

Newsletter of the Global Ocean Acidification Observing Network (GOA-ON)

OA Observing News

Issue 6, Summer 2018



The GOA-ON Executive Council at the Institute of Oceanology, Sopot, Poland

The 5th Annual Meeting of the GOA-ON Executive Council

The GOA-ON Executive Council held their 5th annual meeting on 28-30 May 2018 at the Institute of Oceanology, Polish Academy of Sciences, in Sopot, Poland. During the meeting, the methodology for the Sustainable Development Goal (SDG) target indicator 14.3.1 ("average marine acidity measured at an agreed suite of representative sampling stations") was reviewed. The Intergovernmental Oceanographic Commission of UNESCO (IOC-UNESCO) is the custodian agency for this SDG indicator, and

developed methodology which provides detailed guidance to scientists and countries in terms of how to carry out measurements following the best practices established by the ocean acidification community, as well as how to report the collected information in a manner that ensures it is transparent, traceable and can be utilized in a global comparison of pH measurements. In addition to contributing their expertise to the development of this methodology, the GOA-ON Executive Council also welcomed the recognition of ocean acidification as one of the seven World Meteorological

Organization Global Climate Indicators and planned for its inclusion in future reports. The GOA-ON Executive Council reported on GOA-ON international capacity building activities including Pier2Peer, received updates from the regional hubs, and welcomed the new GOA-ON Secretariat, among other exciting updates. See the GOA-ON website, SDG Methodology website, and the meeting documents for further details.

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GOA-ON News

Introducing the GOA-ON Distributed Secretariat

The Intergovernmental Oceanographic Commission of UNESCO (IOC-UNESCO) and the International Atomic Energy Agency (IAEA) have developed a reinforced partnership to contribute to a distributed GOA-ON Secretariat. We are pleased to introduce two new full-time members of a GOA-ON Secretariat: Dr. Katherina Schoo, based at IOC-UNESCO in Paris, and Ms. Marine Lebrec, based at the IAEA Environment Laboratories in Monaco. These two positions are in addition to an existing position at the US National Oceanic and Atmospheric Administration Ocean Acidification Program (NOAA OAP), currently held by Ms. Meredith Kurz. Additional technical support is provided by Ms. Cathy Cosca at NOAA's Pacific Marine Environmental Laboratory and Dr. Emilio Mayorga and Mr. Troy Tanner, both at the Applied Physics Laboratory of the University of Washington. This reinforcement of the GOA-ON Secretariat will accelerate progress on all GOA-ON's activities towards increased OA research and monitoring capacity across the globe and centralized access to ocean acidification data.

Contacts: Meredith Kurz (<u>meredith.kurz@noaa.gov</u>), Katherina Schoo (<u>k.schoo@unesco.org</u>), Marine Lebrec (m.lebrec@iaea.org), Cathy Cosca (cathy.cosca@noaa.gov)



Members of the GOA-ON Secretariat, from left to right: Katherina Schoo, Meredith Kurz, and Marine Lebrec

GOA-ON abstract accepted for OceanObs'19 in Honolulu, HI, USA, 16-20 September 2019

The OceanObs'19 conference will galvanize ocean observing communities to improve coordination of regional and national efforts to improve observations of the ocean, to better respond to the joint scientific and societal needs for a fit-for-purpose ocean observing system, and maximize the overall benefit of more integrated observing. OceanObs'19 is the third in a decadal series of conferences bringing together the international ocean observation community to develop strategies for an integrated, sustained, and multidisciplinary ocean observing system. The GOA-ON Executive Council submitted an abstract on behalf of our network for white paper development, and it was accepted.

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Recent Activities

Session on ocean acidification at 4th Climate Change Symposium, 4-8 June 2018

The 4th Annual Symposium on the Effects of Climate Change on the World's Oceans, held on 4-8 June 2018 in Washington DC, USA, included a session entitled "Carbon uptake, ocean acidification, and ecosystems and human impacts." This session included presentations on GOA-ON's efforts, given by Executive Council members. In general, ocean acidification research was featured prominently across the conference.

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Capacity development workshop at the University of Gothenburg

Dr. Sam Dupont led a three-week capacity building summer course at the University of Gothenburg, from 4-22 June 2018, which was organized in the framework of an IAEA interregional Technical Cooperation project (INT7019) and the OA-ICC. This advanced training included 15 participants from 15 different countries. The workshop was designed to give trainees some choice over which subjects they would like to focus on, and included sessions on planning of biological experiments, proper water sampling, field work, carbonate chemistry analyses, etc. Participants in this course will collaborate to write and publish a paper together. This design provides a tangible outcome for the course's participants and provides a concrete contribution to global understanding of biological ocean acidification impacts.

Contact: Sam Dupont (sam.dupont@bioenv.gu.se)



Conducting laboratory experiments during the University of Gothenburg training (Photo credit: Sam Dupont)

Regional Hub Activities

OA-Africa

In May 2018, the Western Indian Ocean Marine Science Association (WIOMSA) announced a partnership with IOC-UNESCO and GOA-ON to fund the establishment of ocean acidification observation systems in the field in the Western Indian Ocean. The deadline for proposals has passed, and applicants are now awaiting WIOMSA's decision about which institutions will receive funding to carry out this important work.

The OA-Africa website has received some updates in recent weeks. <u>Visit today</u> to see the latest news and resources from the regional hub.

