

## **ON ROAD EMISSION TEST IN A 4-STROKE BIKE USING WASTE PLASTIC DERIVED OIL**

**P. PREMKUMAR**

Assistant Professor, Department of Mechanical Engineering, Faculty of Engineering and Technology,  
Annamalai University, Annamalainagar, Tamil Nadu, India

### **ABSTRACT**

Waste plastic oil has been obtained by degradation of broken bucket and tub made HDPE, saline bottles made of LDPE and polythene bags made of LDPE using fly ash as a catalyst. Oil boiling within 150<sup>0</sup>C has been separated using a separation unit. The fraction termed as waste plastic petrol oil (WPPO) has been tested for its suitability as a substitute for petrol on a bike. The results suggested that WPPO from the waste plastic can be used as the substitute for petrol.

**KEYWORDS:** HDPE and LDPE Have Been Successfully converted into Hydrocarbons