

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY  
BELGAUM – 590014**



**A PROJECT REPORT ON**  
**“INVESTIGATIONS ON EFFICACY OF LUBE-OIL VISCOSITY  
ON PERFORMANCE OF SPARK IGNITION ENGINES”**

**Sponsored By**

**Karnataka State Council for Science and Technology, Bengaluru**  
**(Under 37<sup>th</sup> Student Project Programme 2013-14)**

*Submitted in partial fulfilment of the requirements for the award of*

**BACHELOR DEGREE  
IN  
MECHANICAL ENGINEERING**

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# **ABSTRACT**

IC engines (CI & SI) have become economic drives of present times by virtue of their extensive deployment at agriculture, transport & energy sectors of our economy. The efficiency of internal combustion engines are required to be improved by effective modifications. Absorption of energy by the lubricant of automotive engines has been the matter of concern. Friction loss is reported to be one of the major losses, accounting for nearly 15-20% of the total losses, and nearly 75-80% of which occurs at piston ring and engine walls (PRW). Lubricating oils are designed to function in an optimal fashion when engine oil operating temperatures are approximately 10°C to 15°C above the coolant temperature. Keeping this in mind, the sump operating temperatures of the engine oil should not exceed 105°C under normal conditions. Effort is made in the present work to design an effective cooling system for the lubricating oil and study the performance behaviour of the engine.