The Effect of Nano-Additive Blended Water-Diesel Emulsion Fuel on CI Engine Performance and Emissions - A review

IJCA Proceedings on International Conference on Advances in Emerging Technology
© 2016 by IJCA Journal

ICAET 2016 - Number 4

Year of Publication: 2016

Authors:
Rajwinder Singh
Sumeet Sharma
D. Gangacharyulu

Abstract

Nano-additives blended water-diesel emulsion fuel is the alternative fuel for compression ignition (CI) engine that reduce the NOx emission and at the same time increase the brake thermal efficiency due to combined effect of nanoparticles and micro explosion phenomenon of water diesel emulsion. This review paper addresses emulsion, emulsion types, micro-explosion phenomenon of water-diesel emulsion and impact of nano-additive blended water diesel emulsion on the performance and exhaust emission of CI engine. Further, this review paper
discusses the long run scope of nanoparticles in water diesel emulsion.
- SasiKumar, N., Senthilkumar, M., JCPS 6, 37 (2015)

**Index Terms**

| Computer Science | Information Sciences |

**Keywords**

Micro-explosion  Hydrophilic Lipophilic Balance  Three Phase Emulsion  Engine Performance  Emission  Nano-fluids