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NOx Emission and Computational Analysis of Jatropha Curcus Fuel and Crude Oil

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Abstract : Diminishing of conventional fuels and hysterical vehicles emission leads to deterioration of the environment, which emphasize the research to work on biofuels. Biofuels from different sources attract the attention of research due to low emission and biodegradability. Emission of carbon monoxide, carbon dioxide and H-C reduced drastically using Biofuels (B-20) combustion. Contrary to the conventional fuel, engine emission results indicated that nitrous oxide emission is higher in Biofuels. So this paper examines and compares the nitrogen oxide emission of Jatropha Curcus (JCO) B-20% blends with the vegetable oil. In addition to that computational analysis of crude non edible oil performed to assess the impact of composition on emission quality. In conclusion, JCO have the potential feedstock for the biodiesel production after the genetic modification in the plant.

Keywords : jatropha curcus, computational analysis, emissions, NOx biofuels
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