

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY
BELGAUM, KARNATAKA**



A PROJECT REPORT ON

“ALTERNATE USES OF ARECANUT HUSK IN ENGINEERING APPLICATIONS”

A project report submitted in the partial fulfillment of the requirement of the completion of the requirements for Bachelor of Engineering in

MECHANICAL ENGINEERING

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ABSTRACT

The increase in consumption of Areca nut usage every year leads to production of waste which is directly proportional to the quantity Areca nut cultivated. Presently the areca nut husk is used in domestic applications mainly as a fuel. In the present project, the fine fibers of the Areca nut husk will be used as the reinforcement material. The main thrust of present research work is to explore the possibility of utilizing areca nut husk fibers as reinforcement for composites. Using the areca nut husk fibers as reinforcement with appropriate matrix material the composite material will be fabricated. Also, a feasibility study involving the economics aspects will also be carried out. This study will open up new avenues of research for alternate uses in engineering applications in general and in particular for rural domestic applications.

The fiber reinforced plastic composites made of areca fibers extracted from areca, were prepared with used plastic and waste rubber. The composite was prepared with different proportion of areca fiber, plastic and rubber. The cost estimate for the production of composite material was carried out.