Engineering Staff College of India

Autonomous Organ of The Institution of Engineers (India)

Old Bombay Road, Gachi Bowli, Hyderabad – 500 032. Telangana, India

Centre for Climate Change Division

Continuing Professional Development Programme

Exploring Earth's Natural Balance:
Understanding Soil Biodiversity Dynamics

12 – 14 June 2024

Interactive Sessions | Digital Learning | Assessments | 24/7 Experts Online/Offline Support

Introduction

Climate change, driven largely by human activities, is altering the conditions under which soil organisms thrive. Rising temperatures, changes in precipitation patterns, and increased frequency of extreme weather events pose significant challenges to soil biodiversity. Understanding these impacts is vital as healthy soil biodiversity is fundamental to ecosystem functioning and resilience. Soil organisms play crucial roles in nutrient cycling, soil structure formation, carbon sequestration, and even in mitigating climate change impacts. Thus, the implications of climate change on soil biodiversity extend far beyond the ground beneath our feet. ESCI has planned a three-day training programme to provide professionals with the knowledge and tools to assess, adapt, and mitigate the effects of climate change on soil biodiversity. This course will equip participants with insights and skills to address one of the critical challenges of our time—preserving soil biodiversity in the face of climate change.

Objectives

Gain insights into climate change and soil biodiversity, explore the mechanisms by which climate change influences soil microbial communities and investigate the impacts of altered precipitation, temperature, and extreme weather events on soil organisms. Adaptive strategies for mitigating climate-induced threats to soil biodiversity. Analyze case studies illustrating climate change's impact on soil biodiversity.

Course Coverage

This programme is designed to cover broadly the following topics.

- Introduction to Climate Change Science
- Basics of Soil Biodiversity and Microbial Ecology
- Effects of Climate Change on Soil Organisms
- Adaptations and Responses of Soil Biota to Climate Change
- Implications for Ecosystem Services and Sustainability
- Climate-Smart Soil Management Techniques
- Case Studies and Current Research
- Policy and Management Approaches

Methodology

Methodology of the programme includes classroom Sessions with Lectures/discussions, with audio visual aid; bench - marked video shows, Chalk & Talk sessions, group discussions, case studies, debates, sharing of experiences, etc. All the sessions will be interactive, demanding active participation from all the participants.

Target Participants

- Researchers and Academicians in the fields of climate science, hydrology, and environmental studies.
- Water Resource Managers and Planners from governmental and non-governmental organizations.
- Policy Makers and Government officials involved in water resource management.
- Industry Professionals working in water-related sectors.
- Environmentalists, NGOs, and Community Leaders concerned about climate change impacts.

Programme Dates, Timings & Code

Dates: 12 – 14 June 2024, Timings: 10 AM Onwards. & Code: 8046

Course Director

Dr. K. Chandrakala Faculty, Centre for Climate Change **Mr. Aadhi Naresh,** Jr. Faculty, CCC

Engineering Staff College of India,
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Faculty/Speaker Details

Apart from the core internal faculty, Experienced Professionals/Faculties/Sector experts will be delivering the lively lecture with practical knowledge & case study.

Course Fee

- **Course Fee (Residential):** – Rs. 16,000/- (Rupees Sixteen Thousand only) per participant. Fee includes course material, course kit, twin-sharing/single AC accommodation as per availability, breakfast, lunch, dinner, tea / coffee and snacks during the actual days of training programme. ESCI provides complimentary accommodation and boarding to the participants one day before commencement (Check-in 1200 h) and one day after conclusion (Check-out 1200 h) of the programme duration. Overstay charges will be applicable as per ESCI rules (subject to availability of accommodation)
- **Non-Residential Fee:** 10% discount on course fee is allowed for non-residential participants
- **Group Incentive:** 10% discount for five or more participants, if sponsored by the same Organization

GST @18% is to be paid extra over and above the training fee. **PAN Card No.** AAATT3439Q. **GST No:36AAATT3439Q1ZV, HS No.: 999293** (under commercial training or coaching services – clause 65(105) (ZZC)of Finance act – 1994).

Programme fee is to be paid in in favour of "**THE INSTITUTION OF ENGINEERS (INDIA) – ENGINEERING STAFF COLLEGE OF INDIA**" in the form of demand draft payable at Hyderabad. Alternatively the payment may be made by **Electronic Fund Transfer (EFT)** to ESCI – **SB A/c No. 10007111201 with The SBI**, PBB, Rajbhavan Road Branch, Khairatabad, Hyderabad-500004 by **NEFT/ RTGS. IFSC Code No. SBIN 0004159 – MICR No.500002075. PAN Card No AAATT3439Q; GSTIN No. 36AAATT3439Q1ZV**. While using EFT method of payment, please ensure to communicate us your company name, Contact details, our invoice reference and programme title.

Registration

Online registration shall be available on ESCI **web portal**: www.escihyd.org

To register manually please send your nominations giving details of name, designation, contact address, email address, mobile no, telephone and fax number of the participant along with the details of mode of payment of fee, addressed to: **Course Director** (or) **Contact us at: Mr. GNM. Rao (Prog. Manager) – 9866431555.**

A Certificate of participation will be awarded to each participant on conclusion of the programme.