

Electronic supplementary materials

For: <https://doi.org/10.1631/jzus.A2200389>

Effect of coral sand on the mechanical properties and hydration mechanism of magnesium potassium phosphate cement mortar

Hao LIU^{1,2,3}, Huamei YANG^{4,5}, Houzhen WEI³✉, Jining YU⁶, Qingshan MENG³, Rongtao YAN^{1,2}

¹College of Civil Engineering and Architecture, Guilin University of Technology, Guilin 541004, China

²Guangxi Key Laboratory of Geomechanics and Geotechnical Engineering, Guilin University of Technology, Guilin 541004, China

³State Key Laboratory of Geomechanics and Geotechnical Engineering, Institute of Rock and Soil Mechanics, Chinese Academy of Sciences, Wuhan 430071, China

⁴School of Intelligent Construction, Wuchang University of Technology, Wuhan 430002, China

⁵Hydraulic Concrete Institute, China Three Gorges Corporation, Beijing 100038, China

⁶The First Railway Survey and Design Institute Group Corporation, Xi'an 710043, China

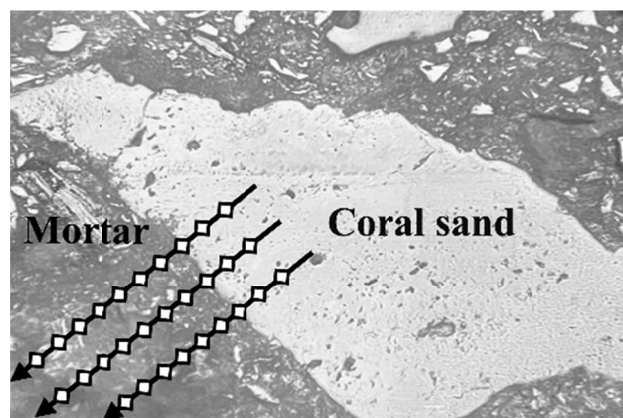


Fig. S1 The interfacial transition zone between coral sand and mortar

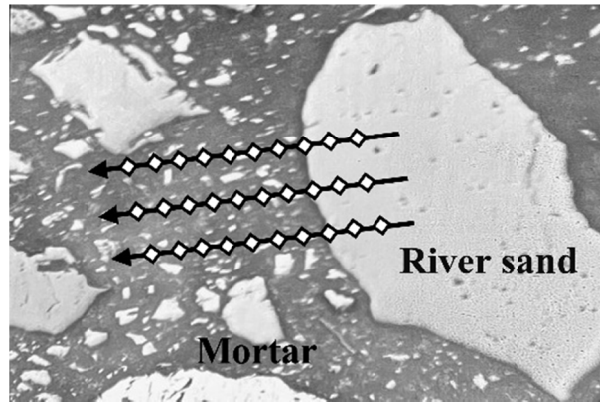
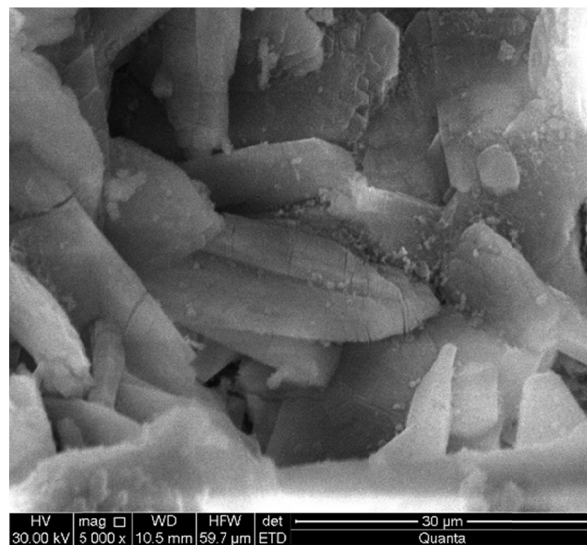
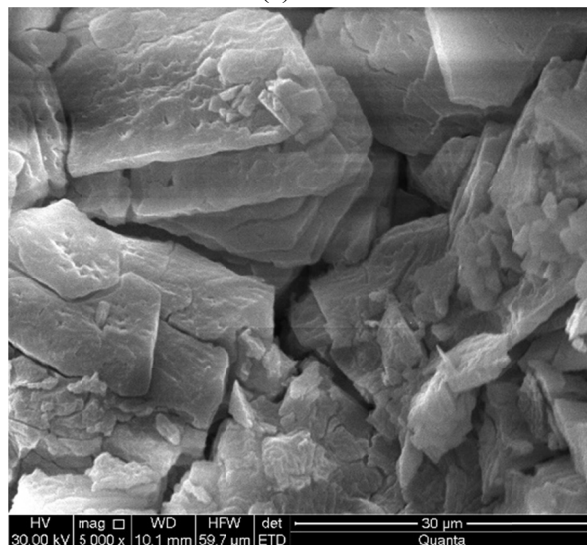


Fig. S2 The interfacial transition zone between river sand and mortar

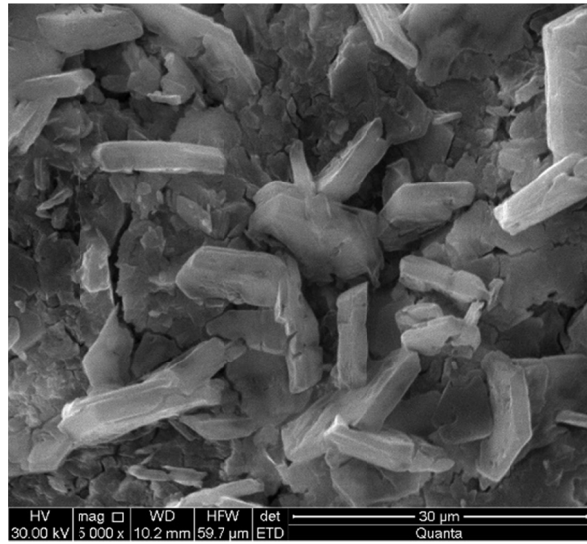


(a) 12 h

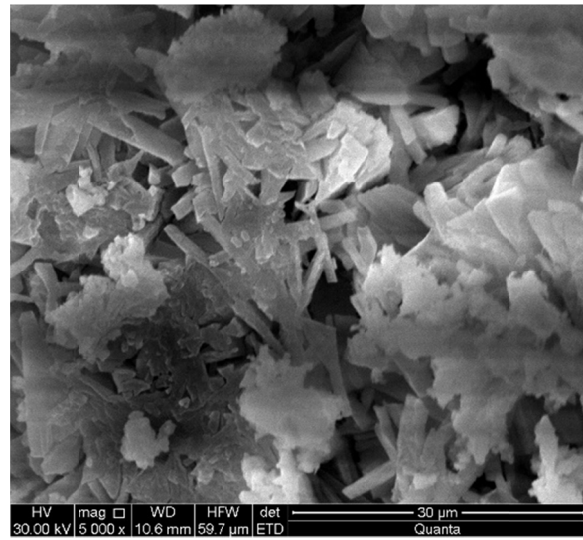


(b) 7d

Fig. S3 MKPC coral sand mortar of 5000× SEM photograph after 12 h and 7 d curing age



(a) 12 h



(b) 7d

Fig. S4 MKPC coral sand mortar of 5000× SEM photograph after 12 h and 7 d curing age