





CSIR-Indian Institute of Toxicology Research

Organising

Science and Engineering Research Board Sponsored

Research Facility Training Program

on

"Atmospheric Pollution Monitoring and Computational Modeling Tools"

About Training Program

Studies in the field of environmental science and atmospheric pollution require thorough understanding and training on various instruments and computational models for representative data and scientific analysis for assessment of impact and regularizing pollutants. Therefore, the curriculum of the training programme is designed to demonstrate and provide hands-on training on the most applicable instruments and computational tools that enhance the quality and easiness of the research and professional work in environmental management systems, source identification, apportionment, and scientific investigations related to designing effective strategies in abatement of pollutants. The training program is targeted to train Researchers in the field of Environment/ Civil/ Chemical/ Mechanical engineering/technology or Chemistry/ Physics / Mathematical sciences.

Objectives

The training is proposed with the following objectives:

- Scientific and social responsibility (SSR) under the sponsorship of SERB-DST initiated for training on various soft and mechanical tools used in atmospheric pollution assessment.
- Theoretical and practical demonstrations of various computational and monitoring/sampling tools to boost research skills for air and water quality assessment.

Salient Features of the Training:

- 30% theory and 70% practical demonstration on various environmental monitoring devices and computational modeling tools.
- Interactive sessions with experts on various instruments and soft-modeling applications
- Hands-on practical exposure
- Training certificate will be provided.

| Details of Training Trogram | - | |
|------------------------------|-----|---|
| Title of Training Program | : | Atmospheric Pollution Monitoring Devices and Computational |
| | | Modeling Tools |
| Funding Agency | : | DST-SERB, Govt. of India (Scientific Social Responsibility under |
| | | the Sanction Order No. EEQ/2021/001089 dated: 11 March, 2022) |
| Dates and Duration | : | October 26, 2023 (One-day) from 10:00 AM to 5:00 PM |
| Maximum No. of registrations | ••• | 10 |
| Essential Qualification | : | Researchers (i.e., PhD pursuing/completed students and |
| | | Professionals from research / academic institutes/ universities / |
| | | industrial / MSME) working in the field of Environment/ Civil/ |
| | | Chemical/ Mechanical engineering/technology or Chemistry/ Physics |
| | | / Mathematical sciences. |
| Host institute | :. | CSIR-Indian Institute of Toxicology Research, Lucknow |
| Programme venue | : | CRK Campus, CSIR-Indian Institute of Toxicology Research, Gehru, |
| _ | | Kanpur Road, Lucknow. |
| Mode of training | : | Physical/direct presence mode |

Details of Training Program





Training for whom

The program aims to upgrade the skills of researchers/ faculty to work using atmospheric pollution monitoring and computational prediction tools. The training program is targeted to train Researchers in the field of Environment/ Civil/ Chemical/ Mechanical engineering/technology or Chemistry/ Physics / Mathematical sciences.

Course Structure

The training covers theory and practical demonstrations of various atmospheric pollution monitoring devices and computational/statistical modeling tools. First, a theoretical explanation of various monitoring devices will be elaborated then a practical demonstration will be given of each tool. Lectures on computational modeling software will be given and interaction with participants in the understanding of various tools and software models for assessment, identification, and apportionment of pollution sources as well as predict and forecast the impact of pollution. The trainees will definitely upgrade their knowledge in various disciplines of course such as data extraction process, usage of various statistical tools and computational packages, and model simulations.

Methods of Instruction

Instruction methods will involve the theoretical explanation and practical demonstration of atmospheric pollution monitoring instruments. Lectures on computational modeling tools, demonstrations, and hands-on training of software tools with example data included. The medium of instruction will be in English.

Selection and Registration

Online registration for participation in the programme is mandatory. There is no registration fee for the training programme as sponsored by SERB-DST for 10 participants. Selection will be done on the first received applications by fulfilling the Essential Qualification on a first-come, first-served basis from all over India, and then selected candidates will be informed of the due date.

Boarding and lodging: Participants will have to arrange their own for boarding and loading at Lucknow. No TA/DA/Accommodation will be provided from CSIR-IITR. However, Lunch and refreshments, tea/snacks will be served to all the participants during the training programme.

Certification: The successful candidates will receive certification.

Last date for receipt of applications: October 20, 2023 @ 3PM Information to the selected candidates: October 20, 2023 @ 5PM

Event Coordinator Contact:

Dr. B. Sreekanth Email ID: sreekanth.b@iitr.res.in Tel: +91-522-2217497 | Extension: 205 Mobile: +91-7989232674