

Name of the Lab:

UNITS OPERATION LAB

Location:

L1 G-Block

Lab Facilities (Experimental set-ups and Equipment):

Experimental Setup of

1. Fixed and fluidized bed.
2. Gas/Liquid Absorption.
3. Falling Film evaporator.
4. Batch distillation column.
5. Fluid mixing apparatus.
6. Filtration
7. Liquid-Liquid extraction
8. Sieving.
9. Tray Drier



Name of the Lab:

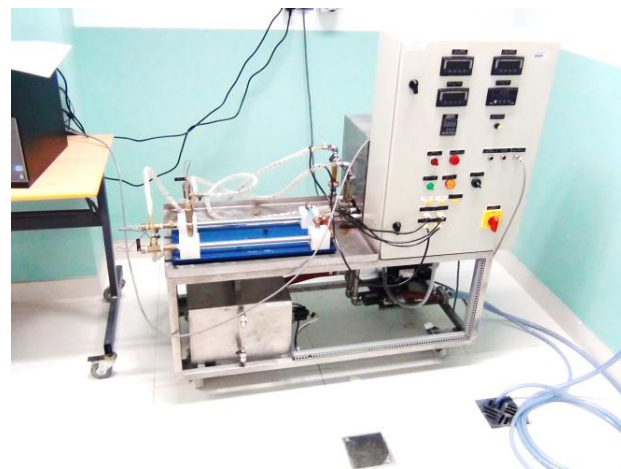
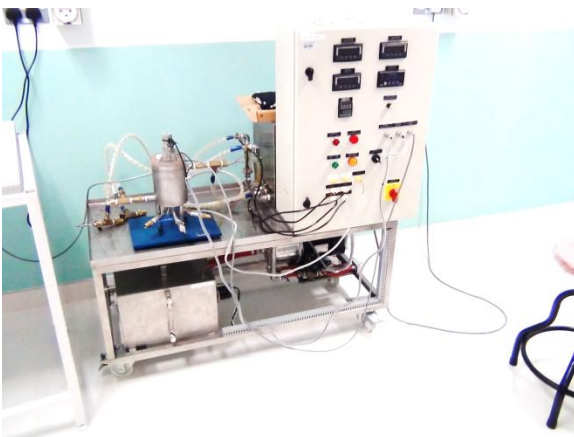
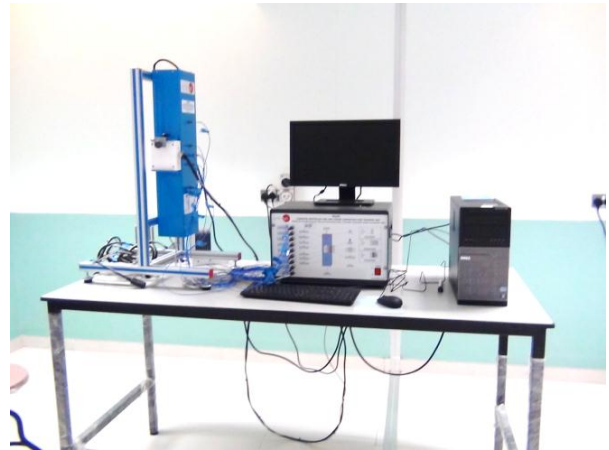
Heat transfer lab

Location:

L1 G-Block

Lab Facilities (Experimental set-ups and equipment):

1. Thermal Radiation unit.
2. Convection heat transfer unit.
3. Boiling heat transfer unit.
4. Heat exchanger (Jacketed vessel).
5. Heat exchanger (Tubular).
6. Heat exchanger (Shell and Tube).



Name of the Lab:

Reaction lab

Location:

L1 G-Block

Lab Facilities (Experimental set-ups and Equipment):

Experimental Setup of

1. Batch reactor
2. Continuous stirred tank reactor
3. Stirred tank reactors in series
4. Tubular reactor

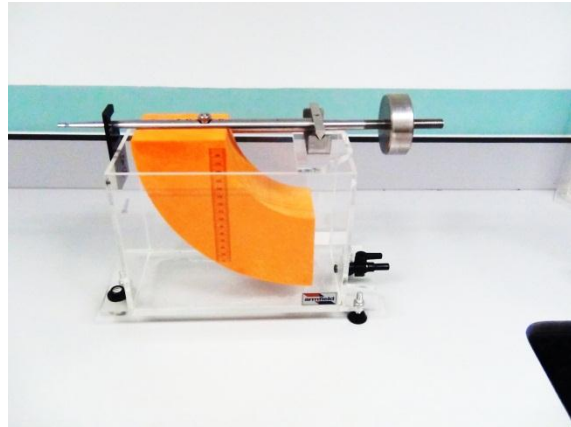


Name of the Lab:

Fluid Mechanics lab

Location:

