



ACCELERATE  
राष्ट्रपूजन



**DST-SCIENCE & ENGINEERING RESEARCH BOARD (SERB), NEW DELHI**

**Sponsored**

**High-End Workshop (KARYASHALA)**

On

**“Hands-on Training on Physiological and Bio-molecular  
Techniques for Crop Improvement”**

**03 July- 12 July, 2023**



Organised by-

**Department of Basic Science  
College of Agriculture**

**Rani Lakshmi Bai Central Agricultural University,  
Jhansi-284003, Uttar Pradesh**

### **About the University**

The Rani Lakshmi Bai Central Agricultural University has been established as an Institution of national importance under Department of Agricultural Research and Education (DARE) by an Act of Parliament (Act No. 10 of 2014) and notified on 5th March, 2014. This second Central Agricultural University in India established and named in the memory of great freedom fighter known as warrior queen of Jhansi Late Rani Lakshmi Bai who sacrificed her life at the altar of the freedom. The objectives of the university are to impart education in different branches of agriculture and allied sciences, undertake research in agriculture, programmes of extension education and promote linkages with national and international educational institutes. The University headquarter is at Jhansi located in Bundelkhand region. The university has established different constituent colleges, namely: College of Agriculture, College of Horticulture & Forestry at Jhansi in Uttar Pradesh and College of Veterinary & Animal sciences, College of Fisheries at Datia in Madhya Pradesh.

### **Objective of the Training Programme:**

This training aims to introduce the participants to the emerging field of non-destructive physiological instruments for field phenotyping and molecular techniques and their relevance in crop improvement. These are the basic techniques applied in most of physiological and molecular biology work for students in their PG/PhD degree program in plant science including agriculture. This training will cover basic and applied techniques and instrument handling to develop the candidates with effective practical skills to improve the vision of applying the learned skills and developing skilled human resources to take up research challenges in the field of plant physiology and molecular biology. The 10 days training programme will comprise lectures and practical sessions by experienced scientists from RLBCAU Jhansi and external experts.

### **Course Content:**

In this workshop, students will be given both theoretical and practical hands on training for handling and recording data through plant physiological instruments like Infra-Red Gas Analyser (Photosynthesis System), Plant Canopy Analyser, Leaf Area Meter, Chlorophyll meter, Chlorophyll Fluorescence meter, and molecular techniques like Primer designing, DNA and RNA isolation, PCR amplification, gel electrophoresis, besides this they will be given opportunities to learn high end equipments and its uses like Kjeldal Nitrogen distillation, HPLC, GLC, Flame Photometer, Microtomy and Advance Research Microscopy etc.

### **Travel, Boarding and lodging:**

The boarding, lodging and travel expenses of the selected participants will be borne under workshop programme budget as per DST-SERB guidelines. Accommodation will be provided at the University's guest house/Hostels. The travel expenses will be restricted to maximum sleeper class train or state road transport bus fare by the shortest route as per GOI norms. Participants are required to produce tickets in support of their claim. Air fare will not be reimbursed. Participants are advised to make their return reservations well in advance at their end. The reimbursement will be made as per DST-SERB guidelines. Participants are requested not to bring any family member along with them.

**Registration fee:** Selected students shall deposit Rs. 500 for registration at the university.

**How to reach the University:** RLBCAU, Jhansi is located on NH-75, Gwalior Road, Near Pahuj Dam in Jhansi district about 10 km from the Virangana Lakshmi Bai Jhansi railway station (Station code: VGLJ) and 15 km from the Jhansi Bus Stand.

**Eligibility:**

The participants pursuing Ph.D./ Master's degree in Plant/Crop Physiology, Agril. Biochemistry, Plant Biotechnology, Genetics & Plant Breeding, Plant Sciences or in any other allied subject in Agricultural Sciences from SAUs/CAUs/Universities/ICAR Institutes are eligible for this workshop. The maximum intake of participants will be restricted to 20 numbers on the recommendation of screening committee.

**How to apply:**

Interested candidates may apply online by registering at the following link. Subsequently, the applicants can download the application form through link provided below (links will be remain opened up to 15<sup>th</sup> June, 2023). A Duly filled application form should be submitted by following the guidelines through proper channel (recommended by the competent authority) on or before **last date (15<sup>th</sup> June, 2023)**. After that candidates will be communicated about their selection, they should immediately reply to the event organizer with firm acceptance and a travel plan.

**Important Dates:**

Last date for submission of Application: **15<sup>th</sup> June, 2023**

Communication to Participants: **19<sup>th</sup> June, 2023**

**Chief Patron** : Dr. A. K. Singh, Vice-Chancellor, RLBCAU, Jhansi

**Patron** : Dr. S. K. Chaturvedi, Dean, College of Agriculture, RLBCAU, Jhansi

**Event Organiser** : Dr. Ashutosh Kumar, Assistant Professor (Plant Physiology)

**Event Co-ordinators:** Dr. Anshuman Singh, Scientist (GPB)

Dr. S. K. Shukla, Assistant Professor (Agril. Biochemistry)

Dr. Ashutosh Singh, Assistant Professor (Biotechnology)

Dr. Rakesh Choudhary, Scientist (GPB)

Dr. Artika Singh, Scientist (Agronomy)

**Registration link:**

[https://docs.google.com/forms/d/e/1FAIpQLSfPuKK9IQeF6Lb6LBZPAciiZg0NYA3huM9AJzS pNVPp6\\_kSaA/viewform?usp=pp\\_url](https://docs.google.com/forms/d/e/1FAIpQLSfPuKK9IQeF6Lb6LBZPAciiZg0NYA3huM9AJzS pNVPp6_kSaA/viewform?usp=pp_url)

**All correspondence may be made to Event Organizer:**

**Dr. Ashutosh Kumar**

Event Organizer

Assistant Professor (Plant Physiology)

Department of Basic Science

Rani Lakshmi Bai Central Agricultural University, Jhansi-284003, Uttar Pradesh

Mobile +91-9646353901 Phone: +91-510-2730050 (Ext. 4021)

Email: [aksri.rlbcu@gmail.com](mailto:aksri.rlbcu@gmail.com); [aksri\\_du@yahoo.com](mailto:aksri_du@yahoo.com)