

# Special Issue

## Mechanical Properties of Asphalt and Asphalt Mixtures: 2nd Edition

### Message from the Guest Editors

Asphalt mixtures are essential materials in pavement construction and form the backbone of highway infrastructure. The mechanical properties of the asphalt mixtures directly influence the performance and durability of pavement structures. The journal *Buildings* is calling for papers for a Special Issue focused on the "Mechanical Properties of Asphalt and Asphalt Mixtures: 2nd Edition". We welcome original research and review articles on the following topics:

- Constitutive models of asphalt base materials under multi-physical field coupling;
- Inversion of mechanical parameters and prediction of service performance for asphalt pavements;
- Rheological behavior of asphalt materials;
- Microstructural and mechanical behavior of asphalt and asphalt mixtures;
- Testing methods for the physical and mechanical properties of asphalt materials at various scales;
- Applications of big data and artificial intelligence in pavement design and evaluation;
- Smart pavement structures and materials;
- Nondestructive testing techniques for assessing pavement performance;
- Evaluation and use of technologies for recycled asphalt pavement.

### Guest Editors

Dr. Guoqiang Liu

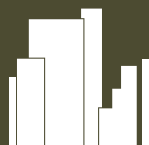
Dr. Yanqiu Bi

Dr. Xiaokang Zhao

Dr. Rui Li

### Deadline for manuscript submissions

31 December 2025



## Buildings

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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.

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### Editor-in-Chief

Prof. Dr. David Arditi

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### 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).