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Course Director

Dr. Diwas Pradhan
Scientist (SS), DM Division

Course Co-director

Dr. Raghu HV
Sr. Scientist, DM Division



Correspondence

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Note: The candidates will be notified about the selection latest by 19.04.2024. In case of any query please contact Course Director or the Coordinator.

Last date of application	17.04.2024
Communication to participants	19.04.2024
Commencement of training programme	08.05.2024

For Updates visit: www.ndri.res.in



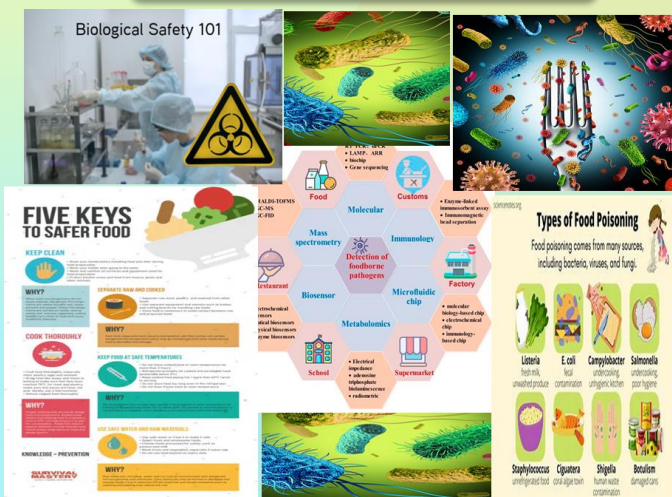
High-End Workshop (Karyashala)

on

Advanced Biosafety Practices for Handling & Detection of Foodborne Pathogens

Sponsored by
Science and Engineering Research Board
(Accelerate Vigyan Scheme)

May 8-17, 2024



Organized by

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

www.ndri.res.in



About NDRI

ICAR-National Dairy Research Institute (NDRI) at Karnal, Haryana is a premier Institute 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 Division

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 Division has transferred technologies on probiotic strains, Misti Dahi, rapids kits for antibiotic residues and food pathogens to potential stake holders in our country for their industrial application. Few more such products like vitamin B12 rich propioni-yoghurt, blueberry fortified probiotic dahi, real time test for detection of *E. coli* and antibiotic residues in milk have also been developed. The 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

- Bio-safety concept during handling of pathogens, Microbiological criteria, Sampling plan for milk and milk products
- Global food safety standards and Integrated Food Laws
- Aseptic concept and principles in enumeration of hygiene and safety bacteria in milk
- Testing of pathogenic bacteria (*E.coli*, *Salmonella/Shigella*) as per ISO standards specified in FSS standard 2016
- Testing of pathogenic bacteria, *Listeria monocytogenes* as per ISO standards specified in FSS standard 2016
- Testing of hygiene bacteria (SPC/Coliform, YMC) as per ISO standards specified in FSS standard 2016
- Testing of coagulase positive *Staphylococcus aureus* as per ISO standards specified in FSS standard 2016
- Testing of *Bacillus cereus* and Sulphite reducing clostridia as per ISO standards specified in FSS standard 2016
- Detection of antibiotics, pesticides and aflatoxin M1 in milk
- Rapid Microbiological testing of Raw milk (DMC/DRT)
- Enumeration of Enterobacteriaceae count in milk and milk products (Theory & Practical)
- Isolation and identification of *Cronobacter* spp. in infant milk foods
- Analysis of milk and milk products for Faecal Streptococci
- Rapid enzyme substrate assay for detection of hygiene and safety indicator organisms in dairy products

Eligibility

Students currently pursuing Masters or Ph.D. in Dairy or Food Microbiology/ Animal Biotechnology or Biochemistry/ Life Sciences/ Veterinary Public Health/ Zoology or any other related disciplines at Government Universities, Colleges or private academic institutions are eligible to apply. The maximum no. of participants for the program will be limited to 25.

How to apply

Nomination for participation in the workshop may be made as per the attached format. The scanned copy of the duly filled application signed by the Head of the Department/ Principal or the competent authority may be sent to diwas.pradhan@icar.gov.in or 4rvsy.dmndri@gmail.com. Along with filled application, students must also send scanned copy of the University ID card and Aadhar card. Selected students should register themselves through "Register as student option" provided on login page of AV portal (acceleratvigyan.gov.in/login), to facilitate their participation in "VigyanVarta" section of the Accelerate Vigyan Portal. Selected candidates should bring "NO Objection Certificate (NOC)" from their Supervisor/ Head of the department/ Head of the institute while joining the workshop.

Mode of selection

The candidates will be selected based on the evaluation criteria set by the evaluation committee. The number of candidates is restricted to 25.

Travel, Boarding & Lodging

Selected participants are eligible for TA (max. AC-III train fare or state transport buses by shortest route as per GoI norms and on production of documentary evidence). Food and accommodation will be provided by the organizers.



DST-SERB Sponsored High-End Workshop (May 8-17, 2024)

on

**“Advanced Biosafety Practices for Handling & Detection of
Foodborne Pathogens”**

ICAR- National Dairy Research Institute, Karnal-132001 (Haryana)

Application Form for Participation in Karyashala

1	Full Name (in block letters)	
2	Email Id (active)	
3	Date of Birth	
4	Sex (Male/Female)	
5	Mobile Number (WhatsApp)	
6	Domicile State	
7	Correspondence Address	
8	Highest degree pursuing with specialization	
9	Present Institute/University	
10	Number of training/workshop attended during the previous years under ICAR/other Organizations	
11	How will this training help in your study or research program?	

Academic Record:

Degree passed	Discipline	Year	Name of the University/College/Institute
Bachelor Degree			
Master Degree			
Doctoral Degree			
Other certificates, diploma, degree			

Date:

Signature of the applicant

Recommendations of forwarding Institute:

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Signature of the Head of Department with Seal

- 1. Last date for receipt of application: 17th April, 2024**
- 2. Confirmation of participation: 19th April, 2024**
- 3. Workshop Dates: 8-17th May, 2024**

Note: The candidate can email the filled form directly to diwas.pradhan@icar.gov.in or 4rvsy.dmindri@gmail.com.