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FABRICATION AND MECHANICAL CHARACTERISATION OF ISOPHTHALIC POLYESTER BASED PINEAPPLE LEAF FIBER REINFORCED COMPOSITES

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ABSTRACT

A composite material is a macroscopic combination of two or more distinct materials, having a recognizable interface between them. Composites are used not only for their structural properties, but also for electrical, mechanical, and environmental applications. Present review deals with the recent development of lingo-cellulosic/lingo-cellulosic and lingo-cellulosic/synthetic fibers based reinforced hybrid composites. Fibers are taken from leaves of Pineapple leaf by retting process. This fiber along with glass fiber can be a new source of raw material and can be a potential replacement of the expensive and non renewable synthetic fiber. Isophthalic polyester is used as the binding agent. This work intended to present an outline of main results presented on hybrid composites focusing the attention in terms of processing, mechanical and heat resistant properties. Hybrid composites are one of the emerging fields in polymer science that triumph attention for application in various sectors ranging from automobile to the building industry.

KEYWORDS: Composite, Glass Fiber, Isophthalic Polyester, Pineapple Fiber, Synthetic Fiber