ABSTRACT

Natural sand is a vital material used for making of concrete and the requirementof sand in Self Compacting Concrete (SCC) is more compared to normal concrete. Nowa day's different environmental issues have led to the scarcity of river sand. Due to scarcity of natural sands availability, it is needed to find alternate materials to replace natural sand. The sugarcane Bagasse Ash (SBA) is a by-product of burning of bagassewaste in the sugarcane factories.The main focus of the study was to investigate the characteristic strength on SCCby using SBA as partial replacement of fine aggregate by about 10%, 20% and 30% on volume basis. Fly ash had been used as admixtures in SCC as per EFNARC guidelines. In this study, Fosroc Conplast SP430 ether based super plasticizer had been used to reduce water content to attain the high workability.The fresh properties of SCC were examined. The investigations were carried out for finding mechanical properties such as compressive strength, splitting tensile strength and flexural strength. Finally the results were compared with SCC without partial replacement of fine aggregate.