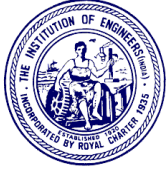




Engineering Staff College of India

Autonomous Organ of The Institution of Engineers (India)



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

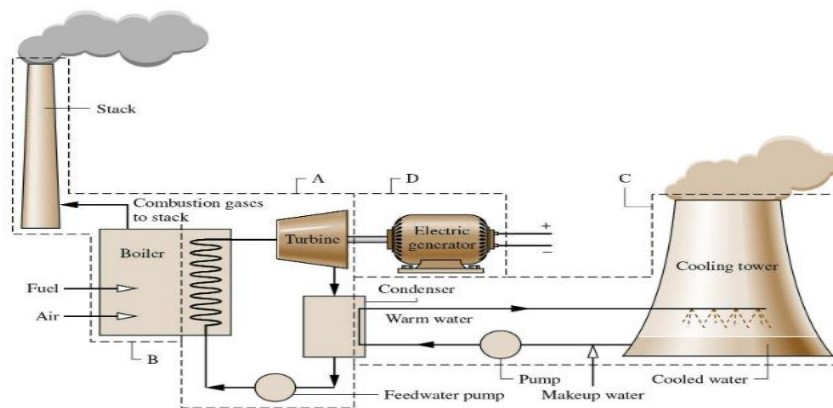
POWER & ENERGY DIVISION

Classroom Continuing Professional Development Programme on

Power Plant Chemistry for Chemists and Operation Engineers

14 - 16 July, 2026

at ESCI, Hyderabad



(An IMS Certified (ISO 9001:2015 QMS, ISO 14000:2015 Env'tl. Mgmt., ISO 45001:2018 (OH&SM), ISO 50001:2018 EnM), AICTE & CEA Recognized Institution)

Centre for Promotion of Professional Excellence

INTRODUCTION

Water is one of the most vital life supporting component of this planet without which there is no life on the earth. Water also constitutes as an equally vital input for industry particularly in power generation and process industry. In thermal power plants, which are the major water consumers of industrial sector, water acts as a heat-carrying medium, which extracts heat from burning coal flame and rotates turbine to generate electricity. In the process industry, water is one of the most important inputs for almost all chemical processes.

The oceans, which cover major part of surface, hold water about 96.5 percent of all Earth's water. Though water is the most abundantly available in oceans, fresh water is very scarce, as it constitutes only 2 - 3% total water, which is fed through rains. Rapid industrialization caused indiscriminate usage of fresh water resulting severe scarcity of fresh water for new industries and even for human consumption. The per-capita water availability is declining significantly. As per the UN estimate, water scarcity already affects every continent, and around 1.2 billion people, or almost one-fifth of the world's population, live in areas of physical water scarcity.

As power plants and process industry use a large portion of fresh water, there is an urgent need for reducing indiscriminate usage of water in these industries. Power plants use water for various purposes such as boiler feed water, cooling water, ash disposal, fire water, dust suppression, flue gas treatment etc.. Government authorities stipulate new regulations to reduce specific water consumption in power plants and process industry, and water conservation, therefore, assumes much greater importance. This program takes participants through the new regulations on water consumption and means of reducing water consumption in various areas of water use in power plants and process industry with case studies

OBJECTIVE

To sensitize participants with impending danger of water scarcity, importance of usage of water for different purposes, new regulations of water use, and methods of water conservation in power plants and process industry

COURSE COVERAGE

- Overview of water scenario and importance of chemistry in Power Plants including importance of corrosion
- Area of water use in power plants and process industry such as
 - a) Boiler Feed water, b) Cooling Water, c) Ash disposal water
 - d) Fire water, e) Auxiliary water, f) Domestic / potable water - Case studies.
- Water Chemistry Guidelines for Boiler water Systems
- Water Chemistry guide lines for Super Critical Boilers
- New regulations of water use
- Importance and methods of water conservation in the above areas.
- Case Studies of Water Chemistry
- Water chemistry- Online measuring instruments
- Operation & Best Practices in O&M of Water Chemistry

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 provided with latest audio – visual teaching aids. The ambience in the campus and classrooms facilitate in effective learning by participants.

FACULTY

Apart from Core Internal Faculty, Consulting Firms, Government Organisations, Manufacturing, Academic and Research Institutions etc. will share the sessions.

TARGET PARTICIPANTS

The course addresses the need of Power Plant Chemists, Operation & Maintenance Engineers, Consultants, Technical Project Managers and Engineers of Process Industry, Chemists & Operators

PROGRAMME VENUE, DATES & TIMINGS

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

DATES

14 - 16 July, 2026

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.

ACCOMMODATION

Participants will be accommodated in our Executive Hostel located within ESCI Campus. The accommodation will be on twin sharing basis.

COURSE DIRECTOR

Dr. V. Vidyasagar

Sr. Faculty - Power & Energy Division, ESCI
(Mob: 9421801203)

COURSE FEE

Residential Fee is Rs.18,000/- per participant. Residential fee includes Course Material, Course Kit, and Twin-sharing / Single AC accommodation as per availability, Breakfast, Lunch, Dinner, Tea / Coffee and Snacks.

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)

GST @18% (as applicable) is to be paid extra over and above the training fee. ESCI's **GST No. 36AAATT3439Q1ZV, 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 – Current A/c No. 33705165550** with The SBI, Manikonda Branch, Gachi Bowli, Hyderabad – 500 032 by **NEFT / RTGS / IFSC Code No: SBIN0011076 – MICR No: 500002107**. 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:

Power & Energy Division

Engineering Staff College of India

Gachi Bowli, Hyderabad – 500 032

Phone: 9885372277 / 7287860384

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 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.1120/- per day / per head, (Food will be charged extra).
- Well developed Information Centre and Internet facilities are available to the participants free of cost.