Special Issue

Pathway to Sustainability: Advances in Road Pavement Structures and Materials

Message from the Guest Editors

In the face of rapid urbanization and heightened transportation demands, developing sustainable road pavement structures and materials is vital. This multifaceted concern has far-reaching impacts on our environment, economy, and society, and necessitates careful material selection, thoughtful design, environmentally conscious construction, and proactive preservation strategies. We are extending an invitation to researchers to contribute original research articles, as well as review articles that delve into novel trends and breakthroughs in sustainable road materials and pavement design. Papers are invited, but not limited to, the following topics:

- Sustainable pavement design and modeling
- Life-cycle assessment of road pavement systems
- Innovative materials for road construction (e.g., recycled and waste materials)
- Novel pavement structures and designs for enhanced sustainability
- Advances in pavement maintenance and rehabilitation techniques
- Climate change adaptation strategies for road pavements
- Energy-efficient pavement technologies
- Noise reduction measures in road construction and maintenance

Guest Editors

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Deadline for manuscript submissions

closed (31 March 2025)



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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).