

SRI ADITYA ENGINEERING COLLEGE

(Approved by AICTE & Affiliated to JNTUK, Kakinada)
Aditya Nagar, ADB Road, Surampalem – 533437

Department of Mechanical Engineering

Title of the Workshop : ADVANCED IC ENGINES

Resource Persons : Prof. V. PANDU RANGARAO
IIT Bhubaneswar

Date(s) of Workshop : 22-10-2013 to 24-10-2013

Aim of Workshop : To learn recent developments in IC engines
Learn the applications
Learn latest trends in designing
Learn how to improve performance of engine

An **internal combustion engine (ICE)** is a heat engine where the combustion of a fuel occurs with an oxidizer (usually air) in a combustion chamber that is an integral part of the working fluid flow circuit. In an internal combustion engine, the expansion of the high-temperature and high-pressure gases produced by combustion applies direct force to some component of the engine. The force is applied typically to pistons, turbine blades, rotor or a nozzle. This force moves the component over a distance, transforming chemical energy into useful mechanical energy.

The term *internal combustion engine* usually refers to an engine in which combustion is intermittent, such as the more familiar four-stroke and two-stroke piston engines, along with variants, such as the six-stroke piston engine and the Wankel rotary engine. A second class of internal combustion engines use continuous combustion: gas turbines, jet engines and most rocket engines, each of which are internal combustion engines on the same principle as previously described.

Typically an ICE is fed with fossil fuels like natural gas or petroleum products such as gasoline, diesel fuel or fuel oil. There is a growing usage of renewable fuels like biodiesel for compression ignition engines and bioethanol or methanol for spark ignition engines. Hydrogen is sometimes used, and can be obtained from either fossil fuels or renewable energy.

Program Schedule:

Date **22-10-2013**

10:00-10:20 Intro to Workshop

10:20-11:10 Getting started with Advanced IC Engines

11:10-11:30	Tea break
11:30-12:20	Basics of IC engines
12:20-1:10	Heat transfer applications revision
1:10-2:00	Lunch
2:00-4:40	Hands-On

Date 23-10-2013

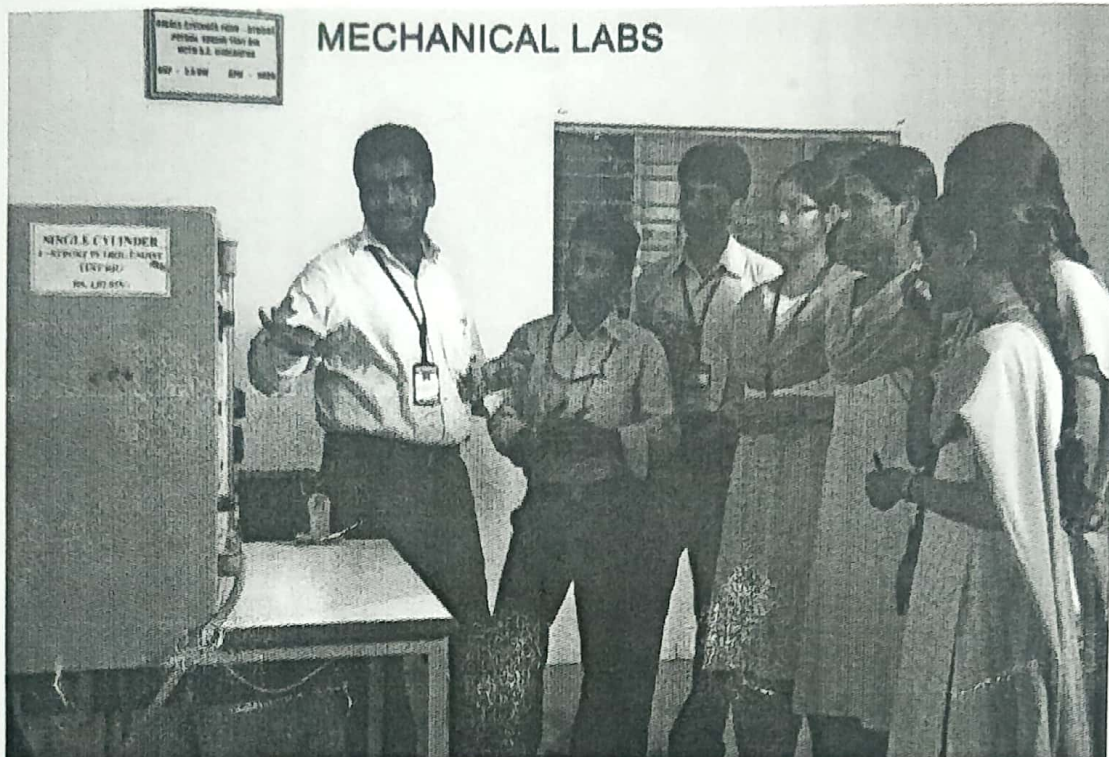
10:00-10:20	Revision of work
10:20-11:10	Design Technologies
11:10-11:30	Tea break
11:30-1:10	Latest developments in IC engines
1:10-2:00	Lunch
2:00-4:40	Hands-On

Date 24-10-2013

9:30-10:30	Design of equipment
10:20-11:10	Materials used
11:10-11:30	Tea break
11:30-12:20	Video demonstration
12:20-1:00	Applications
1:00-2:00	Lunch
2:00-4:40	Overview

No. of Participants : 78

PROGRAM PHOTOS



Overall Assessment : Good

Event Coordinators :

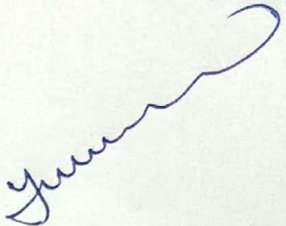
1. Mr. SP. PRABHAKAR

Assistant Professor, Dept. of ME

2. Ms. D. SAI HARITHA

Assistant Professor, Dept. of ME


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