



HVAC Research in Built Environment

Guest Editors:

Dr. Jun Wang

College of Architecture and
Environment, Sichuan University,
Chengdu 610065, China

Prof. Dr. Rongpeng Zhang

School of Architecture and
Planning, Hunan University,
Changsha 410082, China

Dr. Dong Liu

School of Civil Engineering and
Architecture, Southwest
University of Science and
Technology, Mianyang 621010,
China

Deadline for manuscript
submissions:

closed (20 April 2024)

Message from the Guest Editors

Dear Colleagues,

Heating, Ventilation and Air Conditioning (HVAC) can provide system support for building thermal environments and air quality environments. Building energy efficiency and energy systems, thermal environments and thermal comfort, indoor air quality, and human health are the key issues in the field of HVAC research. With the increasing demand for reducing building energy consumption and carbon emissions, achieving the goal of green and low-carbon buildings requires more efficient energy-saving technologies and low-carbon energy systems in buildings, including passive and active energy saving. Meanwhile, with the continuous improvement in people's living standards and in working environments, it is very important to determine reasonable thermal comfort requirements, and the building thermal environments need to meet people's requirements under different environmental conditions. In addition, the main environmental exposure of most people is indoors, especially indoor air pollution exposure. Efficient control of this and improving indoor air quality are the fundamental ways to protect the health of personnel.





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, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/buildings
buildings@mdpi.com
X@Buildings_MDPI