

## Preparation and Analysis of Enhanced Glass Fiber Reinforced Plastics with Al Base Alloy

**Authors :** M. R. Ashok, S. Srivatsan, S. Vignesh

**Abstract :** Common replacement for glass in composites is the Glass Fiber Reinforced Plastics (GFRP). The GFRP has its own advantages for being a good alternative. The purpose of this research is to find a suitable enhancement for the commonly used composite Glass Fiber Reinforced Plastics (GFRP). The goal is to enhance the material properties of the composite by providing a suitable matrix with Al base. The various mechanical tests are performed to analyze and compare the improvement in the mechanical properties of the composite. As a result, this material can be used as an alternative for the commonly used GFRP in various fields with increased effectiveness in its functioning.

**Keywords :** alloy based composites, composite materials, glass fiber reinforced plastics, sSuper composites

**Conference Title :** ICAMME 2016 : International Conference on Applied Mechanics and Materials Engineering

**Conference Location :** Bangkok, Thailand

**Conference Dates :** December 12-13, 2016