



# IAEA

Átomos para la paz y el desarrollo

الوكالة الدولية للطاقة الذرية

国际原子能机构

International Atomic Energy Agency

Agence internationale de l'énergie atomique

Международное агентство по атомной энергии

Organismo Internacional de Energía Atómica

## Laboratorios para el Medio Ambiente

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La Secretaría del Organismo Internacional de Energía Atómica (OIEA) saluda a los Estados Miembros del OIEA y tiene el honor de señalar a su atención la celebración de la **Reunión Técnica sobre la Utilización de Prácticas Óptimas en Experimentos sobre la Acidificación de los Océanos Basados en Escenarios con Múltiples Factores de Estrés**, que tendrá lugar en Mónaco del **24 al 28 de junio de 2019**.

La finalidad de la reunión es diseñar y aplicar nuevos métodos y prácticas óptimas para estudiar la acidificación de los océanos en contextos con múltiples factores de estrés.

En la reseña informativa adjunta se ofrecen más detalles sobre la reunión.

La reunión se celebrará en inglés.

Se invita a los Estados Miembros a designar a una o más personas para que participen en esta reunión y se los alienta encarecidamente a seleccionar con ese fin a mujeres calificadas.

Por lo general, el OIEA no está en condiciones de sufragar los gastos de viaje ni de otra índole de los participantes en la reunión. No obstante, dispone de fondos limitados para ayudar a cubrir los gastos de asistencia de determinados participantes. Esa ayuda puede ofrecerse normalmente, previa solicitud expresa, a un participante por país, siempre que, en opinión del OIEA, la persona para la que se solicita pueda hacer una contribución importante a la reunión. La solicitud de apoyo financiero debe presentarse en el momento de la designación de los participantes mediante el formulario de solicitud de subvención adjunto (Formulario C).

Cabe señalar que el OIEA no paga ninguna indemnización por daños o pérdida de efectos personales. Tampoco proporciona seguro médico a los participantes en eventos del OIEA. Por lo tanto, se recomienda que estas personas adopten las medidas necesarias para contratar por su cuenta un seguro privado. No obstante, el OIEA cubrirá mediante un seguro los accidentes y enfermedades claramente relacionados con los servicios prestados al OIEA.

Las designaciones deben presentarse al OIEA por conducto de la autoridad nacional competente (el Ministerio de Relaciones Exteriores, la Misión Permanente ante el OIEA o la Autoridad Nacional de Energía Atómica), a más tardar el **5 de abril de 2019**, por medio del formulario de participación adjunto (Formulario A). Los formularios de participación debidamente cumplimentados y autorizados deben enviarse por correo electrónico a la dirección [Official.Mail@iaea.org](mailto:Official.Mail@iaea.org), o por fax al número +43 1 26007 (no se precisan copias impresas).

Asimismo, han de enviarse copias por correo electrónico a la Secretaria Científica de la reunión, Sra. Lina Hansson, División de los Laboratorios del OIEA para el Medio Ambiente, Departamento de Ciencias y Aplicaciones Nucleares (correo electrónico: [L.Hansson@iaea.org](mailto:L.Hansson@iaea.org)), y a la Secretaria Administrativa, Sra. Hasti Dessa (correo electrónico: [H.Dessa@iaea.org](mailto:H.Dessa@iaea.org)). Una vez recibidas las designaciones oficiales, la Secretaria Científica de la reunión contactará directamente a los participantes en relación con otras cuestiones de organización, como los detalles del viaje, según proceda.

En caso de que los Gobiernos desearan, además, nombrar uno o más observadores para que presten asistencia y asesoramiento a los participantes designados, se les ruega que comuniquen al OIEA los nombres y las señas de esos observadores a más tardar en la fecha antes indicada. De conformidad con las normas establecidas, corresponde a los Gobiernos sufragar los gastos de asistencia de los observadores que envíen a los eventos del OIEA. Este no paga ninguna indemnización por daños o pérdida de efectos personales de los observadores, ni por enfermedad, lesión o fallecimiento durante los viajes o en relación con su asistencia a los eventos del OIEA.

La Secretaría del Organismo Internacional de Energía Atómica aprovecha esta oportunidad para reiterar a los Estados Miembros del OIEA el testimonio de su distinguida consideración.



26 de febrero de 2019

Documentación adjunta (en inglés únicamente):

Reseña informativa

Formulario de participación (Formulario A)

Formulario de solicitud de subvención (Formulario C)



# **Technical Meeting on the Use of Best Practices for Ocean Acidification Experiments in Multi-Stressor Scenarios**

**IAEA Environment Laboratories  
Monaco**

**24–28 June 2019**

**Ref. No.: EVT1703906**

## **Information Sheet**

### **Introduction**

The ocean is subject to a multitude of human-caused pressures, such as ocean warming, acidification, eutrophication and oxygen depletion, acting simultaneously in complex ways. A major challenge for scientists today is to determine the cumulative effects of such interactive stressors on marine organisms, communities and ecosystems. Most studies on ocean change to date have investigated the response of acclimated single species/strains under the influence of a single driver. However, the assessment of impacts on ecosystems, necessary to inform science-based policy advice, requires information on responses to multiple drivers at the ecosystem level. There is an urgent need to develop a new generation of studies based on methodology that will allow studies to progress from single to multiple drivers, from organisms to ecosystems, and from acclimation to adaptation responses.

