Background:
Diesel fueled compression ignition engines emit high level of NOx emission due to high localized in-cylinder temperature whereas high particulate matter/smoke emissions due to their operation with heterogeneous mixture. The energy efficiency of the engine has to be increased significantly in order to reduce CO2 emission. The diesel engine under dual fuel mode could solve the twin issues of its emission and energy efficiency. Utilization of gaseous fuels in diesel engines under dual fuel mode (diesel as pilot fuel and CNG, hydrogen (H2), etc. as main fuel) is an effective way to reduce the degree of heterogeneity resulting to less NOx and PM emissions along with benefit of fuel economy improvement. In this view, this short term course is aimed at dissemination of the latest information to the participants in order to enrich their knowledge in this emerging area.

The faculty members from IIT Delhi and experts from automotive engine manufacturer, oil and gas R&D Institution and Governmental organization will deliver lectures on the current topics including alternative fuels in Indian and World context, development of gas management system, durable performance of dual fuel engine, emission reduction mechanism with dual fuel mode concept, greenhouse gas emission reduction with dual fuel mode, impact of alternative fuels on performance, combustion and emissions characteristics of dual fuel diesel engine, and advanced technologies including PHCCI for NOx and PM reduction, pathways of sustainable energy development and CO2 mitigation options including energy efficiency improvement.

Eligibility Criteria:
Faculty members from AICTE approved Universities/Colleges with minimum educational qualification of M.Tech./M.E./M.S in Internal Combustion Engines / Thermal / Chemical / Energy / Automobile / Production /Electronics are eligible to apply this course. In addition, Faculty members who are teaching and pursuing research in IC Engines and Alternative Fuels will be given for preference. It is expected that the acquired knowledge by the participants would be helpful for their teaching, development of laboratory infrastructure, taking sponsored research projects, etc.

Registration Fee and other information for attending this course:
The application form which is given in next page shall be duly filled by the candidates with the required signature from competent authority (Dean/Director) from their university/college. A refundable caution deposit of Rs 500 (Five hundred rupees) through demand draft in favour of “Registrar, IIT Delhi”, payable at IIT Delhi must be attached along with the application. The other mode of payment including Cheque and E-payment will not be acceptable. If the selected candidate will not attend the course, the caution deposit will not be refunded to the candidates. The TA to outstation participants (maximum by AC-3 tier by shortest train route) along with applicable allowances will be provided as per the AICTE norms under the Quality Improvement Program and TA. The hostel facility will be provided for the candidates only from outside the territory of Delhi but it is subjected to availability of hostel accommodation in IIT Delhi.

Important Dates:
Last date for application submission : June 13, 2015
Declaration of Results to participants : June 16, 2015

Venue: Centre for Energy Studies, IIT Delhi
A Scanned copy of the filled application form with the demand draft shall mandatorily be e-mailed to subra@ces.iitd.ac.in and balualive2015@gmail.com on or before June 13, 2015. A hard copy of the filled application form with the demand draft should be sent to the following address.

Contact Details:
Dr. K.A. Subramanian
Associate Professor
Centre for Energy Studies
V- Block
Indian Institute of Technology Delhi
Hauz Khas, New Delhi – 110016 (India)
For further details, you may contact the course coordinator through email: subra@ces.iitd.ac.in or Ph: 09911608890.

QIP Short Term Course
on
Emerging Trends in Development of Alternative Fuelled Dual Fuel Compression Ignition Engine
(July 13 – 17, 2015)

Course Coordinator
Dr. K.A. Subramanian
Organized by
Centre for Energy Studies
Indian Institute of Technology Delhi
Hauz Khas, New Delhi – 110016
CENTRE FOR ENERGY STUDIES
Indian Institute of Technology Delhi
NEW DELHI - 110016
QIP Short Term Course
on
Emerging Trends in Development of Alternative Fuelled Dual Fuel Compression Ignition Engine
(July 13 – 17, 2015)
Application Form
(Application form should contain the following information and should be printed on A4 size paper)

Name : ....................................................
Designation : ....................................................
Department : ....................................................
Address of Institute : ....................................................
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Institute ...................... Tel.Ph. (O):
E-mail address: ......................... Mobile No.: ....................................................

Educational Background (Starting from M.E./M.Tech.):

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Experience (No. of years): ...................... Research Area: .................................
Subjects taught: ............................................................

Demand Draft details:
Demand Draft No. .................. Dated.................. Payable at IIT Delhi
Amount in Rs. ...................... drawn at ......................

Signature of applicant

It is certified that our Institute / College is AICTE approved and the above information has been verified from the office records and is found correct. We assure the faculty member will be relieved to attend the entire course period without absent.

Signature of the Head of the Organization with official seal