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- Prof. M. Sultan Bhat Dean Research, University of Kashmir
- Prof. Naseer lobal Registrar. University of Kashmir
- Prof. Abdul Hamid Wani Dean School of Biological Sciences, University of Kashmir
- Prof. Zahoor Ahmad Kaloo Head Department of Botany, University of Kashmir

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CONVENER

- Department of Botany University of Kashmir
- **CO-CONVENER** Prof. Manzoor A. Shah 🛛 🕘 Dr. Anzar A. Khuroo Department of Botany **University of Kashmir**

ORGANIZING COMMITTEE

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- Dr. Shahzad Pandith
- Dr. Maroof Hamid
- Dr. Rayees Malik
- Mr. Faizan Shafee

Address for correspondence: All communications with respect to the workshop should be made to:

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DR. ANZAR A. KHUROO | Co-convener E-mail: anzarak@uok.edu.in. Mobile no. 7006124417

WORKSHOP THEMES:

- Plant phenology and climate change
- Understanding plant phenophases: what, how and where
- Functional traits and plant phenology
- Plant phenology and pollination ecology
- Monitoring plant phenology using citizen science
- Role of botanic gardens and herbaria in plant phenology monitoring
- Phenological shifts and alien species' invasion
- Role and relationship of macro- and microclimate data in plant phenology
- Phenological data: collection, curation and analysis

WHO CAN PARTICIPATE?

The workshop is primarily intended for faculty members. scientists and researchers working in colleges, universities and institutions. Only 25 participants will be selected for this workshop, on a first-come, first-serve basis, subject to meeting the eligibility criteria and payment of registration fee.

REGISTRATION



https://botany.uok.edu.in/Main/UserForm.aspx?Form=TWMPPECC

Bank details for depositing the registration fee I&K Bank, Hazratbal, Srinagar A/C No.: 0007040520000048 A/C Name: Botany Alumni IFSC Code: JAKAONASEEM

IMPORTANT DATES:

Registration starts: Last date for submission of application form: 16th Feb. 2024 27th Feb. 2024

Registration fee: Rs 500/=

No TA/DA will be provided for participation in the workshop. However, the participants will be served lunch, tea and refreshments during the workshop. Participants who require accommodation during the workshop will have to make their own arrangements. Those participants who require accommodation at the university guest house may please mention it on the

Training workshop

Monitoring Plant Phenology in an Era of Climate Change

(MARCH 04 - 05, 2024)

Sponsored by



Science & Engineering Research Board (SERB) Under

Scientific Social Responsibility (SSR)

Organized by



Department of Botany University of Kashmir, Srinagar

Venue: Auditorium, Department of Botany, University of Kashmir, Srinagar- 190006, J&K, India



OR Code

ABOUT THE DEPARTMENT

he Department of Botany's modest seed, planted in 1961 and nurtured by renowned botanists, scientists, and naturalists, has grown into a massive tree, its branches bursting with blooms of scholarship and dispersing fruits of excellence. Since its inception, over a half-century ago, the Department has made tremendous growth, reaching numerous milestones. The Department has evolved into a mega-entity that includes important adjuncts such as an internationally recognised herbarium (KASH), the Centre for Biodiversity and Taxonomy (CBT), and the Kashmir University Botanical Garden (KUBG), which features a high altitude garden at Gulmarg. Rare distinction of running major international and national projects, and earning two levels of special funding by the Department of Science & Technology, Govt. of India under its Fund for Improvement of Science & Technology Infrastructure (FIST) scheme and grant of Special Assistance Programme (SAP) by the University Grants Commission (UGC), testify to the achievements of the Department in teaching and research.

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ABOUT THE WORKSHOP

e are currently living in an era of rapidly changing climate. Tracking the pace and impact of the climate change on natural environment is important but quite challenging. Phenology, the study of the timing of seasonal events in living organisms, is a robust indicator of climate change impacts on biological world. For instance, as the winter ends, the surroundings burst with new lease of life owing to the onset of spring in temperate regions of world, such as Kashmir, the natural fields fill with vibrant greens, and brilliant wildflowers and their insect pollinators appear in rapid succession across the natural landscape. Similarly, as autumn approaches, the deciduous trees progress towards a colourful fall and lose their green colour and often turning brilliant shades of vellow, orange or red and many plants ripen their last fruits before the arrival of winter. Plant phenology has gained increasing public and scientific attention over the recent times due to the substantial scientific evidence that the timing of these life-cycle events are significantly shifting as a result of climate change. Plants change the timing of leaf-out, flowering, fruiting and leaf colour, in response to environmental cues such as temperature, irradiance, precipitation, and photoperiod, Recently, the unprecedented climate change is altering these environmental cues, and the plants, therefore, are reported to be shifting/adjusting their phenological events to track the changing climate. The timing of phenological events determines almost every biological activity, ecological function and evolutionary relationship, including plant-pollinator interactions. To date, majority of scientific research on phenology in relation to climate change is available from the developed countries. Nevertheless. the footprints of shifting phenology are prominently visible in the developing world, including Kashmir, Given the serious consequences of shifting phenology on biodiversity, a better mechanistic understanding of plant phenology, its variability and drivers across multiple scales, and its link to functional traits, micro- and macroclimate, and other physiological processes is urgently required. Therefore, in this regard, Science & Engineering Research Board (SERB) has sanctioned a research project entitled "Functional diversity, phenology, and frost resistance in plants under extreme Himalayan environments" to the Department of Botany, in which a training workshop to faculty and research scholars working in colleges and universities is to be conducted under Scientific Social Responsibility (SSR policy). It is in this context that the Department of Botany is organising a Training Workshop on the main theme of "Monitoring Plant Phenology in an Era of Climate Change" from 04-05 March, 2024. The primary goal of the workshop is to introduce the young faculty, scientists and researchers to the emerging frontier of plant phenology with reference to climate change. The workshop is expected to train the faculty and researchers in monitoring plant phenology, collection and analysis of phenological data, and its wider applications in biodiversity management and mitigation in an era of climate change.

ABOUT THE UNIVERSITY

he University of Kashmir, located at Hazratbal, Srinagar, is flanked by the world-famous Dal Lake on the east and Nigeen Lake on the west under the foothills of Zabarwan mountains and alongside the Holy Hazratbal shrine. The University's Main Campus, which covers 247 acres, is separated into three parts: Hazratbal Campus, Naseem Bagh Campus, and Mirza Bagh Campus (the latter serving for residential purpose), besides having three satellite campuses (North Campus, South Campus and Kupwara Campus). The tranquil ambience of the Campus, South Campus and Kupwara Campus). The tranquil ambience of the Campus makes it ideal for serious intellectual discourse and research studies. Over the years, the University has strived for excellence in its curriculum and activities. The National Assessment and Accreditation Council of India (NAAC) has re-accredited it as a Grade-A+ university and it figures in top 50 Universities of the country currently at Rank 33 under NIRF 2023. This is recognition and reflection of the high standard of quality in teaching and research at the University of Kashmir.