



Engineering Staff College of India  
Autonomous Organ of The Institution of Engineers (India)

Old Bombay Road, Gachi Bowli, Hyderabad – 500 032. TS, India



## POWER & ENERGY DIVISION



*Continuing Professional Development Programme on*

# Control & Instrumentation Including Advances in Power Plant Applications

21 - 23 February, 2017



(An ISO 9001:2008 Certified, AICTE & CEA Recognized Institution)

**Centre for Promotion of Professional Excellence**

## **INTRODUCTION**

Control and Instrumentation is one of the most important operational activities in industrial sector, particularly in Power and Process Industry where uninterrupted operation is an essential requirement. In power plants, control systems have to cater to specific challenges such as generation, distribution and consumption having to be simultaneous and matching and power generating units having to alter their electric power generation output as per load demand variations in a speedy and highly responsive manner, etc... Process automation plays a vital role in controlling the process parameters like temperature, pressure, liquid level, flow rate, voltage, current, frequency etc., and optimizing the power output from operating station. This training program takes the participants through various basic and advanced control concepts used in power plants.

## **OBJECTIVE**

To acquaint the power plant professionals with theory and working principles of different types of instruments used in the power plant and their applications.

To acquaint the engineers working in C&I areas with advanced technologies in C&I with relative process / plant behaviors

## **COURSE COVERAGE**

- General Description of Power Plant Instrumentation and Controls and their layout details
- Working Principles of Instruments
- Temperature/Flow/Level and Pressure measurements
- Control valves and actuators
- Programmable Logic Controllers (PLC) & their Applications
- Introduction to Distributed Digital Control System Hardware and Software Configuration
- Advanced Technologies in C&I
- On-Line Analytical Instruments & Vibration Analysis
- Various Protections and Interlocks
- Automatic Control Loops etc.

## **METHODOLOGY**

The programme will be conducted in an interactive environment providing greater scope for discussions. Emphasis will be on a highly participative style of learning. The classrooms are equipped with latest audio-visual aids for better learning process.

## **FACULTY**

Apart from core internal faculty, experts from industry, consulting firms, government organisations, academic and research institutions etc. will share the sessions.

## **TARGET PARTICIPANTS**

Power Engineers and Managers from Power Utilities, CPPs, Generating Companies, Independent Power Projects associated with Planning, Design, Construction, Operation & Maintenance, System Operation, Manufacturing Industries all Process Industries, Academic and Consultancy Firms etc.

## **PROGRAMME VENUE, DATES & TIMINGS**

Engineering Staff College of India (ESCI) Campus, Old Bombay Road, Gachi Bowli, Hyderabad - 500032, Telangana, India.

### **DATES**

**21 – 23 February, 2017**

### **TIMINGS**

On the first day registration will commence at 0900 Hrs. On all other days the programme timings will be from 0945 to 1715 hrs with breaks in between for tea and lunch.

### **COURSE DIRECTOR**

**A Chandra Mohana Rao**

Head I/c & Sr. Faculty - Power & Energy Division, ESCI

### **COURSE ADVISOR**

**B Prahlad**

Former Dy. Chief Executive, Nuclear Fuel Complex, DAE

### **COURSE FEE**

**Residential Fee** is Rs.15,000/- per participant. This fee includes course material, course kit, and twin-sharing / single AC accommodation as per availability, Breakfast, Lunch, Dinner, Tea / Coffee and Snacks during the actual days of training programme.

### **DISCOUNTS**

**Non-Residential Fee:** 10% discount on course fee is allowed for non-residential participants.

**Group Discount:** 10% discount for three or more participants if sponsored by the same organization.

**(All discounts are applicable only if fee is received at ESCI a week before the commencement of the programme)**

**Service Tax @ 15%** is to be paid extra over and above the training fee. ESCI's **Service Tax Registration No** AAATT3439QST008 (under commercial training or coaching services – clause 65(105) (ZC) of Finance act – 1994). **PAN Card No.** AAATT3439Q;

The course fee is to be paid in favour of “**IE (I) – ENGINEERING STAFF COLLEGE OF INDIA**” in the form of demand draft payable at Hyderabad.

Alternatively the payment may be made by **Electronic Fund Transfer (EFT) to ESCI – SB A/c No. 10007111201** with The SBI, PBB Rajbhavan Road Branch, Khairatabad, Hyderabad – 500 004 by **NEFT / RTGS / IFSC Code No: SBIN 0004159 – MICR No: 500002075**. While using EFT method of payment, please ensure to communicate us your company name, ESCI invoice reference and programme title.

Online registration is available on ESCI website. To register, manually please send your nominations (**10 days** prior to date of commencement of the programme) giving details of name, designation, contact address, email address, mobile number,

telephone and fax number of the participant along with the details of mode of payment of fee, addressed to:

**Head, Power & Energy Division**

Engineering Staff College of India

Gachi Bowli, Hyderabad – 500 032

Phone: 040 – 6555 3371 / 3370/ 3372; 040-6630 4100, Fax: 040 - 23000336

Email:pe.esci@gmail.com / pe@escihyd.org; Website: www.escihyd.org

**CERTIFICATE:** A certificate of participation will be awarded to each participant on conclusion of the programme.

**GENERAL INSTRUCTIONS**

- ESCI encourages participants to present case studies from their respective organizations.
- For the convenience of the outstation participants ESCI will facilitate pickup and drop from Airport / Railway Station / Bus Stations, if travel plans are received at least 3 days in advance along with mobile number by fax or email. The charges shall be paid by the participants directly to the cab driver.
- ESCI provides complimentary accommodation to participants a day prior to the commencement and after the conclusion of the programme. (Check in at 12:00 hrs a day prior to the commencement & check out at 12:00 hrs a day after completion of the programme)
- Overstay charges of @ Rs.990/- per day / per head including hospitality (Bed Tea / Coffee to Dinner) will be charged.
- Well developed Information Centre and Internet facilities are available to the participants free of cost.