Recent Advances in Alternative & Renewable Energy Technologies (7-11 December 2015)

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, Dr. J.P. Kesari



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

Topics to be covered

- Waste to Energy
- Biomass and Biofuels
- Solar Photovoltaic and Solar Thermal
- Wind, Hydral and Geothermal
- Alternate cleaner fuels (CNG/LPG)
- Hydrogen & Fuel Cells
- Engine performance and emissions

Resource persons

Faculty of DTU/ IIT/NIT/CSIR 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. *http://dtu.ac.in/*

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Important Dates

- *Last date for receipt of applications:* Registration form complete in all respect may be sent to the course coordinators latest by November 10, 2015.
- Information to selected candidates, Nov 20, 2015 (On DTU website)

APPLICTION FORM Recent Advances in Alternative & Renewable Energy Technologies (December 7-11, 2015)

(TEQIP-II)
1. Name:
2. Date of Birth:
3. Designation :
4. Institution:
5. Institution AICTE approved Yes / No6. Address for correspondence :
Mobile: E-mail:
7. Qualifications with Specialization
8. Area of research:
 8. Experience (in years) TeachingResearchIndustry 9. Accommodation Required Yes/ No 10 DD NoDrawn onDrawn on
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 RAARET-15**

Place:

Signature of the Head of Institution (with Stamp)

Date:

Introduction

With the pollution levels reaching to alarmingl levels, worldover there is a quest to search for the environment energy technologies. Renewable friendly alternative technologies are potential sources of clean energy and their optimal use may lead to minimize environmental impacts, produce minimum secondary wastes prove them economically viable. Sun is the cause of all energies. The primary forms of solar energy are heat and light. Sunlight and heat are transformed and absorbed by the environment in innumerable ways. Some of these transformations result in renewable energy flows such as biomass and wind energy. Renewable energy technologies offer an excellent opportunity for mitigation of greenhouse gas emission and reducing global warming by substituting conventional energy sources.

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 or before 10th November 2015. There is no Registration fee forparticipants from AICTE approved institutions, however a DD of Rs500/- in favour of the registrar DTU payable at Delhi, has to be attached with the application which will be returned to the participants on successfull completion of the course (if not being shortlisted, it shall be returned by post). Advance registration is Mandatory. For industry professionals, the registration fee is Rs 2500/ 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 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 for all major fuel properties and also tested on both constant speed and variable speed engines for performance and emissions.