#### Eligibility

No special qualification or prior knowledge is required to attend the skill development program. Anyone who can read and write English and Hindi and has an interest to learn is eligible to attend. All applications duly forwarded by the Head of the Institution (not required in case of private candidates) should be sent to the Course Coordinator at the address provided. Photocopies of the format can also be used.

#### **Intake Capacity**

A total of 20 participants will be selected after screening.

### Fees /Accommodation/Food Charges

Rs. 4000/- per person needs to be paid as course fees. The payment can be made at the venue on first day of program, either in cash or DD made in favour of ICAR Unit – CIFE. Accommodation and food charges will be extra and have to be borne by participants as per expenditure incurred. Boarding and lodging in the International Guest House (IGH) – Rs. 2000/ day twin sharing, while food charges would cost approximately Rs. 400/day.

#### How to apply

The applications in the attached format may be emailed to :

nkchadha@cife.edu.in chandrakantmh@cife.edu.in Mob: 09821265019 Programme Director Dr. Gopal Krishna Director / Vice-Chancellor

Course Director Dr. N.K. Chadha Head, Division of Aquaculture

## **Programme/Course Coordinators**

Dr. Chandrakant M. Hittinahalli Mrs. Madhuri Pathak

### DATES TO REMEMBER

Last date for submission of application form 31 January 2019

Communication of acceptance 07 February 2019



**ICAR - Central Institute of Fisheries Education** 

Panch Marg, Off Yari Road, Andheri (W), Mumbai - 400 061, India Fax. 022-26361573



## Recent Advances in Aquacultural Engineering

## 19-25 February 2019



## ICAR-CIFE's

## SKILL DEVELOPMENT PROGRAM



ICAR - Central Institute of Fisheries Education Panch Marg, Off Yari Road, Versova, Andheri (W) Mumbai-400 061, INDIA Aquacultural engineering has played a vital role in expansion of the aquaculture industry, which now accounts for half of all seafood products consumed in the world. Commercial aquaculture production lies in the realm of biotechnology, which requires a balanced support from the biological and engineering sciences. Aquacultural engineering deals with planning, design, construction, and maintenance of fish ponds, aquafarms, hatcheries, and support facilities. In fact, Aquacultural Engineering is a multidisciplinary field of engineering that aims to solve technical problems associated with farming of aquatic animals.

Aquaculture technology is varied with design and development requiring knowledge of civil, mechanical, and environmental systems along with material engineering and instrumentation. Furthermore, engineering techniques often involve solution burrowed from wastewater treatment. fisheries, and traditional agriculture. Aquacultural engineering can be defined as application of engineering principles to the production of food and fibre from aquatic environments.

The worldwide demand for fish and seafood is steadily rising. To meet increasing demand for fish; innovative technologies are inevitable. Recent advances in the field of aquaculture wouldn't have been possible without the support of aquacultural engineers. Design of recirculating aquaculture systems (RAS), design of cages for freshwater and seawater systems, integrated aquaculture systems, aquaponics, biological filters, biofloc technology, design of automatic and

demand feeders, computer based water quality monitoring systems, and remote sensing and GPS in selection of sites for aquaculture are some techniques developed recently. The knowledge of these techniques is essential for professionals and entrepreneurs engaged in the field of aquaculture.

Thus; with an aim of imparting the knowledge of recent technologies and advances in the field of aquacultural engineering, the Division of Aquaculture is organizing a Skill Development Program on "Recent Advances in Aquacultural Engineering" at ICAR - Central Institute of Fisheries Education, Mumbai - 400061 from **19-25 February 2019.** 

# ICAR - CENTRAL INSTITUTE OF FISHERIES EDUCATION

The premier *alma mater* for fisheries in India, CIFE was established in 1961 as an in-service training centre, mainly to impart proficient training and education to the fisheries professionals; where trainees were exposed to various operative learning strategies so as to equip them to face the challenges of the fisheries sector. By the year 1979, CIFE came under the administrative control of the Indian Council of Agricultural Research. In recognition of its yeoman services and expertise,

CIFE was deservingly conferred the Deemed-to-be-University status by University Grants Commission in 1989. Subsequently, the scope and mandate have been widened to include education as well as research. CIFE has made its mark in knowledge - driven economy and in the process of enriching the quality of fisheries education, received accreditation from ICAR for its academic programmes and has been providing a need based curriculum, with tailor made extracurricular activities for the holistic development of fisheries professionals.

The Institute is located about 9 km away from the domestic and international airports, 20 km from Dadar and 5 km form Andheri railway station. Mumbai, the financial capital of India, is well connected by air, rail and road with all cities of India. The climate is moderately cool during January and participants are advised to carry light warm clothing.

## **Topics:**

- Design of recirculating aquaculture systems (RAS)
- Design of biofilter based giant freshwater prawn hatchery
- Raceways, and intensive aquaculture systems
- Aeration systems, aerators & design of aeration grid
- Management of soil and water quality for different Aquacultural systems
- Water budgeting for aqua farms and hatcheries
- Design of integrated aquaculture systems
- Aquaponics & biofloc technology
- Application of GPS and remote sensing

Fill up the form below and submit to the course coordinators/course director in person or submit a copy by email with a scanned signature:

#### FORMAT FOR APPLICATION

ICAR-CIFE's Skill Development Program

on

## RECENT ADVANCES IN AQUACULTURAL ENGINEERING

(19-25 February 2019)

Name of the candidate

Full address of candidate for correspondence with phone/mobile/fax/email

**Qualification (last degree attained)** 

Reasons for attending the program