"DESIGN AND FABRICATION OF HYBRID BIKE"

A thesis submitted in the partial fulfillment of the requirements for the award of the degree of

BACHELOR OF TECHNOLOGY

IN

MECHANICAL ENGINEERING

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CERTIFICATE

This is to certify that this project work entitled "DESIGN AND FABRICATION OF HYBRID BIKE" that is being submitted by K. Shanmukha Teja (16811A0332), N.L.S. Prasanna(16811A0348), M. Kumar(16811A0341) B. Tarun Kumar (16811A0309) to AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY, Makavarapalem, Visakhapatnam in partial fulfillment of the requirements for the award of degree of bachelor of technology in mechanical engineering is a bonafide work carried out by them under the guidance and supervision during the year 2016-2020.

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ABSTRACT

The progress of automobile for transportation has been intimately associated with the progress of civilization. The automobile of today is the result of the accumulation of many years of pioneering research development. In the modern automobiles the need of alternative fuel as replacement of conventional fuel is necessary as the conventional fuels are non-renewable. Electric-vehicles also have some disadvantages like time taken to charge and less speed.

The goal of this **HYBRID BIKE** was to combine the petrol engine and electric bike and to implement the most efficient and less polluting vehicle by converting fuel energy in to mechanical energy and then mechanical energy in to electrical energy by alternator and stores that electrical energy in the battery. This stored energy is used when the fuel is runs out so that we can increase the travelling distance and decrease the pollution.

KEYWORDS: I.C. engine, Alternator, Energy conversion, Dual mode vehicle.