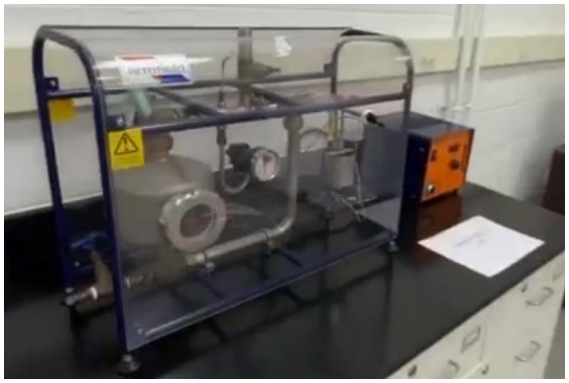
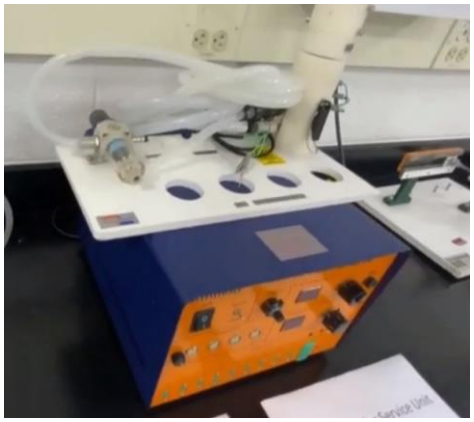
Thermo-fluids Lab 42-C11



TH3 – Saturation Pressure
Demonstrates how the temperature of water behaves at its boiling point with variation in the absolute pressure.



Linear Heat Conduction Experiment

Measures temperature changes along different metallic specimens for heat conduction and thermal conductivity calculations.

HT14-Combined Convection and Radiation

Demonstrate the laws of radiant heat transfer and radiant heat exchange using light radiation to complement the heat demonstrations, where the use of thermal radiation would be impractical.

F1-18 Energy Losses in Pipes

The unit consists of a vertical test pipe on the side of the equipment which can be fed directly from the hydraulics bench supply or, alternatively, from the integral constant head tank above.

H30 Pressure Measurement Bench

Demonstrates Bernoulli’s theory that height is the only factor changes pressure.

FLOW MEASUREMENT METHODS

This apparatus include a Venturi meter, an orifice plate meter and a rotameter that demonstrates typical methods of measuring the flow of an incompressible fluid and shows applications of Bernoulli's equation

F1-23- Free and Forced Vortex
This equipment is designed to produce and measure the characteristics of free and forced vortices using a hydraulics bench.

Wind Tunnel

Demonstrates how the pressure profile on an airfoil changes at different angles. It also demonstrates the aerodynamic properties that allow a plane to fly.