Special Issue

New Trends in Sustainable Concrete and Its Structural Applications, 2nd Edition

Message from the Guest Editors

Sustainability is very important to the continued growth of our society and human civilization. In particular, cement, a main constituent material of concrete, emits a large amount of CO2 and other greenhouse gases, so it constitutes the most important axis of the sustainability issue. In addition, due to restricted natural resources, the constituents of concrete are gradually depleted. To address this sustainability issue in concrete construction, new innovative technologies have been developed in the last decades. Recently, limestone calcined clay cement is being spotlighted as one of the alternative types of cement with lower CO2 emissions. All concretes that utilize these technologies can be called "sustainable concrete," but sustainable concrete is not limited to just cement and constituent materials; it can be extended to technologies related to the entire cycle of concrete manufacturing, construction, operation, and disposal.

From these viewpoints, subjects that will be dealt with in this Special Issue will focus on recent trends in sustainable concrete research, and also case studies that prove the structural performance of sustainable concrete.

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As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multidimensional network.

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