Project Report on

MANUFACTURING AND STUDY OF PROPERTIES OF VARIOUS FIBER REINFORCED POLYMER MATRIX COMPOSITES

Sponsored by K.S.C.S.T.

Submitted to

VISVESVARAYA TECHNOLOGICAL UNIVERSITY
BELGAUM

For the partial fulfillment of

BACHELOR OF ENGINEERING IN INDUSTRIAL AND PRODUCTION ENGINEERING

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ABSTRACT:

Composites are formed by combining materials together to form an overall structure that is better than the individual components. Composites are widely used in all possible fields such as aerospace, marine, automotives and day to day accessories. This project is a small experiment to study the fabrication of fiber reinforced polymer composites using different fibers such as carbon fiber, glass fiber, polyester fiber and natural fibers such as silk fiber, jute fiber, coir fiber. Various fabrication methods such as pultrusion, RTM, VARTM, hand layup method are available. Hand layup method is vastly used for open molding process. This project is also includes estimation of the strength addition obtained by incorporating various fibers into the polymer resin.

KEYWORDS:

Composites, fiber reinforced polymers, matrix, reinforcement, hand layup method.