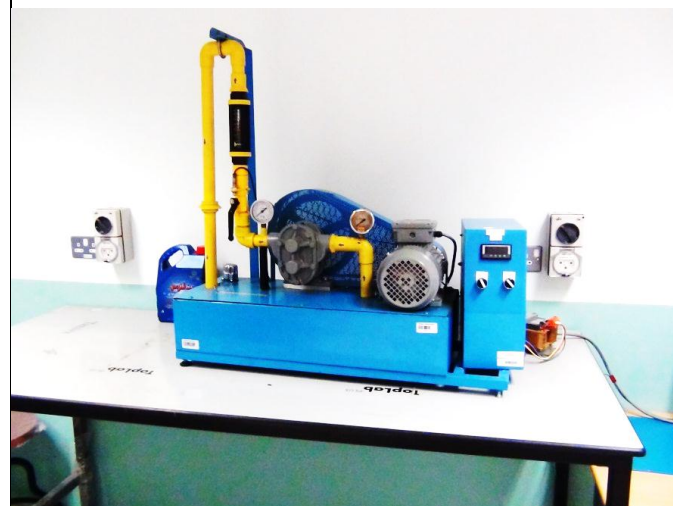
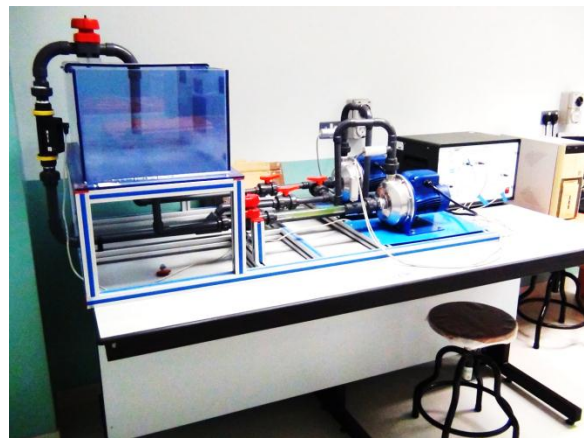
L1 G-Block



Lab Facilities (Experimental set-ups and Equipment):

Experimental Setup of

1. Venturi Tube as a flow rate measurer
2. Coefficient of Friction in Pipes
3. Drag Coefficient of a sphere
4. Velocity Profile in the Test Pipe
5. Head Losses in a pipe joints
6. The Performance Characteristics of Centrifugal Pumps
7. The Performance Characteristics of Gear Pumps



Name of the Lab:

Process Control lab

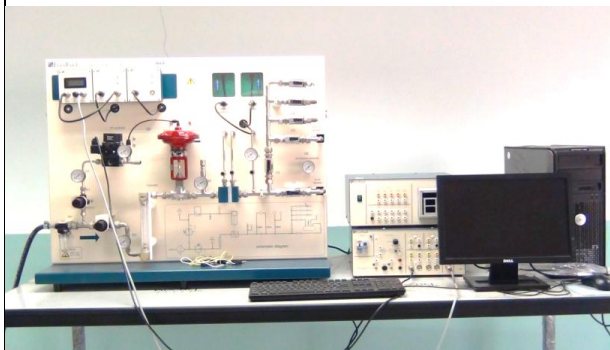
Location:

L1 G-Block

Lab Facilities (Experimental set-ups and Equipment):

Experimental Setup of

1. Valve Characteristics
2. Proportional and Integral Control in a pH Control Rig
3. Pressure Control
4. Flow control
5. Flow control with a PID controller
6. PID Settings for Level Control System
7. Level automatic control with outflow
8. Temperature Control: The proportional controller



Name of the Lab:

Chemistry lab

Location:

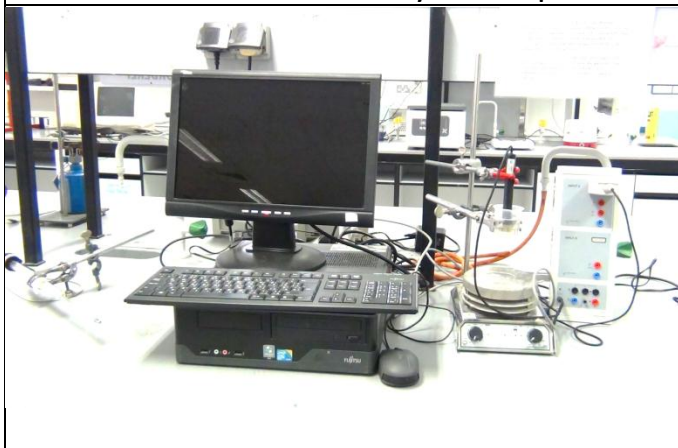
L1 G-Block



Lab Facilities (Experimental set-ups and Equipment):

Experimental Setup of

1. Verification of the Ideal Gas Law
2. Acid Base Titration
3. Osmotic Pressure Experiment
4. Fractional Distillation Endothermic and Exothermic Reactions
5. Determine Ion Concentration in a Solution
6. Determine Amount of Gaseous Oxygen Dissolved Chromatography Column
7. Separation by Extraction
8. Chemical Equilibrium
9. Copper Electroplating
10. Verification of the Nernst Equation
11. Reactions and Kinetics
12. Interfacial Chemistry: Contact Angle, Surface Tension
13. Chemical Equilibrium: Evaporative Equilibrium
14. Determining Activation Parameters
15. Determination Heat of Neutralization (Liquid Calorimeter)
16. Interfacial Chemistry: Adsorption Isotherm



Name of the Lab:

Environmental lab

Location:

G1 G-Block

Lab Facilities (Experimental set-ups and Equipment):

Experimental Setup of

1. Batch sedimentation studies
2. Deep bed filtration
3. Study of continuous sedimentation of solids
4. Study on Determination of Volumetric Mass Transfer Coefficient in Stirred Vessels

