

**PERFORMANCE, EMISSIONS AND COMBUSTION  
CHARACTERISATION OF METHANE DIESEL DUAL FUEL  
COMPRESSION IGNITION ENGINE**

*A Thesis*

Submitted

by

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for the award of the degree of

**Doctor of Philosophy**



**SCHOOL OF ENGINEERING  
INDIAN INSTITUTE OF TECHNOLOGY MANDI  
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**April, 2021**

## **Declaration by the Research Scholar**

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This is to certify that the thesis entitled "**Performance, Emissions and Combustion Characterisation of Methane Diesel Dual Fuel Compression Ignition Engine**" submitted by me to the Indian Institute of Technology Mandi for the award of the degree of Doctor of Philosophy is a bonafide record of research work carried out by me in the School of Engineering, Indian Institute of Technology Mandi, under the supervision of Dr. Atul Dhar. The contents of this thesis, in full or in parts, have not been submitted to any other Institute or University for the award of any degree or diploma.

In keeping with the general practice of reporting scientific observation, due acknowledgements have been made wherever the work described is based on the findings of other investigators.

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Date:

## **Thesis Certificate**

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This is to certify that the thesis entitled "**Performance, Emissions and Combustion Characterisation of Methane Diesel Dual Fuel Compression Ignition Engine**" submitted by Mr. Gaurav Tripathi to the Indian Institute of Technology Mandi for the award of the degree of Doctor of Philosophy is a bonafide record of research work carried out by him under our supervision in the School of Engineering, Indian Institute of Technology Mandi. The contents of this thesis, in full or in parts, have not been submitted to any other Institute or University for the award of any degree or diploma. In keeping with the general practice of reporting scientific observation, due acknowledgements have been made wherever the work described is based on the findings of other investigators.

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