

## CERTIFICATE

This is to certify that the thesis entitled “**Studies on Hydrogen Supplementation of SVO operated IDI CI engine for Performance improvement and reduction in Emissions**” submitted by **Pasupuleti Subrahmanya Ranjit**, to University of Petroleum and Energy Studies, for the award of the degree of Doctor of Philosophy is a bonafide record of the research work carried out by him under our joint supervision and guidance. The content of the thesis, in full or parts have not been submitted to any other institute or University for the award of any other degree or diploma.



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