

# APPLICATION FORM FOR PARTICIPATION IN TRAINING COURSE

**HANDS-ON TRAINING ON PREPARATION OF  
FUNCTIONAL FERMENTED DAIRY PRODUCTS**  
[Sponsored by the Government of India's SCSP  
[Scheduled Caste Sub Plan] Scheme]

**Organized at  
ICAR-National Dairy Research Institute  
Karnal-132001 (Haryana) INDIA**

**12-21<sup>st</sup> July 2023**

- Name of the applicant in block letters:
- Designation:
- Present Address:
- Address to which reply should be sent:  
(In block letters)  
(Give Email ID and phone no.)
- Permanent address:
- Date of birth:
- Sex: Male/ Female
- Previous training, if any:
- Mention if you have participated in any training course during the previous years under SCSP scheme
- Academic records

Sr. No.	Exams passed	Subject	Year of passing	University

Signature of the applicant

Date .....

Place .....

7. Recommendation by forwarding authority:

Signature .....

Designation .....

Date .....

Note: It is mandatory for applicant to submit a soft copy of SC community certificate issued by state/central government and an Aadhaar card with the filled application form for consideration. Submit the soft copy of application to Dr. Shilpa Vij ([shilpavijn@gmail.com](mailto:shilpavijn@gmail.com)) before 20<sup>th</sup> June 2023. The confirmation of participation should be sent before 21<sup>st</sup> June 2023.

**Chief Patron**

**Dr. Dheer Singh**  
Director & Vice Chancellor  
ICAR-National Dairy Research Institute  
Karnal-132001

**Patron**

**Dr. Shilpa Vij**  
Head, Dairy Microbiology

**Course Director**

**Dr. Shilpa Vij**  
Principal Scientist, Dairy Microbiology

**Course Co-ordinator**

**Dr. Anil Kumar Puniya**  
**Dr. Pradip V. Behare**

**Training Co-ordinator**

**Mr. Mohammad Rizwan**  
**Mr. Nishchal Thakur**

**Correspondence**

**Dr. Shilpa Vij**

Principal Scientist

ICAR-National Dairy Research Institute,  
Dairy Microbiology Division,  
Karnal-132001. Haryana.

Contact No. +91-1842259180, 9996262863

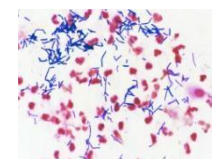
Email: [shilpavijn@gmail.com](mailto:shilpavijn@gmail.com)



## 10-Days Hands-on Training on Preparation of Functional Fermented Dairy Products

*Sponsored Under*  
**[Sponsored by the Government of  
India's SCSP (Scheduled Caste Sub  
Plan) Scheme]**

**12-21<sup>st</sup> July 2023**



*Organized by*

**Dairy Microbiology Division,  
ICAR-National Dairy Research  
Institute, Karnal-132001.  
Haryana**

## About NDRI

ICAR-National Dairy Research Institute (NDRI) at Karnal, Haryana is one of the premier Institutes in the dairy sector, which has contributed immensely to the growth of the dairy industry. The R & D activities and HRD programs of the Institute mainly focus on the fundamental aspects of dairying. Quality milk production is at the fore of institute mandate. The institute has established several landmarks in the field of production and management of dairy animals for better productivity, innovating milk processing technologies and equipment, and providing the dairy farmers and entrepreneurs with updated information about existing market demands and practical solutions for making dairying a self-sustaining and profitable business.

## About Dairy Microbiology

The Division is currently engaged in research, teaching, consultancy, training and technology transfer in specialized field of Dairy Microbiology. Broadly, the research work of the division covers the areas related to starter cultures and fermented milk products; direct vat starters (DVS); indigenous probiotics, their functional efficacy and gut microbiota, prebiotics and synbiotics; diversity of traditional fermented milk products by metagenomic, metabolomic and culturomic approaches, bioactive peptides, microbial metabolites and bio-preservatives; biosensors, quality assurance and food safety. The Division has played a key role in establishing National Collection of Dairy Cultures' (NCDC) with current repository of more than 800 cultures and National Referral Centre for Milk Quality and Safety.

The technologies have been developed for bio-functional synbiotic fruit yoghurts, soy-based yoghurt, soy dahi and whey based functional probiotic beverages. The division is also engaged in the production of antimicrobial bioactive peptides from milk protein like whey and casein, and also from soy proteins and bio-preservation of dairy products. Besides, the laboratory is also involved in the research project on the production of bioethanol from whey using stress tolerant yeasts.

