



an Open Access Journal by MDPI

# Building Information Modeling (BIM): Recent Application and Future Perspective

Guest Editors:

### Dr. Zhen Liu

School of Design, South China University of Technology, Guangzhou 510006, China

#### Prof. Dr. Mohamed Osmani

School of Architecture, Building and Civil Engineering, Loughborough University, Loughborough LE11 3TU, UK

Deadline for manuscript submissions: **20 July 2024** 

# Message from the Guest Editors

Dear Colleagues,

As the backbone of the fourth industrial revolution, the building information modeling (BIM)-enabled digital economy in the building industry is considered to have a disruptive effect. Studies have shown that BIM and its associated digital technologies (BIM dig-ecosystems), such as city information modeling (CIM), internet of things (IoT), artificial intelligence (AI), virtual reality (VR), augmented reality (AR), mixed reality (MR), big data, data visualization, machine learning (ML), blockchain, digital twin, and even building the Metaverse, have great potential in promoting sustainable building development. Particularly during the COVID-19 pandemic that severely negatively affected the global economy, the environment, and society, the BIM tech ecosystems have received much attention from policy makers, practitioners, and scholars around the world. The aim of this Special Issue is to review cases and recommend technologies and policies for the transition of the emerging theory and practice of BIM to the future perspectives on BIM dig-ecosystems.

**Special**sue



mdpi.com/si/147035





an Open Access Journal by MDPI

# **Editor-in-Chief**

#### Prof. Dr. David Arditi

Construction Engineering and Management Program, Department of Civil, Architectural, and Environmental Engineering, Illinois Institute of Technology, 3201 South Dearborn Street, Chicago, IL 60616, USA

## Message from the Editor-in-Chief

Current urban environments are home to multi-modal transit systems, extensive energy grids, a building stock, and integrated services. Sprawling neighborhoods are composed of buildings that accommodate living and working quarters. However, it is expected that the cities and communities of the future will face complex and enormous challenges, including maintenance. interconnectivity, resilience, energy efficiency, and sustainability issues, to name but a few. A smart city uses advanced technologies and a digital infrastructure to improve the outcomes in every aspect of a city's operations. A smart building optimizes the experience of occupants, staff, and management by using a modern and connected environment. Innovations in technology that can bring dramatic improvements to design, planning, and policy are critical in developing the cities and buildings of the future.

## **Author Benefits**

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), Inspec, and other databases.

Journal Rank: JCR - Q2 (Engineering, Civil) / CiteScore - Q1 (Architecture)

## **Contact Us**

*Buildings* Editorial Office MDPI, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/buildings buildings@mdpi.com X@Buildings\_MDPI