VISVESVARAYA TECHNOLOGICAL UNIVERSITY

Belgaum – 590010

A PROJECT REPORT
ON

"EXHAUST GAS TREATMENT USING LIMESTONE CATALYST"

(Sponsored by Karnataka State Council for Science and Technology, Bangalore)

Submitted in partial fulfillment of the requirements for the award of
BACHELOR OF ENGINEERING
IN
MECHANICAL ENGINEERING

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ABSTRACT

In this study a simple low-cost exhaust gas treatment filter using limestone is developed and tested on a four cylinder petrol engine under variable engine running conditions. Limestone is placed in cast iron housing through which exhaust gases passes. The concentration of carbon dioxide, nitrogen oxide, sulphur dioxide and carbon monoxide are measured with and without the filter in place. It is found that the pollutants are decreased significantly when the filter is in place, with no increase in the fuel consumption rate.

This project aims at developing an exhaust system with minor manipulations and added agents, which is installed in a vehicle thereby reducing the amount of pollutants coming out. A simple arrangement using limestone that will help decrease the pollution, which is the major cause of global warming.