

## Important Dates

- Last date for receipt of application : 30.09.2019  
Intimation of selection : 05.10.2019  
Confirmation of participation by candidates : 10.10.2019

**NOTE:** Once selected, candidates will be intimated through e-mail, fax or by post to which they should promptly reply with firm acceptance and travel plan.



## Contact Us:

### **Course Director:**

**Dr R K Singh, Director (Acting) & PC (PET)**

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### **Course Co-Directors:**

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### **Mailing address:**

**Course Director,**

ICAR-Winter School- Nov. 05-25, 2019

AICRP on PET, ICAR-CIPHET, PO: PAU Ludhiana - 141004.

For any other update log on [www.ciphnet.in](http://www.ciphnet.in)

## Application Form for participation In Winter School

**Design, innovations and applications of Plasticulture  
Technologies in Agriculture, Horticulture and Pisciculture  
production and Post-Harvest management for doubling the  
Farmer's Income**

**November 05-25, 2019**

1. Full name (in BLOCK letters):
2. Designation:
3. Present employer and address:
4. Address to which reply should be sent (in BLOCK letters):  
Mobile No..... E-mail:.....Fax.....
5. Permanent address:
6. Date of birth:
7. Sex: Male/ Female:
8. Teaching/ research/ professional experience:  
(mention post held during the last 5 years and number of publication)  
S. No. Post held Period with dates
9. Marital status: Married/Un-married:
10. Mention if you have participated in any seminar, Summer/ Winter School/Short course, etc., during the previous years under ICAR/ other organizations:
11. Postal order/DD No. Dated of Rs. 50/- (NON REFUNDABLE) for registration of application (in favor of ICAR Unit-CIPHET, Ludhiana)
12. Academic record: (Degree onwards)  
Examination passed Subjects Year Division University  
  
Bachelor  
Master  
Doctorate  
Post-doc  
  
Signature of the applicant with date & place
13. Recommendation & certificate of sponsoring institute:  
  
Signature with date, designation & address  
(Office seal)



Winter School

**Design, Innovations and Applications of  
Plasticulture Technologies in Agriculture,  
Horticulture and Pisciculture Production  
and Post-Harvest Management for  
Doubling the Farmer's Income**

**November 05-25, 2019**



**Sponsored by  
INDIAN COUNCIL OF AGRICULTURAL RESEARCH  
NEW DELHI**

**Course Director  
Dr. R K Singh**

**Course Co-Directors  
Er. Indore Navnath  
Dr. Ranjeet Singh**

**Organized by**



**AICRP on Plasticulture Engineering & Technology  
ICAR- Central Institute of Post-Harvest Engineering &  
Technology Ludhiana**



## **Background**

India is one of the leading producing country in horticulture, animal husbandry, horticulture and pisciculture etc. Agriculture sector accounts for almost 15.83 % of GDP and provides employment to around 60% of the total work force and contributes 20% of total exports. India currently supports nearly 17.84% of the world population, with 2.4% land and 4 % of water resources. Presently, In India 85% farmers are fall under small and marginal land holding category. About 10 lakh hector land was reduce from 2005. The major challenge for the country is to maximize production from limited land holdings which only possible through intervention of Plasticulture technologies. Average agriculture household income was a mere Rs 8,931 per month (NABARD, 2016) and cultivation is still a major source of income (35 per cent), followed by daily wage laborer (34 per cent), with livestock rearing about 8 per cent of their income. Hence Plasticulture technologies such as shade net, Polyhouse, plastic lined ponds, micro irrigation, improved housing shelter, FRP carp hatcheries, plastic packaging and plastic mulching has potential to double the farmers income by enhancing productivity and resource use efficiency. Irrigation efficiency of 37% could be enhanced up to 80% with modern micro irrigation and plastic mulching plasticulture technologies. Hence there need to produce more from available land which can only be possible by improvement in crop/fish/animal productivity, resource use efficiency and reduction of losses through application of Plasticulture technologies. Plasticulture will play crucial role in achieving government goal of doubling farmer's income by 2022-23.

