



Smart Cities and Future Mobility

Topics of internal conferences within POB 4 planned for February – June 2023:

- I.2023 **15.02.2023, 14:00**, Spatial surveying of municipal resources, diagnostics and structural monitoring of built features and municipal systems, including the aspects of safety of buildings and infrastructure as well as risk management, application of state-of-the-art computational methods, artificial intelligence, spatial analysis and visualisation techniques (BIM, VR i GIS)
- II.2023 **15.02.2023, 14:00 (with I.2023)**, Optimised design and planning of buildings along with their management systems as well as building automation and control systems with regard to the problems of energy consumption, thermal comfort, acoustic climate, user safety, studies on the energy self-sufficiency of buildings attained by implementing RES-based technologies in urban areas, making use of the potential of local cultural heritage, through renovation and adaptation of historical buildings as well as reclamation of degraded post-industrial areas
- III.2023 **29.03.2023, 14:00**, Modern design solutions as well as high-end and eco-friendly materials for construction and reinforcement of built features, particularly in respect of circular economy, as well as solutions related to state-of-the-art construction materials for aviation
- IV.2023 **20.04.2023, 14:00**, Qualitative and quantitative social surveys used to describe various phenomena related to the human factor in urban transport and logistics, smart city building/transformation strategies, acquisition and processing of data on urban traffic and condition of transport infrastructure as well as means of transport, application of internet of things, satellite navigation and indoor positioning systems, state-of-the-art hardware and software solutions, and methods for signal processing, assessment and design of urban space and buildings from the perspective of the quality of life, standards, and availability for all social groups
- V.2023 **14.06.2023, 14:00**, Development of means of road and off-road transport, autonomous transport systems, traffic safety improvement, technologically advanced aircraft constructions, new air navigation systems, and rail transport control systems, as well as safety systems for means of transport
- VI.2023 **14.06.2023, 14:00 (with V.2023)**, ITS, collective public transport, urban sharing systems, electromobility, trigger a change in the modal split of traffic, supporting local authorities and enterprises in the rectification process (decisions making problems), integration of the flow of goods, passengers, and information within stages of first and last mile deliveries, environmental impact exerted by means of transport, development of air pollution profiling systems and the application of Life Cycle Assessment as a tool for analysis of the environmental impact of smart urban solutions