World Academy of Science, Engineering and Technology
International Journal of Civil and Environmental Engineering
Vol:10, No:12, 2016

The Use of Secondary Crystallization in Cement-Based Composites

Authors : Nikol Žižková, Šárka Keprdová, Rostislav Drochytka

Abstract : The paper focuses on the study of the properties of cement-based composites produced using secondary crystallization (crystalline additive). In this study, cement mortar made with secondary crystallization was exposed to an aggressive environment and the influence of secondary crystallization on the degradation of the cementitious composite was investigated. The results indicate that the crystalline additive contributed to increasing the resistance of the cement-based composite to the attack of the selected environments (sodium sulphate solution and ammonium chloride solution).

Keywords : secondary crystallization, cement-based composites, durability, degradation of the cementitious composite
Conference Title : ICCSGE 2016 : International Conference on Civil, Structural and Geoenvironmental Engineering
Conference Location : Barcelona, Spain
Conference Dates : December 12-13, 2016