



ICAR-CIFT Trainee  
Hostel



ICAR-CIFT, Kochi



## Important Dates

Late date of application : 25<sup>th</sup> August 2025  
Intimation of selection : 30<sup>th</sup> August 2025  
Confirmation of participation  
by participants with payment : 5<sup>th</sup> September 2025

For more information :  
Director

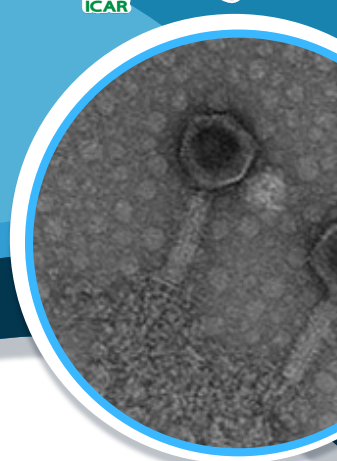
ICAR - Central Institute of Fisheries Technology  
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Web : [www.cift.res.in](http://www.cift.res.in)



## Recent Advances in the Isolation and Characterization of Lytic Bacteriophages for Seafood Safety

17<sup>th</sup> - 26<sup>th</sup> September 2025

Venue:  
ICAR-CIFT, Kochi  
Kerala, India



### PROGRAM DIRECTOR

Dr. George Ninan  
Director, ICAR-CIFT

### COURSE DIRECTORS

Dr. T. Raja Swaminathan  
Dr. Toms C Joseph  
Dr. B. Madhusudana Rao

### COURSE COORDINATORS

Dr. Murugadas Vaiyapuri  
Dr. Visnuvinayagam Sivam

Organized by  
**Microbiology, Fermentation and Biotechnology Division,  
ICAR-Central Institute of Fisheries Technology,**

Matsyapuri P.O., Willingdon Island, Kochi, Kerala, India, Pin Code: 682 029



# About CIFT

The Central Institute of Fisheries Technology (CIFT) set up in 1957 is the only national institute in the country where research in all disciplines relating to fishing and fish processing is undertaken i.e. harvest and post-harvest technologies in fisheries covering both inland and marine sectors. The institute started functioning at Kochi in 1957. Research centers function at Veraval (Gujarat), Visakhapatnam (AP), Mumbai (Maharashtra). The institute works on basic and strategic research in fishing and processing, design and developing energy efficient fishing systems for responsible fishing and sustainable management, seafood safety, development of implements and machinery for fishing and fish processing, and human resource development through training, education and extension. Within it bestowed with state-of-art infrastructure for conducting research on harvest and post-harvest fisheries activities. CIFT is an NABL accredited laboratories for testing fish and fishery products and the institution is recognized as a national referral laboratory for testing the fish and fishery products by FSSAI, Govt. of India. CIFT has given several consultancies and transferred technologies to various beneficiaries and stakeholders. CIFT is involved in development of standards for various fish and fishery products.



## About MFB

Microbiology, fermentation and biotechnology (MFB) division focuses its activities on monitoring the aquatic environment for human pathogens and for development of remedial measures. The MFB division also entrusted to explores the marine microbial biota for isolation and identification of novel bioactive molecules and genes for industrial applications. Development of ideal preservative methods for enhanced shelf life of products of seafood origin is also an area of interest of the division. The MFB division has leading research on ESKAPEE pathogens including *Enterococcus faecium*, *Staphylococcus aureus*, *Klebsiella pneumoniae*, *Acinetobacter baumannii*, *Pseudomonas aeruginosa*, *Enterobacter spp* and *Escherichia coli* and other Extensively drug-resistant (XDR), multi-drug resistance (MDR), antimicrobial resistance (AMR) pathogens in fish, fishery products and in aquaculture settings with a main aim of developing diagnostic and mitigating agents.

The division works on nanoparticle based biological materials, phage based biological materials, probiotics based biological materials for the betterment of food and aquaculture safety in mitigation lines. MFB performs the *in vitro* evaluation of nanocomposite and other biocompounds for their cytotoxicity activity, anticancer activity, antiviral activity on various mammalian, murine and fish cell lines. The division also focuses on microbial bio-compost development for the various waste to wealth projects.

