

CONTACT

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Last date for the submission of application is 9th Oct., 2017.

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

APPLICATION PROFORMA

13th November – 22nd November, 2017

1. Full Name :
(in Block Letter)
2. Designation.....
3. Date of Birth :
4. Sex : Male/Female.....
5. Basic pay as on 31.07.2017.....
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 application
15. Signature and address of the forwarding authority



ICAR Sponsored
Training programme

Techniques for Estimation of Nutraceutical Properties from Crops

13th November – 22nd November, 2017

**Last date for application
9th Oct., 2017**



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B.A. College of Agriculture
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ANAND – 388 110

ABOUT THE INSTITUTE

Anand Agricultural University

Anand Agricultural University (AAU) was established in 2004 at Anand with the support of the Government of Gujarat, Act No. (Guj. 5 of 2004) dated April 29, 2004. Carved out of the erstwhile Gujarat Agricultural University (GAU), the dream institution of Sardar Vallabhbhai Patel and Dr. K. M. Munshi, the AAU was set up to provide support to the farming community in three facets namely education, research and extension activities in Agriculture, Horticulture, Agril. Engineering, Product Processing and Home Science. At present, there are seven Colleges, seventeen Research Centers and six Extension Education Institutes working in nine districts of Gujarat. Anand Agricultural University has secured 40th position in India and 1st in Gujarat among all Universities as per National Institutional Ranking Framework, MHRD, Govt. of India.

B. A. College of Agriculture

Established on May 15, 1947, B. A. College of Agriculture was a dream project of our great leaders Sardar Vallabhbhai Patel and Shri Kanaiyalal Munshi with a major responsibility of generating technology in agriculture and allied fields for the development of rural community. Its main mission is to meet the need of agricultural manpower for social, professional and economic development through teaching, research, practical training and extension education.

Department of Biochemistry

Department of Biochemistry was established during the VIth F.Y.P. (1977-78) in G.A.U. Under phase I of National Agricultural Research Project, Grain Quality Laboratory was established in 1983 to take up biochemical research related to grain quality. The department is mainly associated with teaching in U.G. and P.G. degree programs. It is also conducting important research for nutraceutical quality of cereals, pulses oilseeds, vegetable and fruit crops. It has ten state-of-art

function based laboratory facilities which are well equipped with necessary instruments and equipments required for conducting basic and advanced research.

INTRODUCTION

In the field of Biochemistry/Biotechnology and Food Science use of sophisticated instruments is increasing day by day. In the recent years scientists are working for yield as well as nutritional quality. Scientists are also taking experiments to reduced/eliminate the anti-nutritional compounds present in cereals, pulses, oil seeds and vegetables also. For the estimation of such compounds use of modern instruments are necessary to detect the compound at ppm and ppb level. In India many laboratories are not having facility of such instruments. Hence, scientists are not able to know the different techniques and principles of modern equipments. This type of training will provide knowledge of advanced techniques to the different universities as well as various ICAR centres. It will 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 Biochemistry and Molecular biology related with researchable topics in food crops.

DURATION OF THE COURSE

The course has been planned for 10 days (13th November to 22nd November, 2017). The training will comprise of lectures and practicals by experts from the AAU and also by invited experts from the premier Institutions.

VENUE

The venue of the training is the Biochemistry Department, B.A.College of Agriculture, Anand Agricultural University, Anand-388 110.

PARTICIPANT'S ELIGIBILITY

Young researchers/teachers not below the rank of Assistant Professors or equivalent from the ICAR institutes and SAUs having minimum two years experience in the disciplines of Biochemistry/ Molecular Biology/ Microbiology/ Plant Pathology/Plant Breeding and allied sciences in Agriculture are eligible. A total of 25 candidates will be selected for this training. 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 Programm 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 training in the given format should be duly forwarded by the employer and submitted to the training along with a sum of Rs. 50/- (Fifty only) as registration fee (non-refundable) in the form of postal order drawn in favour of **Course Director** payable at **Institute of Agriculture Post Office, Anand-388110**. However, an advance hard copy of the application may be sent to the Course Director at AAU, Anand. The last date for the receipt of the application is **9th Oct., 2017**.

