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A REVIEW ON - IMPACT OF NANO ADMIXTURE TO IMPROVE THE DURABILITY AND STRENGTH OF CONCRETE

Nano additives contains various supplementary cementations' materials (SCMs) such as silica, fly ash, clay, and slag are used to improved concrete properties. New Nano modifies (a Nanometer, nm, is 10⁻⁹m), with possible applications in concrete technology, have the fine grinded particle size that is less than hundred nm. Nano additives of smaller in size and great potential to expose in large surface area. Nano materials are very reactive, in connection with improving concrete performance such as mechanical strength, durability properties of concrete. The objective of this present investigation is to evaluate the structural strength of Nano modified concrete by Nano silica and Nano clay material as supplementary cementitious material and potential use of non-destructive testing devices for in-situ strength parameters of NMC during and after construction. The concrete specimens of different for different mix proportions were analysed in the study. This research primarily focuses on the development of experimental evaluation for estimating the 7, 28, 60 and 90 days' compressive strength of concrete. Also 28 days of split tensile strength, flexural strength. To study the behaviour of bond action between concrete and steel performed using pull-out test at different levels of compressive strength were considered through the use of different Nano modified concretes, and different concentration of Nano modified with conventional curing, acid and saline curing.

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