Experimental Investigation on Utilization of Shredded Waste Paper in Concrete

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Abstract: The usage of concrete around the world has become a significant importance, same as that of water in the world. There is a ascending rise in the production of cement leads to the lot increase in the emission of greenhouse gases into the environment, contributing to about 6-8% of overall green house gas emission in the world. This leads to the alternative introduction of paper pulp concrete against conventional concrete and environmental friendly paper pulp concrete. This paper deals with the study of strength properties with various mix proportion of paper pulp with the different percentage of 0%, 2.5%, 7.5%, 12.5%, 17.5%.

Compare all the various percentage of addition of combination of paper pulp with conventional concrete, under various tests like compression, split tensile, flexural tests for the samples of cube, cylinders, beam respectively and justifies the advantage of paper pulp concrete the cement replaced by waste paper pulp.

Keywords: Ordinary Portland Cement (OPC), Fine Aggregate, Coarse Aggregate, Waste Paper Pulp, Compressive Strength, Flexural Strength, Split Tensile Strength