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.

TIME TABLE OF TRAINING PROGRAMME

Sr. No.	Topic of Lecture/Practical	Start Day	End Day	Faculty Name & Designation
1.	Transformation in Plants – Practical Perspectives	1	1	Dr. Sunil Kumar Singh (Associate Professor)
2.	Separation of protein by PAGE – SDS PAGE – Acid Page	1	1	Dr. J.G. Talati (HOD)
3.	Electrophoresis – Basic and Current Advances	1	1	Dr. J.G. Talati (HOD)
4.	Composition and nutritional quality of cereals	2	2	Dr. Jitendra Dhruve (Associate Professor)
5.	Techniques for Gene Tagging and Cloning	2	2	Dr. R.B. Subramanian (Professor)
6.	Estimation of lysine and tryptophan from maize and wheat/rice	2	2	Dr. Jitendra Dhruve (Associate Professor)
7.	Quality Protein Maize	3	3	Dr. S.M. Khanorkar (HOD)
8.	Composition and nutritional quality of pulses	3	3	Dr. Y.M. Shukla (Professor)
9.	Estimation of methionine and trypsin inhibition property from chickpea and pigeonpea	3	3	Dr. Y.M. Shukla (Professor)
10.	Estimation of oil and protein/Estimation of anti-nutritional or off flavour compounds	4	4	Dr. N.J. Patel (Associate Professor)
11.	Biochemistry of soybean	4	4	Dr. N.J. Patel (Associate Professor)
12.	Molecular Dynamics Simulations of Biomolecules	4	4	Dr. Pratibha Parihar (Assistant Professor)
13.	Nutritional importance of vegetables	5	5	Dr. R.R. Acharya (HOD)
14.	Antioxidant Properties in Food Grains	5	5	Dr. Vinayak H. Patel (HOD)
15.	Estimation of Ascorbic Acid, TSS, Anthocynin, Carotene, Saponins etc. from different vegetables	5	5	Dr. Jitendra Dhruve (Associate Professor)
16.	Principle and application of UPLC	6	6	Dr. N.J. Patel (Associate Professor)
17.	Success stories of crop improvement by biotechnology	6	6	Dr. Akarsh Parihar (Associate Professor)
18.	Separation of phenols by UPLC	6	6	Dr. Nitesh Litoriya (Assistant Professor)
19.	Visit to Amul Dairy	7	7	Dr. N.J. Patel (Associate Professor)
20.	Visit to DMAPR, Boriavi, Gujarat and lecture on Important medicinal plants and their nutraceutical properties	7	7	Dr. P. Manivel (Principal Scientist)
21.	Use of tissue culture technique for crop improvement	8	8	Dr. Ghanshyam B. Patil (Assistant Professor)
22.	Importance of oil types in the diet	8	8	Dr. J.G. Talati (HOD)
23.	Separation of oils by GLC and Active ingredient estimation from medicinal plants by GC-MS	8	8	Dr. Amar Sakure (Assistant Professor)
24.	Extraction of DNA and RNA by Automated Extraction System	9	9	Dr. Amar Sakure (Assistant Professor)
25.	States of Pesticide Residues in Food, Grains and Vegetables	9	9	Dr. P.G. Shah (HOD)
26.	Molecular markers	9	9	Dr. Sushil Kumar (Assistant Professor)
27.	Enhancement of Micronutrients in food grains through PGPR	10	10	Dr. R.V. Vyas (HOD)
28.	Identification of variety by SSR markers using automated Electrophoresis system	10	10	Jalpesh Patel (Assistant Professor)
29.	Use of markers for crop improvement	10	10	Dr. R.S. Fougat (HOD)