

ABOUT THE INSTITUTE

The Indian Agricultural Research Institute (IARI) is the country's premier institution for agricultural research, education and extension. It has been serving the cause of science and society with distinction through basic research, generation of appropriate technologies and development of human resources. Recognizing the importance of biochemical studies in crop research, the Division of Biochemistry was created in 1966 as separate Division with major emphasis on molecular biology, plant biochemistry and nutrition. Since its inception, the Division has acquired the best research, teaching and training facilities, and take legitimate pride in being recognised as the only Centre of Advanced Faculty Training in Biochemistry in NARS by ICAR ever since 1995.

INTRODUCTION

Plants are exposed to various biotic and abiotic stresses which limit the growth and yield. Global climate change has drastic effect on the quantitative and qualitative parameters associated with the yield in different agriculturally important crops. In order to feed the burgeoning population, we have to develop crops/technologies which can mitigate the problem of climate change without compromising with the quality and yield of grains. In some of the crops like cereals, pulses, legumes etc. not much work has been done in order to decipher the mechanism associated with defense/tolerance against different abiotic stresses. Similarly on nutritional aspect, these crops are deficient in one or other essential amino acid which must be supplemented in the diet in order to have a healthy life. Functional genomics has come in a big way to identify the candidate genes associated with these parameters. Proteomics tools like gel-based and gel-free characterization of proteins have

paved the way for the characterization of various metabolic pathways and potential proteins which can be used for the development of 'smart crops'. This training aims to introduce the participants with various techniques and tools used in molecular biology and biochemistry for dissecting various pathways associated with defence/nutrition of plants. The participants will be provided hands-on training in basic tools used in molecular biology and biochemistry to make them confident and competent in their future endeavours.

OBJECTIVES

The objective of this training is to give an opportunity to the teachers and young scientists working in the ICAR institutes and SAUs to learn recent techniques used in molecular biology and Biochemistry related with researchable topics in food crops.

DURATION OF THE COURSE

The course has been planned for 21 days (12th November to 02nd December 2014). The training will comprise of lectures and practicals by experts from the IARI and also by invited experts from the premier Institutions.

VENUE

The venue of the training is the Centre of Advanced Faculty Training, Division of Biochemistry, Indian Agricultural Research Institute, New Delhi-110012

PARTICIPANT'S ELIGIBILITY

Young researchers/teachers not below the rank of Assistant Professors or equivalent from the ICAR institutes and SAUs having minimum two year experience in the disciplines of Biochemistry/ Molecular Biology/ Plant Biotechnology and allied sciences in Agriculture, are eligible. A total of 25

candidates will be selected for this course. The selection of the candidates will be made by a screening committee as per the guidelines of the ICAR.

MODE OF APPLICATION

Scientists interested in participating the CAFT course should apply through proper channel in the given proforma. The participants should submit their application online using CBP portal (<http://iasri.res.in/cbp/> or under the link Capacity Building Program at <http://icar.org.in>). After filling the online application, take a printout of the application and get it approved by the competent authority of the organization. Upload the scanned copy of application through CBP portal. The application for participation in the CAFT Course in the given format should be duly forwarded by the employer and submitted to the Course along with a sum of Rs. 50/- (fifty only) as registration fee (non-refundable) in the form of postal order drawn in favor of Course Director payable at IARI, Post Office, New Delhi-110012. However, an advance hard copy of the application may be sent to the Course Director. The last date for the receipt of the application is 31st September, 2014.

ACCOMMODATION AND TRAVELING ALLOWANCE

Free boarding and lodging will be provided to the participants during the training period. Travel Allowance to the participants will be paid as per their entitlement for the class of travel, restricted to the maximum of AC II tier rail fare by the shortest route. Participants are required to produce money receipt/tickets in support of their claim. The reimbursement will be made as per ICAR guidelines.

Contact

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**Last date for the submission of application is
30th September, 2014**

Application form can be downloaded from the
CBP portal of ICAR or from IARI website
(<http://www.iari.res.in>)

Application Proforma

12th November – 02 December, 2014 (21 Days)

1. Full Name :
(in block letter)
2. Designation:
3. Date of Birth:
4. Sex Male/Female:
5. Basic pay as on 31.07.2014:
6. Present employer & address:
.....
7. Correspondence Address:
.....
Phone Nos. off/Res./Mobile:
E-mail:
8. Academic qualification with discipline and year:
M.Sc./Ph.D.:
9. Major area of specialization:
.....
10. Professional Experience (Year)
11. a) Paper published in journals (Nos.)
b) Title of the project associated with
12. State how this training is going to be useful to you
13. Mention if you have participated in Summer/
Winter School/Training Course under ICAR/
other organization
14. Signature of the applicant
15. Signature and address of the forwarding
authority.



**ICAR sponsored
Center of Advanced Faculty
Training on**

**Functional Genomics and
Proteomics -Techniques and Tools
for Crop Improvement**

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Indian Agricultural Research Institute
New Delhi-110012**