

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM



A PROJECT REPORT  
ON

“A PROTOTYPE OF AN ELECTRICAL VEHICLE BASED ON SMFIR  
TECHNOLOGY AND DESIGN OF BATTERY MONITORING SYSTEM”

(SPONSORED BY K.S.C.S.T, BANGALORE)

Submitted in partial fulfillment of the requirements for the award of the Degree of

BACHELORS OF ENGINEERING

IN ELECTRICAL & ELECTRONICS ENGINEERING

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## **CHAPTER 1: INTRODUCTION**

The world is facing a tough challenge in the perspective of climate change and the global energy supply, mainly caused by a heavy dependence on fossil fuels. The problems of petroleum resource depletion and environmental pollution are two of the difficult challenges we face today. Petroleum resources are being drained and thus their prices increase. The peak annual global production of petroleum will be at its peak between 2030 and 2050 According to the U.S. Energy Information Administration (EIA) scenario, published in 2002, In response to these problems automobile industries are making competitive. However, most electric vehicles (EVs) get the electric energy needed for operation from on-board storage devices (i.e. batteries). However, current battery technology provides a very limited travel range with high costs, long charging times, there are few problems associated with Battery such as charging problems (time, frequency and efficiency, weight, prices and capacity).

In this project by preparing a prototype of Electric vehicle based on the concept of shaped magnetic field in resonance we are making an effort to Create more demand for eco-friendly, low-cost and high-efficiency transportation system and the design methodology of battery monitoring system using LI-ION battery monitor CHIPSET would address all these above mentioned issues in order to increase adoption of EVs in both public and personal transportation. Investments in developing eco-friendly cars.