Location and climate

Bhopal, a sprawling and picturesque capital city of Madhya Pradesh, is well connected by air, rail and roadways to different parts of country. Participants travelling by train/bus should alight at Bhopal railway station/Bhopal bus stand from where taxi/ auto-rickshaws can be hired to reach ICAR-IISS Campus located near Karond Chowrana on Berasia Road at a distance of 8 km from railway station and 7.5 km from Bus Stand. The Raja Bhoj Bhopal airport is located at a distance of 11 km from the campus. The participants are advised to make their return journey reservations in advance before leaving for Bhopal. The climate is pleasant during the month of February, moderate (26°C) during day time and cool in the night (11°C).

Registration form APPLICATION FORM FOR PARTICIPATION IN SHORT COURSE TRAINING

Organizing Institute: ICAR-Indian Institute of Soil Science, Bhopal

- 1. Full name (In block letters)
- 2. Designation
- 3. Present employer and address
- 4. Postal address with PIN
- Phone/ Mobile No.
- Fax No.
- E-mail
- 5. Permanent address
- 6. Date of Birth
- 7. Sex (Male/Female)
- 8. Marital status (Married/Unmarried)
- 9. Teaching/research/professional experience

(mention post held during last 5 years & number of publication) 10. Field of specialization and current area of research / teaching

11. Mention if you have participated in any Research seminar, Summer/Winter School/Short Course, etc. during the previous years under ICAR/Other organization

12. Postal order No. _____ dated _____ of Rs 50/- (Nonrefundable) in favour of ICAR unit IISS Bhopal for registration of application

3. Acade	mic record
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Degree	Subjects	Year of passing	Class ranks etc	University/ Institution	Other
Ph.D.					
PG					
Graduation					

Date & Place

Signature of the applicant

14. Recommendation of the Head of the Department/Institute

Signature & Seal

CERTIFICATE

It is certified that the information has been verified from the office record and is found correct.

Signature and designation of sponsoring authority

Date

Note: Application may be sent to the Course Director of the training or the Director, ICAR-IISS, Bhopal.

Important Dates

Last date for receipt of application: 20-12-2023
 Intimation of selection of participants: 25-12-2023

All correspondence should be addressed to

Dr. M. Vassanda Coumar

Senior Scientist & Course Director ICAR-Indian Institute of Soil Science Nabi Bagh, Berasia Road, Bhopal-462 038, Madhya Pradesh Mobile: +91- 9893050019 Email : <u>vassanda.coumar@gmail.com</u> or

The Director

ICAR-Indian Institute of Soil Science Nabi Bagh, Berasia Road, Bhopal-462 038, Madhya Pradesh Email : director.iiss@icar.gov.in



ICAR Short Course on Soil Pollutants Impact Assessment and Remediation of Contaminated Soil



Dr. M. Vassanda Coumar

Course Co-Director Dr. Abhijit Sarkar Dr. Dinesh K. Yadav

Sponsored by Indian Council of Agricultural Research



Krishi Anusandhan Bhawan New Delhi 110012, India



Organized by

Division of Environmental Soil Science

ICAR-Indian Institute of Soil Science

Nabibagh, Berasia Road Bhopal – 462038, Madhya Pradesh

Background

Post liberalisation in 1991, India has recorded considerable industrial growth; industry accounts for more than 30 % of GDP. However, such impressive industrial growth has also been ascribed to the increasing threat to the environment from emission industries. discharge and disposal of pollutants urbanization in the country has also posed risk to the agroecosystem from solid and liquid wastes through their unscientific disposal on precious water bodies and agricultural land. Through these anthropogenic activities, several toxic metals and compounds are contaminating our precious soil resources which have evolved through millions of years of pedogenic processes and threatening different life forms including human beings. Effects of pollution on soil are quite alarming and can cause huge disturbances in the ecological balance and health of living creatures on earth. Some of the most serious pollution effects decrease in soil fertility with consequent decrease in the crop yield /biomass growth; (b) increased soil erosion (due to less vegetative protection) resulting in loss of soil and natural nutrients present in it; (c) decline in soil biodiversity; (d) contamination of food chain causing serious health problems to animals and human beings; (e) emanation of toxic dust from polluted land causing adverse effect on human health due to their inhalation. Although degradation of soil resources of the country due to faulty land management practices has been highlighted for long, the same due to industrial and urban activities is by and large ignored. We cannot take no notice of the fact that though estimated land area affected with pollution is smaller as compared to other types of degraded land, these are generally situated in more fertile area nearby cities and also, reclamation of such land is generally very costly (many a times with lower degree of success) as compared to the degraded land caused by faulty management practice. In order to protect our land resources as well as to manage the already polluted land appropriately, our country needs to develop infrastructural facility as well as human resources effectively for carrying out high guality researches in the area of soil pollution and its remediation.

