

# FLOW LABORATORY



Faculty In charge

Dr.Srinivasan S, Professor

Technical Staff

Mr.Jagadheesh A,

Professional Assistant -I



## Flow Measurement and Control Test Rig.

Rs. 34,73,241/-

Three test rigs - 3" water line, 1" water line and 1" air line

- **Available Instruments:**

- Variable Head Type flow meter (orifice), Turbine flow meter, Electromagnetic flow meter, Coriolis mass flow meter, Vortex flow meter.
- Pressure and temperature transmitters, flow transmitters and pneumatically actuated control valves with positioner.
- Transmitters are interfaced to Distributed Control System (Yokogawa DCS CENTUMCS 3000) through suitable input-output modules as well as to the Multi-loop PID Controllers (US 1000).



- UGC-SAP-DRS-I Project

- 'Flow Measurement and Control Test Rig'

- comprises of three test rig: 3" water line, 1" water line and 1" air line
- The sensors, flow meters and control valve are all interfaced with the Distributed Control System (Yokogawa DCS-) and through local controllers
- Students can execute their control algorithm either through the DCS or through the local controllers
- can be used for
  - flow measurement and control,
  - calibration of flow meters using gravitational flow and forced flow,
  - dual phase (air and water) flow measurement and control.