Special Issue

Extraterrestrial and Extreme Environmental Buildings

Message from the Guest Editors

Extraterrestrial buildings are important infrastructure for long-term exploration and for facing the extreme extraterrestrial environment, as they provide artificial shelter for extraterrestrial life. Extraterrestrial buildings include planetary buildings on the moon and Mars and in-orbit buildings such as space stations. At present, many countries and institutions have proposed the construction of extraterrestrial buildings. The advantages that the architectural discipline has in the development of extraterrestrial buildings lie in its holistic thinking, its ability to create a suitable living environment, and its experience in resisting extreme environments. The aim of this Special Issue is to present the latest research findings and ideas with respect to the theme of Extraterrestrial and Extreme Environmental Buildings to readers around the world. For further reading, please follow the link to the Special Issue Website at:

https://www.mdpi.com/journal/buildings/special_issues / Extraterrestrial_buildings

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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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