

OBJECTIVES

Identifying contaminants in the water is the first step to treat them. Water quality analysis should be conducted promptly and precisely after samples collection so that the chemical and biological nature of the samples does not change. Having accurate measurements of water chemistry is crucial when designing a water & wastewater treatment system, measuring its performance, identifying the source of contamination, measuring the quantum of the environmental damage and assessing the economics of the environmental damage. Sophisticated analytical instruments play a crucial role in water chemistry estimation. However, their calibration and operation is a skill. This training program has been designed to impart hands on skills to the participants for the efficient operation and calibration of the sophisticated instruments.

COURSE CONTENTS

- Fundamentals of Water chemistry
- Fundamentals of Water Pollution, its sources and water quality analysis
- Introduction to advanced sophisticated analytical instrumentation for environmental sample analysis
- Fundamentals of Spectroscopy
- Fundamentals of Chromatography
- Ion Chromatograph (IC) – Principle, working, sample preparation and data interpretation
- GC-MS-MS for the determination of organic compounds in environmental samples
- Hands on training on the working of HPLC
- ICP-OES/MS for trace elemental determination in environmental samples

VENUE: CSIR-NEERI's Delhi Zonal Centre, A-93-94, Naraina Industrial Area Phase-I, Delhi-110028.

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

REGISTRATION

- Registration Fee for Sponsored/Employed/Self Payment candidates, etc.: **Rs. 7,500/- + 18% GST**
- Registration Fee for Students: **Rs. 3,000/- + 18% 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:
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"
- Attached enrollment form & SBI collect receipt is to be sent on email id: **hv_singh@neeri.res.in**
- Registrations will be confirmed on first-come first-serve basis since there are 25 seats only
- Last date of Registration: **November 14, 2022**

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

DIRECTOR	PROGRAM CO-ORDINATOR	COURSE CO-ORDINATORS	
Dr. Atul N. Vaidya Director CSIR-NEERI	Dr. Harshvardhan Singh Senior Principal Scientist & Head, Training & Skill Development Division (TSDD) Email: hv_singh@neeri.res.in Ph. : 0712-2249885 Ext. 344 / 645	Dr. S. K. Goyal Chief Scientist & Head, DZC	Mrs. Priyanka Saxena Senior Scientist, DZC

**COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH (CSIR)
INTEGRATED SKILL INITIATIVE (PHASE-II) (2020-25)
TRAINEE ENROLLMENT FORM**

CSIR-NEERI (National Environmental Engineering Research Institute) Nehru Marg, Nagpur- 440020	
TITLE OF SKILL DEVELOPMENT PROGRAM	Sophisticated Instruments used for the Water Quality Analysis
DATE(S), TIME AND VENUE	December 14-16,2022 and CSIR-NEERI, Delhi ZC
FULL NAME OF TRAINEE	
FATHER'S / HUSBAND'S NAME	
DATE OF BIRTH (DD/MM/YYYY)	
GENDER (MALE / FEMALE / OTHERS)	
CATEGORY (SC / ST / OBC / EWS / GENERAL)	
PHYSICALLY DISABLED (YES / NO)	
CURRENT STATUS (working/ entrepreneur/ student/ unemployed/ school dropout)	
QUALIFICATIONS	
PHOTO ID NUMBER (Aadhar/ PAN/ Voter ID/ Passport)	(Attach Copy of Photo Id)
MOBILE NUMBER	
EMAIL	
ADDRESS (Mention name of District, State & Pin code)	
TRAINEE'S DOMICILE (RURAL / URBAN)	
FEE PAYMENT DETAILS (IF APPLICABLE)	
SIGNATURE OF APPLICANT	SIGNATURE OF NODAL PI
DATE	DATE