PROCESS CONTROL LABORATORY
(DST - FIST SPONSORED LAB)

Faculty Incharge
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Technical Staff
Mr. A. MATHANKUMAR
The Department of Instrumentation Engineering, MIT Campus has a well-equipped Process control laboratory which is equipped with state of art facilities to understand the concept of modeling, optimization and control of processes which mimic the industrial scenario.

The students are trained to design conventional (PID, On-Off), advanced controllers like MPC, IMC and the designed controllers will be implemented on the real time test rigs and the performance of different controllers are analyzed for their optimal performance.

The test rigs are equipped with field devices which are enabled with HART and Foundation field bus protocols which are popularly used in process industries.

The students are also explored to understand different process symbols, Plot plans, Process flow Diagrams, Piping and Instrumentation Diagrams and loop diagrams with industrial standards.

The procedure for designing complex control schemes like cascade, Feed forward and adaptive controllers will be taught and they will be implemented on real time non-linear process test rigs.
**PROCESS CONTROL LABORATORY**

**Distillation Column**
- Date of Purchase: 14.12.2015
- Amount: Rs. 50,64,430
- Funding Agency: DST- FIST

**Compact Flow Unit**
- Date of Purchase: 27.07.1989
- Amount: Rs. 57,901
- Funding Agency: GTZ, Germany

**pH Meter & Bio - Reactor**
- Date of Purchase: 20.08.2015 & 26.02.2013
- Amount: Rs.14,98,000 & Rs. 1,77,450
- Funding Agency: DST-FIST & CPDE

**Four tank System**
- Date of Purchase: 11.12.2006
- Amount: Rs. 3, 96,732
- Funding Agency: DST – Fast Track Scheme

**Process Control Training Plant**
- Date of Purchase: 14.08.1984
- Amount: Rs.10,53,351
- Funding Agency: GTZ, Germany

**Temperature Control System**
- Date of Purchase: 25.07.2016
- Amount: Rs.8,10,000
- Funding Agency: Anna University

**Training Plant - Control Panel**
- Date of Purchase: 14.08.1984
- Amount: Rs. 9,85,842
- Funding Agency: GTZ, Germany

**Conical Tank System**
- Date of Purchase: 01.02.2006
- Amount: Rs. 1,56,613
- Funding Agency: Anna University (CPDE)
Pressure Control Station
- Date of Purchase: 20.06.2016
- Amount: Rs. 6,94,938
- Funding Agency: Anna University

Level and Flow Control Station
- Date of Purchase: 04.08.2016
- Amount: Rs. 8,29,953
- Funding Agency: Anna University

Level and Flow Control Station
- Date of Purchase: 16.03.2006
- Amount: Rs. 5,62,831
- Funding Agency: DST-FIST

Test Set-up with Smart Field Devices
- Date of Purchase: 16.03.2006
- Amount: Rs. 5,62,831
- Funding Agency: DST-FIST

pH Control Test Rig
- Date of Purchase: 16.03.2006
- Amount: Rs. 5,62,831
- Funding Agency: DST-FIST

Three Tank level Measurement System
- Date of Purchase: 05.10.2005
- Amount: Rs. 1,99,803
- Funding Agency: UGC grant

Spherical Tank
- Date of Purchase: 06.10.2008
- Amount: Rs. 1,53,400
- Funding Agency: DST-FAST TRACK

Three Tank Hybrid System
- Date of Purchase: 09.03.2010
- Amount: Rs. 7,49,595
- Funding Agency: UGC-MRP