



ISSN No. : 2321-9653

IJRASET

**International Journal for Research in Applied
Science & Engineering Technology**

IJRASET is indexed with Crossref for DOI-DOI : 10.22214

Website : www.ijraset.com, E-mail : ijraset@gmail.com

Certificate

It is here by certified that the paper ID : IJRASET12156, entitled
Mathematical Modelling and Analysis of Diesel-Biodiesel-Ethanol blends and ZnO
Addition effects into the Combustion and Emissions Characteristics in CI Engine

by
Sourabh Jain

after review is found suitable and has been published in
Volume 5, Issue XII, December 2017
in

*International Journal for Research in Applied Science &
Engineering Technology*

(International Peer Reviewed and Refereed Journal)

Good luck for your future endeavors



ISRA Journal Impact
Factor: 7.429



45.98
INDEX COPERNICUS



THOMSON REUTERS
Researcher ID: N-9681-2016



TOGETHER WE REACH THE GOAL
SJIF 7.429

By

Editor in Chief, IJRASET



ISSN No. : 2321-9653

IJRASET

**International Journal for Research in Applied
Science & Engineering Technology**

IJRASET is indexed with Crossref for DOI-DOI : 10.22214

Website : www.ijraset.com, E-mail : ijraset@gmail.com

Certificate

It is here by certified that the paper ID : IJRASET12156, entitled

*Mathematical Modelling and Analysis of Diesel-Biodiesel-Ethanol blends and ZnO
Addition effects into the Combustion and Emissions Characteristics in CI Engine*

by

Vardan Singh Nayak

*after review is found suitable and has been published in
Volume 5, Issue XII, December 2017
in*

*International Journal for Research in Applied Science &
Engineering Technology*

(International Peer Reviewed and Refereed Journal)

Good luck for your future endeavors

By [Signature]

Editor in Chief, IJRASET



ISRA Journal Impact
Factor: 7.429



45.98
INDEX COPERNICUS



THOMSON REUTERS
Researcher ID: N-9681-2016



TOGETHER WE REACH THE GOAL
SJIF 7.429



ISSN No. : 2321-9653

IJRASET

**International Journal for Research in Applied
Science & Engineering Technology**

IJRASET is indexed with Crossref for DOI-DOI : 10.22214

Website : www.ijraset.com, E-mail : ijraset@gmail.com

Certificate

It is here by certified that the paper ID : IJRASET12156, entitled

*Mathematical Modelling and Analysis of Diesel-Biodiesel-Ethanol blends and ZnO
Addition effects into the Combustion and Emissions Characteristics in CI Engine*

*by
Arvind Gupta*

*after review is found suitable and has been published in
Volume 5, Issue XII, December 2017
in*

*International Journal for Research in Applied Science &
Engineering Technology*

(International Peer Reviewed and Refereed Journal)

Good luck for your future endeavors

By

Editor in Chief, IJRASET

ISRA
JIF

ISRA Journal Impact
Factor: 7.429



45.98
INDEX COPERNICUS



THOMSON REUTERS
Researcher ID: N-9681-2016



TOGETHER WE REACH THE GOAL
SJIF 7.429