



ADHI
COLLEGE OF ENGINEERING & TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

GUEST LECTURE

On

ENERGY EFFICIENCY AND GREEN ENERGY TECHNOLOGIES

Of late, many research works emphasize on the energy crisis existing in most of the countries and also, effect of CO₂ emission leading to global warming. For creating awareness and gaining certain exposure on this issue, a guest lecture entitled ENERGY EFFICIENT AND GREEN ENERGY TECHNOLOGIES was arranged on 06.01.2017 at 1.30 P.M. in Conference Hall. The eminent speaker, Dr. P. MUTHUKUMAR ME, Ph.D, Professor, Department of Mechanical Engineering, Indian Institute of Technology, Guwahati, was invited to address the gathering on the issue.

Dr. A. Devaraju, Principal, introduced the speaker, Dr. P. Muthukumar, and shared his experience about the importance of Energy and Green Energy.

ABOUT THE GUEST

Dr. P. Muthukumar, received his Ph.D degree from IIT Madras in 2004. He has wide knowledge in Energy areas and he published 55 journal papers, presented 71 International conferences. He obtained 3 patents and has filed 3 more patents on his research works. In addition, he has been accomplishing many funded projects sanctioned for the cost of about Rs. 15 Crores, under different funding agencies like, DST, MNRE and AICTE. He received many awards namely, Young Scientist from DST, Young Engineer from Institute of Engineers. He is a reviewer for about 25 SCI Journals and also, one of the evaluating committee members for funded projects submitted in DST, MNRE and CSIR. He shared his knowledge and experience in the field of Green Energy and Sustainability.

ABOUT THE PROGRAM

Our honourable chief guest Dr. P. Muthukumar thanked for arranging this wonderful meet and created an awareness and opportunities on the energy areas. Then, he explained about the various promotion activities from the government of India for education and research. He explained about the environment, various internship programmes offered in IITs. Further, he has motivated all the students to take the GATE exams seriously in order to pursue their higher education in the national premiere technical institutions and also, importance of GATE score for job opportunities in various government/private sectors.

He delivered the lecture in the following topics.

1. Importance of energy in basic human needs
2. Annual energy consumption in Global as well as India
3. Carbon Emission and their effects
4. Utilisation of renewable and non renewable resources
5. Energy savings with less emission.
6. Usage of future fuel as hydrogen
7. Importance of metal hydride machines
8. Characteristics of fuel and its hazardous
9. Consumption of non renewable energy in India
10. Expenses for importing fuel in India
11. Power production in India
12. How hydrogen act as a energy carrier
13. Importance of fossil fuels
14. Purification of water by hydrogen
15. Improving the percentage of using hydrogen as a fuel
16. Heat transfer through radiation in burner
17. Improving the efficiency of conventional burner
18. Utilisation of hydrogen in vehicle safely

At the end of the session, all the queries raised by the participants were addressed by the eminent speaker with great clarity.



1. Our Principal introducing the eminent speaker, Dr. P. Muthukumar



2. Eminent speaker addressing the gathering



3. Queries addressed by the eminent speaker