Special Issue

The Durability of Innovative Construction Materials and Structures

Message from the Guest Editors

This Special Issue aims to explore the latest advancements, challenges, and research in the field of durable and sustainable construction materials and structures. With the increasing focus on environmental sustainability and the need for resilient infrastructure, this Special Issue presents a comprehensive collection of studies addressing the durability aspects of innovative materials and their impact on the long-term performance of structures. It covers a wide range of topics, including, but not limited to, the following: Novel construction materials. Durability assessment and modelling, Maintenance and repair strategies, Case studies and real-world applications. Overall, this Special Issue serves as a valuable resource for researchers, engineers, architects, and policymakers seeking to understand and enhance the durability of construction materials and structures. By fostering the exchange of knowledge and promoting the adoption of innovative and sustainable solutions, it contributes to the development of resilient infrastructure that can withstand the challenges of the future while minimizing environmental impact.

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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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