#### FIRST CIRCULAR

## INTERNATIONAL CONFERENCE ON

# ECOSYSTEM FUNCTIONING AND SUSTAINABILITY IN CHANGING ENVIRONMENT

FEBRUARY 6-8, 2025







Convenor: Prof. R. Sagar

Co-Convener: Prof. Satheeshkumar P. K.

**Organizing Secretaries:** 

Dr. Supriya Tiwari

Dr. R. K Sharma

**Joint Organizing Secretaries:** 

Dr. Deepak Kumar

Dr. Anita Singh

Dr. J. P Maurya

**Treasurer:** 

Dr. Sanjay Kumar





Organized by:

Department of Botany, Institute of Science Banaras Hindu University, Varanasi – 221005, India



#### **SEMINAR BACKGROUND AND THEME**

The unprecedented anthropogenically induced climate change experienced in the present times is intricately entwined with the other disturbances influencing the functional attributes of the biosphere. Ecosystem patterns and processes such as rates of primary productivity, input-output balance of chemical elements, food-chain relationships, disease spread, pollutant transport, etc, respond in complex ways to changing climate scenarios. Rising temperatures, changes in seasonality, increased frequency, magnitude of extreme events, and perturbations in nutrient cycling bring about significant changes in the ecosystem structure and functioning. Loss of biodiversity, species shifting, and interference in species compatibility are a few of the disastrous outcomes of climate change that can destabilize the ecosystem by influencing the its structural and functional attributes. Additionally, the change in atmospheric composition, viz. increased pollutant's load, elevated CO<sub>2</sub> levels, etc. modulate the functional aspects of plants, thus bolstering the ecosystem's vulnerability. Artificial ecosystems like agroecosystems are highly susceptible to climate alterations and can directly affect global food security. The urgent need of the hour is to seek sustainable elucidations to safeguard the biosphere from the repercussions of climate-induced permutations. Biodiversity conservation, biotechnological implications, alternative energy resources, and climate-smart agriculture are a few of the decisive strategies for sustainable ecosystem management in the face of global environmental change and brought into practice with immediate effect. The present seminar intends to focus on the effects of climate change and its synergy with other stressors on ecosystem structure and functioning and explore sustainable solutions for ecosystem stabilization and sustainable ecological productivity.

#### The themes to be deliberated during this Seminar include:

- Biodiversity, ecosystem function and services
- ↓ Atmospheric pollution, nutrient cycling and carbon sequestration
- Climate change, environmental management and policies
- Aquatic ecosystem and ecotoxicology
- ♣ Ecology of disturbances, habitat fragmentation and invasion
- Molecular and biotechnological approaches in ecology
- La Challenges in mountain ecosystem
- Microbial Biology, soil health and climate-smart agriculture
- Plant responses to abiotic and biotic stresses
- Remote sensing and ecological modelling

The seminar aims to create a platform for researchers around the globe to exchange knowledge and share their findings in the areas mentioned. The discussions are expected to help consolidate global expertise and knowledge, which will be an opportunity for the enthusiast to cherish. The amalgamation of conventional and modern avenues of ecological themes will attract people to work in diverse fields to the seminar. Increasing disturbances in the environment created by man and their retaliations realize the necessity of a sustainable mode of living. The experience and insights of eminent scholars can enlighten the participants in these aspects.

#### **VENUE:**

The venue of the seminar will be "Mahmana Hall seminar complex, Institute of Science, Banaras Hindu University, Varanasi-221005, UP, India.

#### **BANARAS HINDU UNIVERSITY (BHU)**

Banaras Hindu University, located in the sacred city of Varanasi, is a renowned center of learning with a rich history. The university was established in 1916 by the prominent nationalist leader, Pandit Madan Mohan Malviya, with the support of influential figures such as Dr. Annie Besant. It played a significant role in India's independence movement and has since emerged as one of the country's premier educational institutions.

The main campus of the university covers an area of 1300 acres and features well-maintained roads, abundant



greenery, a temple, an air strip, and architecturally stunning buildings. The university family includes about 38,000 students, nearly 1700 teachers, and almost 8,000 non-teaching staff. The university comprises 5 Institutes, 14 Faculties, 140 Departments, 4 Interdisciplinary Centers, a constituent College for Women, and 3 Constituent Schools, offering a wide range of subjects across humanities, social sciences, technology, medicine, science, fine arts, and performing arts. Additionally, it hosts 6 centers of Advanced Studies, 10 Departments under Special Assistance Programme, and numerous specialized Research Centers. Furthermore, four Degree Colleges in the city are affiliated with the University. Equipped with modern amenities, the university provides a conducive environment for learning and growth. As a central university with Institution of Eminence status, BHU is supported by the Government of India and has been at the forefront of promoting new ideas, fostering global integration, and nurturing intellectual and cultural development.

