Connected and Automated Vehicles (CAVs) are seen as game changers and key enabling technologies that considerably will shape our society and will influence future transportation modes and quality of life, altering the face of mobility as we experience it by today. By connecting and automating vehicles we are able to make our mobility safer, faster, cheaper, cleaner, and more enjoyable.

The 2019 IEEE ICCVE – International Conference on Connected Vehicles and Expo – held in Graz, Austria is the brand-new application-driven flagship conference of the IEEE Instrumentation and Measurement Society and is the world’s premier conference in that field to bridge the automated vehicle gap: Science and Technology, Consumer Trust, Homologation and Liability. Experts, researchers, practitioners, and policymakers from all around the world will present the latest innovations and advances on CAVs, share the experience and insights, forecast the trends and opportunities, and discuss the policy, economics and social implications.

IEEE ICCVE is proposed as a catalyst to promote interactions between industry and academia – a wide spectrum of academic research results will be presented, with potential practical applications in current industrial technology, as well as industry-driven developments.

The conference focuses on all aspects related to research, development, and applications of vehicle connectivity and autonomy. Topics of interest include, but are not limited to:

- Advances in Sensors, Signal Processing, Data Fusion, and Instrumentation of CAVs
- Sensor Simulation and Stimulation (Radar, Lidar, Camera, Ultrasonic, Infrared…)
- Active Perception Architectures and Implementations
- Vehicle Navigation and Situational Awareness
- Vehicle Control (adaptive, fuzzy, cooperative, neuro, emergent paradigms)
- Multi-vehicle Cooperation, Connected Vehicles, Platooning
- Fault-tolerant Algorithms and Fail-operational Architectures
- Real-time Computational Paradigms and Architectures
- Computational and Artificial Intelligence (AI)
- Dependable High Performance Computing (in-vehicle, cloud, fog)
- Cooperative Intelligent Transport Systems (C-ITS)
- Wireless Communications and Vehicular Networking
- Hybrid Simulation and Empirical Testing Paradigms (X-in-the-loop)
- Scenario-based Risk Assessment
- Active Safety and Vulnerable Road Users Protection
- Radical new CAV Concepts
- Virtual Homologation, Validation, and Test of AI-powered CAVs
- Safety Assurance, Cybersecurity, Reliability, Certification
- Applications from different Domains (Automotive, Offroad, Maritime, Avionics…)
- Shared Mobility: from Technology to Business
- Practices, Recommendations, and Standards in CAVs
- Policy, Economics, and Social Implications of CAVs

Many other new initiatives and opportunities to encourage your active participation in the conference are planned, and will make 2019 IEEE ICCVE a vibrant event to meet with people working in the field of connected and automated vehicles.

Visit the conference website as well as Facebook and LinkedIn pages for each specific call and additional news.