# Special Issue

# HVAC System Design for Building Energy Saving

## Message from the Guest Editors

A major part of global energy consumption is that of buildings. Optimizing the building energy system, especially improving HVAC technology, is an important means to reduce energy consumption in homes and public buildings and address the global energy crisis. This Special Issue aims to provide a platform for reporting the latest research progress in HVAC systems, exploring HVAC system design and evaluating the application of relevant theories and advanced technologies in building energy saving. This Special Issue on "HVAC System Design for Building Energy Saving" invites high-quality and cutting-edge articles. Possible topics include, but are not limited to:

- HVAC system analysis;
- Simulation and optimization of HVAC systems;
- Heat pump technology;
- Dehumidification technology.

#### **Guest Editors**

Prof. Dr. Zhongbao Liu

Department of Refrigeration and Cryogenic Engineering, Beijing University of Technology, Beijing, China

Dr. Han Sun

Department of Refrigeration and Cryogenic Engineering, Beijing University of Technology, Beijing, China

### Deadline for manuscript submissions

closed (31 October 2024)



an Open Access Journal by MDPI

Impact Factor 3.1 CiteScore 4.4



mdpi.com/si/184745

Buildings
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
buildings@mdpi.com

mdpi.com/journal/buildings





an Open Access Journal by MDPI

Impact Factor 3.1 CiteScore 4.4





# **About the Journal**

# 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.

#### **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

#### **Author Benefits**

# **High Visibility:**

indexed within SCIE (Web of Science), Scopus, Ei Compendex, Inspec, and other databases.

#### Journal Rank:

JCR - Q2 (Construction and Building Technology) / CiteScore - Q1 (Architecture)

## **Rapid Publication:**

manuscripts are peer-reviewed and a first decision is provided to authors approximately 14.9 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).