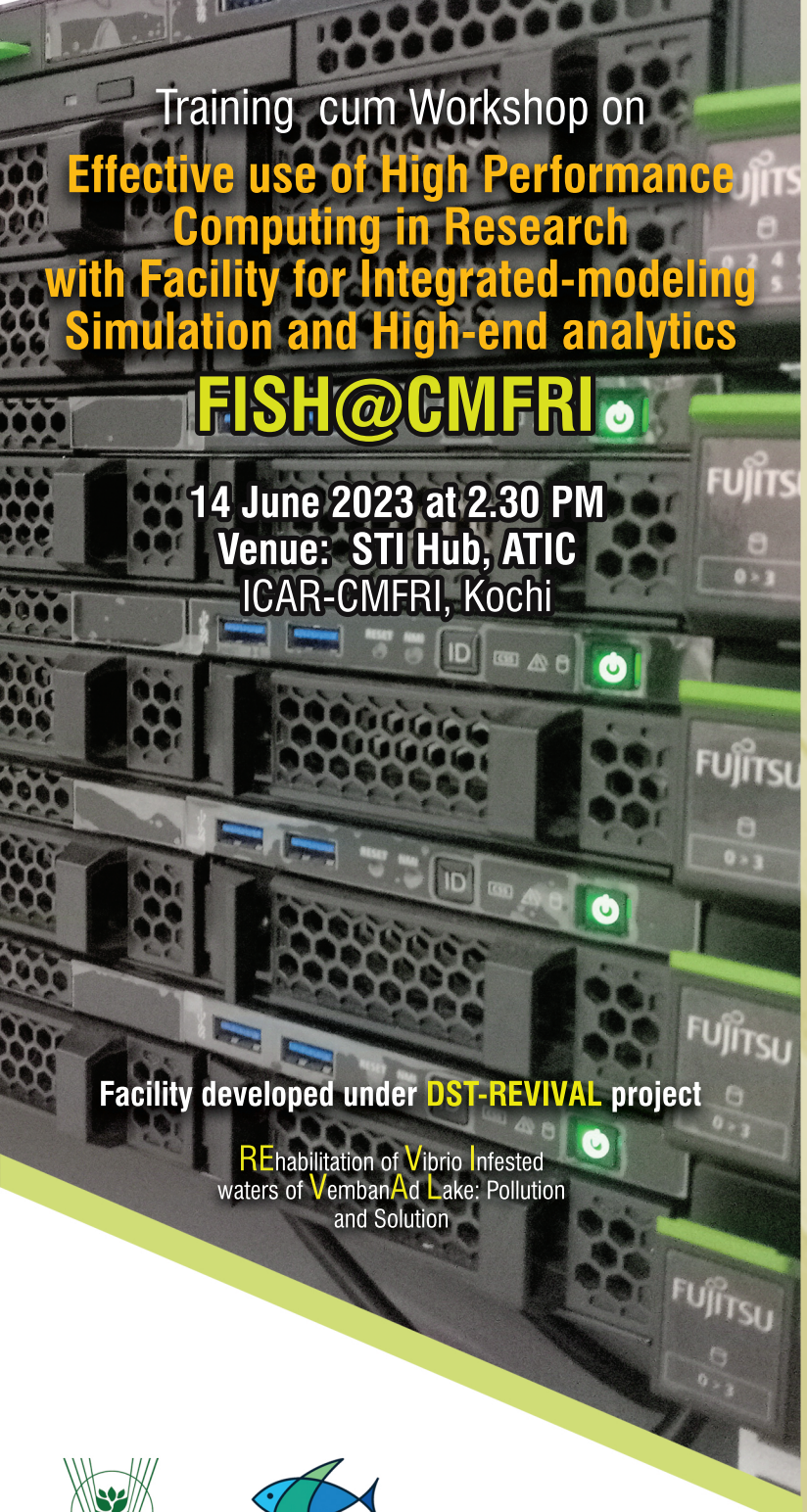

Training cum Workshop on

Effective use of High Performance Computing in Research with Facility for Integrated-modeling Simulation and High-end analytics

FISH@CMFRI

14 June 2023 at 2.30 PM
Venue: STI Hub, ATIC
ICAR-CMFRI, Kochi

Facility developed under DST-REVIVAL project

REhabilitation of Vibrio Infested waters of VembanAd Lake: Pollution and Solution

ICAR – Central Marine Fisheries Research Institute
Post Box No. 1603, Ernakulam North P.O., Kochi-682018, Kerala, India

FISH@CMFRI: An Overview

High speed computing has been the "go to" option for many institutions doing research and development in biological science, especially natural resources. With the platform that usually hosts such research initiatives being multipronged and multi-sourced, data collation and analysis gets all the more computer intensive. In any science based initiative, it is next to impossible to have a data template which is homogenous, equispaced and equidistributed. More so for any other initiative that could be planned in marine fisheries scenarios. The inputs could be of any kind from an organized tabulated data to sudden pieces of messages leading to actionable information akin to IoT and more rigorous systematic input from concerted exercises like downscaling from macro regional models like the ROMs. All these need both vertically sequenced and laterally accommodative computational architecture that could receive, preprocess and store with equal efficacy. So in such situations solutions that are a scale above work stations bordering high performance computing clusters would be the single stop game changer solution. A high performance computing fecility **(FISH@CMFRI)** with multi-core computing and expansive scalability of big data analytics/streaming data processing architecture was developed at AKMU, ICAR-CMFRI (Room No.108) with the following specifications:

Computing Capacity: 3 TFLOPS; No. of Computer Nodes: 4; Total No. of Processors: 8; Total No. of Cores: 96; Memory per node: 64 GB; Total RAM: 256 GB; Total Usable Storage Capacity: 4 TB; Primary Interconnect: 10 Gbps Ethernet; Administration and Management Network: 1 Gbps Ethernet; Operating System: Linux RHEL

The workshop will cover the following topics:

1. **Introduction to high-performance computing.**
2. **Overview of FISH@ CMFRI.**
3. **Best practices for using FISH@ CMFRI.**
4. **Hands-on exercises.**

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