

OBJECTIVES

Measurement of environmental pollutants is a very important aspect of understanding the environmental contamination baseline and predicts its impacts for effective environmental decision making and implementing mitigation plans. Both organic and inorganic environmental pollutants are integral part of monitoring programs because of their significant long term and toxic effects on human health and the environment. It is important to identify and quantify these environmental pollutants with a high sensitivity and accuracy as they could be present in the environment at ppb and sub ppb levels. Advances in analytical techniques, has made it possible to measure even the trace level contaminants present in environmental matrices like soil/sediment, water and air, after suitable sample processing.

The objective of this training program is to impart basics and advanced knowledge on analytical instrumentation techniques for analysis of environmental contaminants including trace level analysis like pesticides, using sophisticated instrumentation. An over view of occurrence and fate of pollutants in environment, besides sample collection and processing techniques for environmental analysis.

COURSE CONTENTS

- Basic concepts of analytical techniques used for environmental contaminants.
- Sample Collection and Preparation Techniques for determination of Organic and Inorganic Contaminants in environmental samples
- Analytical application of Gas Chromatography, Gas Chromatography-Mass Spectrometry etc. for monitoring of organic contaminants.
- Analytical application on instrumentation techniques for analysis of organic and inorganic contaminants like TOC and CHNS Analyzer, Atomic Absorption Spectrometry, Inductively Couple Plasma (ICP-OES/ICP-MS), FTIR and Ion Chromatograph.
- QA/QC of equipment's and analytical activities as per ISO/IEC 17025:2017.

VENUE: CSIR-NEERI, Nagpur

MODE OF TRAINING: Classroom lectures/ demonstration/ interaction. The lecture material shall be provided to the participants after the completion of the program.

REGISTRATION

- Interested candidates (Educational qualification: Graduate in Science / Engineering & above) can register through weblink: <https://forms.gle/czkwZxJ2KCndDuCv5>
- Registration fees: Rs. 2000/-
- Closing Date: October 18, 2025
- Seats are limited (20 seats) and registration will be confirmed on first come first get basis by email. Registration weblink will be closed after receiving requisite registrations.
- Accommodation (twin sharing basis) at CSIR-NEERI Guest House can be arranged for registered participants only on payment basis, if available

CERTIFICATE OF PARTICIPATION: Certificate of Participation will be issued on successful completion.

DIRECTOR	GREEN SKILLS COORDINATOR	COURSE COORDINATOR
Dr. S. Venkata Mohan Director CSIR-NEERI	Dr. Harshvardhan Singh Senior Principal Scientist & In-Charge Skill Development Centre (SDC)	Dr. Sanjeev Kumar Singh Senior Principal Scientist & In-Charge, Sophisticated Environmental Analytical Facility (SEAF) Dr. Gajanan S. Kanade , Chief Scientist, SEAF Dr. Kavita Gandhi , Principal Scientist, SEAF