

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY,  
BELGAUM**



PROJECT REPORT  
ON

**DEVELOPMENT OF JUTE ROVING REINFORCED  
EPOXY COMPOSITES AND STUDY OF THEIR EFFECT  
ON MECHANICAL PROPERTIES**

*(SPONSORED BY KSCST, BANGALORE)*

*Submitted in partial fulfillment for the award of Bachelor of Engineering in*

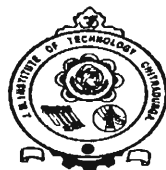
**MECHANICAL ENGINEERING**

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## **ABSTRACT**

**In order to obtain reliable composite materials in structural applications and to utilize fully the potential of reinforcing fibers, both perfect impregnation and strong interfacial bond formation have to be guaranteed. In the present study, the mechanical properties of jute roving reinforced epoxy composites were investigated as a function of fiber loading and fiber surface wettability.**

**An attempt is made to investigate and compare properties of jute roving reinforced epoxy composite laminates and E-glass epoxy composite laminates.**

**Laminates are fabricated by hand lay-up technique and cured under light pressure at room temperature for 24 hr. One group of E-glass epoxy composite laminate is also fabricated for comparison purpose.**

**The best combinations of the constituents which exhibit good mechanical properties are chosen as the optimum. The result of various tests are recorded & graphs are plotted.**