

Review Report Of

**PERFORMANCE AND EMISSION CHARACTERISTICS OF BIO DIESEL
ON FOUR STROKE DIESEL ENGINE**

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

BACHELOR OF TECHNOLOGY

IN

MECHANICAL ENGINEERING

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CERTIFICATE

This is to certify that project report is entitled "**PERFORMANCE AND EMISSION CHARECTERISTICS OF BIO DIESEL ON FOUR STROKE DIESEL ENGINE**" was carried out by **J.AYYAPPA(16811A0330), D KRISHNA RAO(1681A0315), A RAMMOHAN RAO (16811A0306), P SOMESWARA RAO(16811A0370)**, in partial fulfilment of requirements for the award of the degree of bachelor of technology in "**MECHANICAL ENGINEERING**" by Jawaharlal Nehru Technological university , Kakinada During the years 2016-2020.



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EXTERNAL EXAMINER

Abstract

- The transport sector is one of the most addicted to Petroleum product and then pollutant.
- A new bio-fuels generation is being studied, but the use of the ones already available should be decreased.
- The use of cooking oils could represent interesting alternative fuels for Diesel engines in some specific applications (i.e., public transportation, hybrid or marine propulsion, etc.).
- The Engine Performance and emission characteristics of biodiesel fueled diesel engine are highly influenced by the ignition and combustion behavior. in this study, emission and combustion characteristics were studied when the engine operated using blends(B20) with different additive solvents(I.e., Isopropyl and Isobutyl) in two various proportions(B20+1%,B20+2%).
- It was found that engine was difficult to start at pure form of Cooking Oil due to high viscosity so blend is made with the diesel. Biodiesel was prepared and used in Diesel engine for testing the performance.