Innovations & challenges in Thermal Engineering (7-8th July 2016) Funded by Technical Education Quality Improvement Program (TEQIP)-II

> Chairman: Prof. R S Mishra, HOD, Mech, DTU.

> > Course Coordinator Dr. Amit Pal,

Co-Coordinators: Dr. Raj kumar Singh, Md Zunaid Vijay Gautam



Organized by Department of Mechanical, Automobile and Production& Industrial Engineering Delhi Technological University Bawana Road, Delhi-110042

Topics to be covered

- Energy efficiency, standards & rating of therma systems
- ✤ Nuclear power generation/Solar Thermal
- ✤ Alternate cleaner fuels (CNG/LPG)
- Hydrogen & Fuel Cells
- Engine performance and emissions
- Nuclear Fission
- Combustion/ CFD/ Gas Turbines
- Cryogenics Geothermal engineering

Resource persons

Faculty of DTU/BEE/ IIT/NIT/CSIR/IIPR and other Experts from industry & Research organizations

Venue:

Committee Room(FW4-GF5) Mechanical Engineering Department

For further information

Please visit institute Website., Brochure can also be downloaded by the link provided. <u>http://dtu.ac.in/</u>

E-mail: <u>amitpal@dce.ac.in,</u> <u>vijay.dce@gmail.com</u> <u>rajkumarsingh@dce.ac.in</u>

Mob:9868543545,9868211819,09310050842

Important Dates

- *Last date for receipt of applications:* Registration form complete in all respect may be sent to the course coordinators latest by June 30, 2016.
- Information to selected candidate, July 3, 2016 (On DTU website)

APPLICTION FORM Innovations & challenges in Thermal Engineering (7-8th July 2016) (TEQIP-II)

1. Name:
2. Date of Birth:
3. Designation :
4. Institution:
5. Institution AICTE approved Yes / No
6. Address for correspondence :
Mobile: E-mail:
7. Qualifications with Specialization
8. Area of research:
8. Experience (in years)
Teaching Research Industry
9. Accommodation Required Yes/ No
10. DDNo. Drawn at
Declaration

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

(Signature of Applicant)

SPONSORSHIP CERTIFICATE

Dr/Mr/Mrs/Ms-----

------ is an employee of our institute and is hereby sponsored to participate in the **Faculty Development Program ICTE-2016**

Place:

Date: Signature of Head of the Institution

Introduction

In recent days, the engineering challenges that are primarily relevant to thermal engineering are national power deficit and growing demand of energy for various applications. Some specific challenges that have been identified include energy conservation and efficiency of mechanical equipment, development of sustainable energy generation and advancement of management technologies. thermal Thermal engineering is the area of concern which is required to be given due attention to attain the goal of "Make in India" and "Solar mission" initiatives of the Government of India. This programme shall be of immense value to the researchers and faculty members and pave the way for the better industry- institute interaction.

Target Participants

The programme is open to the faculty of AICTE approved educational institutions and the professionals from research organizations and Industries.

Registration

Registration form in the prescribed format approved/sponsored by competent authority should reach to the Course Coordinator on time. There is a nominal Registration fee for forparticipants from AICTE approved institutions, a DD of Rs500/- in favour of the registrar DTU payable at Delhi, should be enclosed with the application. Advance registration is Mandatory. For industry professionals, the registration fee is Rs 1000/ per person in the form of DD favouring Registrar, DTU, Delhi. List of selected participants will be displayed on University website http://dtu.ac.in/

Accommodation and Travel

Accommodation for few pre-registered delegatescan be arranged in Campus Guest house or Hostels on payment basis if available. The delegates will have to bear the expenses. TA/DA will not be paid for attending the STC. However, working lunch/tea/snacks will be provided during course.

About DTU, Delhi

Delhi Polytechnic was established in the year 1941. The institution was set up at historic Kashmere Gate campus as a follow up of the Wood and Abott Committee of 1938. The national diploma awarded by the institution was recognized as equivalent to degree level for the purposes of employment. In 1952 the college was affiliated with University of Delhi and called as Delhi College of Engineering. The department of Architecture later became the School of Planning and Architecture, now a Deemed University and Institution of National importance. The department of Arts and Sculpture became College of Arts and the departments of Chemical Technology and Textile Technology were shifted out en-block to mark beginning of the IIT Delhi. DCE was given the status of University (DTU) in the year 2009.

The Department of Mechanical Engineering

The Department Of Mechanical Engineering and Production & Industrial Engineering has seen considerable growth since its inception in 1941. The department offers UG programme in mechanical, Production & Industrial Engineering and Automobile Engineering and PG programmes on Thermal Engineering, Production Engineering, Renewable Energy Technology and Computational Design. About 50 Research scholars are presently persuing their Ph D research work. The department possesses modern laboratories equipped with latest experimental set-ups and research facilities for instrumentation, experimental stress analysis, strength of materials, fluid mechanics, IC engines, automotive engineering, robotics, heat transfer, solar energy, flexible manufacturing system, computational fluid dynamics supported by Software like view-flex, CAD-CAM etc.

The department is having many small to medium capacity bio-diesel processing units based on conventional and latest technologies. Different species of non-edible oil such as linseed, cottanseed, waste cooking oil and high FFA rice bran oil, jatropha, Karanja, mahua, neem oil etc., have been successfully converted into bio diesel. The processed biodieselhas been tested on both constant speed and variable speed engines for performance and emissions..