



Materials, Structures and Designs for Durable Roads

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Message from the Guest Editors

Dear Colleagues,

The smartness and resilience of infrastructure are becoming increasingly ubiquitous. As important components of infrastructure, roads play an important role in achieving the goal of the entire infrastructure system. To obtain this enhanced durability and sustainability, in the past few decades, certain smart admixtures have been developed to make this material more intelligent. Thermochromic materials have been used in asphalt due to the advantages of the dynamic conversion of optical and thermal properties, which reversibly change color according to temperature, thereby dynamically adjusting the reflectivity of the asphalt to solar radiation. Ultraviolet-blocking materials can enhance the anti-ultraviolet aging ability of asphalt. Induction heating is used to enhance the engineering healing ability of asphalt mixtures. Warm and cold mixing technologies can reduce greenhouse gas emissions, thereby saving energy. Recycling technology and regeneration technology play an important role in realizing long-life pavement structures. In this Special Issue, the latest developments in these smart and durable road surfaces are discussed.





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Message from the Editor-in-Chief

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