VISVESVARAYA TECHNOLOGICAL UNIVERSITY

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DEVELOPMENT OF A LOW COST BIODIESEL REACTOR AND CHARACTERIZATION OF BIODIESEL.

A project report submitted in partial fulfilment for the award of Degree of

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In

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ABSTRACT

Energy is the prime movers for development of any country and fossil sources are the main sources of energy. It is observed from the literature that the fossil fuels are limited and they are going to exhaust in near future. Hence most of the countries are looking for alternative energy sources.

India is the fast growing economics in the world. India imports more than 70%of the crude oil and other petroleum products from other countries. In India, biodiesel produced from non-edible oil is considered as a substitute for fossil diesel. Most of the researchers working in the field of energy production are carrying research to produce biodiesel from hongi, jatropha, mahua etc. Since the cost of biodiesel is higher than biodiesel, most of the consumers are not ready to use the biodiesel.

One of the main reasons for the higher cost of biodiesel is higher investment required for the biodiesel plant.

Hence in this work a low cost biodiesel reactor is developed and tested. Also the produced biodiesel will be characterized. The biodiesel will be characterized based on the physical and chemical properties of the fuel.

Key words: Energy, Fossil source, Biodiesel reactor.