The 46th JCI Technical Conference | A. Material & Construction | Cement

Cement

座長:迫井裕樹(土木),西祐宜(建築)

Wed. Jun 26, 2024 10:00 AM - 12:00 PM Room 3 (第1·2会議室)

[1008]Quantification of VGP content in hardened cement paste by PONKCS method

Yuqi REN¹, Ryo Kurihara¹, Atsushi Tomoyose¹, Ippei Maruyama¹ (1.東京大学) Keywords: Volcanic Glass Powder、pozzolanic reaction、XRD/Rietveld analysis、PONKCS

In recent years, Volcanic Glass Powder (VGP) emerged in cement materials as a promising Supplementary Cementitious Material (SCM). VGP's robust pozzolanic reactivity makes it a leading SCM for the future. The demand for an efficient quantification method led to the PONKCS method's development, specifically for amorphous phase quantification. This paper discussed the application of the PONKCS method on the measurement of glass content of VGP. Results demonstrated its accuracy in determining VGP reactivity, particularly before reaching a 40% reaction degree.