

Basic Training Course on Ocean Acidification

Host Institute: The Kristineberg Marine Research Station, University of Gothenburg, Sweden

Dates: 14-19 March 2022

Deadline for Application: 24 January 2022

Organizers: The University of Gothenburg, the Ocean Acidification International Coordination Centre (OAICC) of the International Atomic Energy Agency (IAEA), the North Atlantic Hub of the Global Ocean Acidification Observing Network (GOA-ON)

Contact person:

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Language: English.

Background Information: The course will be based on previous courses on ocean acidification held as part of the activities of the IAEA Peaceful Uses Initiative project "Ocean Acidification International Coordination Centre" (OA-ICC) and partners, and the document "Guide to Best Practices in Ocean Acidification Research and Data Reporting" (see <https://www.iaea.org/sites/default/files/18/06/oa-guide-to-best-practices.pdf>).

Purpose: To train early-career scientists and researchers entering the ocean acidification field with the goal to assist them to be able to measure and manipulate seawater carbonate chemistry, set up pertinent experiments, avoid typical pitfalls and ensure comparability with other studies, in a sustainable way.

Expected Outputs: Increased capacity to measure and study ocean acidification and increased networking among scientists working on ocean acidification. Initiate/deepen connections with international networks such as the Global Ocean Acidification Observing Network (GOA-ON; www.goa-on.org).

Scope and Nature: The training will include lectures in plenary and hands-on experiments in smaller groups (the level will depend on the basic knowledge of the selected participants). Subjects to be covered include: theoretical aspects of ocean acidification from chemistry to society, the characterization of the seawater carbonate chemistry including making TRIS buffer, calibration of pH electrodes, measurement of alkalinity, software packages used to calculate CO₂ system parameters, key aspects of ocean acidification experimental design, such as manipulation of seawater chemistry, biological perturbation approaches, and lab- and field-based methods for measuring organism responses to seawater chemistry changes, including nuclear and isotopic techniques.

Participation: The course is open to 15 trainees. Priority will be given to early-career scientists who begin to work in the ocean acidification area. Experts interested in starting ocean acidification studies would be welcome, space permitting. As identified by the Global Ocean Acidification Observing Network (GOA-ON) European hub, there is a strong need for capacity building in Europe. For this training, priority will be given to European but applications from other countries are welcome.

Participants' Qualification: The participants should have a university degree in marine chemistry, biology, oceanography or a related scientific field, and should be currently involved in or planning to set up ocean acidification studies.

Application Procedure: Selection will be based on merit and interest. Your applications should include:

- * A motivation letter with a short description of your research interest, why you would like to participate, and your plans regarding present and future ocean acidification research (max one A4 page)

- * CV with publication list

Applications must be received by not later than 24 January 2022 for the attention of the course organizer, Dr. Sam Dupont (sam.dupont@bioenv.gu.se).

Financial Arrangements and support: Selected participants will be informed by 31 January 2022.

The course is funded through the Swedish Royal Academy of Science and therefore free of charge. All local costs will be covered (accommodation at the marine station, food and bench fees).

Travel expenses are not included. However, a limited number of travel grants will be made available by the IAEA for some selected countries. Candidates should indicate in their application if they want to apply for such grants.

Participants should also make their own arrangements for transportation, passports, visas, and vaccinations (including covid).

The closest airport is Gothenburg.