



Information Brochure
Summer School (Sponsored by ICAR)

on

**“FARMERS EMPOWERMENT AND
ENTREPRENEURIAL DEVELOPMENT IN FOOD
TECHNOLOGIES FOR SUSTAINABLE
AGRICULTURE”**

June 27 - July 17, 2017

Course Director

Dr. Amarjeet Kaur

Sr. Milling Technologist

Department Milling Technologist

Course Co-Directors

Dr. Poonam A Sachdev ,Sr Vegetable Technologist cum Head

Dr. Preeti Ahluwalia, Pakaging Technologist

Dr Kamaljit Kaur, Assistant Professor

Venue

Food Industry Centre

Department Food Science and Technology

Punjab Agricultural University

Ludhiana-141004

About Punjab Agricultural University

The Punjab Agricultural University was established in 1962 to serve the state of erstwhile Punjab. It was inaugurated by Pt. Jawahar Lal Nehru, Prime Minister of India on July 8, 1963. On trifurcation of Punjab in November 1966, Haryana Agricultural University was carved out of PAU by an Act of Parliament in February 1970. Later, in July 1970, Himachal Pradesh Krishi Vishvavidalya was established. In 2006 the College of Veterinary Science was upgraded to become Guru Angad Dev Veterinary and Animal Science University (GADVASU) at Ludhiana. The Punjab Agricultural University (PAU) performs the integrated functions of teaching, research and extension in agriculture, agricultural engineering, home science and allied disciplines. The University has well equipped laboratories, library and lecture rooms and elaborate farm facilities. The PAU has played a key role in increasing food grain production in the Punjab State several folds share its reputation and ushering in an era of Green Revolution in India. It has also made notable contributions in increasing livestock and poultry production. In recognition of its outstanding achievements in agricultural research, education and extension, it was adjudged the Best Agricultural University in India in 1995.

The Punjab Agricultural University now has four constituent colleges, viz. College of Agriculture, College of Agricultural Engineering, College of Home Science and College of Basic Science & Humanities. At present the University, through 35 departments in the four constituent colleges, offers 43 Master's and 29 Ph.D. Programmes besides 4 under-graduate programmes at Ludhiana and outstations. The course curricula are constantly revised and restricted to keep pace with the latest developments in agriculture and allied fields.

Department of Food Science and Technology

The Department of Food Science and Technology was established in 1972 under the College of Agriculture. The Department offers Food Technology as Elective in B.Sc. Agriculture, B.Tech. (Food Technology), master's and doctorate programmes in Food Technology. It has four sections viz. cereals, fruit and vegetables, dairy, meat and egg Technology. The department has produced around 450 trained food technologists so far. The department undertakes basic and applied research on value addition of foods. A pioneer among the State Agricultural Universities, the department has developed sophisticated laboratories and pilot plants for tackling the problems faced by the food processing industry in and around the state. The department conducts various training programmes for the benefits of the farmers, women and entrepreneurs. The expertise of the Department is also available to the industry in diverse ways, which include developing technologies and assessment of quality and analysis of raw material and food products. The Department has built linkages with private and public sectors, food industries, other agencies and institutes. The Department has established Food Industry Centre with the technical guidance of Ohio State University, USA with the aim of upscaling the technologies developed for value addition of food crops. Similarly, the department has set up Food Processing Training-cum-Business Incubation Centre at Bathinda to impart hands-on training to farmers and entrepreneurs in food processing.

Introduction

Being an agricultural country, the condition of farmers is very indigent. Although the food production rate is commendable, but the farmers are not getting enough price for their hard work. Agriculture is under pressure to produce greater quantities of food, feed and bio-fuel on limited land and financial resources. Current over reliance on handful of major staple crops has inherent agronomic, ecological, nutritional, economic risk and is probably unsustainable in the long run. The factors behind this may be our more dependency upon climatic conditions, sometimes government policies or may be lack of knowledge about other processing conditions. This has led to the condition that we are producing so much but the output is atrocious. There is a lack of marketing returns from the farm produce in general. Marketing of perishable crops in remunerable price for the farmer has become the major challenge leading to financial insecurity among farming community. Thus this training programme has been proposed to update the skill of scientists so that they can extend this knowledge to the target group for their benefit. This training programme includes dissemination of knowledge to the target group right from post harvest handling and management of fresh produce to status and scope of processing . Another purpose of this training is to educate them about the technologies of various products that can be prepared from cereals, fruits and vegetables, milk and meat. One of the major aim of this training is to upgrade their knowledge about laws and regulations, quality control, marketing and costing and pricing of the product. All these things help the target group in long run and helps them to understand the importance and benefits of food technologies in this growing world.

About The course

The major objective of this summer school is to provide training to scientists and teachers to update their scientific knowledge about the novel and advanced food processing technologies for value addition of food crops for decreasing the post-harvest losses and ensuring food and nutritional security of the nation. Post harvest handling and management of fresh produce and advances on various technologies from **Farm to Fork** for preparation of wide range of food products such as jams, jellis, pickles, chutneys, preserves, candies, juices, breakfast cereals, snack foods by extrusion, ice-creams, cheese and paneer making, meat products, milk beverages will be discussed theoretically and practically. Topics like food safety, food standards, labeling, marketing, product economics and scale up for commercialization and entrepreneurship development will also be covered. Field visits will be arranged to different food processing units of the state. Young scientists and teachers will be given opportunities to discuss and exchange their ideas with experts/resource persons working in this field. The scientists and teachers will be evaluated and given certificates.

