

The Dynamic In Situ Characterisation of Buildings

Guest Editors:

Dr. Virginia Gori

UCL Energy Institute, Bartlett
School of Environment Energy
and Resources, University
College London, London WC1E
6BT, UK

Prof. Dr. Cliff Elwell

UCL Energy Institute, Bartlett
School of Environment Energy
and Resources, University
College London, London WC1E
6BT, UK

Dr. Frances Hollick

UCL Energy Institute, Bartlett
School of Environment Energy
and Resources, University
College London, London WC1E
6BT, UK

Message from the Guest Editors

The decarbonisation of the built environment is a critical component of our path to net zero. Conventional approaches to understanding the performance of buildings are mostly static, addressing average conditions and thermal performance. However, real buildings are subject to varying external conditions, including temperatures, wind and solar gains and internal factors, which can all be highly variable, involving factors such as heating system use, ventilation and occupancy. There is increasing interest in the dynamic performance and conditions in buildings, relating both to the conditions experienced and the demands on the energy system, with implications for the integration of less flexible generation and requirements for demand side response.

Deadline for manuscript
submissions:

31 August 2024



mdpi.com/si/157182

Special Issue

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](https://twitter.com/Buildings_MDPI)