

## One Week Workshop

On

# COMBUSTION PROCESS IN IC ENGINE

1<sup>st</sup> - 5<sup>th</sup> November, 2018

## Registration Form

1. Name: .....

2. Designation: .....

3. Institution/Organization: .....

4. Address for communication: .....

5. E mail: .....

6. Phone/Mobile No: .....

7. Highest educational qualification: .....

8. Accommodation required (Tick): Yes/No

9. Any other information: .....

10. Details of Registration Fee: .....

11. D. D. No.:                      Date:

Bank:

Place:

Date:

*Signature of the applicant*

Forwarded/recommended

Signature of Head

## Organizing Committee

**Patron:** Prof. Sivaji  
Bandyopadhyay  
Director, NIT Silchar

**Chairman:** Dr. Agnimitra Biswas  
Head of the Department, ME

**Advisory members**  
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Prof. R.D. Misra  
Prof. P.K. Patowari,  
Prof. D.H. Das  
Dr. K. Chakraborty  
Dr. K.K. Sharma  
Prof. P. Chowdhury

**Coordinators:** **Dr. Sumita Debbarma**  
**Dr. Abhishek Paul**  
**Dr. Biplab Das**

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Dr. S. Dey  
Dr. S. R. Maity  
Dr. P. Randive  
Dr. C.K Sahoo  
Dr. Y. Singh  
Dr. B. Das

## Address for Communication

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## One Week Workshop

on

# COMBUSTION PROCESS IN IC ENGINE

(TEQIP III SPONSORED)

1<sup>st</sup> - 5<sup>th</sup> November, 2018

Venue: Seminar Hall, ME Dept., NIT Silchar



## Coordinators

**Dr. Sumita Debbarma**  
**Dr. Abhishek Paul**  
**Dr. Biplab Das**

## Organized by

**Department of Mechanical Engineering**  
**National Institute of Technology Silchar**  
**Assam -788010, India.**  
**Web: <http://www.nits.ac.in>**

## INTRODUCTION

Internal combustion (IC) engines are prevalent in a wide range of applications throughout the world. The Combustion process in an IC engine is heterogeneous and depends on a number of operating variables. One of the major current goals of IC engine development is to achieve higher performance and thermal efficiencies without penalizing the exhaust emissions. The optimal method for achieving this paradoxical objective is to study and improve the combustion process in an IC engine. Such combustion studies are performed to attain valuable insights on flame propagation, fuel injection, droplet distribution, chemical kinematics of droplet combustion, air-fuel interactions at elevated temperature inside the combustion chamber etc. The Course participants will learn such interesting topics through lectures from eminent researchers in the field of IC engine. Also case studies and assignments will be shared to stimulate research motivation of participants.

## OBJECTIVE

The Workshop is intended to provide opportunity for the participants to enrich their knowledge in the intricacies of combustion process in an IC engine. The workshop also plans to acquaint the participants with latest technologies and innovations in the field of combustion improvement of IC engine.

## CONTENTS

- Combustion process in SI and CI engine.
- Chemical Kinetics of Combustion in IC engine.
- Liquid fuel combustion.
- Droplet combustion, Spray Combustion.
- Advance Combustion Engine and Alternative Power trains.
- Combustion process in Gas Engines.
- Emission from combustion of an IC engine.
- Quantification of emission, Emission control methods. Etc.

## ABOUT THE INSTITUTE

National Institute of Technology (NIT) Silchar, an Institute of National Importance under the NIT Act was established in 1967 as Regional Engineering College (REC) Silchar in Assam. In year 2002, it was upgraded to the status of an NIT from REC. NIT Silchar is situated on the banks of river Barak and on a sprawling campus spread over 600 acres of land on the outskirts of Silchar. The landscape of NIT Silchar campus is beautiful with natural lakes and hillocks, surrounded by tea gardens. NIT Silchar is a fully residential institution with nine hostels for boys and two hostels for girls. It has six engineering degree offering branches and five non-engineering branches. It conducts various programmes, including organizing the workshops, seminars, conferences, invited talks etc. in collaboration with different academic departments, institutes and reputed multinational and national industries.

## ELIGIBILITY

This program is open to industrial personnel, faculty members and research scholars/PG students of technical institutions, engineering colleges, polytechnics, universities and other recognized institutions

## ACCOMMODATION AND TRAVEL

All the out station participants will be provided accommodation on payment basis in the Guest House/Hostels of the institute. No TA and DA will be paid to the participants.

## HOW TO REACH NIT SILCHAR

There are daily flights from Kolkata, Guwahati. Taxi are available from Airport to NIT Silchar, Silchar is also well connected by road and train from Guwahati.

## REGISTRATION DETAILS

- Internal Students: ₹. 500/-
- External Students: ₹. 1000/-
- Internal Faculty members: ₹. 1000/-
- External Faculty members: ₹. 3000/-
- Industry Persons: ₹. 5000/-

The registration fee includes registration kit and lunch.

All participants have to pay the registration fees before submitting application either (i) via DD in favour of **Director NIT Silchar**, Payable at State Bank of India, NIT Silchar branch or (ii) online transfer to the account of the Director, NIT Silchar (A/C No.: 10521277057, Branch: NIT Silchar).

Brochure and registration form can also be downloaded from: <http://www.nits.ac.in/>

## SUBMISSION PROCESS

Scanned copies of both registration form along with D.D. (or online transfer proof) are to be sent to v1.abhishek@gmail.com on or before 15/10/2018. The original hard copies of registration form and D.D. has to be submitted at the registration desk, just before the commencement of the workshop.