IAEA
International Atomic Energy Agency
Atoms for Peace and Development

Training Course on

Ocean Alkalinity Enhancement —

Assessing the Impact on Marine Organisms

IAEA Marine Environment Laboratories, Monaco

15–19 June 2026

Ref. No.: EVT2504122

Information Sheet

Introduction

The **Training Course on Ocean Alkalinity Enhancement — Assessing the Impact on Marine Organisms** is part of the capacity building program of the IAEA Ocean Acidification International Coordination Centre (OA-ICC). The program aims to support IAEA Member States to minimize and address the impacts of ocean acidification (Sustainable Development Goal 14.3) and study the impacts of ocean-based solutions.

The course is organized by the IAEA OA-ICC in partnership with the Prince Albert II of Monaco Foundation through the OACIS Initiative (Ocean Acidification and other ocean Changes – Impacts and Solutions).

Objectives

The ocean is under pressure from warming, acidification and oxygen loss, adversely impacting marine ecosystems and the communities and societies who depend on them. But the ocean, covering 70% of Earth's surface, can also be a vital part of the solution and our ally to mitigate and adapt to climate

change. Meeting the objectives of the Paris Agreement to limit warming to well below 2º C would not only require drastic cuts in carbon dioxide (CO_2) emissions, but also the active removal of carbon CO_2 on the order of 100–1000 Gt CO_2 over the 21st century (IPCC, 2018). Ocean alkalinity enhancement (OAE) is a marine Carbon Dioxide Removal (mCDR) approach which is receiving growing interest from scientists, policy makers and industry. It entails the addition of alkaline materials to the sea with the goal of increasing the ocean's potential to absorb CO_2. There is limited scientific information to date about the impact that OAE might have on marine organisms and ecosystems. Building technical expertise to assess ecological impacts of OAE is critically needed to allow for informed policy decisions about this approach.

The aim of this course is to train scientists on how to perform laboratory experiments on the potential impact of OAE on marine organisms. The course includes both theoretical and practical exercises with the goals of designing purposeful experiments, analyzing complex datasets, avoiding typical pitfalls, and ensuring data comparability with other studies. Lectures on the broader context and implications of OAE will also be provided (e.g., societal and governance aspects). The course will be largely based on the 2023 Guide to Best Practices for Ocean Alkalinity Enhancement Research, especially the chapters on experimental design.

Target Audience

The course is open to 10-12 trainees. Priority will be given to early-career scientists with experience in marine environmental changes who have already received training on ocean acidification and seawater carbonate chemistry. Preference will be given to applicants with experience in biological response research and who are interested in conducting studies on the ecological impact of OAE. At least one publication in the field of marine environmental changes is required.

Working Language(s)

English

Expected Outputs

Increased capacity to study the impact of OAE on marine organisms and ecosystems and increased collaboration and networking among participating scientists. Participants will also work on personal research projects, developing strategies for their own research.

Structure

The training will include lectures and hands-on exercises in the laboratory. Subjects to be covered include seawater chemistry and different approaches to produce alkalinity; an overview of different approaches to study OAE biological impacts; experimental strategies and design, including designs to evaluate multiple stressors; tools to assess biological impacts, including nuclear and isotopic techniques; and data analysis, processing, and modeling.

Participation and Registration

Scientists wishing to participate in the event must be designated by an IAEA Member State or should be members of organizations that have been invited to attend.

In order to be designated by an IAEA Member State, participants are requested to send the **Participation Form (Form A)** to their competent national authority (e.g. Ministry of Foreign Affairs, Permanent Mission to the IAEA, or National Atomic Energy Authority) for onward transmission to the IAEA by **17 April 2026**. Participants who are members of an organization invited to attend are requested to send the **Participation Form (Form A)** through their organization to the IAEA by the above deadline.

Selected participants will be informed in due course on the procedures to be followed with regard to administrative and financial matters.