The trans-disciplinary [Working Group 149](#) of the Scientific Committee on Oceanic Research (SCOR) is working to design a framework of experiments, observations, and conceptual/mathematical models to respond to this need. These include a series of guidelines to perform multi-stressor studies, including a web-based decision support tool for researchers to assist with the design of their experiments; a virtual marine scientist laboratory application called MEDDLE (Multiple Environmental Driver Design Lab for Experiments) to test experimental set-ups; and a series of video tutorials on a range of topics made by experts in each field. These resources will go live in April 2019 and will provide a platform for the next

generation of scientists to conduct rigorous interrelated research and to further refine this approach as new technologies emerge.

The IAEA Ocean Acidification International Coordination Centre ([OA-ICC](#)) promotes international collaboration and coordination to address ocean acidification. Among its many activities, the OA-ICC facilitates the development of standardized protocols, methods and tools for ocean acidification research to ensure the quality and comparability of results. To that end, it also promotes the use and development of guidelines and protocols, including those developed by SCOR Working Group 149, for both newcomers and established scientists working in the field, as well as training using these tools

## **Objectives**

The objectives of this event are to become familiar with the modes of learning available in the new SCOR WG149 web-based best practice guide. This best practice guide will provide a valuable platform to test methods and best practices for ocean acidification studies within a multi-stressor context that were developed at an IAEA Technical Meeting held in Monaco in June 2017, and to train the participants in their use.

## **Target Audience**

This Technical Meeting is open to 20 participants from IAEA Member States. Financial support is limited to participants from Member States eligible to receive technical assistance under the IAEA's Technical Cooperation Programme. Participants should have a university degree in marine biology, oceanography or a related scientific field, and should be currently involved in ocean acidification studies, ideally within a multi-stressor context. Priority will be given to early- to mid-career scientists and/or technicians, working in the ocean acidification/ocean change field.

## **Working Language(s)**

The working language of this event will be English.

## **Expected Outputs**

- Competency in the use of the new web-based best practices guide that can be passed on to others;
- New tools and best practices to study ocean acidification in conjunction with other stressors tested and adapted as necessary;
- Increased capacity by participants to study ocean acidification in a multi-stressor context; and
- New science collaborations among scientists attending the event.

## Structure

The training will be based on the web-based decision support tool and other tools developed by the SCOR Working Group 149, available here, and include both lectures and discussions in plenary sessions and hands-on laboratory sessions in smaller groups to support the online tools.

## Topics

Subjects to be covered include: introduction to multiple-driver studies and to a newly developed online best practices guide for multi-stressor experiments, including a decision support tool, and the MEDDLE simulator.

## Participation and Registration

All persons wishing to participate in the event have to 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 **5 April 2019**. 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 above deadline.

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

Please note that the IAEA is in a transition phase to manage the entire registration process for all regular programme events electronically through the new InTouch+ (<https://intouchplus.iaea.org>) facility, which is the improved and expanded successor to the InTouch platform that has been used in recent years for the IAEA's technical cooperation events. Through InTouch+, prospective participants will be able to apply for events and submit all required documents online. National authorities will be able to use InTouch+ to review and approve these applications. Interested parties that would like to use this new facility should write to: [InTouchPlus.Contact-Point@iaea.org](mailto:InTouchPlus.Contact-Point@iaea.org).

## 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 in 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 has to be stamped, signed and submitted by the competent national authority to the IAEA together with the **Participation Form (Form A)** by **5 April 2019**.

## **Venue**

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

## **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**

More information on travel and logistical arrangements will be provided to selected participants in due course before the event.

## **IAEA Contacts**

### **Scientific Secretary:**

#### **Ms Lina Hansson**

IAEA Environment Laboratories  
Department of Nuclear Sciences and Applications  
International Atomic Energy Agency  
4a, Quai Antoine 1er  
98000 MONACO  
PRINCIPALITY OF MONACO

Tel.: +377 9797 72-56

Fax: +377 9797 72-73

Email: [L.Hansson@iaea.org](mailto:L.Hansson@iaea.org)

## **Administrative Secretary:**

### **Ms Hasti Dessa**

IAEA Environment Laboratories  
Department of Nuclear Sciences and Applications  
International Atomic Energy Agency  
4a, Quai Antoine 1er  
98000 MONACO  
PRINCIPALITY OF MONACO

Tel.: +377 9797 72-50

Fax: +377 9797 72-76

Email: [H.Dessa@iaea.org](mailto:H.Dessa@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.

## **Event Web Page**

Please visit the following IAEA web page regularly for new information regarding this event:

<https://www.iaea.org/events/evt1703906>





# Participation Form

## Technical Meeting on the Use of Best Practices for Ocean Acidification Experiments in Multi-Stressor Scenarios

**IAEA Environment Laboratories, Monaco**

**24–28 June 2019**

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](mailto: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](mailto:L.Hansson@iaea.org) and to the Administrative Secretary [H.Dessa@iaea.org](mailto:H.Dessa@iaea.org).

Please attach a passport copy or other document of identification (ID).

**Deadline for receipt by IAEA through official channels: 5 April 2019**

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:	
If/as applicable: Do you intend to submit a paper?                      Yes <input type="checkbox"/> No <input type="checkbox"/> Would you prefer to present your paper as a poster?    Yes <input type="checkbox"/> No <input type="checkbox"/> Title:		



# Grant Application Form

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**Deadline for receipt by IAEA through official channels: 5 April 2019**

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** \_\_\_\_\_