



7th WMCAUS 2022

7th

WORLD MULTIDISCIPLINARY
CIVIL ENGINEERING - ARCHITECTURE - URBAN PLANNING
SYMPOSIUM

ABSTRACT BOOK

5-9 September, 2022 - Prague (Czech Republic)

Eco-friendly Symposium - WMCAUS



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World Multidisciplinary Civil Engineering - Architecture - Urban Planning Symposium

Preface

This is the Abstract Collection of 7th WMCAUS 2022 and consists of the abstracts of oral and poster presentations in the “7th World Multidisciplinary Civil Engineering-Architecture-Urban Planning Symposium” in the city of romance Prague (Czech Republic) during 5-9 September 2022. The World Multidisciplinary Civil Engineering-Architecture-Urban Planning Symposium (WMCAUS) aims to provide a forum for discussion of the latest findings and technologies in different fields of Civil Engineering, Architecture and Urban Planning, to give opportunities for future collaborations, to be a platform for sharing knowledge and experiences in the fields of Civil Engineering, Architecture and Urban Planning, to lead for providing a forum for early career researchers for presentation of their work and discussion of their ideas with experts in different fields of Civil Engineering, Architecture and City and Urban Planning such as; Construction Management and Engineering, Construction Materials, Geotechnics, Hydromechanics, Structural Engineering, Building Performance Simulations, Transportation, Architectural Space, Social Sciences and Architecture, Architectural Culture, Theories of Vision and Visuality, Architectural Design and Methods, Architectural Historiography, Architectural Heritage and Conservation of Historical structures, Sustainability in the Built Environment, Urban Planning, Public Space, Urban Design, Theories and Methods, Regional Planning, Archaeological Method and Theories, Sustainable Urban Development, Urban Sociology, Economics and Politics, Risk Management and Mitigation Planning, GIS-Based Modelling for Mitigation Planning, Computer Aided Design, Mathematical and Statistical Methods, Integrated Coastal Zone Planning and, Management, Accreditation of Civil Engineering, City and Regional Planning Education.

The main mission of the "7th World Multidisciplinary Civil Engineering-Architecture-Urban Planning Symposium - WMCAUS" is to lead to contribute in multidisciplinary studies related with Civil Engineering, Architecture, City and Urban Planning and to improve interactions between people within these fields. As another mission it will provide a forum for this diverse range of studies which report very latest results and document emerging understanding of the related systems and our place in it.

We would like to express our sincere gratitude to almost 400 submissions to WMCAUS 2022 from 50+ different countries all over the world for their interests and contributions in WMCAUS 2022. We wish you enjoy the 7th World Multidisciplinary Civil Engineering-Architecture-Urban Planning Symposium – WMCAUS 2022 and have a pleasant stay in the city of romance Prague.

We hope to see you again during next event “8th World Multidisciplinary Civil Engineering-Architecture-Urban Planning Symposium - WMCAUS 2023” which will be held in Prague (Czech Republic).

Prof.Dr. Işık YILMAZ
Prof.Dr. Marian MARSCHALKO
Prof.Dr. Marian DRUSA

Chairmen of WMCAUS 2022



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ABSTRACT

COLLECTION



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SOCIAL IMPACT AND URBAN QUALITY: GRAPHIC REPRESENTATION TOOLS FOR INTERPRETATION AND INTEGRATED DESIGN

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ABSTRACT

The contribution proposes an ongoing part of a larger work that will be completed in the coming months. The pretext is the update of the evaluation of the social return on investment index carried out in 2015 by the Turin-based Fondazione Sviluppo e Crescita CRT with Politecnico di Torino. In 2021 it will be ten years of activity for Sharing, the first example of social housing in Turin, and so we have decided to give an up-to-date reading of the social return by defining an assessment model that on the one hand makes the process of data collection and analysis more rapid, and on the other includes in the study variables of a broader context, at the scale of the neighbourhood, incorporating parameters and indicators of urban quality and resilience, always read through the filter of social impact. The evaluation model being prepared is intended to be light and simple to apply, while maintaining transparency, representativeness and significance. The objective is twofold: on the one hand to read the evolution of this node within the urban fabric in which it lives. On the other hand, to define an evaluation tool that can operate in the monitoring of different interventions (which will obviously also need to have variables sewn up case by case), but that can also provide elements to identify in advance, ex ante, those social and territorial realities that could support the success of the investment in terms of social impact. This is a field in which social impact must be linked together with local actions and urban infrastructure triggers, involving public and private actors. The survey and the urban project see illustrious references in the research; in particular, significant perceptual approaches will be highlighted through authors, visual approaches linked to the reading of urban space, scenes collected apparently in an extemporary manner, in a rush, dense with layers of reading, as well as analytical approaches, which break down the image of the city and operate synthesis at different levels of interpretation. The research group's attention is also focused on the codes of representation, the graphic language that gives access to knowledge and enables the conception and realisation of conscious projects. Urban survey is a lively field of research, sensitive to innovation in methods and tools of investigation. Access to an ever-increasing range of data makes it possible to answer complex questions about the use of urban space and the social impact of its quality.

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