

OA-ICC HIGHLIGHTS

The latest news and updates from the OA-ICC and partners



Participants of the PERSGA ocean acidification introductory course in Aqaba, Jordan (Photo: © PERSGA)

THIS QUARTER:

REGIONAL OA WORKSHOP:
RED SEA/ GULF OF ADEN

METHODOLOGY FOR SDG 14.3.1
ADOPTED

GALAPAGOS OA SCHOOL

OA-ICC SURVEY FOR OA
SAMPLING & STORAGE METHODS

SOLAS SUMMER SCHOOL

COMMUNITIES OF OCEAN
ACTION WEBINAR

COORDINATED RESEARCH
PROJECT

PERSGA Member States trained on ocean acidification in Aqaba

A group of 26 participants representing 7 Member States (Djibouti, Egypt, Jordan, Kingdom of Saudi Arabia, Somalia, Sudan and Yemen) of the Regional Organization for the Conservation of the Environment of the Red Sea and Gulf of Aden ([PERSGA](#)), attended a 5-day introductory course on ocean acidification in Aqaba, Jordan, from 30 September to 4 October 2018. This regional workshop was organized by PERSGA in partnership with OA-ICC, The Aqaba Special Economic Zone Authority (ASEZA) and the Marine Science Station (MSS)/University of Jordan and Yarmouk University.

The workshop sought to give participants a solid overview of the topic, from the underlying chemistry to its impacts on marine organisms and ecosystems. It introduced methods used to monitor ocean acidification in the field, as well as approaches to assess the risk to marine life using lab experiments. An international group of experts shared their expertise in ocean acidification

research through lectures and practical demonstrations.

The course covered the carbonate system in seawater, simplified methods for measuring alkalinity and pH, software packages used to calculate CO₂ system parameters, as well as key aspects of ocean acidification experimental design and methods to measure physiological responses of organisms, including nuclear and isotopic techniques.



(Photo: © PERSGA)

The course was one of the first organized in the region on the topic and was an opportunity to raise awareness about ocean acidification. Discussion between lecturers and participants through interactive sessions allowed the group to assess the capacity needs for each of the participating countries and to identify opportunities to start ocean acidification research. Building capacity in regions with limited ocean acidification monitoring efforts is important to fill current gaps in understanding of the issue and to inform processes such as the United Nations Sustainable Development Goal 14 and its target 3, which specifically seeks to minimize and address the impacts of ocean acidification. [#CAPACITY-BUILDING](#)



Methodology for Sustainable Development Goal 14.3.1 adopted

During its 51st Executive Council Meeting from 3-6 July 2018, the Member States of the Intergovernmental Oceanographic Commission (IOC) of UNESCO welcomed the [Methodology for the Sustainable Development Goal \(SDG\) Target Indicator 14.3.1](#) and recommended to the IOC secretary as the custodian agency for this indicator to propose its upgrade from [Tier III to Tier II](#). The SDG Target Indicator 14.3.1 calls for "*average marine acidity measured at an agreed suite of representative sampling stations*". The Methodology provides guidance to scientists and countries about how to carry out measurements following the best practices established by experts in the ocean acidification community. The OA-ICC contributed to the Methodology and will continue to support IAEA Member States in collecting and reporting ocean acidification data as part of this SDG Target.

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2018 Galapagos OA School

The OA-ICC provided support for 11 participants to attend the 2018 Galapagos Ocean Acidification School, held at the Charles Darwin Research Station between 19-28 August 2018. This advanced training course served as an opportunity to train twelve participants from seven countries (Argentina, Brazil, Chile, Colombia, Costa Rica, Ecuador, and Mexico) on both theoretical and practical techniques, using a natural CO₂ vent system in the Galapagos Islands. Participants gained expertise in measuring carbonate chemistry in the lab, collecting seawater and biological samples in the field for isotopic analyses, as well as managing and analysing data. The course was also supported by the Latin American Ocean Acidification Network (LAOCA), the Galapagos Marine Research and Exploration Program, the Millennium Institute of Oceanography, the Galapagos National Park, the Oceanographic Institute of the Navy (INOCAR), the Scientific Council for Oceanic Research (SCOR) and others. [#CAPACITY-BUILDING](#)



Participants of the OA Galapagos School gaining hands-on experience in the field
(Photo: © Galapagos Marine Research and Exploration)

OA-ICC survey

The OA-ICC and partners are launching an effort to document uncertainties associated with various OA sampling and storage techniques and provide guidance on how best to reach optimal measurements depending on the science question and the intended use of the data. To this end, a [short survey](#) was developed in order to evaluate which storage techniques are currently being used by the OA community. We would greatly appreciate your contribution to this effort. The survey should only take 5-10 minutes to complete.

[#SCIENCE](#)



2018 SOLAS Summer School Participants
(Photo: © SOLAS)

SOLAS Summer School in Corsica

The Surface Ocean Lower Atmosphere Study ([SOLAS](#)) held its 7th biennial summer school in Corsica, France, from 23 July to 4 August 2018. This international course included participation from 64 doctoral students and early-career scientists and focused on linking ocean-atmosphere interactions with climate and people, including ocean acidification. The OA-ICC supported four participants from Brazil, Egypt, and Nigeria to attend this course.

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Communities of Ocean Action on Ocean Acidification - webinar series

At the 2017 UN [Ocean Conference](#) in New York, 240 voluntary commitments were submitted toward Target 3 (on OA) of the Sustainable Development Goal 14. In response to this, the UN launched a [Community of Ocean Action on Ocean Acidification](#) (COA on OA) to help implement the



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IMPLEMENTATION OF SUSTAINABLE DEVELOPMENT GOAL 14

SDG 14.3. Focal points in charge of leading this Community of Ocean Action are David Osborn, IAEA Environment Laboratories, Monaco, and Bronte Tilbrook, CSIRO, Australia, and co-chair of the Global Ocean Acidification Observing Network (GOA-ON). The COA on OA hosted a kick-off webinar as part of a webinar series for this newly formed Community of Ocean Action on 17 October 2018. An analysis of the focus and scope of the voluntary commitments on ocean acidification was presented during the webinar, and participants discussed current progress and opportunities for collaboration.

[#COMMUNICATION](#)

Call for proposals open for IAEA Coordinated Research Project (CRP) on ocean acidification

The IAEA is launching a new 4-year Coordinated Research Project (CRP K41018) starting in 2019 to advance understanding on the effects of ocean acidification on seafood around the world and to explore adaptation strategies for aquaculture and seafood industries. One of the research objectives of this project will be to expand international collaboration on ocean acidification using knowledge and research kits developed through the OA-ICC capacity building activity and the IAEA Technical Cooperation project INT7019. The deadline for submitting proposals is 30 November 2018. More information on the project and proposal submission on the CRP can be found [here](#).

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NEXT ISSUE

- *Technical Meeting on the Management, Analysis, and Quality Control of Ocean Acidification Observation Data*, IAEA Monaco, 22-26 October 2018.
- Release of data portal for biological response to OA papers.

OA-ICC online resources: www.iaea.org/services/oa-icc

- [OA-ICC news stream](#) - recent publications, media coverage, meeting announcements, jobs etc.
- [OA-ICC bibliographic database](#) - over 5,000 references with citations, abstracts and keywords.
- [OA-ICC data compilation](#) on the biological response to ocean acidification - access to experimental data from 928 scientific papers.

The IAEA OA-ICC promotes global collaboration and activities to advance ocean acidification science, capacity building, and communication

Visit the OA-ICC Website:

www.iaea.org/services/oa-icc

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