EXPERIMENTAL INVESTIGATION ON COMPRESSIVE STRENGTH OF CONCRETE WITH PAPER SLUDGE AS SELF CURING AGENT

R.Yuvaraja, M.E. Structural Engineering,
Dr. G. Maheswaran, Professor,
Department of Civil Engineering,
K.S.R. College of Engineering, Thiruchengode,
Namakkal dist. - 637 215.

Abstract

Every year in the world approximately 1000 tonnes of solid waste are generated from industries and by demolition of structures. Recently many of the solid waste materials which are by products from industries replaced as construction materials such as fly ash, glass powder, construction and demolition wastes, silica fume, copper slag, E-waste, quarry dust, bottom ash, rice husk ash, wood pulp, waste rubber, granite industry waste etc. In this present work, paper sludge is used as self curing agent which is a low cost and easily available material. In pulp and paper industry generates large volume of wastes. When using the waste materials into concrete it is one of the solutions for waste management. However for Paper Sludge Concrete (PSC) used in practical applications its mechanical properties need to be investigated. This paper presents the (PSC) with different water sludge ratio and two different curing condition Air-dry or self curing, Full water or normal laboratory curing. The compressive strength result shows that the (PSC) were higher to that of other conventional concrete.