

ABSTRACT

An experiment was conducted with four stroke single cylinder engine, water cooled compression ignition engine operated with neat diesel and blends of hydrogen peroxide with diesel. Main focus of this research is to investigate the performance of diesel engine by injecting hydrogen peroxide as blends with diesel at 2%,4%, 6%and 8% proportions. In the experiments, injection pressure was also changed, which is an important parameter in the study. Results showed that, the efficiency of engine increased by injecting hydrogen peroxide at all fractions along with diesel and the exhaust gas temperature has found to be decreased reasonably. Also, efficiency of engine has increased by advancing the injection timing by five degree for both diesel and its blends with hydrogen peroxide. At injection pressure of 150 and 180bars.