

**Training Programme on Marine Phytoplankton-Optics, Pigments and Taxonomy during
23 - 27 March 2020**

ESSO - Indian National Centre for Ocean Information Services (INCOIS), Ministry of Earth Sciences (MoES), Government of India is going to organize a training programme on Marine Phytoplankton-optics, Pigment and Taxonomy during 23 - 27 March 2020 at International Training Centre for Operational Oceanography (ITCOcean) ESSO-INCOIS, Hyderabad, India. The training programme will provide information on observations of marine phytoplankton, its distribution, ecology and optical characteristics. The course includes theory classes as well as hands-on practice sessions. In theory various aspects of marine phytoplankton including its distribution in the world ocean, physical control, ecology, pigment composition, optical characteristics, etc will be covered. The hands-on exercise will focus on measurement of phytoplankton pigment analysis using high-performance liquid chromatography (HPLC), optical properties and taxonomy. Also, trainees will independently analyse samples and undertake a mini-group project.

Following topics will be covered in the training programme:

A. Theory Sessions:

- ✚ Marine phytoplankton ecology and analysis using high-performance liquid chromatography (HPLC);
- ✚ Phytoplankton optics: Applications and analysis and
- ✚ Marine Phytoplankton: photosynthetic systems, size classification and taxonomy.

B. Hands on Sessions:

- ✚ Phytoplankton pigment analysis using high-performance liquid chromatography (HPLC);
- ✚ Measurements of phytoplankton absorption spectra and
- ✚ Phytoplankton taxonomy using microscopy.

C. **Group project**

- ✚ Course participants are expected to perform an independent analysis of the unknown samples;
- ✚ The participants will be grouped and provided unknown samples and
- ✚ The participants would require to perform the analysis and explain the results as a part of the mini-project.

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