Special Issue

Corrosion, Properties and Characterization in Concrete

Message from the Guest Editors

Concrete has been widely used in the construction of engineering structures for many decades. However, the durability of reinforced concrete (RC) structures could be significantly compromised under extreme environmental conditions. As the deterioration of concrete could lead to the significant reduction in the service life of RC structures, and the ultimately the potential loss of billions of dollars, the fundamental understanding of corrosion, properties and characterization in concrete becomes increasingly important. With the development of microscopic new techniques in material science, significant advances have been made in capturing the change in the microstructure of concrete at different. In addition, the development of modern concrete using supplementary cementitious materials (e.g., fly ash and slag) and the application of advanced 3D printing and nanotechnology represent the direction of future concrete development. This Special Issue contributes to a useful reference for further research and development of new advanced concrete technology to prolong the service-life of concrete structures.

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