

Special Issue

Effect of Additives/Admixtures on the Properties of Concretes and Cementitious Composites—Second Edition

Message from the Guest Editors

In today's cement and concrete industry, chemical admixtures have become one of the essential components of cement-based materials. The addition of a certain amount of chemical admixture to cement concrete can improve the defects of the cementitious material itself or improve the performance of the cementitious material. There is a wide range of chemical admixtures in cement concrete, such as water-reducing agents, retarders, early strength agents, accelerators, quick setting agents, air-entraining agents, etc. However, regardless of the admixture added to achieve a particular effect, the addition of admixture will affect the cement hydration process. With the high performance of cement and concrete and the wide application of various chemical admixtures and mineral admixtures, the systematic study of the effect of various admixtures on cement hydration is of great theoretical and engineering significance in terms of understanding the interaction between different chemical admixtures and cement and regulating the hydration process of cement.

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