4.6	Driver Interaction and Road Safety
4.7	Biomechanics and Human Models
5	Mobility Comfort
5.1	New Concept for Vehicle Seat and Cabin
5.2	Aero-Acoustic Wind Noise
5.3	Intake & Exhaust Noise
5.4	Tire and Road Noise
5.5	Vehicle NVH Testing and Simulation
5.6	Thermal Comfort and HVAC Systems
5.7	In-Vehicle Experience
5.8	Active Control of NVH Problem
5.9	Vehicle Powertrain Noise
5.10	Human Factors and HMI

9.2	Software Development for Design, Test, Quality Management
9.3	Software/Hardware Reliability and Safety
9.4	Model-Based Design, Analysis and Verification
9.5	In-Vehicle Networks
9.6	ECU Consolidation and Multicore ECUs
9.7	Automotive Operating Systems
9.8	AUTOSAR and Software Architecture
9.9	Vehicle HMI Software
9.10	Telematics and Infotainment Systems
10	Materials and Manufacturing
10.1	Industry 4.0 in Vehicle Manufacturing and Maintenance
10.2	Intelligent and Novel Manufacturing Technologies
10.3	Weight Reduction Technology & Materials in Automotive Industry
10.4	Forming Processes
10.5	Fatigue, Fracture and Failure of Traditional and Lightweight
10.6	Vehicle Manufacturing Technology
10.7	3D and 4D Printing in Automotive Industry
11	Emerging Transport Technology
11.1	Unmanned Aircraft and Drone
11.2	UAS Traffic Management (UTM)
11.3	VTOL
11.4	Urban Air Mobility