





City Analytics, Smart Energy efficiency solutions, Mobility data and visualisation, Data and analytics for circular economy in cities, Participation and empowerment, Privacy, data security challenges in digital twins and smart cities, Open data and open urban platforms, Crowdsourcing data collection and analytics, Smart cities during and after Covid-19, Application of Artificial Intelligence (AI) and machine learning, Smart transportation, Net zero emission cities, Blockchain technology for municipal management.

This volume consists of 39 peer-reviewed scientific papers. These were selected on the basis of double-blind review of full papers among the papers submitted to the joint event. Each paper was reviewed by three scientific reviewers. The authors of the papers were encouraged to revise, extend, and adapt their work to reflect the comments of the reviewers. The selected paper focussed on topics related to pointcloud processing (8), Digital Twins (5), semantics (5), spatial analysis (including topology) (5), BIM (4), 3D data integration (3), 3D simulation (2), management of data (2), voxel modelling (2), CityGML (1), indoor/outdoor navigation (1) and web-based applications (1). Figure 1 and Figure 2 illustrate the word count of keywords and titles in the papers in this volume.

The joint event program consisted of scientific presentations, keynote speeches, panel discussions and workshops. The conference was opened by minister Rob Stokes and minister Victor Dominello. The four scientific keynote speakers were Prof Volker Coors (HFT Stuttgart, Germany), USC, US), Prof. Flora Salim (UNSW, Sydney, Australia), Prof. Nick Bailey (University of Glasgow, UK) Prof. Debra Laefer (NY University, USA) and Prof Michael Batty (UCL, UK) discussed different aspects of Smart Cities, 3D modelling and Digital Twins for different applications. The scientific sessions were blended with industry presentations to provide more opportunities to exchange ideas and experiences, connect people and researchers from all over the world. Several pre-conference workshops gave the possibility to learn about CityGML 3.0, Urban Simulations, Web-based visualisation and streaming, 3D modelling and navigation, EU GATE project on Digital Twin, Liveable City Digital Twin project, Australia data housing platform. Invited speakers elaborated on tendencies advances in Digital Twins for infrastructure. The day was open with keynotes by New South Wales, Victoria and Queensland on the state-of-the-art of state Digital Twins. The workshops were closed with a panel session at which professionals, governments and academia discussed challenges to using geoinformation in Digital Twins and Smart Cities.

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