11th Advanced Phytoplankton Course - APC 11

Taxonomy and Systematics

Stazione Zoologica Anton Dohrn, Naples, **4-24 October 2015**

The Course will be held on, Naples, Italy**.**

The Course is organized by the Stazione Zoologica in cooperation with the University of Copenhagen, Denmark, and the IOC Science and Communication Centre on Harmful Algae.

APC 11 will cover morphology, taxonomy, and phylogeny of marine phytoplankton species. The aim is to increase and update the expertise of the students in the taxonomy and specific identification of diatoms, dinoflagellates, coccolithophores and other phytoflagellates, with emphasis on light microscopy and integrating molecular data and new approaches to the study of microalgae.

The programme will consist of lectures and practical sessions. During the latter, a diverse collection of preserved and live material will be offered for examination in light microscopy. Selected material will be observed in electron microscopy.

Topics

- methods and criteria for species identification
- taxonomic classification and phylogeny
- molecular identification
- methods for light and electron microscopy
- single cell isolation and cultivation, serial dilution culturing
- specialized literature
- toxic and harmful species
- general and specific aspects of phytoplankton biodiversity and biogeography
- lectures on historical aspects and advanced approaches to the study of phytoplankton diversity (e.g., automated imaging systems, high throughput sequencing, meta-DNA barcoding)
- tutorials on new species discovery and description.

Faculty

- **Federica Cerino** (Istituto Nazionale di Oceanografia e di Geofisica Sperimentale, Trieste, Italy)
- **Mona Hoppenrath** (Forschungsinstitut Senckenberg, Wilhelmshaven, Germany)
- **Wiebe H.C.F. Kooistra** (Stazione Zoologica Anton Dohrn, Naples, Italy)
- **Carina B. Lange** (University of Concepción, Chile)
- **Jacob Larsen** (IOC Science and Communication Centre on Harmful Algae)
- **Nina Lundholm** (Natural History Museum of Denmark, University of Copenhagen, Denmark)
- **Øjvind Moestrup** (Department of Biology, University of Copenhagen, Denmark)
- **Marina Montresor** (Stazione Zoologica Anton Dohrn, Naples, Italy)
- **Ian Probert** (Station Biologique, Roscoff, France)
- **Diana Sarno** (Stazione Zoologica Anton Dohrn, Naples, Italy)
- **Karen Steidinger** (Florida Fish and Wildlife Conservation Commission, St. Petersburg, FL, USA)
- **Carmelo R. Tomas** (University of North Carolina at Wilmington, NC, USA)
- **Adriana Zingone** (Stazione Zoologica Anton Dohrn, Naples, Italy)

Depending on funding, the faculty will be flanked by a number of renowned guest speakers who will deliver seminars and lead discussion on specific topics. Details will be provided on this website upon confirmation of their participation.

Participation

Participation is limited to 20 participants with PhD, MSc degree or equivalent, and with documented experience in phytoplankton identification. A good knowledge of the English language is necessary. APC is an **advanced course** for participants that already have a good expertise in phytoplankton taxonomy and identification. More than 50% of the course time is devoted to the observation of live and fixed specimens of single species and of mixed samples from different areas. The amount of samples observed and the details of the information provided may be neither suitable nor beneficial to participants who are not already fairly familiar with phytoplankton taxonomy and identification, or who have so far focused only on some species or groups.

The selected participants will receive relevant publications and information material to be studied before the course. A mandatory distant learning activity is planned starting next spring.

The registration fee is 600 € and will cover course tuition and materials, as well as social activities (welcome party, social dinner, excursion and refreshments during daily breaks).

An average cost of 70-80 €/day is estimated to cover double-room accommodation and meals in Naples during the course time. Accommodation options will be communicated to the selected participants next spring.

Deadline for application is 15 November 2014

The application form can be downloaded here

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