

Training objective

To provide hands-on experience/training in basic microbiological techniques including isolation, identification, handling, storage and preservation of bacteria and microalgae from aquatic environment.

Intake capacity

A maximum of 5 participants (in one batch) will be selected after screening the applications.

Time period

Three batches in a year - Last week of September 2017 and January and April 2018.

Duration : 5 days

Course Fee

Rs.5000/- (Rupees Five thousand only) for researchers / technicians who are employed and Rs.3000/- for students, payable at the time of registration or as DD drawn in favour of "ICAR Unit, CIFE" payable at Mumbai.

Travel/boarding and lodging

TA, DA will not be paid. Facilities for paid boarding and lodging may be provided in the campus, as per the availability, of which the participants have to bear the charges (stay in hostel dormitory @ Rs.50/day as per the availability and food @ 110 Rs/day).

How to apply

The applications in the attached format may be emailed to kundankumar@cife.edu.in saurav@cife.edu.in



PROGRAMME DIRECTOR

Dr. Gopal Krishna

*Director / Vice-Chancellor
ICAR-CIFE, Mumbai*

COURSE DIRECTOR

Dr. K.V. Rajendran

*Head, AEHM Division
ICAR-CIFE, Mumbai*

COURSE COORDINATORS

Dr. Kundan Kumar

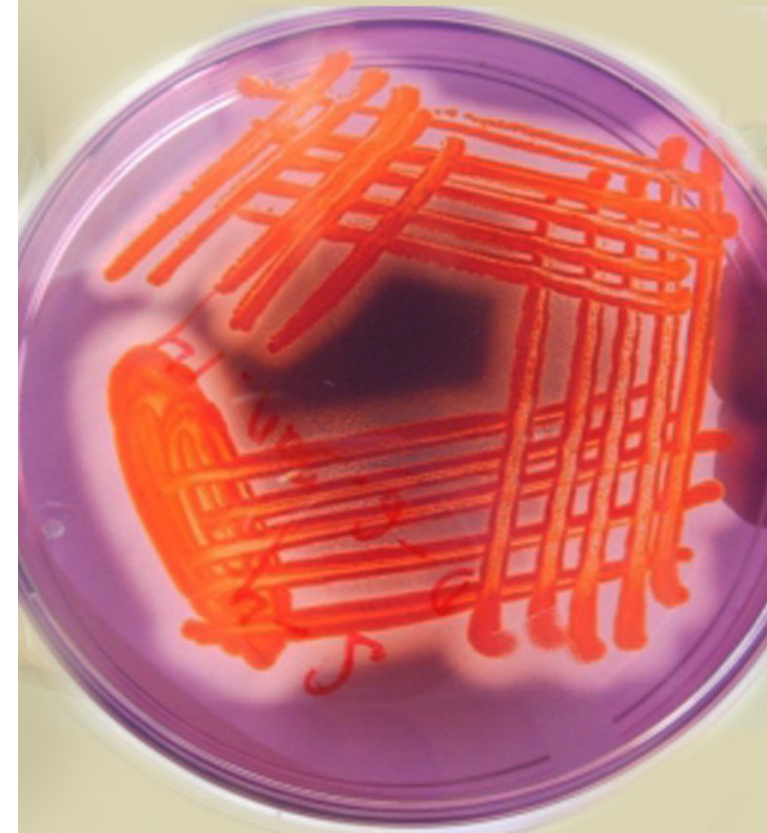
Dr. S.P. Shukla

Mr. Saurav Kumar

Short-Term Training Program on Techniques in Aquatic microbiology

Venue

Aquatic Environment and Health Management Division



ICAR - Central Institute of Fisheries Education

Panch Marg, Yari Road, Versova, Andheri (West)

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ICAR-Central Institute of Fisheries Education

(Deemed University)

Mumbai

www.cife.edu.in

Short-Term Training Program on "Techniques in Aquatic Microbiology"



Aquatic microbiology is the science that deals with microscopic living organisms in fresh or marine water systems. While aquatic microbiology can encompass all microorganisms, including microscopic plants and animals and their relation to other organisms in the aquatic environment. Bacteria are very diverse in nature and are classified based on their shape, cell structure, staining properties (used in the laboratory for

identification), and metabolic functions. In the recent years, molecular biology and biotechnology are advancing rapidly where uses of bacteria are very common. It is essential to update skills in microbiology to make researcher competent in the emerging area of basic and applied research. At present traditional methodologies are being used by many laboratories for identification of bacteria and microalgae. The emphasis of this training programme is to impart training in traditional and advanced techniques for enhancing the capabilities of students and research personal working in the area of aquatic microbiology.

The content of the training is designed to cover various conventional and modern tools and techniques used in microbiology. The emphasis will be on hands-on experience and skill development of the participants for the analysis of bacteria and microalgae in water samples.

Training content

(Theory and hands-on sessions)

- Overview of aquatic microbiology
- Importance of bacteria in aquatic system
- Sterilization techniques
- Isolation, enumeration and identification of aquatic bacteria and microalgae from different sources
- Biochemical and molecular techniques for identification of bacteria
- Automated bacterial identification using VITEK2 Compact
- Storage and preservation of bacteria and microalgae.
- CHNS analysis and measurement of C/N ratio in microalgae

Eligibility

Researchers, graduates and post-graduate students, Technicians employed in private laboratories/hatcheries/farms, entrepreneurs etc.

ICAR-CENTRAL INSTITUTE OF FISHERIES EDUCATION

ICAR-Central Institute of Fisheries Education (CIFE), in over 50 years of existence, has emerged as a Centre of Excellence in Higher Education in Fisheries and allied disciplines. The Institute was established on 6th June 1961, under the Ministry of Agriculture, Govt. of India with assistance from FAO/UNDP. It came under the administrative control of Indian Council of Agricultural Research (ICAR) in 1979. Considering the wide mandate involving education, research and extension and

recognizing the pivotal role played by CIFE in human resources development in fisheries, the institute was conferred the status of Deemed-to-be-University in 1989. The institute with its core strength in quality teaching, research and training has become a brand name in fisheries higher education. ICAR-CIFE is now placed in a new campus with state-of-the-art facilities and located about 8 km from the domestic and international airports and 20 km from Dadar railway station, a major rail terminus in Mumbai.

