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## **Experimental Investigation of Mechanical Properties of Epoxy LY556/ E-Type Glass Fiber/ Nano Clay Nano Composite Materials**

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**Abstract :** In this research paper clearly explained about the Epoxy LY556/Glass Fiber/Nano Clay nanocomposites consisting of an epoxy resin matrix reinforced with nano clay was investigated. This investigation describes the fabrication of nano composites, mechanical properties. The nano composites were manufactured by using hand layup technique with low weight percentages of filler material Nanoclay (0.5, 1, 1.5, and 2 wt. %) added with epoxy resin. Nano composites were subjected to tensile tests, impact testing, to analyze the mechanical properties and tensile modulus.

**Keywords :** Nanoclay, Epoxy/clay nanocomposites, Glass fiber, impact strength, tensile strength.

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