

# **EFFECT OF ADDING HHO GAS A FUEL IN SPARK IGNITION ENGINES FROM THE ELECTROLYSIS PROCESS**

**R.B. DURAIRAJ<sup>1</sup> & M.SIVASANKAR<sup>2</sup>**

<sup>1</sup>M.Tech in School of Mechanical Engineering, SRM University ,Chennai, India.

<sup>2</sup>Director, Center for Biomedical Research, Arunai Engineering College, Tiruvannamalai, India.

## **ABSTRACT**

Nowadays usage of alternative fuels and Research works in the field of alternative fuels such as fuel cell, Biogas, biodiesel, solar, biomass, LPG, hydrogen and HHO for the automobiles were increasing to meet the huge demand over the petroleum based fuels for the automobiles. In this the researches have less concentration towards the environmental effects and to the engine. HHO is one of the fuel produced form water through by the electrolysis process. This is the chemical process of separating ions which is present in the electrolyte solution. This can be used as a hydrogen fuel for the SI engine. But usage of this fuel have some disadvantages such as Corrosion over the engine cylinders, improper combustion ,water formation during combustion, improper air and fuel mixture , which also reduces the engine life when compare to the ordinary petroleum based fuels. This paper deals with the effect of HHO gas usage in the spark ignition engines and their major disadvantages observed from their production through electrolysis process.

**KEYWORDS:** Engine cylinders , Improper combustion ; Environmental effects ; Petroleum fuels ; SI Engine