#### THE BOTANY DEPARTMENT

The Botany department was established in 1916 and became the second oldest department in the country to start post-graduate teaching in Botany since 1919. The department was established and nurtured by noteworthy botanists like Birbal Sahni (FRS), Y Bhardwaja (FNA), R Misra (FNA), RN Singh, and RY Roy. The Department is internationally known for contributing to various domains of Botany, including Ecology, Phycology, Mycology, Plant Pathology, etc. The department has excellent teaching programs in diverse areas of life sciences, such as Master's degrees in Botany, Environmental sciences, and Applied Microbiology, and has modern laboratory facilities.

In recognition of its outstanding contribution, the department was chosen under the Special Assistance Programme of UGC in 1972, as the Centre of Advanced Study (CAS) in 1980, and



recognized as the "Centre of Excellence" in 1984 under the COSIST program. Recently, the Department of Science and Technology (DST) Government of India has selected the department for financial assistance under the FIST scheme (Level II). The faculty is involved in both conventional and modern aspects of research. At present the department has 15 Professors, 05 Associate Professors, 14 Assistant Professors, 3 Distinguished Professors,1 INSA senior scientist, and 1 JC Bose National fellow. The total strength of undergraduate students is about 800 and 140 at the post-graduate level, besides more than 160 PhD students and 18 post-docs.

Since its inception, the department has maintained a very high profile in the country's teaching and research in plant sciences. To continue developing knowledge in Ecological Science, the Department of Botany regularly organizes national and international conferences. At this time, the Botany Department will be hosting an 'International Conference on Ecosystem Functioning and Sustainability in a Changing Environment' on February 6–8, 2025.

#### SEMINAR PARTICIPATION AND ABSTRACT SUBMISSION

Seminar is open to all involved in R&D, teaching, consultancy, planning etc., in the area of seminar themes. Interested participants are invited to contribute their papers for oral/or poster presentation with an indication about the theme in which it needs to be considered. Abstracts should be prepared (about 250 words) using MS-Word and sent to the Organizing Secretary, icesce2025@gmail.com as file attachment before 15<sup>th</sup> January, 2025. The name of presenting author should be asterisked.

#### **LANGUAGE**

English will be the official language of the seminar

#### **SOUVENIR**

The abstracts of the seminar will be published in form of an e-souvenir.

#### **REGISTRATION FEE (₹)**

Delegates	<b>Early Bird Registration</b>	After	On the spot
	On up to 31.12.2024	31.12.2025	Registration
Scientists/Academicians	Rs. 3000	Rs. 4000	Rs. 5000
Accompanying persons	Rs. 1500	Rs. 2000	Rs. 2500
Foreign delegates	150 USD	160 USD	170 USD
Research Scholar	Rs. 2000	Rs. 3000	Rs. 3500
Participation only	Rs. 1500	Rs. 2000	Rs. 2500
Students	Rs. 1000	Rs. 1200	Rs. 1500
Industrial persons	Rs. 5000	Rs. 6000	Rs. 7000
Accommodation charges (d			
Single occupancy			Rs. 4500
Double occupancy			Rs. 2300



#### MODE OF PAYMENT: Demand Draft/ RTGS / NEFT / UPI

All delegates should pay registration fee in favor of CONVENER, ESCE 2025 payable at State Bank of India, Banaras Hindu University Campus, Varanasi.

#### **Account details**

BANK: STATE BANK OF INDIA, BANARAS HINDU UNIVERSITY CAMPUS, VARANASI

Account No: 43218442423 IFSC Code: SBIN00211

#### **ACCOMMODATION**

- Only registered delegates will be provided hospitality and shared accommodation in guest house /hostels after confirmed payment of accommodation charges in advance.
- Participants who require hotel accommodation for their stay should inform us so that we can send tariff and others details separately.
- No TA/DA shall be paid to participants.

#### YOUNG SCIENTIST, WOMEN SCIENTIST, BEST ORAL, POSTER AWARDS

Awards will be given for young scientist and women scientist and for the best oral and poster presentations.

#### SPECIAL ISSUE IN "TROPICAL ECOLOGY", SPRINGER NATURE.

Selected work-based abstracts will get a chance to get published as a complete manuscript in a special volume in the Journal "Tropical Ecology".