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Latin American Ocean Acidification Network (LAOCA)

The 2018 Galapagos Ocean Acidification School The Galapagos Islands are a unique natural laboratory where different currents converge, giving origin to an exceptional marine biodiversity. Roca Redonda is an active submarine volcano where CO₂ is released through cold vents, simulating the conditions of ocean acidification. The 2018 Galapagos Ocean Acidification School will be held 19-28 August at the Charles Darwin Research Station, Puerto Ayora, Galápagos. Using natural CO₂ seeps as experimental units, participants from Latin-American and Caribbean countries will gain knowledge in aspects of ocean acidification research including in-situ sample collection in a CO₂ vent, analytical chemistry techniques for carbon system parameters, and the study of benthic community structure under the influence of high CO₂ conditions. This workshop will be led by Dr. Rafael Bermudez, Escuela Superior Politécnica del Litoral (ESPOL), Galapagos, Ecuador, and one of the co-chairs of LAOCA, Dr. Cristian Vargas of Universidad de Concepción, Chile. Organizational partners include LAOCA, the IAEA OA-ICC, SCOR, IOC-UNESCO, musels, and US NOAA; more information can be found here. The application period has closed.

Contact: Dr. Cristian Vargas (crvarqas@udec.cl)

Recent regional meeting of the OAiRUG at Invemar, Colombia, 19-21 March 2018

The Ocean Acidification International Reference User Group (OAIRUG) held its first regional Latin American meeting at Invemar in Santa Marta, Colombia. The high-level participants at the three-day event discussed the potential impacts of ocean acidification on the Latin American region and identified gaps in science and policy around ocean acidification. More information about the meeting can be found here.

Western Pacific Hub (WESTPAC)

The IOC Sub-Commission for the Western Pacific (WESTPAC) has announced their 5th Workshop on Research and Monitoring of the Ecological Impacts of Ocean Acidification on Coral Reef Ecosystems, scheduled for 6-7 November 2018 in Xiamen, China. Additionally, a WESTPAC Ocean Acidification Symposium will be held on 5 November preceding the workshop to highlight recent ocean acidification research. The OA workshop and the science symposium will be hosted by the Third Institute of Oceanography. State Oceanic Administration of China. As a regional component of GOA-ON, WESTPAC contributes to monitoring ocean acidification and its impacts particularly in coral reef environments, while building capacity in the Western Pacific and its adjacent regions. More information on the upcoming workshop can be found here.

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North American Ocean and Coastal Acidification Network

The North American Ocean and Coastal Acidification regional hub will hold its first inperson meeting at the Hakai Institute, British Columbia, Canada on 17-18 October 2018. Interested stakeholders held an initial conference call in September 2017 to identify priorities, which included holding training workshops, increasing data exchange between countries, and coordinating to hold webinars.

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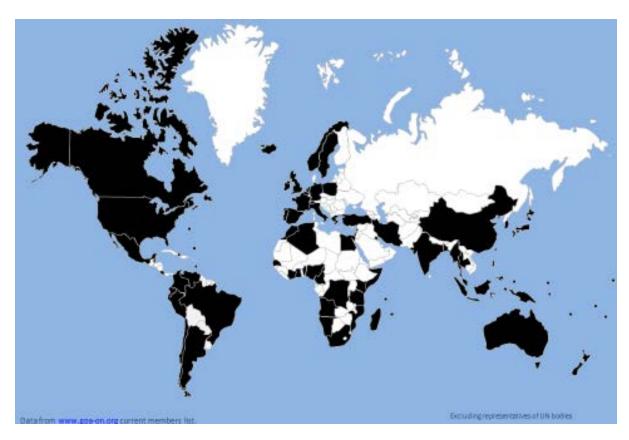
Pier2Peer mentors needed! Pier2Peer (P2P) is a GOA-ON scientific mentorship program supporting the expansion of OA observing capacity by fostering relationships between experienced OA researchers and early career scientists. P2P partnerships provide a range of professional development opportunities, including technical guidance and study design advice, exchange of scientific articles and information about meetings and workshops, the option to apply for a limited funding opportunity, and much more. The program is always open to new mentees, and is particularly searching for new mentors. The P2P program currently has many new mentees who are interested in pursuing GOA-ON's second goal, "improve our understanding of ecosystem response to OA," and are looking for mentors to help guide these biological monitoring or experimental efforts. Consider becoming a mentor or mentee today by following this link and filling out a short survey about your experience and research interests. Applicants are allowed to specify if there is a specific mentor/mentee they wish to work with, though we cannot guarantee a particular match. Contact: Meredith Kurz (meredith.kurz@noaa.gov)

Funding Opportunities

IAEA Coordinated Research Project on Evaluating the Impacts of Ocean Acidification on Seafood

The International Atomic Energy Agency (IAEA) is launching a new 4-year Coordinated Research Project (CRP) starting in 2019 to advance understanding on effects of ocean acidification on seafood around the world and to explore adaptation strategies for aquaculture and seafood industries. IAEA CRPs consist of a network of 10 to 15 research institutes that work in coordination for three to five years to acquire and disseminate new knowledge. Proposals for a Research Contract or Agreement are due by email no later than 30 November 2018; more details are available here.

Contact: research.contracts@iaea.org



The GOA-ON has grown to a network of over 480 scientists from 80 countries, shown in black. In the first half of 2018, the GOA-ON added 38 scientists from Argentina, Bangladesh, Belize, Brazil, Chile, Colombia, Egypt, France, Greece, India, Kenya, Monaco, Myanmar, New Zealand, Nigeria, Norway, Papua New Guinea, Peru, Portugal, Spain, Tanzania, Turkey, the United Kingdom, and the United States of America