

Properties and Performance of Alkali Activated Concretes

Guest Editor:

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Message from the Guest Editor

One of the important priorities in the world today is the reduction of net carbon emissions to zero by 2050, and Alkali-activated concrete (AAC) can play a significant role by reducing the carbon emissions of concrete structures. This can be promising when all the AAC mechanical and durability properties are well known and have proven their appropriate performance in various applications of the building industry.

The aim of this Special Issue on AACs' mechanical and durability properties is to provide a comprehensive overview of all aspects related to the application of this type of concrete in the building industry, including the mechanical properties and performance of AACs in different aggressive environments. This review also explores the current problems hindering the universal acceptance and large-scale application of AACs. This Special Issue will bring together high-quality research articles on the different aspects of AACs, including their current status and remaining challenges.

For scholars interested to submit papers to the Special Issue, please click "Submit to Special Issue" or contact Astoria Yao: astoria.yao@mdpi.com.



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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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