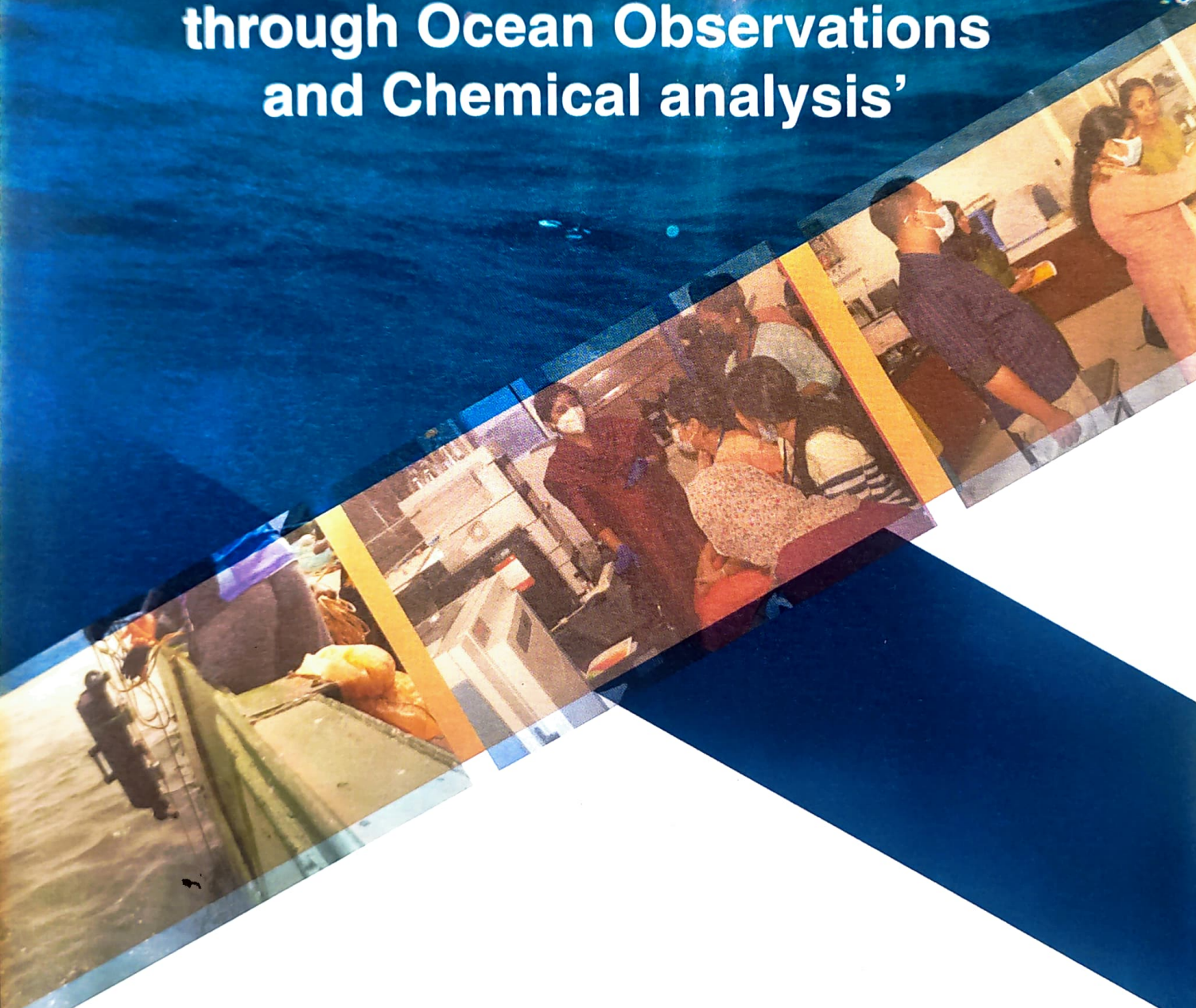


Training on
**'Ocean biogeochemistry
through Ocean Observations
and Chemical analysis'**



Date

June 12 to July 1

Venue

**Department of Chemical Oceanography
School of marine sciences**

Cochin University of Science and Technology (CUSAT)
Kochi 682016



The background of the page is a composite image. The top half shows a close-up of water ripples with sunlight reflecting off the surface, creating a shimmering effect. The bottom right corner features a photograph of a laboratory flask containing a white, foamy substance, likely a chemical reaction or biological sample. The overall design uses a dark blue gradient background with white text.

AIM

To provide the trainees with theory and hands-on to various chemical analysis related to ocean biogeochemistry

TARGET AUDIENCE

B.Sc/B.FSc/Postgraduate students

ABOUT THE DEPARTMENT OF CHEMICAL OCEANOGRAPHY

The Department of Chemical Oceanography has credential of rich expertise in biogeochemical and pollution analysis for well over three decades. It has well qualified and experienced scientific personnel and strong analytical facilities. The Department of Chemical Oceanography has excellent facilities for training, research and consultancy in chemical studies on diverse aspects of the marine and terrestrial environment and has pioneered investigations in many areas of national/international significance.

COURSE CONTENTS

Introduction to Marine Chemistry, composition of seawater, Geochemical balance, Trace elements, Dissolved gases, nutrient cycles, Dissolved and particulate organic matter, importance of ocean colour components in the ocean observation studies, Blue carbon, carbon sequestration and global carbon budget.

Organised by :

**Department of Chemical
Oceanography, CUSAT**

School of Marine Sciences Lake side
Campus, Cochin university

of Science and Technology (CUSAT), Cochin 682016

Protocol and general method of collections, preservation, pre-treatment and post treatment of water and sediment samples, Preparations of reagents and standards

Determination of pH (sensor, spectrophotometer) and alkalinity.

Determination of Nutrients – nitrate, Nitrite, phosphate and silicate

Determination of Dissolved Oxygen and salinity

Determination of pigments (Chlorophyll a)

Flame photometry- Determination of sodium, potassium, Calcium and lithium

Characterisation of micro plastics using FTIR, interpretations of FTIR spectrum

Water/ sediment/ biological samples preparation for trace metal elements - Trace elements measurements using ICP-OES/AAS

Target audience

·B.Sc/B.FSc/Postgraduate students

Duration

20 days (June 12 – July 1)

Course Fees

The course fee is 5000/- plus 18% GST

Payment mode: Online

Link for Registration

<https://forms.gle/n42UzGyJFhh44KHk7>

PATRON

Prof (Dr.) P.G. Sankaran, Hon'ble Vice-Chancellor, CUSAT

CO-ORDINATOR

Dr. Shaju S. S., Head, Department of Chemical Oceanography, CUSAT

JOINT CO-ORDINATORS

Dr. Habeeb Rahman K., Asst. Professor, Department of Chemical Oceanography, CUSAT

Dr. Jorphin Joseph, Asst. Professor, Department of Chemical Oceanography, CUSAT

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