



Advances in Soil–Geosynthetic Composite Materials

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Message from the Guest Editors

Dear Colleagues,

By leveraging the engineering characteristics of soil through closely placed reinforcement, GRS design achieves remarkable improvements by reinforcing the soil internally. As such, the stability of GRS structures is self-sustained, as they do not depend on an external support such as the facing wall.

In this Special Issue, we extend an invitation to researchers to delve into the behavior of soil–geosynthetic composites. By amalgamating insights from experimental studies, numerical simulations, and artificial intelligence (AI) methodologies, our aim is to push the boundaries of knowledge within the realm of GRS engineering.

We are pleased to accept original research articles that cover a wide range of topics related to, but not limited to, the following: developing new composite materials; laboratory, numerical, and field-scale studies of GRS; life cycle assessments; mathematical modeling; and other relevant subjects that address geosynthetic materials in construction and engineering contexts.

Guest Editors





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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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