

Utilization of Recycled Aggregates and Waste in Road Engineering

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Message from the Guest Editors

The high-quality development of society is facing constraints imposed by resource scarcity, energy shortages and environmental pollution. While road engineering makes an outstanding contribution to social and economic development, the consumption of non-renewable resources during the life cycle of roads cannot be ignored. At the same time, human production and living activities have resulted in a large amount of waste for which there is a lack of resourceful utilization methods. Therefore, this Special Issue aims to stimulate broad research and discussion around waste material resourcing and its application in road engineering.

The scope includes, but is not limited to, the following:

- Road materials with waste components.
- Recycled aggregates in road engineering.
- Recycling of road materials and waste management.
- Bio-based materials in road engineering.
- Materials, techniques and practices related to reclaimed asphalt pavement (RAP).
- Materials, technologies and methods to enhance the durability of asphalt pavements.



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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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