

ICES 2024

TITLE OF PROJECT: Numerical Study on Geopolymer Cement Mortar.

NAME OF ALL AUTHORS: Dr.R.GopalaKrishnan, Kaviswetha K V, Hrithik Aadithyaa M, Kuldeep.V, Rajasekar B S.

NAME OF YOUR MENTOR: Dr.R.GopalaKrishnan.

NAME OF YOUR COLLEGE: SRM Easwari Engineering College.

ABSTRACT: In the recent years, lots of efforts are being taken for Partial or less than 60 % replacement with the Geopolymer cement mortar. Complete understanding of the Geopolymer cement mortar is necessary for the effective replacement of cement mortar. This research work deals with the comparison of Compressive behavior and flexural bond strength of ordinary cement mortar and Geopolymer cement mortar is carried out. Numerical study was done using Abaqus CAE tool is effectively used to study the behavior of the flexural strength of deflection pattern was carried out. Further experimental studies were carried out the Compressive behavior and the numerical studies with actual behavior was recorded and compared with results obtained from the Abaqus results. Fair results have been obtained in this study and it unleashes a lot of scope in Geopolymer cement mortar.

KEYWORDS: This research work deals with the comparison of Compressive behavior and flexural bond strength of ordinary cement mortar with Geopolymer cement mortar.

CATEGORY: Concrete Technology and Building Materials