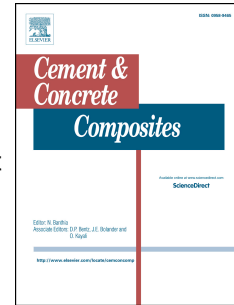


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Rubber aggregate-cement matrix bond enhancement: Microstructural analysis, effect on transfer properties and on mechanical behaviours of the composite

N.-P. Pham, A. Toumi, A. Turatsinze



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4 N-P. Pham^{a,b} A. Toumi^{a,*} A. Turatsinze^a

5 ^a LMDC, INSAT/UPS Génie Civil, 135 Avenue de Rangueil, 31077 Toulouse cedex 04 France

6 ^b Faculty of Bridge and Road Engineering, The University of Danang - University of Science
7 and Technology, 54 Nguyen Luong Bang Str., Danang, Vietnam

8 **Abstract:** Limited strain capacity and low tensile strength of cement-based materials make
9 them brittle and sensitive to cracking, behaviour that limits durability of cement-based applica-
10 tions. Rubber aggregates (RA) incorporation appeared to be a suitable solution to improve the
11 strain capacity and to limit the propensity of such materials for cracking. However, bond defect
12 between RA and cementitious matrix is well-known and detrimental to mechanical and transfer
13 properties of rubberized cement-based composites. This paper is dedicated to the enhancement
14 of rubber-cement matrix interface and then investigates effect of this bond on transfer properties

*corresponding author. E-mail address: toumi@insa-toulouse.fr (A. Toumi). Phone: (33 5 61 55 99 19) LMDC, INSA/UPS Génie Civil, 135 Avenue de Rangueil, 31077 Toulouse Cedex 04 France.

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