The division is well equipped with advance equipments such as cell culture facility, microarray, FTIR, PFGE, Bioanalyser, Realtime PCR, thermal cyclers etc. The Division is also involved in the development of rapid detection and characterization methods required for investigation on seafood borne disease outbreak. The division continually supports the seafood industry for testing WOA listed viral pathogens of shellfish, finfish crabmeat samples for *Clostridium botulinum* toxins, and consultation on identification of spoilage flora associated with seafood product developed by industry etc and thereby ensuring seafood safety to achieve the goal of Nutrition to all.

सूक्ष्मजीव विज्ञान, किण्वन एवं  
जैव प्रौद्योगिकी प्रभाग  
**MICROBIOLOGY, FERMENTATION AND  
BIOTECHNOLOGY DIVISION**



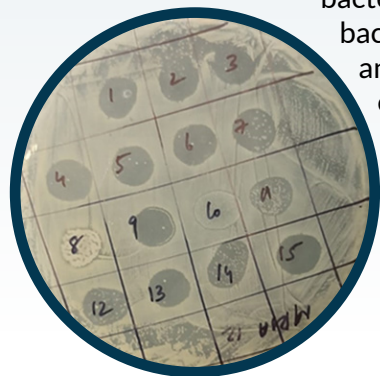
## About the theme of the training program

Seafood is a highly nutritious food and highly durable commodity vulnerable for contamination with food borne pathogens and spoilage flora. Fisheries provides huge employment opportunities and economic growth to the Nation. In the wake of growing trend of development of antimicrobial resistance in food and aquaculture safety, there is a urgent need of alternative to antibiotics. One such promising alternative to antibiotics is bacteriophages. Across the globe, phage and phage-based proteins are being explored for biocontrol, and therapeutic agents. In this current context, the course intended for researchers who are interested in phage studies which in turn supports the capacity building activities of the nation there by providing safe food for all.



## Brief outline of the training program module

The training Programme consists of a blend of lectures and practical. More emphasis will be given to practical /hands on training. This course begins with the basics of bacteriophages, handling of pathogens and bacteriophages, sample processing and isolation of bacteriophages, confirmation, characterization, storage and maintenance of bacteriophages, one step growth curve, genomic DNA extraction and restriction digestion analysis, basics of genomics etc. A series of lectures, coupled with extensive course notes covering all aspects of bacteriophages, will underpin the theory behind the practical sessions, and provide essential information for future reference.



## Who can apply or participate

The programme is open to early career faculty members, scientist, industrial partners, scholars and researchers who wish to work on bacteriophages across India with experience in microbiology. A maximum of 25 participants will be selected based on their experience, area of working and first come first served basis.

## Applying for the training

The interested candidates may send their applications in the enclosed google form through proper channel to the Course Director in mail ID

✉ [mfbdvntesting@gmail.com](mailto:mfbdvntesting@gmail.com)

☎ 0484 2412392 ; 0484 2412384

## Course fee, Boarding and Lodging

The training fee for the program is Rs. 12000 + 18% GST. This fee includes the training fee, training manual kit, working lunch and refreshments for all the working days. The travel, breakfast, dinner and accommodation should be borne by the candidates. If required the accommodation will be provided as first come first serve basis at a very reasonable rate at trainees hostel.

CIFT trainees hostel : Rs. 80/ day/person on sharing basis

CIFT guest house : Rs. 450/ day/person on sharing basis (ICAR/ SAU Staff)

CIFT guest house : Rs. 1000/day / person on sharing basis (others)

The participants should abide by the rules and regulations of the Institute trainees' hostel or guest house.

### Google form for the registration



<https://forms.gle/tDuzrnoNYV9y6pYk8>

### QR code / Google form for the payment



Name : ICAR UNIT CIFT  
Bank : State Bank of India  
Branch : COCHIN PORT TRUST  
IFSC ; SBIN0006367

\*Please share the payment details to [aticcift@gmail.com](mailto:aticcift@gmail.com)