Participants are hereby informed that the personal data they submit will be processed in line with the Agency's Personal Data and Privacy Policy and is collected solely for the purpose(s) of reviewing and assessing the application and to complete logistical arrangements where required. The IAEA may also use the contact details of Applicants to inform them of the IAEA's scientific and technical publications, or the latest employment opportunities and current open vacancies at the IAEA. These secondary purposes are consistent with the IAEA's mandate.

Expenditures and Grants

No registration fee is charged to participants.

The IAEA is generally not in a position to bear the travel and other costs of participants for the event. The IAEA has, however, limited funds at its disposal to help meet the cost of attendance of certain participants. Upon specific request, such assistance may be offered to normally one participant per country, provided that, in the IAEA's view, the participant will make an important contribution to the event.

The application for financial support should be made using the **Grant Application Form (Form C),** which must be stamped, signed and submitted by the competent national authority to the IAEA together with the **Participation Form (Form A)** by **17 April 2026**.

Venue

The event will be held at the IAEA Marine Environment Laboratories in Monaco.

Participants must make their own travel and accommodation arrangements. The closest airport is Nice, France.

Visas

Participants who require a visa to enter France should submit the necessary application as soon as possible to the nearest diplomatic or consular representative of France.

Additional Information

Participants who have been designated by the relevant authorities of an IAEA Member State and have been selected by the IAEA will be informed by **30 April 2026**.

The course is funded through the IAEA and co-sponsored by the Prince Albert II of Monaco Foundation.

Additional Requirements

The participants should have a university degree in marine chemistry, biology, oceanography, or a related scientific field, and must have already received training on ocean acidification and seawater carbonate chemistry or performed ocean acidification biological response experiments.

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

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

* CV with publication list

IAEA Contacts

Scientific Secretary:

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PRINCIPALITY OF MONACO

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Email: L.Hansson@iaea.org

Administrative Secretary:

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Department of Nuclear Sciences and Applications
International Atomic Energy Agency
98000 MONACO
PRINCIPALITY OF MONACO

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Fax: +377 97 97 72 73
Email: C.Galdino@iaea.org

Subsequent correspondence on scientific matters should be sent to the Scientific Secretary and correspondence on other matters related to the event to the Administrative Secretary.

IAEA
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Form A
EVT 2504122

Participation Form

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IAEA Marine Environment Laboratories, Monaco
15–19 June 2026

To be completed by the participant and sent to the competent national authority (e.g. Ministry of Foreign Affairs, Permanent Mission to the IAEA, or National Atomic Energy Authority) of his/her country for subsequent transmission to the International Atomic Energy Agency (IAEA) either by email to: Official.Mail@iaea.org or by fax to: +43 1 26007 (no hard copies needed). Please also send a copy by email to the Scientific Secretary L.Hansson@iaea.org and to the Administrative Secretary C.Galdino@iaea.org.

Deadline for receipt by IAEA through official channels: 17 April 2026

Family name(s): (same as in passport)	First name(s): (same as in passport)	Mr/Ms
Institution:		
Full address:		
Tel. (Fax):		
Email:		
Nationality:	Representing following Member State/non-Member State/entity or invited organization:	

Participants are hereby informed that the personal data they submit will be processed in line with the Agency's Personal Data and Privacy Policy and is collected solely for the purpose(s) of reviewing and assessing the application and to complete logistical arrangements where required. The IAEA may also use the contact details of Applicants to inform them of the IAEA's scientific and technical publications, or the latest employment opportunities and current open vacancies at the IAEA. These secondary purposes are consistent with the IAEA's mandate.

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Form C
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Family name(s): (same as in passport)	First name(s): (same as in passport)	Mr/Ms:
Mailing address:	Tel.:	
	Fax:	
	Email:	
Date of birth (yy/mm/dd):	Nationality:	

1. Education (post-secondary):

Name and place of institution	Field of study	Diploma or Degree	Years attended from	to

2. Recent employment record (starting with your present post):

Name and place of employer/ organization	Title of your position	Type of work	Years worked from	to

3. Description of work performed over the last three years:

4. Institute's/Member State's programme in field of event:

Date: **Signature of applicant: _____**

Date: **Name, signature and stamp of Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy Authority _____**