# Special Issue

# Energy Consumption Prediction and Energy-Saving Technologies in Buildings

# Message from the Guest Editors

We invite you to submit articles related to HVAC, IAQ, nZEB, heat transfer, modelling and simulation, heat exchangers, heat pumps, and optimisation. Works should be original, new, and not be previously published elsewhere. Publications should fall within the following topics: Energy Consumption Prediction and Energy-Saving Technologies in Buildings. Particular attention can be paid to the parameters of the air in the rooms, energy flows and balances in buildings, including solar and wind energy, and the bottom heat source of heat pumps. These can be related to measurement techniques, the analysis of results, theoretical models, as well as solutions and prototype constructions. Optimisation issues related to the presented solutions and structures are also within the scope of this Special Issue.

#### **Guest Editors**

Dr. Mariusz Adamski

Department of HVAC Engineering, Bialystok University of Technology, 15-351 Bialystok, Poland

Dr. Tomasz Cholewa

Department of Indoor and Qutdoor Air Quality, Faculty of Environmental Engineering, Lublin University of Technology, 20-618 Lublin, Poland

#### Deadline for manuscript submissions

closed (31 December 2023)



an Open Access Journal by MDPI

Impact Factor 3.1 CiteScore 4.4



mdpi.com/si/175160

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).