This training course not only addresses the basics of soil degradation but also pollution status in Indian scenario and recent development in environmental pollution management.

Objectives

- 1. To provide advance training to the college /university/institute teachers, researchers and extension subject matter specialists in the area of soil pollution assessment and remediation of contaminated soils.
- 2. To acquaint participants with the latest information that may have been gathered in the relevant subject area.
- 3. To provide hands-on experience on laboratory techniques and procedures for measuring various environment related pollutants.

Course Content

The main focus of this short course is to impart knowledge to the scientists and academicians about the soil degradation due to pollution, factors that cause soil degradation, major environmental pollutants, their sources and management practice that addresses the issues of prevention and mitigation of soil pollution/ degradation. The following broad areas will be covered during the training program:

•Impact of environmental soil pollutants on terrestrial/aquatic ecosystem, food quality and public Health

- Risk assessment methodologies for polluted sites
- Organic pollutants: Sources and Impacts on ecosystem

 Impact of municipal solid waste/waste water on ecosystem and food quality

- Impact of anthropogenic greenhouse gases on climate change and food security of India
- Remediation Techniques and Mitigation Plan
- Use of industrial wastes as soil amendments for improving soil fertility and associated risks

Use of agricultural and industrial wastes for remediation of contaminated soils

• Soil management practices for minimizing impact of soil pollution

- Role of nanotechnology in remediation of contaminated soils
 Principles, operation and precautions in handling of
- advanced environmental analytical instruments

Eligibility

The officers in the cadre of Scientists / Assistant Professors / Subject Matter Specialists or equivalent and above from ICAR institutes, SAUs, CAUs, Agricultural faculty of AMU, BHU, Vishwa Bharati and Nagaland University who are actively engaged in research, teaching and extension in the areas of Soil Science, Agronomy, Soil Physics, Microbiology, Environmental Sciences and other relevant Agriculture subjects are eligible to attend the short course training. The total number of participants will be restricted to 25. For speedy disbursement of selection letters, participants are requested to apply online at CBP portal of ICAR and provide email ID and FAX number.

Duration of Short Course

Duration of the Short Course Training is 10 days with effect from 12-21 February 2024 (both days inclusive). The participants are expected to arrive at ICAR-IISS, Bhopal latest by the evening of 11 February, 2024 and can leave after 17:00 hrs on 21 February 2024.

Application and Registration

Participants are requested to apply online at CBP vortal (https://cbp.icar.gov.in/)

- A. Create account on CBP vortal, if your account is not created on CBP vortal:
- 1. Click on 'Create New Account' link on home page.
- 2. Fill the form.

3. Click on 'Create Account' button. User will get the message 'Successfully created account' after account is created on the CBP

B. Login on CBP vortal:

1. Enter the 'User Id' and 'Password in the candidate login window on the home page.

2. Click on 'Login' button.

C. Participate in training programme:

1. After login, click on 'Participate in Training' button/menu, list of trainings will be displayed.

2. Click on Training Title - " Soil Pollutants Impact Assessment and Remediation of Contaminated Soil ".

3. Click on 'Apply' link.

4. A form will open with all your personal details filled in. In case, user want to change any of these information then click on 'Edit' button and do the desired changes.

5. Click on 'Save' button to save the information then click on 'Next' button.

6. Fill the 'Academic details' and 'Experience details' information. Click on 'Next' button.

7. Fill 'Draft/Postal' order for Rs. 50/- drawn in favour of ICAR unit IISS Bhopal and click on 'Next button.

8. Advance Application form will be generated in system and click on 'print' link. Submit this print out copy in your office for approval of competent authority. Click on 'Submit' button, advance copy will be submitted to course director.

9. After approval from competent authority, upload the scanned copy of duly approved application form and click on 'Next' button.

10. Click on 'Upload Approved Application File' button to upload signed 'Advance Application form' (Approved Application Form) in pdf/ doc/ jpg/ jpeg/ docx and click on 'Submit' button for final submission.

Boarding, Lodging and TA

The selected participants will be provided free boarding and lodging in the institute guest house. Food expenses will be borne by the organizers as per ICAR norms. All participants will be reimbursed to and fro travel fare for the Journey to Bhopal by rail or bus by shortest route. The payment will be made as per the entitled class of travel, but restricted to the maximum of AC-II tier train fare/bus fare (as per actuals). Local participants are not eligible for boarding and lodging, however, they will be provided lunch and inter-session tea. Participants are requested to not to bring family members with them, as the institute has limited hostel facilities. No DA will be paid to participants.

Additionally, interested candidates may send their applications in the prescribed format duly nominated / forwarded by the competent authority to Dr. M. Vassanda Coumar, Course Director, ICAR-Short Course Training or Director, ICAR-IISS, Bhopal.