

MECHANICAL PROPERTIES OF COCONUT CARBON FIBRE/EPOXY COMPOSITE MATERIAL

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ABSTRACT

In this research, the carbon fibre developed from komeng coconut coir fibre was reinforced with epoxy resin with difference weight percentage (0wt.%, 2.5wt.%, 5wt%, 7.5wt% and 10wt%) of carbon fibres. All the samples were prepared using the silicon rubber mould (SRM) to produces the specimen with the rectangular shape and dumbbell shape. The mechanical properties using Izod impact test (ASTM 256) and Creep Test (ASTM D2990) were investigated. The characteristics of all composite materials was also investigated and discussed.

KEYWORDS: Komeng Coconut, Carbon Fibre, Silicon Rubber Mould, Izod Un-Notched Impact Test, Work of Fracture (WOF)