

A REFRESHER COURSE ON OCEAN DREDGING AND MINING July 18, 2022 – July 22, 2022



Coordinators:

**Prof R. Paneer Selvam (IIT Madras)
Dr.Atmanand (Visiting Faculty, IIT Madras)
Prof. R. Sundaravadivelu (IIT Madras)**

Organized by

**Department of Ocean Engineering
Indian Institute of Technology Madras
Chennai 600 036 INDIA**

DESCRIPTION

This course aims to introduce and review the aspects of ocean dredging and mining. The scheme of lectures is planned to address the needs of existing engineers, faculty and students as well. The course will add to the knowledge of practicing engineers and open up new electives for the engineering colleges.

FACULTY

1. Prof. R. Panneer Selvam
2. Dr. Atmanand (Retired Director, NIOT, Chennai)
3. Prof. R Sundaravadivelu

PROPOSED CONTENTS OF THE COURSE Dredging

Introduction to coastal environment
Introduction to ports and harbour structures
An overview of Dredging Methods
Mechanical Dredgers
Hydraulic Dredgers
Environmental Dredgers
Dredging - Disposal
Engineering aspects of field dredging
Dredging Survey
Case studies on dredging in soil (Chilika lake, Mahanadhi river and Goa port) and rock(vizag, VOC and JNPT) EIA and EMP of dredging in Cuddalore, Pondichery and Gopalpur ports

Mining

Introduction to deep sea bed resources - polymetallic nodules, massive sulphides and Cobalt crusts
International status of Deep sea mining
Methods for deep sea mining

COURSE DURATION & VENUE FEE STRUCTURE

The course will be conducted in Hybrid mode.
Venue – Department of Ocean Engineering, IIT Madras

Proposed Date -July 18- 22, 2022 Monday-Friday Five days

Course notes/presentations in pdf form from will be shared to all participants. This course is approved by the CCE Program, IIT Madras. Registered candidates will get a copy of certificate as well.

In person

Course fee Rs 5000/- per participant from companies/industries (Includes lunch and refreshments for 5 days).

Academic Faculty Rs 3500/- per participants
Students (Limited Final year UG Engineering and Post Graduate students - Rs 2000)

Participants have to make their own arrangements for travel and stay and must adhere to the Covid Protocols

Online participants - Google meet/Webinar

Course fee Rs 4000/- per participant from companies /industries

Academic Faculty Rs 2500/- per participants
Students (Limited Final year UG Engg and Post Graduate students - Rs 1500)

If any issues with connectivity online lecture recordings will be made available

About the Coordinators



Dr.M.A.Atmanand has 37 years of experience in the field of ocean technology and retired as the Director of National Institute of Ocean Technology Chennai. He is currently working as a Visiting Professor in Indian Institute of Technology, Madras - Chennai. He is nominated as Chair Marine Systems Panel, Naval Research Board, Defence Research and Development Organisation (DRDO), Govt. of India. He is the Governor's nominee to the Planning board of Bharathidasan University. He is elected as a member of Society for Underwater Technology (SUT) Council. He is a former member of the Executive Planning Group and a former member of the Interim Decade Advisory Board for preparation of UN Decade of Ocean Science for sustainable development [2012-2030] of Intergovernmental Oceanographic Commission (IOC) of UNESCO. He was elected as Chair of Intergovernmental Oceanographic Commission Regional Committee for the Central Indian Ocean (IOCINDIO) of IOC, UNESCO [2016-2021]. He has published more than 160 papers including International Journals, International conferences, Book chapter, National Conference and others. He has delivered more than 300 invited lectures in conferences. He is Chair of IEEE Oceanic Engineering Society Technology committee on Cables and Connectors. He is the founder Chair of IEEE Oceanic Engineering Society in India. He has also served IEEE Madras Section in various capacities.



Prof R Sundaravadivelu is currently Emeritus Professor, Department of Ocean Engineering, IIT Madras. He has about 40 Years of Teaching, Research and Consultancy experience in IIT Madras in the field of Offshore, Coastal, Ship and Ports & Harbor Structures. He has guided 30 PhD and 60 M Tech and B Tech projects. He has published about 200 international journal and conference papers. He has served in the governing council of Indian Maritime University, IIT Madras and CRRRI Delhi. He is the Fellow of the Indian national Academy of Engineering and Member of the Bureau of Indian Standards on Port & Harbor. He has carried out sponsored projects on Ship structures, Deep sea platforms, Mobile offshore berths, Jack up dredger with submersible pump etc. He has successfully completed about 1000 consultancy projects worth Rs. 1000million.



Prof R Panneer Selvam Faculty at Department of Ocean Engineering at IIT Madras since 2006. Main interests teaching and research associated with wave structure interactions. He has been associated with teaching Dredging course for the students. He has several publications to his credit in the area of offshore structures

Course structure

Timings

9.00 to 12.30 pm and 2.00 to 4.30 pm

Day 1 Coastal Environment

Port and Harbour structures

Day 2 Dredging

Day 3 Dredging

Day 4 Mining

Day 5 Mining

Detailed course schedule will be sent to registered participants

How to register for the course

The participants can register for the course through the following link

<https://cce.iitm.ac.in/cep/odm/index.php>

Sponsorships welcome Sponsorship Fee Rs 25000/- which includes 5 free registrations and name included in course kit and banner.

Please use same link

For more information: Please contact

Prof R Panneer Selvam pselvam@iitm.ac.in

9962446557 whatsapp message

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