

FEATURE AND DURABILITY EVALUATION OF NANO-MATERIALS CEMENT

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ABSTRACT

In this study, the cementation matrices used a range of nanomaterials, including multiwall carbon nanotubes and Nano-clays. The properties of were looked at. Nano-kaolin was the subject of the study. Clay platelets were exfoliated using the chemical ammonium chloride. OPC is used in the study. The carbon nanotube was applied at a percent cement ratio, and the OPC was replaced with (NMK) at a percentage cement ratio. In the study, the percentage of mixed cement. A percent cement was used to produce the mixed cement mortar. The novel mortar pastes were cured in water for 28 days after being percent hours. The use of mixed cement is being investigated. In addition to the control combination, replacing OPC with 6 wt. percent NMK increased 18 percent, while mixing percent with carbon nanotubes improved 29 percent. After only 5 grams of nanomaterial is applied to 1 kilogram of cement, the amount of cement needed was decreased by 30 percent. Chemical resistance has increased significantly as a result of the use of MWCNT.

KEYWORDS: Carbon Fiber, Carbon Nanotubes, Cement Mortar, Coarse Aggregate, Compressive.

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