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#### Environment Laboratories

4 Quai Antoine 1<sup>er</sup>, MC 98000 Monaco, Principality of Monaco Phone: (+377) 97.97.72.72 • Fax: (+377) 97.97.72.73 Email: <u>mel@iaea.org</u> • Internet: <u>http://www.iaea.org/monaco</u>

In reply please refer to: EVT1703906 Dial directly to extension: (+377) 9797 72-56

The Secretariat of the International Atomic Energy Agency (IAEA) presents its compliments to the IAEA's Member States and has the honour to draw their attention to the **Technical Meeting on the Use of Best Practices for Ocean Acidification Experiments in Multi-Stressor Scenarios** (hereinafter referred to as "event") to be held in Monaco, from **24 to 28 June 2019**.

The purpose of the event is to develop and apply new methods and best practices for ocean acidification studies in a multi-stressor context.

The attached Information Sheet provides further details of the event.

The event will be held in English.

Member States are invited to designate one or more participants for this event. Member States are strongly encouraged to identify suitable women 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 at the time of designating the participant(s) using the attached Grant Application Form (Form C).

It should be noted that compensation is not payable by the IAEA for any damage to or loss of personal property. The IAEA also does not provide health insurance coverage for participants in IAEA events. Arrangements for private insurance coverage on an individual basis should therefore be made. The IAEA will, however, provide insurance coverage for accidents and illnesses that clearly result from any work performed for the IAEA.

Designations should be submitted to the IAEA through the competent national authority (Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy Authority) not later than **5 April 2019** using the attached Participation Form (Form A). Completed and authorized Participation Forms should be sent either by email to: <u>Official.Mail@iaea.org</u> or by fax to: +43 1 26007 (no hard copies needed). Copies should be sent by email to the Scientific Secretary of the event, Ms Lina Hansson, Division of Environment Laboratories, Department of Nuclear Sciences and Applications (Email: <u>L.Hansson@iaea.org</u>), and to the Administrative Secretary, Ms Hasti Dessa (Email: <u>H.Dessa@iaea.org</u>). The Scientific Secretary of the event will liaise with the participants directly concerning further arrangements, including travel details, as appropriate, once the official designations have been received.

Should Governments wish, in addition, to appoint one or more observers to assist and advise the designated participants, they are kindly requested to inform the IAEA of the names and contact details of any such observers by the above date. In accordance with the established rules, Governments are expected to bear the cost of attendance of any observers they may send to IAEA events. Compensation is not payable by the IAEA for any damage to or loss of observers' personal property or for illness, injury or death occurring while travelling to or in connection with their attendance at IAEA events.

The Secretariat of the International Atomic Energy Agency avails itself of this opportunity to assure the IAEA's Member States of its highest consideration.



2019-02-26

Enclosures: Information Sheet Participation Form (Form A) Grant Application Form (Form 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 <u>Working Group 149</u> 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+ (<u>https://intouchplus.iaea.org</u>) 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.

## **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: <u>L.Hansson@iaea.org</u>

#### 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: <u>H.Dessa@iaea.org</u>

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: <u>Official.Mail@iaea.org</u> or by fax to: +43 1 26007 (no hard copies needed). Please also send a copy by email to the Scientific Secretary <u>L.Hansson@iaea.org</u> and to the Administrative Secretary <u>H.Dessa@iaea.org</u>.

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	e as in passport)	Mr/Ms
Institution:				
Full address:				
Tel. (Fax):				
Email:				
Nationality:	Representing follo invited organizatio	owing Member State/1 on:	non-Member State/er	ntity or
If/as applicable: Do you intend to submit a p Would you prefer to presen Title:	-	Yes 🗌 ster? Yes 🗌	No 🗌 No 🗍	



# **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	

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**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<br/>to the IAEA or National Atomic Energy Authority