

**Online Skill/ Training Program on
“Analytical Instrumentation Techniques for Environmental
‘Organic Contaminants’ ”**

January 18-20, 2022

OBJECTIVES

The organic pollutants are chemicals of global concern due to their potential for long-range transport, persistence in the environment, ability to bio-magnify and bio-accumulate in ecosystems, as well as their significant long term and toxic effects on human health and the environment. Due to automation, modernization and urbanization many organic pollutants are present in environment including polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), Pesticides, Persistent organic pollutants (POPs), Volatile organic carbon (VOCs), Pharmaceuticals and personal care products (PPCPs), Dioxin and Furans etc. These pollutants include hundreds of organic contaminants belonging to diverse compound classes and usually detected in concentrations at the level between ng/L and µg/L. Advances in analytical techniques make it possible to measure even the smallest amount of contaminants present in environmental matrix such as soil, water, air, etc. after extraction in the suitable solvents.

The objective of this training program is to impart basics and advanced knowledge on analytical instrumentation techniques for instrumental methods and analysis of environmental organic contaminants using sophisticated instrumentation, which is needed in monitoring of environmental pollution and in investigation and mitigation of related environmental issues. Providing theoretical and analytical aspects for qualitative and quantitative analysis of organic contaminants in environmental samples. Strengthening analytical capabilities on analysis of trace organic contaminants in environmental samples.

COURSE CONTENTS

- Importance of environmental monitoring
- Basics of Chromatography
- Sample Processing Techniques for Organic Contaminants
- Theory and principles of Gas Chromatography (GC)
- Theory and principles of Gas Chromatography-Mass Spectrometry (GC-MS)
- Theory and principles of High-Performance Liquid Chromatography (HPLC)
- Theory and principles of Liquid Chromatography-Mass Spectrometry (LC-MS)
- Practical aspects for analysis of organic contaminants using GC, GC-MS, HPLC and LC-MS

MODE OF TRAINING: Online training through MS Team comprising Live lectures, Interactions, Q&A session, etc.

REGISTRATION FEE

- For Sponsored/Employed/Self Payment candidates, etc.: **Rs. 15,000/- (including GST)**
- **Fee will be paid online through SBI Collect link as mentioned below:**
<https://www.onlinesbi.com/sbicollect/icollecthome.htm>
- Instructions for remittance of fee through State Bank Collect is shown below:
State of Corporate / Institution: "MAHARASHTRA"
Type of Corporate / Institution: "GOVT. DEPARTMENT"
GOVT Department Name: "NATIONAL ENVIRONMENTAL ENGINEERING RESEARCH INSTITUTE"
Payment Category: "WEBINAR / TRAINING PROGRAM REGISTRATION FEE"

NOTE:- Kindly send SBI Collect Fee receipt on email hv_singh@neeri.res.in for confirmation

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

LAST DATE OF REGISTRATION: January 08,2022

DIRECTOR	MENTOR	PROGRAM CO-ORDINATOR	COURSE CO-ORDINATORS
Dr. Atul Vaidya Director	Dr. Sadhana Rayalu Chief Scientist & Head, EMD	Dr. Harshvardhan Singh Senior Principal Scientist & Head, TSDD Email: hv_singh@neeri.res.in Ph.0712-2249885 ext. 344 / 645	Dr. Amit Bansiwala Senior Principal Scientist & Head, SEAF Dr. G.S. Kanade Senior Principal Scientist, SEAF