The research on food safety aspect has also been initiated. Division also offers contractual and consultancy/training services such as supply of starter cultures, freeze-drying of cultures, microbiological analysis and setting standards for regulatory compliance of dairy products in our country.

## Course Contents

- ❖ Introduction to Starter Culture for Fermented Milks
- ❖ Propagation and Evaluation of Starter Cultures (Theory & Practical)
- ❖ Sub-culturing, Activity and Purity Tests of Starter Cultures (Practical)
- ❖ Probiotic, Prebiotics and Synbiotic
- ❖ Bio-functional Properties of Starter Culture
- ❖ Bioprotective Lactic Cultures
- ❖ Microbiological Quality of Milk for Fermented Product Preparation (Theory & Practical)
- ❖ Hygiene Monitoring System – Swab and Rinse Techniques (Theory & Practical)
- ❖ Chemical Quality of Milk for Fermented Product Preparation (Theory & Practical)
- ❖ Detection of Antibiotics, Pesticides and Aflatoxin M1 in Milk (Theory & Practical)
- ❖ PCR Based Techniques for Identification of Bacteria (Theory & Practical)
- ❖ Preparation of Dahi and Mishti Doi (Theory & Practical)
- ❖ Preparation of Lassi, Buttermilk and Shrikhand (Theory & Practical)
- ❖ Direct-vat-set (DVS) Starter Culture (Theory & Practical)
- ❖ Fermented Goats and Camel Milk
- ❖ Health Promoting Functional Foods and Gut Microbes (Theory)
- ❖ Preparation of Bio-functional Yoghurt (Theory & Practical)
- ❖ Bioactive Peptides Production by LAB Fermentation (Theory & Practical)
- ❖ Cheese Technology and Manufacturing (Theory & Practical)
- ❖ Entrepreneurship Opportunities in Dairy Industry: Emerging Technologies and Marketing Options

## Eligibility

Applications are invited from the researchers belonging to Scheduled Caste (SC) community, including students and research staff (RAs and SRFs) of ICAR/ SAUs and CAUs and other Universities/ institutes. The basic qualification of the candidates must be B.Tech (Dairy Technology), Masters in Microbiology/ Dairy Microbiology or equivalent.

## How to apply

Interested candidate should submit his/her application through email to the Course Director ([shilpavijn@gmail.com](mailto:shilpavijn@gmail.com)). The application needs to be approved by the competent authority of his/her organization. There is no need to submit the hardcopy of the application.

**Registration Fee: There is no registration fee.**

## Mode of selection

The candidate shall be selected based on the evaluation criteria set by the evaluation committee. The number of candidates is restricted to 15 to ensure the social distancing and low trainee-instructor ratio for better learning and experience.

## Certificate

A certificate will be awarded to the participants on the successful completion of the course

## Financial Assistance

The participants will be paid T.A. for to and fro journey by rail/ bus/ public transport by the shortest route as per entitlement restricted up to 2nd AC in train (on production of documentary evidence).

## Accommodation

Accommodation will be provided free of cost at the Institute's accommodation facilities on sharing basis. (Please do not bring your family members along with you. It will not be possible to arrange for their accommodation at Karnal during the period).



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**10-days Hands-on Trainingon**  
**“Hands on Training on Preparation of Functional Fermented Dairy Products”**  
**(Sponsored by ICAR’s Developmental Action Plan for Scheduled Caste)**  
**Organized at ICAR- National Dairy Research Institute (Deemed**  
**University), Karnal- 132001 (Haryana) INDIA**  
**July 12-21<sup>st</sup>, 2023**

1. Full Name (in block letters) :
2. Designation :
3. Present address :
4. Permanent address :
5. E-mail id and Phone/ mobilenumber :
6. Date of Birth :
7. Sex: Male/Female :
8. Previous trainings, if any :
9. Mention if you have participated in any training course during the previous years under SCSP scheme :
10. | Academic record

Sr. no.	Bachelor degree	Subject main/subsidiary	Year of passing	Class ranks distinctio nsetc.	University or Institution	Other Informati on
1.	Bachelor degree					
2.	Master degree					
3.	Doctoral degree					
4.	Other certificates, Diploma, Degree, ifany					

Signature of the applicant

Date.....

Place.....

11. Recommendation by forwarding authority: .....

Signature

.....

Designation

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Address

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Date .....

*Note: It is mandatory for applicant to submit a soft copy of SC community certificate issued by state/central government and an Aadhaar card with the filled application form for consideration. Submit the PDF copy of the filled application form to [shilpavijn@gmail.com](mailto:shilpavijn@gmail.com) before 20<sup>th</sup> June 2023. The confirmation of participation will be sent before 21<sup>st</sup> June 2023.*