Eligibility:

- i) Master's Degree in Processing and Food Engineering/ Post-harvest Technology/ Dairy Engineering and Technology/ Agril. Engineering / Chemical Engineering / Biochemical Engineering / Food Science and Technology/ Food Technology/ Food and Nutrition/ Veterinary (LPT)/ Fish Processing/ Horticulture / Microbiology or equivalent.
- ii) Working not below the rank of Scientist/ Assistant Professor/ Assistant Scientist and equivalent in the concerned subject under ICAR Institutes/ State Agricultural University/ Horticultural and Forestry University/ Veterinary and Fishery University/ Central University.

The total number of **participants in the Summer School will not exceed 25.**

How to Apply :

The interested candidates should apply online using CBP portal through <http://iasri.res.in/cbp> or under the link Capacity Building Program at <http://icar.org.in>.

Steps for submission of online application form are as follows:

1. To create User Id use **“Create New Account”** link on home page. Login using your User Id & Password. If you have forgotten your password, click on **“Forgot password”** link.
2. After login, choose this training under Food Engineering category, and click on **“Participate in Training”** link and fill the proforma. After filling the online application, fill 'Draft/Postal' order details and take a printout of application and get it approved by the competent authority of the organization. Upload the scanned copy of the application through CBP portal. In addition, **send the hard copy to The Course Director of the Summer School along with DD/PO.**
3. The applicant has to pay non-refundable **registration fee of Rs. 50/- (Rs. Fifty only)** as DD/PO in the favour of **“COMPTROLLER”, PAU payable at Ludhiana.**
4. Advance copy of application can be sent by E-mail to Course Director/Course Coordinator.
5. The selected candidates will be informed by post/email/ fax/CBP portal well in advance.
6. Once the candidates are intimated about their selection for short course, they need to confirm their acceptance by last date.

Boarding & Lodging

Participants will be provided free boarding and lodging by PAU, Ludhiana as per ICAR norms for conducting summer school. The trainees will be accommodated in the Parker House of PAU which is about 300 m from the PAU Gate No. 2. **Participants are requested not to bring family member** as the accommodation is strictly limited for trainees only. Participants are requested to inform the Course Director well in advance about their arrival and departure including date and time

Note: Participants are advised not to bring their spouse/children along with them during training period

Travelling Allowance

The candidates selected for participation in the training will be provided travelling expenses as per their entitlement restricted to 2nd/3rd AC rail fare or Bus fare by the shortest route after submission of original tickets. No DA will be paid to the participants. In the absence of tickets sleeper class train/bus fare will be paid. Travel by Air is not permissible.

Duration and Venue

The summer School will be organized in the Department of Food Science & Technology, College of Agriculture at Punjab Agricultural University, Ludhiana (Punjab) for the duration of 21 days from June 27-July 17,2017 (both days inclusive). The participants can leave the venue after 5:00 PM on July17, 2016.

Location & Weather

Ludhiana is well connected by road and rail and is about 320 km from New Delhi and about 100 km from Chandigarh. PAU campus is located on Ferozepur road and about 5 km

from Ludhiana railway station; and about the same distance from the bus terminus. Ludhiana has a tropical climatic condition. From April to June, the city experiences summer season. The city remains excessively hot, maximum temperature reaches up to 45°C (70% RH). June brings a little rain but it does not help reduce the scorching heat as the average minimum temperature hardly drops to 22°C.

Important Dates

Last date for receipt of nominations: May26, 2017, Intimation of selection May 31, 2017

Date for confirmation from participants June7, 2016

Contact Persons & Address for Correspondence

Course Director

Dr Amarjeet Kaur

Sr. Milling Technologist

Department Food science & Technology

Phone No. 0161-2401 960,305 (Off.), 0161-2410983 (Fax)

Mob: 09888466677

Email:fstsummerschool@gmail.com, foodtechak@gmail.com, amarjit@pau.edu

Course Coordinators

Dr Poonam A.Sachdev, Sr. Vegetable Technologist cum Head, Department Food Science & Technology

Email: hodfst@pau.edu, Mob: 09855055871

Dr Preeti Ahluwalia, Packaging Technologist, Department Food Science & Technology

Email: preetiahlwalia68@gmail.com, Mob:07340788956

Dr Kamaljit Kaur,Asstt. Professor

Email : kamalbhella@pau.edu, Mob:09876152061

DR POONAM A. SACHDEV (Head)
DEPARTMENT FOOD SCIENCE & TECHNOLOGY
PUNJAB AGRICULTURAL UNIVERSITY
LUDHIANA

Email:hodfst@pau.edu

APPLICATION FORM

Format for applying (To be sent directly to the Course Director of the Summer school)

1. **Full name (In Block letters):**
2. **Designation:**
3. **Present employer and address:**
4. **Residential address:**
5. **E-mail address**
6. **Telephone No (self and one of family numbers):**
7. **Date of birth & age (as on 1 June, 2017):**
8. **Gender (Male/Female):**
9. **Academic record:**

Degree	Subjects main/subsidiary	Year of passing	Division	University/Institution

10. **Teaching/Research/Professional experience** (mention post held) during last 5 years and number of publications:
 - Research/Teaching/extension experience:
 - No. of Publications:
11. **Marital status** (Married/unmarried):
12. **Discipline and field of specialization:**
13. **Mention if you have participated in any research seminar, summer/winter school/short course etc.** during the last 5 years under ICAR/Other organizations:
14. **Demand Draft** of Rs. 50/- (in favor of “comptroller, PAU” Payable at Ludhiana) towards registration (non-refundable).

Bank: _____ DraftNo. _____ Dated _____

Signature of Applicant

Date:

Place:

15. **Recommendation of Forwarding Institute:** It is certified that the information furnished above is true and correct as per office record.

Signature _____

Date _____ Designation _____ with _____ official seal-

N.B: This Proforma can be typed/photocopied (enlarged) and used.