



**KARUNYA INSTITUTE OF TECHNOLOGY AND SCIENCES**  
(Declared as Deemed to be University under Sec. 3 of the UGC Act 1956)  
A CHRISTIAN MINORITY RESIDENTIAL INSTITUTION  
AICTE Approved & NAAC Accredited  
Karunya Nagar, Coimbatore - 641 114, Tamil Nadu, India

## **DEPARTMENT OF MECHANICAL ENGINEERING**

### **INTERNAL COMBUSTION ENGINES LAB**

The purpose of this laboratory is to familiarize students with working of different Internal combustion Engines and to estimate the performance of single, twin cylinder diesel engines.

#### **COURSE OBJECTIVES:**

To impart knowledge on

1. Performance of different IC engines like air cooled, water cooled, low speed, single and twin cylinder engines.

#### **COURSE OUTCOMES:**

After completing the course the students will be able to

1. Demonstrate the engine performance tests.
2. Estimate the different performance parameters of IC engines.

#### **Facilities available for regular class work, project, research and consultancy**

- |  |                                       |
|--|---------------------------------------|
| ✓ Computerized IC Engine test Rig          | ✓ Tachometer                          |
| ✓ Single Cylinder Diesel Engine            | ✓ Digital Pressure Indicator          |
| ✓ Retardation Diesel Engine Test Rig       | ✓ Digital Weighing Machine            |
| ✓ Variable Compression Ratio Petrol Engine | ✓ Pensky Martin flash point Equipment |

#### **Industry matching equipment's**

(if any)

#### **Major equipment's**



**Fig. 1 Single Cylinder Diesel Engine**



**Fig. 2 Computerized IC Engine Test Rig**

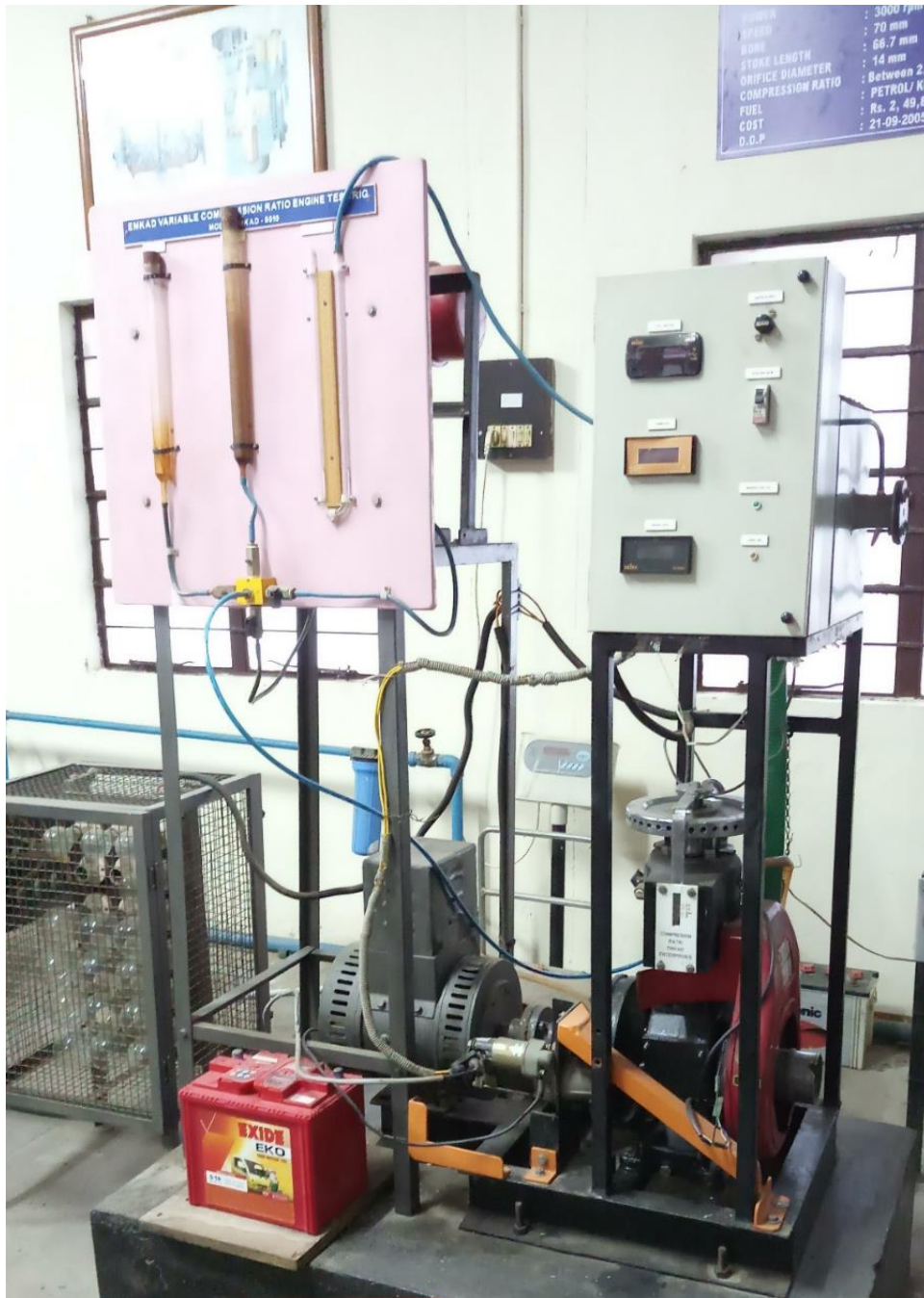




**Fig. 3 Retardation Diesel Engine Test Rig**



**Fig. 4 Pensky Marten Flash Point Apparatus**



**Fig. 5 Variable Compression Ratio Petrol Engine**

Lab in charge:

Dr. Jefferson Raja Bose B, M.E., Ph.D., Assistant Professor



Lab technicians:

Mr. G. Lijo, I.T.I.,D.M.E, Senior Mechanic

