

**AN EXPERIMENTAL INVESTIGATION OF SELF COMPACTING CONCRETE BY
PARTIALY REPLACING CEMENT WITH FLYASH FOR VARIOUS
PROPORTION OF M-SAND**

P.Suguna¹, S.Aswin², R.Bharathidhasan³, Dr.R.Vidya⁴
PG & UG Students, Dept. of CivilEngg, M.A.M College of Engg.and Tech., Trichy.
Associate professor Dept. of Civil Engg, M.A.M College of Engg.and Tech., Trichy

The development of self compacting concrete(SCC) has greater advantages in building industry especially in congested reinforcement areas .The aim of this paper is to present the results of SCC achieved through replacement of the cement by fly ash (30%) and fine aggregate by manufactured sand in various proportions. (0%,25%,50%,75% and100%) of M40 grade. The chemical admixtures (superplasticizers, viscosity modifying agent) are used. Fresh concrete tests such us slump flow, L-box, U-box, V-funnel and J-ring were performed on SCC. Hardened concrete tests such as compressive and split tensile strength tests are presented for 7, 14 and 28 days. The hardened concrete test results were compared with normal Self compacting concrete of M40grade.

