# High-End Workshop

on

# Pressurized Irrigation for Efficient Irrigation Water Management

(under the ABHYAAS Scheme – a SERB Initiative)

(February 13-19, 2023)



# Organized by:

Irrigation and Drainage Engineering Department College of Technology G.B. Pant University of Agriculture & Technology, Pantnagar, U. S. Nagar, Uttarakhand

# Funded by:

Science & Engineering Research Board (SERB), Department of Science and Technology (DST), Govt. of India under 'Accelerate Vigyan Scheme'.

#### About the Host Institution

In 1960, the first agricultural university of India, UP Agricultural University, came into being by an Act of legislation, UP Act XI-V of 1958. The University was further renamed as the Govind Ballabh Pant University of Agriculture and Technology in 1972. University has various colleges, namely College of Basic Sciences and Humanities, College of Agriculture, College of Agribusiness Management, College of Fisheries, College of Home Science, College of Technology and College of Veterinary and Animal Sciences.

The College of Technology came in to existence in this prestigious university in 1966 and College of Agricultural Engineering was merged in to it. Its ten departments offer eight B. Tech Degree Programs namely Agricultural Engineering, Civil Engineering, Computer Engineering, Electrical Engineering, Electronics & Communication, Information Technology, Mechanical Engineering and Production Engineering. In addition to it, the College offers 24 post graduate programs including a self financed MCA program. The programs of study are approved by AICTE and accredited by the National Board of Accreditation. Admissions to B Tech programs are through AIEEE, admissions to M Tech programs are through GATE score while to MCA program are through NIMSET score.

The Department of Irrigation and Drainage Engineering (Agricultural Engineering) is a constituent of the College of Technology. Irrigation and Drainage Engineering as component of Agricultural Engineering encompasses on farm aspects of irrigation and drainage, basically catering for engineering aspects of irrigated agriculture. The department is associated with the degree programme of B. Tech. in Agricultural Engineering and offers M. Tech and Ph.D. degree programs in Irrigation and Drainage Engineering.

#### Access to Pantnagar

Pantnagar, the main campus lies in Udham Singh Nagar district of Uttarakhand at 29° N latitude and 79° E longitude at an elevation of 243.8 m above the mean sea level. This main campus has the area responsibility for the entire Uttarakhand representing plains, Tarai, Bhabar and hill areas.

Pantnagar is about 250 kilometers from Delhi, 256 km from Dehradun, 360 kilometers from Lucknow. It is connected to the rest of India by roadways (Nearest bus stop are Rudrapur, Pantnagar and Nagla), railways (Nearest railway stations are rudrapur, Pantnagar, Lalkaun, Haldwani) and airways (Nearest airport is Pantnagar).

#### About the Workshop

'KARYASHALA' is an effort of SERB under its "Accelerate Vigyan" (acceleratevigyan.gov.in) programme to improve research productivity of promising PG and PhD students from universities and colleges through high-end workshops on specific themes. The present workshop is of one-week duration and for Twenty-five Participants only. This high-end workshop cum training programme is aimed to support the selected candidates by their capacity building in the field of design and operation of pressurized Irrigation. It is planned in order to create a platform for discussions and exchange of knowledge between participants and leading experts, industry professionals who are working for developing methods for sustainable agriculture employing the Modern Technologies of irrigation for efficient water management. The broad theme areas are: Current Applications and Challenges for Future Perspectives of Pressurized irrigation systems; Planning, layout, design, operation and maintenance of Sprinkler and micro irrigation Systems; Application of chemical material; Pumping Systems for Pressurized Irrigation Systems; Irrigation Water quality and soil salinity; Economic implication of Pressurized irrigation; Polyhouse design; Hands on training on design of micro and sprinkler irrigation systems etc.

#### Who can apply?

Motivated students currently pursuing their Post-graduate/ M.S./ M.E./ M. Tech./ Ph.D. degree in any science/ engineering discipline from reputed Institutions/ Universities of India and are interested in making career, doing projects or pursuing research in the field of efficient design and operation of the pressurized irrigation systems. Top 25 candidates would be selected based on criteria decided by duly formed committee for the purpose.

#### How to apply?

Interested participants can apply through Google form (https://forms.gle/utPd7K4d9Y5JpQHE9) latest by February 01, 2023.

# Nature of the support

• Travel expenses will be reimbursed to the participating candidates upon producing the original train tickets for traveling through shortest route as per SERB guidelines.

- The participants will be provided lodging and boarding in University guest house by the organizers on room sharing basis as per SERB/university guidelines
- There is No Registration Fee for the shortlisted candidates.
- The selected candidates have to submit an "No Objection certificate" (NOC) from their supervisor/Head of the department indicating their enrolment with the institute

# **Organizing Committee**

Chief Patron: Dr. Alaknanda Ashok, Dean COT, G.B.P.U.A.&T.
Pantnagar
Patron: Dr. Rajesh P. Singh, Prof. & Head IDED, COT, G.B.P.U.A.&T.
Pantnagar
Chairperson: Dr. P.K. Singh, Prof. IDED, COT, G.B.P.U.A.&T.
Pantnagar
Coordinator: Dr. Mohan Lal, Asstt. Prof., IDED, COT, G.B.P.U.A.&T.
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Co-coordinator: Dr. Dheeraj Kumar, Asstt. Prof., IDED, COT, G.B.P.U.A.&T.
G.B.P.U.A.&T. Pantnagar
Co-coordinator: Dr. V. K. Verma, Asstt. Prof., CED, COT, G.B.P.U.A.&T.

#### Committee members

Dr. Yogendra Kumar, Prof. IDED, COT, G.B.P.U.A.&T. Pantnagar Dr. Harish Chandra, Prof. IDED, COT, G.B.P.U.A.&T. Pantnagar Dr. Vinod Kumar, Prof. IDED, COT, G.B.P.U.A.&T. Pantnagar Dr. Arvind Singh Tomar, Asstt. Prof. IDED, COT, G.B.P.U.A.&T. Pantnagar

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