**ASSESSMENT OF THE SUITABILITY OF COCONUT SHELL AS CHARCOAL AS FILLER IN STONE MATRIX ASPHALT**

**ABSTRACT**

Use of asphalt material and its mixture are used to improve the durability and performance of pavements. SMA requires stabilizing additives composed of cellulose fibres or mineral fibres to prevent draindown of mix. SMA was first implemented in European countries. The stone mastic asphalt is a gap graded mixture consisting of coarse aggregate, fine aggregate, stabilizers and binders. In the project work the main objective is to compare the results obtained by the fillers stone dust and coconut shell charcoal. The binder content has been varied from 4-6%. Binder of 60/70 penetration grade bitumen is used. For minimizing the cost and increasing efficiency different waste materials are used as fillers, coconut shell charcoal is one among them. It possesses properties such as resistance to crushing, resistance to freezing, surface moisture etc. Stability flow parameters and air void ratio are compared among the fillers. Marshall test method is used for carrying out this project.