## **Course Contents**

The course contents include lectures and hands-on practicals on important topics some of which are listed below:

- + Introduction and Initiatives and policies of Government of India for promoting Plasticulture
- + Scope of Post-Harvest in the current Scenario of Agricultural Production System
- + Recent technological advances in Plasticulture for enhancing farmer income
- + Protected cultivation techniques for different agro climatic zones of India
- + Prospects and potential to promote Micro -irrigation and Fertigation in India

- + Design of Underground Pipeline Irrigation System for Plasticulture
- + Application of Plasticulture on fish processing and animal husbandry
- + Practical on Application of Plasticulture on fish processing
- + Cold arid horticulture
- + Intelligent packaging system for perishables
- + On-farm practices to maintain the quality of horticultural produces
- + Micro plastics in fisheries and aqua culture
- + Solar dryer plasticulture technology: Principles, types and uses
- + Soil Less Cultivation Of High Value Crops
- + Vertical farming for urban vegetable production
- + Flood water and drainage management
- + Plasticulture invention in food safety, nutrition & health
- + Design, layout, selection for plastic mulching in agriculture production
- + Automation in protected structures and micro irrigation systems
- + Importance of renewable energy in plasticulture
- + Recycling of plastics used in agriculture
- + Preparation of business proposals for Plasticulture technology based industries
- + Water filtration & Low cost water lifting devices in Plasticulture

## **Eligibility**

Active researcher/ SMS/ Teachers/ Scientist/ not below the rank of Assistant Professors or equivalent and above from ICAR Institutes/SAUs/ CAUs/ National institutes/ IIT/NIT/ or other Universities/ Institutes approved by UGC. Participants having minimum two years experience in disciplines of Agricultural Sciences/ Horticulture/ Agronomy/ Agriculture Engineering/ Fishery Sciences/ Aquaculture/ Animal Sciences/ Dairy Sciences/ Soil Science/ Land and Water Management Engg/ Natural Resource Management or other disciplines working in the field of Plasticulture and other similar areas are eligible to apply.

## **Travel / Accommodation**

The expenditure on travel by the participants from SAU's and other ICAR institutions will be paid as per their entitlement for the class of travel restricted to the maximum of AC II/III Tier fare by the shortest route. Participants are required to produce the original and photocopies of tickets in support of their claim. Lodging and boarding arrangements for selected participants shall be made free of cost in the Guest House of the ICAR-CIPHET.

*Note: Reimbursement of air fare will not be done under any circumstances*

## **Field Trips and Exposure Visits**

There shall be two or three field trips/ exposure visits to important plasticulture industries, laboratories & progressive farmer fields located nearby Ludhiana/Abohar/ Amritsar/ Chandigarh.

## **Host Institute**

ICAR-Central Institute of Post-Harvest Engineering and Technology (CIPHET) is an ISO certified premier institute under National Agricultural Research and Education System (NARES) of ICAR with mandates to do research, teaching and extension in post-harvest technology and Plasticulture engineering and technology. Ludhiana is headquarter with 3 divisions and coordination units of two AICRPs and another divisional campus (Horticultural Crop Processing) is located at Abohar, Punjab. This institute gives special emphasis on developing new processes and products, prototypes of processing machineries and development of Plasticulture technologies. The Institute has more than 40 scientists working with advance equipment's and excellent laboratories.

## **How to Apply**

Interested candidates may apply online at CBP portal of ICAR <https://cbp.icar.gov.in> latest by 30<sup>th</sup> September, 2019 following the strictly guidelines mentioned on the link for winter school <https://cbp.icar.gov.in/ToDownload/Guidelines%20to%20participate%20in%20training%20program.pdf>. Hardcopy of successfully submitted online application and application in prescribed format along with a Postal Order/ DD of Rs. 50/- (non-refundable) must be sent to the Course Director after approval from competent authority of University Institute. The amount may be drawn in favour of ICAR Unit-CIPHET, Ludhiana payable at Ludhiana. The complete list of selected participants will be available in CIPHET website [www.cbp.icar.gov.in](http://www.cbp.icar.gov.in) and the same will also be conveyed to the applicants through email. In case of any query please contact Course Director or Course Co-Directors. Only 25 participants shall be selected for the course.

## **Weather**

Ludhiana features a humid subtropical climate, with three defined seasons; summer, monsoon and winter. The Winter School falls during start of winter, so weather will be pleasant with an ambient temperature around 10°C -25°C. Light warm cloths may be required during this period.