



Engineering Staff College of India

Autonomous Organ of The Institution of Engineers (India)

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



ENVIRONMENT MANAGEMENT DIVISION

Continuing Professional Development Programme on
**Design, Operation and Maintenance of
Membrane based Water and Waste Water Treatment
for Zero Discharge Compliance**

18 – 20 September, 2017



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

Centre for Promotion of Professional Excellence

INTRODUCTION:

Used in drinking water for many years, membranes are being used increasingly in Waste Water Treatment as well. Membrane based Waste Water Treatment Process is used as an integral part of Waste Water Treatment, creating high quality Water for Reuse. There are number of very good reasons to select membrane treatment for Waste Water, which are as follows:

- a. Restrictive Discharge Limits
- b. Reducing Nutrient Pollution (Phosphorous and Nitrogen)
- c. Ground Water Recharge and indirect Potable Reuse
- d. Greater removal performances as a result of increased Solid Capture and long Solids Retention Times (SRT)
- e. Producing high Reuse Quality Water
- f. Effective solution for constrained facility sites

OBJECTIVE:

The objective of this **3-day** programme is to provide in depth knowledge on

- a. Different Membrane Based Treatment Processes, their Design & Principles
- b. Membrane Efficiency and Life cycle process
- c. Recycle and Reuse potential
- d. Decentralized Waste Water Treatment Process

COURSE COVERAGE:

- Concepts of Water & Waste Water Treatment Process
- Water and Waste Water quality standards
- Membrane based treatment process (RO, UF, MBR, MBBR etc.)
- Design and O&M of membrane based Treatment Process
- Zero Discharge Compliance Technology using Membrane Applications
- Decentralized approaches in treating Waste Water
- Recycle and Reuse options for Treated Waste Water
- Field Visits
- Case studies and Group Discussions

METHODOLOGY:

Methodology of the programme includes class room Sessions with Lectures/Discussions, with audio visual aid; bench - marked video shows, Chalk & Talk sessions, group discussions, case studies, debates, sharing of experiences, etc. All the sessions will be interactive, demanding active participation from all the participants.

TARGET PARTICIPANTS:

The programme is intended for Engineers & Managers working in design, monitoring, O&M of Sewage Treatment Plants and officials from Metro Boards, Public Health Engineering Departments, Municipal Administration Departments, Municipal Corporations, Urban Development Agency, Urban Local Bodies, Development Authorities, Regulatory Authorities, Townships & Industries etc.

FACULTY:

Apart from the core internal faculty, experienced professionals, consultants, practising engineers at national level from Metro boards, PHEDs, Municipal Corporations will be invited as Resource Persons / Faculty for this course.

PROGRAMME VENUE, DATES & TIMINGS:

Venue:

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

Dates:

18 – 20 September, 2017

Timings:

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

COURSE DIRECTOR

M. SUBHA

Faculty & Head I/c
Environment Management Division, ESCI

COURSE FEE:

Rs. 16,000/- (Rupees Sixteen Thousand only) Residential Fee per participant. Fee includes course material, course kit, 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:** Additional 10% discount for three or more participants, if sponsored by the same organization.

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

GST @ 18% is to be paid extra over and above the training fee, **PAN Card No** AAATT3439Q; **GSTIN No.** 36AAATT3439Q1ZV.

Programme 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-500004 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, our invoice reference and programme title.

Online registration shall be available on ESCI website. To register manually, please send your nominations giving details of name, designation, contact address, email address, mobile nos, telephone and fax number of the participant along with the details of payment of fee, addressed to:

The Faculty & Head I/c
Environment Management Division,
Engineering Staff College of India,
Old Bombay Road, Gachibowli, Hyderabad 500 032
Phone: Direct 040 6630 4120 to 4122 Fax : 040-23000336
Email: em@escihyd.org/esci_emd@yahoo.co.in

CERTIFICATE:

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

GENERAL INFORMATION:

- ESCI encourages participants to present case studies from their respective organizations.
- For the convenience of outstation participants, ESCI will facilitate pick-up and drop from Airport / Railway Stations / Bus Stations, if travel plans are received atleast 3 days in advance along with mobile number by fax or email. The charges shall be paid by the participant directly to the Cab.
- ESCI provides complimentary accommodation and boarding to the participants one day before commencement (Check-in 1200 h) and one day after conclusion (Check-out 1200 h) of the programme duration. Overstay charges will be applicable as per ESCI rules (subject to availability of accommodation)
- Well developed Information Centre and Internet facilities are available to the participants.