



## 13<sup>th</sup> Advanced Phytoplankton Course - APC13 Identification, Taxonomy, Systematics

Stazione Zoologica Anton Dohrn, Naples, Italy, 6-26 October 2024

The Advanced Phytoplankton Course series (APC) was initiated in the 1970s at the University of Oslo with the support of UNESCO and its Intergovernmental Oceanographic Commission (IOC). Subsequent Courses were held from 1985 to 2015 at the Stazione Zoologica Anton Dohrn (SZN), in 2012 at the University of Copenhagen and in 2019 at the Station Biologique de Roscoff (SBR). Over the last four decades, APC has contributed to the dissemination of the vast and ever-expanding body of knowledge on phytoplankton taxonomy, which has recently gained renewed interest because of its importance for interpreting advanced high-throughput imaging and molecular data. Many of the current experts in marine phytoplankton research have been trained at previous APC editions.

The 13<sup>th</sup> Advanced Phytoplankton Course (APC13) is organized by SZN together with SBR, the IOC Science and Communication Centre on Harmful Algae (IOC UNESCO / SCCHA) and Ocean Teacher Global Academy (IOC UNESCO / OTGA).

### Course content

**APC13 aims to provide participants with up-to-date expert knowledge on the identification and taxonomy of marine diatoms, dinoflagellates, coccolithophores and other phytoflagellates.** The intensive 3-week program consists of lectures, demonstrations and practical sessions during which participants will be trained in classical techniques integrated by new approaches of automated imaging and molecular taxonomy. Participants will examine a diverse collection of preserved and live material, which will be identified with the aid of up-to-date taxonomic literature, and learn how sequence data resources can be used for identification purpose. Tutors will provide demonstrations of strain isolation and maintenance, preparation and observation of material in electron microscopy, and automated imaging tools.

In addition to criteria and methods for species identification in the different algal groups with various tools (light and electron microscopy, automated imaging tools, sequence data), course topics will include aspects of phytoplankton classification, cell ultrastructure, molecular phylogeny, biodiversity, ecology, biogeography, and harmful algal blooms.

Advice on taxonomic knowledge needed for all microalgal groups will be provided before the Course. An evaluation test will be conducted at the end of the Course.

### Faculty

The APC13 tutors are renowned phytoplankton experts:

- **Nicolas Chomerat**, IFREMER, Concarneau, France
- **Bente Edvardsen**, University of Oslo, Norway
- **Wiebe H.C.F. Kooistra**, Stazione Zoologica Anton Dohrn, Naples, Italy
- **Carina B. Lange**, University of Concepción, Chile
- **Jacob Larsen**, UNESCO IOC SCCHA, Copenhagen, Denmark
- **Nina Lundholm**, Natural History Museum, 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
- **Urban Tillmann**, Alfred Wegener Institute, Bremerhaven, Germany
- **Daniel Vaultot**, Station Biologique, Roscoff, France & University of Oslo, Norway
- **Adriana Zingone**, Stazione Zoologica Anton Dohrn, Naples, Italy

### How to participate

The **application form** with instructions is found at the IOC UNESCO / OTGA site

<https://otga.wufoo.com/forms/z1akc0410s611yt/>

In addition to filling the form, applicants will have to upload a motivation letter, their curriculum with the publication list and two recommendation letters.

**Applications should be received not later than 5<sup>th</sup> January 2024, 23:59 CET.**

The results of the participants' selection will be communicated in a month from the deadline.

Attendance is limited to 20 participants with PhD, MSc degree or equivalent, and with professional working knowledge of phytoplankton identification. The Course is held in English.

**Participant selection** will consider previous experience in phytoplankton, relevance of APC13 to the present position and future involvement in monitoring and scientific projects, as well as chances for participants to share the information acquired during the course in their respective countries.

**The registration fee of € 800** includes lunches (also vegetarian options), coffee breaks and social activities; it does not include travel and living expenses.

Information will be updated on this Stazione Zoologica website at

<https://www.szn.it/index.php/en/education/advanced-life-long-training/13th-advanced-phytoplankton-course-apc-13-identification,-taxonomy,-systematics>

Mail can be addressed to [apc13@szn.it](mailto:apc13@szn.it)

### Organizing committee

Diana Sarno, Stazione Zoologica Anton Dohrn, Italy

Wiebe H.C.F. Kooistra, Stazione Zoologica Anton Dohrn, Italy

Marina Montresor, Stazione Zoologica Anton Dohrn, Italy

Adriana Zingone, Stazione Zoologica Anton Dohrn, Italy

Ian Probert, Station Biologique de Roscoff, France

Daniel Vaultot, Station Biologique de Roscoff, France & University of Oslo, Norway

Priscillia Gourvil, Station Biologique de Roscoff, France

Henrik Oksfeldt Enevoldsen, IOC UNESCO / HAB

Sofie Tineke de Baenst, IOC UNESCO / OTGA

### Sponsors

APC13 is organised thanks to the logistic and/or financial support of the Stazione Zoologica Anton Dohrn, the Station Biologique de Roscoff, France and the IOC UNESCO / HAB and IOC UNESCO / OTGA. Additional resources have been provided by the Italian National Biodiversity Future Centre (NBFC), McLane Research Laboratory inc. and Carl Zeiss S.p.A. The list of sponsors will be updated as required.

### Practical information

Naples is reachable through its international airport (<https://www.aeroportoedinapoli.it/en/>) and the HS-Rail network (<https://www.trenitalia.com/en.html>) and (<https://www.italotreno.it/en>). A choice of reasonable apartments, B&B accommodations and restaurants can be found in the immediate vicinity of the SZN or within a few stops of the metro. The cost of B&B accommodation in the SZN area starts from ca. 70 € per day close to the SZN, but may be cheaper in other districts of Naples.

