Special Issue

Recycling of Waste in Material Science and Building Engineering

Message from the Guest Editors

Recycling waste materials in building materials and engineering is essential for promoting sustainability in construction. As volumes of construction and industrial waste increase, incorporating these materials into civil engineering offers significant environmental and economic benefits. Recycled waste such as crushed concrete, fly ash, reclaimed asphalt, soil spoils, etc. used in building materials reduces reliance on raw resources and lowers carbon emissions. This process also alleviates landfill pressures and fosters the development of eco-friendly, cost-effective alternatives to traditional building materials. In civil engineering, integrating waste materials enhances structural performance and durability. Moreover, recycling promotes a circular economy, ensuring continuous material reuse, which aligns with global efforts to reduce the construction industry's environmental impact. By transforming waste into valuable resources, recycling in building engineering is key to a more sustainable future. For further reading, please follow the link to the Special Issue Website at:

https://www.mdpi.com/journal/buildings/special_issues / 43A890A3R2

Guest Editors

Dr. Yi Lu

Dr. Abolfazl (Nima) Baghbani

Dr. Wei Qin

Dr. Jiaxin Liang

Deadline for manuscript submissions

closed (30 July 2025)



an Open Access Journal by MDPI

Impact Factor 3.1 CiteScore 4.4



mdpi.com/si/219136

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).