

REGISTRATION FORM
A
FIVE DAY SHORT TERM COURSE
ON
ANALYTICAL AND EXPERIMENTAL TECHNIQUES IN
THERMAL ENGINEERING (AETTE-2018)

4-8 JUNE 2018

Name: -----

Designation: -----

Institute/Organization: -----

Mailing Address: -----

Phone No.(R)----- (O)-----

Mobile: -----Fax: -----

Email: -----

DD No: -----Date: -----

Accommodation required: Yes/No

Date: -----Signature: -----

IMPORTANT DATES

Last date for receipt of application : 11-05-2018

Notification about selection : 18-05-2018

Confirmation by participants : 23-05-2018

Selected candidates will be informed by email. Complete information for communication must be necessarily provided in the registration form.

TRAVEL AND ACCOMMODATION

The participants will have to make their own arrangements for travel. Boarding and lodging can be arranged on payment basis in the guest house at NIT Rourkela based upon prior request and availability. There are also many good hotels in Rourkela; the same can be booked on request and prior payment.

HOW TO REACH ROURKELA

Rourkela is on the Howrah (Kolkata)-Mumbai main line of South Eastern railway. The railway station and intrastate bus stand are 6kms and 2kms from NIT Rourkela campus respectively. The airports near to Rourkela are Ranchi, Bhubaneswar and Kolkata. Rourkela is well connected to these cities by rail and train frequency is very good.

Participants will be paid to and fro train fare (III AC) via shortest route (strictly on the production of ticket) and provided free boarding and lodging subject to the funds received from the funding agencies.

COURSE CONVENER

Dr. S.MURUGAN

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COURSE CO-ORDINATOR

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PATRON

PROF. ANIMESH BISWAS

DIRECTOR

NIT ROURKELA

CHAIRMAN

PROF. D.R.PARHI

HEAD OF THE DEPARTMENT

DEPARTMENT OF MECHANICAL ENGINEERING



ORGANIZED BY

DEPARTMENT OF MECHANICAL ENGINEERING

&

DEPARTMENT OF INDUSTRIAL DESIGN

NATIONAL INSTITUTE OF TECHNOLOGY

ROURKELA-769008

ODISHA

ABOUT THE INSTITUTION

National Institute of Technology Rourkela is an institute of national importance created under the act of parliament. Times World Rankings has figured NIT Rourkela in the list of 601-800 universities in the world in 2016-17. NIT Rourkela is the only NIT to appear in the top 980 universities in the world. BRICS 2016 has figured NIT Rourkela in the list of 111-120 top universities in Brazil, Russia, India, China and South Africa in 2016-17. NIT Rourkela provides quality education in a diverse and multi-cultural environment. The mission of the institute is to become an internationally acclaimed institution of higher learning that will serve as a source of knowledge and expertise for the society and be a preferred destination for undergraduate and graduate studies. The institute is offering Ph.D. and M.Tech by Research programme in 21 branches of Engineering. The institute research centers are engaged in consultancy and research activities of several bodies such as DST, DAE, CSIR, DRDO, BARC, ISRO and private industries.

DEPARTMENT OF MECHANICAL ENGINEERING

The Mechanical Engineering Department of NIT, Rourkela is known for research in most of these fields. The main foci of research are on mechanical vibration, robotics, CAD/CAM, precision engineering, Metal forming, manufacturing, CFD, Industrial refrigeration and Cryogenics. The academic programme of the department reflects not only the core areas of Mechanical Engineer but also the research specialization of the faculty. The department at present has over one hundred research scholars pursuing projects on diverse fields. The faculty is organized under three divisions and six groups. All the groups are working in close co-operation while retaining individual identities. Many Research and Development projects being pursued by the faculty are sponsored by Government agencies and private

industries. Among the major sponsors are BRNS, DST, ARDB, BRFS, HBL Power Systems and Lechier India Private Limited.

ABOUT THE SHORT TERM COURSE

There are lot of research works going on in the field of thermal engineering which includes internal combustion engines, turbo machinery, heat transfer, refrigeration and air conditioning, power plant engineering. There is a need of understanding different mathematical modeling, optimization tools, simulation methods and experimental methods that are used in carrying out research in thermal engineering. This short-term course is aimed at providing the fundamental knowledge about different analytical and experimental methods that have recently been used in the field of thermal engineering. Overall, the objective of the course is to help the engineers and researchers to design in the experiments in thermo-fluids engineering.

COURSE CONTENTS

The short term course will provide lectures on basics and recent methods used in analytical and experimental techniques adopted in various thermal equipment and processes. The course will also provide demonstration of some advanced instruments used in thermal engineering. The course will cover the following

- Mathematical analysis of different thermal systems that include IC engines, refrigeration and air conditioning systems, power plants and renewable energy systems.
- Prediction and optimization methods such as GRNN, Fuzzy regression, Swarm Intelligence and Artificial Immune Systems used in thermal engineering.
- Demonstration on use of simulation tools

- Demonstration of advanced instruments such as GC-MS, TGA, DSC, FTIR, Nanoparticle size and Zeta Potential analyzer, Transmission Electron Microscope, SEM, Particle size analyzer, Liquid Nitrogen Generator, Engine combustion Analyser, Exhaust Gas Analyser etc
- Design of experiments in thermal engineering

FACULTY

The course will be taught by the faculty members of NIT Rourkela. Experts from other academic institutions will be invited to share their latest research findings with the participants.

TARGET PARTICIPANTS

The course will be useful to engineers from industries, faculty members and research scholars from engineering colleges, universities, and research institutes. The successful participants will be given participation certificate.

COURSE FEE

Faculties from academic institutions	Rs: 2000
Participants from industries	Rs: 10000
Research Scholars/Students	Rs: 1000

PAYMENT

All payments should be made through A/C payee demand draft in favor of “**Continuing education, NIT Rourkela**”, payable at SBI NIT Campus branch, Rourkela (Code:2109)

You can also visit www.nitrkl.ac.in for downloading the registration form and other information.