#### **ORGANIZING COMMITTEE**

- Chief Patron: Prof. Sudhir K. Jain, Vice-Chancellor, BHU, Varanasi, India
- Patron: Prof. Sanjay Kumar, Director, Institute of Science, BHU, Varanasi, India
- Chairperson: Prof. Sukh Mahendra Singh, Dean, Faculty of Science, BHU, Varanasi, India
- Co-Chairperson: Prof. RK Asthana, Head, Department of Botany, BHU, Varanasi, India
- Convener: Prof. R Sagar, Department of Botany, BHU, Varanasi, India
- Co-convenor: Prof. Satheeshkumar PK, Department of Botany, BHU, Varanasi, India
- Organizing Secretaries: Dr. Supriya Tiwari & Dr. RK Sharma, Department of Botany, BHU, Varanasi, India
- Co-organizing Secretaries: Dr. Deepak Kumar, Dr. Anita Singh, Dr. JP Maurya, Department of Botany, BHU, Varanasi, India
- Treasurer: Dr. Sanjay Kumar, Department of Botany, BHU, Varanasi, India

#### **ADVISORY COMMITTEE**

Prof. Rattan Lal	USA	Prof. Malapati K. Janarthanam	India
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Prof. Ashwini Pareek	India	Prof. Partha Prathim Barua	India
Prof. B. C Tripathi	India	Prof. R. K Kohli	India
Prof. Brajesh Kumar Singh	Australia	Prof. R. Sukumar	India
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Prof. H. N Pandey	India	Dr. Shilpi Paul	India
Dr. J. C Kuniyal	India	Prof. Shilpi Sharma	India
Prof. Jaffer Ahmed Raishi	India	Dr. Sidharth Singh	India
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Prof. K. S Rao	India	Dr. Ulrike Bechtold	UK
Dr. M. M. S. A Marasinghe	Sri Lanka	Prof. Umashankar	India
Dr. M. S Vithanage	Sri Lanka	Prof. Usha Mina	India
Prof. M. L Khan	India	Dr. Varanaeyam Achal	China

#### **LOCAL ORGANIZING COMMITTEE**

Prof. R. K Asthana	Prof. R. K Gupta
Prof. Santosh K. Dubey	Prof. Hema Singh
Prof. R. P Sinha	Prof. S. S Singh
Prof. A. K Mishra	Prof. S. M Singh
Prof. Nandita Ghoshal	Dr. A. L Singh
Prof. Jitendra Pandey	Dr. Bhanu Prakash
Prof. R. N Kharwar	Dr. Purabi Saikia
Prof. Shashi Pandey	Dr. Raghvendra Singh
Prof. S. K Dubey	Dr. S. P Singh

### Emeritus/Distinguished Prof.

Dr. S. K Verma
Prof. J. S Singh
Dr. L. S Songachan
Dr. Prof. L. C Rai
Dr. Prashant Singh I
Prof. A. K Dwivedy
Prof. S. B Agrawal
Dr. Akhilesh Kumar
Dr. Prashant Singh II

#### **ABOUT VARANASI**

Varanasi, or Banaras, (also known as Kashi) is one of the oldest living cities in the world. Mark Twain, the famous English scholar, enthralled by the legacy and sanctity of Banaras, once wrote: "Banaras is older than history, older than tradition, older even than legend and looks twice as old as all of them put together". Hindus believe that one who is graced to die on the land of Varanasi would attain salvation and freedom from the cycle of birth and re-birth. Ganges in Varanasi is believed to have the power to wash away the sins of mortals. The city is a centre of learning and civilization for over 3000 years. Knowledge, philosophy, culture, devotion to Gods, Indian arts and crafts have all flourished here for centuries. Varanasi is associated with promotion of spiritualism, mysticism, Sanskrit, yoga and Hindi language and honoured authors such as the ever-famous novelist Prem Chand and Tulsi Das, the famous saint-poet who wrote Ram Charit Manas. Major attractions in the city include Kashi Vishwanath Mandir, Ganga ghats, Ganga Arti, Vishwanath temple, BHU, and Sarnath.

Dr. Piyush Mathur

#### **HOW TO REACH**

Varanasi is easily accessible from all parts of the country, well connected by road, rail and air. The nearest airport is Lal Bahadur Shastri International Airport, Babatpur, which is 22 km from Varanasi. There are direct, daily flights connecting major cities like New Delhi, Calcutta, Mumbai, Bangalore, Hyderabad, Chennai, Lucknow and Bhuvaneshwar. Varanasi is a major railway junction, served by trains from all metros and major cities across the country. The city has direct rail connections to New Delhi, Mumbai, Calcutta, Chennai, Gwalior, Meerut, Indore, Guwahati, Allahabad, Lucknow, Dehradun, etc. There are three national highways (NH2, NH 7 and NH29) connecting literally to any part of the country by road.

#### **IMPORTANT DATES**

Registration	December 15, 2024	
Abstract submission	December 31, 2024	
Acceptance of abstract	January 15, 2025	
Conference	February 6-8, 2025	

## **For further details**

About the ESCE-2025	
Prof. R. K. Asthana	Prof. R. Sagar
Head	Convener, ESCE-25
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Abstract submission	Travel and accommodation
Dr. R. K. Sharma	Dr. Deepak Kumar
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