Special Issue

New Technologies in Assessment of Indoor Environment

Message from the Guest Editors

Research on indoor environments safeguards human health and drives advancements in architectural engineering and environmental science. The emergence of new research methods and technologies enhances the scientific rigor and reliability of indoor environment research and provides powerful tools for creating healthier and more comfortable indoor living environments.

In this Special Issue, we invite original contributions introducing new technologies, methodologies, case studies, projects, reviews, and discussions relevant to indoor environments. Submitted materials may encompass various engineering disciplines, such as building physics, environmental science, architecture, fluid dynamics, and experimental sciences. We welcome manuscripts on topics including, but not limited to, the following:

- Simulation and modeling: novel simulation methods for indoor environments:
- Methods and case studies of indoor environment monitoring and experiments;
- Multi-domain and multiphysics investigations on indoor environment;
- Indoor environment and artificial intelligence.

Guest Editors

Dr. Mengtao Han

Dr. Chao Lin

Dr. Shan Gao

Deadline for manuscript submissions

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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

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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).