

Staff Development Programme

On

Use Of Alternative Fuels --- A Current Trends In Automobile Industry  
24 January - 06 February, 2011

To

From,  
Mr. Madhujit Deb  
(Programme Coordinator)  
Asst.Prof.,ME Deptt.  
NIT Agartala

**Staff Development Programme  
On  
Use Of Alternative Fuels --- A Current  
Trends In Automobile Industry  
(24 January -06 February, 2011)**

**Sponsored by**



**All India Council for Technical Education  
New Delhi**

**Organised by**



**Department of Mechanical Engineering  
National Institute of Technology,  
Agartala**

**P.O.: Barjala, Jirania, West Tripura, India.**

**Pin:799055**

**Tele- (0381)-2346630,234636 Fax:: (0381)-2346360**

**Website: www.nitagartala.in**

**Scope of the Course:**

Comprehensive information on the recent technological advances relating to the better utilization of alternative fuels for improved performance, combustion and emission characteristics of internal combustion engines

**Learning Objectives :**

- To know about the technical aspects of performance and emission of conventional fuelled IC engines.
- To learn the cutting edge technologies for effective utilization of alternative fuels in IC engines.
- To identify the scope of undertaking research work for their career growth.

**On successful completion of the course, the participants will be able to:**

- Develop technologies in the emerging areas.
- Penetrate the acquired knowledge to their students.
- Setup research facilities to study the characteristics of fuels for IC engines.
- Explore new and renewable fuels for IC engines.

**Contents of the Course:**

- Alternative fuels & it's prospects.
- Need of alternative fuels and it's context in the modern era.
- Emerging Fuel options for automobiles..
- Combustion characteristics of internal combustion engines.
- Fuel efficient engine technologies.
- Development of injection system to IC engines for use of alternative fuels.
- Gasoline direct injection.
- Dual fuel engine.
- Modeling and simulation of IC Engine processes.
- First and second generation of bio-fuels for IC engines.
- Hydrogen and other Gaseous fuelled engines.
- Future Scope of work.

## Experts/Speakers

Dr. M.R. Nouni (Scientist-F, MNRE, New Delhi)  
Prof. Probir .Kumar Bose ( Director , NIT Agartala)  
Prof. Sreedhara Sheshadri ( Asso. Prof. , ME Deptt., IIT Bombay)  
Dr. R.T Naik (Scientific Officer, IISC Bangalore)  
Prof. Prasun Chakrobarty(Asso. Prof. , ME Deptt. , NIT Agartala)  
Prof. Swapan Bahumik (Asso. Prof. , ME Deptt. , NIT Agartala)  
Prof. Ajoy Kumar Das (Asso. Prof. , ME Deptt. , NIT Agartala)  
Prof. Rahul Banerjee ,( Assistant Prof., ME Deptt. , NIT Agartala)  
Prof. Swarup Pal ( Assistant Prof., PE Deptt. , NIT Agartala)  
Prof. Pritam Das ( Assistant Prof., PE Deptt. , NIT Agartala)

## Eligibility

Faculty Members of AICTE-approved engineering colleges (Central/State Government, autonomous, private colleges/universities and deemed-to-be universities) are eligible for participation.

## Registration

Through **e-mail /speed-post/fax on or before 23<sup>rd</sup> January, 2011 (5.00pm)** on first-come first-serve basis. Maximum participants are limited to **50(fifty)**. The registration form can also be downloaded from our website <http://www.nitagartala.in>. There is no registration fee for the faculties/teachers from AICTE approved colleges/Institutions . TA will be provided to all outstation participants as per AICTE norm i.e. AC 3- tire.

## Course Fee

Course, sponsored by AICTE, fees not to be paid by participants from only AICTE Approved institution

## NIT AGARTALA: Venue

The **National Institute of Technology Agartala** is one of the 20 (twenty) National Level Technical Institutes setup by the Govt. of India. The Institute's mission is "To help to improve the economic development of the country particularly the North-East states and also the public systems, through pursuit of excellence in technical education, research, consultancy and training".

The institute is offering continuing education at undergraduate & post-graduate levels in the field of engineering courses like Mechanical, Civil, Electrical, Computer Science & Engineering, Electronics & Communication Engineering etc. and post graduate courses in Thermal Science & Engineering, Structural Engineering & Power Electronics & Drives under Mechanical, Civil & Electrical Engineering Department respectively. The institute is intended to cater the needs of the technical manpower in this region in particular and in India as a whole.

## Location

National Institute of Technology, Agartala is situated at Jirania, West Tripura nearby National Highway NH-44, at 22 km distance from the capital Agartala and 5 kms from Nearest railway station Jirania.. It is connected by road and railways to Guwahati, Assam. The capital Agartala is also well conncted by Air, roadways and through rails to the rest part of the country.

## Correspondence

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Fax:: (0381)-2346360  
Mobile: 09436582714  
E-mail: madhujit\_deb@rediffmail.com  
[madhujit.deb@gmail.com](mailto:madhujit.deb@gmail.com)

## Accommodation/Transport

Hotels/institute guesthouse accommodation will be arranged as per availability on first come first serve basis. Transport will be arranged between railway/bus station, hotels, and workshop venue by NIT Agartala.

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Department of Mechanical Engineering  
National Institute of Technology, Agartala

## REGISTRATION FORM

Name: \_\_\_\_\_

Designation: \_\_\_\_\_

Affiliation: \_\_\_\_\_

Address for correspondence: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Email: \_\_\_\_\_

Phone (with STD Code): \_\_\_\_\_

Cell: \_\_\_\_\_

Fax: \_\_\_\_\_

Accommodation required: Yes/No

Signature of participant with Date

Recommendation of  
Head of Institute with seal