TITLE: A STUDY ON BEHAVIOUR OF PHOTOCATALYTIC CONCRETE BLENDED WITH M-SAND AND IRON SHAVING

ABSTRACT

At present larger part of the structures built with solid material namely concrete. Concrete is a composite material arranged by including pounded rocks as course total, normal sand burrowing from conduits as fine total ,bond or lime as restricting material and adequate measure of water at specified extents to shape gel. Nowadays the quality of natural sand is degrading and digging at higher depth in water ways leads to land sliding etc . The atmosphere is being polluted due to the harmful gases and toxic byproducts that are released during the production of cement.. Now the present research deals with finding the alternative material for minimizing the problems caused by fine aggregate and binding material. In this context, we are working with the replacement of natural sand by manufacture sand producing from crushing of larger boulders into fine particles of required size in cubical shape in various percentages such as 20%, 40%. … till occurring optimum percentages. After getting M-sand optimum percentages, we are partially replacing TiO_2 instead of cement in various percentages such as 4%, 8%… in addition to that we are adding Iron shavings to concrete volume to improve tensile nature of the conventional concrete.

Keywords: Basalt Sand, Compressive Strength, Flexural Strength, Iron Shavings, River Sand.