





# University of Mosul College of engineering Mechanical department

## Thermal Machines

## Laboratory

#### **Laboratory Aims:**

The laboratory's work is summarized in conducting various experiments on the subject of internal combustion engines (petroleum and diesel) for the department's students and on topics related to those engines. In addition, the project students in the fourth stage, as well as graduate students, benefited from laboratory equipment and conducted their research experiments on it.

#### <u>Apparatus:</u>

It contains several apparatus for doing students experiments and other for demonstration only. The most important apparatus are:

- 1. Modular test stand for single cylinder engines
- 2. Four strokes variable compression ratio engine
- 3. Four stroke petrol engine (spark engine)
- 4. Four strokes diesel engine
- 5. Tow stroke patrol engine (spark engine)
- 6. Exhaust gas analyzer with No<sub>x</sub> snsor
- 7. Stroboscope meter

#### **Experiments:**

- 1. Study the effect of the engine speed on the performance and emissions in spark ignition engine
- 2. Study the effect of the engine speed on the performance and emissions in compression ignition engine



1. ...



### **Lab workers staff:**

No	. name	Functional tasks	Certificate
.1	Nooraldeen Saleh	Laboratory	Master's degree in
	KHidhir Al Eanzi	Supervisor	Mechanical/Fluids

			and Thermal Engineering
.2	Waad Thanoon	Laboratory Technical Officer	Bachelor of Mechanical Engineering, Laboratory Technical Officer