#### **COORDINATORS**

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#### National Institute of Technology, Tiruchirappalli

The National Institute of Technology (formerly known as Regional Engineering College – REC), Tiruchirappalli was established in the year 1964. As an institute of National importance for higher education and innovation, its primary objective is to promote higher education, research and consultancy. NITT has established academic and knowledge focused associations with Universities, Institutions and Organizations around the world. In the NIRF - 2019 ranking by Government of India, NITT has secured an overall rank of 10 among all engineering colleges and 1<sup>st</sup> among NITs.



**Department of Mechanical Engineering** 

The Department of Mechanical Engineering is one among the first three department established in 1964. With a team of highly qualified faculty members, the department consistently strives to be globally renowned where the best of teaching, learning and research synergize to fulfill the requirement of industry and society. As a feather in its cap, the department has been ranked between 300-450 consequently for the past three years in the QS world ranking, which makes the department unique among all NIT's in the country.



# **Sponsored One Week Workshop**

on

# **Combustion Generated Pollution Control**

16<sup>th</sup> – 20<sup>th</sup> December 2019



<u>Organized by</u> Department of Mechanical Engineering National Institute of Technology Tiruchirappalli 620 015 Tamil Nadu | India

#### **Course Objective**

The main objective of this workshop is to enrich the knowledge of the students with industrial experts in the field of combustion and pollution control. In the past two decades, the world is facing a threat of increase in global temperature due to the greenhouse gas emission. Combustion of both fossil as well as bio-derived fuels results in greenhouse gas emissions such as carbondioxide, water vapor and methane. Apart from the greenhouse gas emissions, the combustion process also produces other toxic gases which are detrimental to the environment. Hence, most of the research work concentrates on the methods to reduce the pollutants from the combustion system. The pollutants can be either treated inside the combustion system or outside in the exhaust pipe. Adopting high efficiency combustion concepts like lean combustion technology, low temperature combustion, partially premixed combustion and flameless combustion will help to reduce the pollutants in the combustion system itself. Likewise, the after treatment systems like particulate filter, selective catalytic reduction, oxidation catalyst and catalytic converters are utilized to breakdown or remove the pollutants from the exhaust gases. The workshop will provide insights on the current technological advancement in the field of combustion and pollution control to combat these harmful pollutants.

#### **Topics to be Covered**

- 1. Latest trends in engine & power train design and development to meet BSVI and beyond emission norms.
- 2. E mobility: EV / HEV and FCV design & development / opportunities and challenges from an Indian perspective to implement EV Technology.
- 3. CO<sub>2</sub> emission from power plants: capturing and utilization.
- 4. In furnace and post combustion emission control technologies.
- 5. BSVI technologies for emission control.

#### **Resource Persons**

### 1. Dr Sushil S Ramdasi Deputy Director, PTE, Automotive Research Association of India, Pune.

- 2. Dr N.Saravanan Mahindra Research Valley, Mahindra World City-Chennai.
- 3. Mr. Shankar Naik. V Manager, Bharat Heavy Electricals Limited, Tiruchirappalli.
- **4.** Dr. Sivaji Manager, Bharat Heavy Electricals Limited, Tiruchirappalli.

#### **Participants**

Faculty members, Research Scholars and Students from NIT Tiruchirappalli who are interested in combustion and pollution control can attend the workshop. Selection will be based on first come first served basis.

# Important Dates

Last date for receiving the duly filled scanned copy of the Registration form	12 / 12 / 2019
Confirmation of selection to the participants (to be intimated through email)	13 / 12 / 2019

Venue: Lecture Hall Complex, NIT Trichy.

Note:

- 1. Workshop kit, working lunch, tea & snacks will be provided to the participants.
- 2. There is no registration fee for the participants.



<u>Sponsored one-week workshop on</u> **Combustion Generated Pollution Control** <u>16<sup>th</sup> – 20<sup>th</sup> December 2019</u> <u>**Registration Form**</u>

Name	:	
Designation	:	
Organization	:	
Address	:	
Mobile	:	
E-mail Id	:	

# **Declaration**

The information provided is true to best of my knowledge. If selected, I agree to abide the rules and regulation of the course and shall attend the course for the entire duration.

Place :

Date :

Signature

*Note:* Please send the duly filled scanned copy to *vedha@nitt.edu*