IODE
International Oceanographic Data and Information Exchange

OceanTeacher GLOBAL ACADEMY

INCOIS

OceanTeacher Global Academy (OTGA)
Training Course: Ocean Colour Remote Sensing – Data, Processing and Applications
25 – 29 November, 2019, Hyderabad, India

Overview
Ocean colour analysis is a proven tool for determining the health of ocean using oceanic biological activity through optical means. Phytoplankton pigment, chlorophyll a, are indicators of equilibrium of CO_2 concentration between atmosphere and ocean. The oceanic colour change due to chlorophyll a provides the level of primary productivity whereas the colour change due to CDOM can be attributed to the level of pollution and higher particulate matter. The ability of optical sensor to map the spatial and temporal patterns of ocean colour over regional and global scales has provided important insights into the fundamental bio-optical properties and bio-physical processes occurring in the aquatic media. Chlorophyll, SST and PAR can be operationally scaled up to estimate primary production and estimate the fish stocks. This training focus on basics of marine optics, ocean colour remote sensing, and its applications such as mapping primary productivity, phytoplankton classes and algal blooms.

Aims and Objectives
* To Provide an introduction to Ocean Color Remote Sensing, Marine optics, Ocean colour sensor characteristics, data, uncertainties.
* To familiarize with Ocean colour Algorithms, Chlorophyll, shallow water remote sensing, algal blooms
* Perform atmospheric correction of ocean color observations.
* To familiarize with marine primary production and P-I experiments
* To perform phytoplankton classification using ocean colour data.

Learning Outcomes
* Knowledge on SeaDAS tool for processing ocean colour data.
* Handle different ocean color algorithms.
* Use of Sea DAS software and Plug-in tools for ocean data processing.
* Generate and validate ocean color remote sensing products.
* Basic understanding of ocean color applications like PP, HABs etc.

Target Audience
Target audiences include, but are not limited to, the following:
* Ocean and coastal data managers
* Staff and researchers working on ocean colour applications
* University graduates

NOTE: priority will be given to participants originating from the Indian Ocean Rim countries. UNESCO is committed to promote gender equality: applications from women are strongly encouraged.

Course Pre-requisites:
* Candidates should have a working knowledge of marine data and formats and preferably be working in institutions responsible for the management of marine data
* This training course is not an introduction to Ocean Colour: candidates are expected to have some previous experience in the use of ocean colour data and products.
* Working knowledge of English
* Participants should preferably bring their own laptops.

A certificate of participation will be issued to all successful students (90% attendance to the classroom course mandatory).

Course dates:
25 – 29 November, 2019

Duration: 5 working days
(~ 30 hours classroom sessions, plus eventual online assignments)

Course Venue:
ITCOocean, INCOIS, Hyderabad, India

Lecturers:
* Aneesh Lotliker
* Satya Prakash
* Alakesh Samanta
* SK Baliar Singh
* Nimit Kumar

Period for Applications:
3 – 22 September 2019

Application process:
Please fill in the online application form on https://otga.wufoo.com/forms/p16aftzw0cg1yw8/ or https://bit.ly/2k0ge0c

For more detailed information please check:
https://www.oceanexpert.net/event/2413 and how to apply here: http://bit.ly/2ACZY9r

No tuition fee applies. A limited number of fellowships is available.

Contacts:
OTGA India Regional Training Centre Coordinator:
Dr TVS Udaya Bhaskar itcoocean@incois.gov.in)
OTGA Secretariat: ioc.training@unesco.org

Useful sites:
www.ioc-cd.org   www.iode.org
www.oceanteacher.org   www.oceanexpert.org
http://www.incois.gov.in/portal/ITCOocean.jsp