



OA observing news

issue 3, May 2017

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

Upcoming Events

The Ocean Conference: 5-9 June, 2017 at the United Nations

The UN will host a conference this June in New York focused on implementing Sustainable Development Goal (SDG) 14, which is focused on marine sustainability. Of particular interest to the ocean acidification community will be the interest in SDG target 14.3: “Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels.”

In preparation for this conference [an online discussion was held from 9-31 March](#), moderated by several members of the GOA-ON Executive Council. As a result of strong international participation in that discussion, a number of important issues were raised, including the need for additional research, education, outreach, and capacity building. The conference itself should facilitate further discussion of these issues.

There are several ocean acidification-related side event(s) at this conference; more information will be sent out to the GOA-ON community shortly, and we hope that as many of you can attend as possible.

Contact: Max Kaplan (maxwell.kaplan@noaa.gov)

Ocean Acidification Day: June 8, 2017

When it comes to understanding, projecting, and anticipating the impacts of ocean acidification not every country is on the same page. For example, no studies of ocean acidification impacts have been performed along the African coast despite its biological and socio-economical vulnerability to future global changes. **Show your support for the OA-Africa network by joining the Ocean Acidification Day on June 8, 2017.**

The OA-Africa network has been developed over three training courses (held in South Africa, Mozambique, Mauritius) and was recently launched at a workshop in Dakar, Senegal (more details

This e-newsletter is an effort by the GOA-ON Executive Council to keep the community engaged and informed about all the various related activities that are happening around the world. We intend to produce it bi-annually. If you have any upcoming activities, comments, or suggestions of items that you would like to see in this newsletter please email maxwell.kaplan@noaa.gov.

below). Broadly, the network aims to coordinate on OA-related research and monitoring, provide information and guidance to stakeholders and policy makers, and promote and advance ocean research through outreach and capacity building initiatives.

The OA-Africa network is leading an **African “Ocean Acidification Day”**. On [World Oceans Day](#) (June 8, 2017), scientists from all over Africa and around the world will join forces to measure pH at the same time, following the indicator of SDG 14.3: “Average marine acidity (pH) measured at agreed suite of representative sampling stations.” This initiative, led by African scientists Folasade Adeboyejo (Nigeria) and Andry Herizo Rasolomaharavo (Madagascar), and facilitated by Sam Dupont (Sweden) and Martin Le Tissier (Ireland), will be broadly communicated through a national and international press and social media campaign.

You can support this initiative of the OA-Africa network by:

- Taking a pH measurement on your coast on June 8, 2017
- Taking a picture of the event and share the data on a large scale social media campaign
- Contacting the press to join the event (OA-Africa will provide a press release that will be available in several languages)

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

Pier2Peer Program Updates

Join Pier2Peer today

Pier2Peer is a scientific mentorship program supporting the expansion of OA observing capacity through two way sharing and capacity building activities. [Consider becoming a mentor or mentee today.](#)

Contact: Max Kaplan (maxwell.kaplan@noaa.gov)

Pier2Peer pair spotlight

Mentor: Patrizia Ziveri –
Universitat Autònoma de
Barcelona, Spain

Mentees:

- Koffe Urbain – Cote D’Ivoire
- Adekunbi Falilu – Nigeria
- Sheck Sherif – Liberia



Falilu, Koffe, and Sheck are working with their Pier2Peer mentor Patrizia to develop a west African white paper on regional ocean acidification research priorities and challenges. In addition, they are individually developing collaborative proposals and associated budgets to conduct such research locally. These mentor-mentee pairings exemplify the goals of the Pier2Peer program – to encourage international collaborations and provide an exchange of scientific expertise.

Recent Activities

GOA-ON Executive Council meeting 25-27 April 2017

The Executive Council conducted their annual meeting at the UNESCO headquarters in Paris between 25-27 April 2017. Major issues discussed include the potential for a hosted GOA-ON secretariat, the plan for developing a GOA-ON implementation strategy including how to integrate the exciting work happening within the regional networks, ongoing global and regional efforts to enhance OA data collection and sharing, and opportunities for GOA-ON to engage with other international initiatives.

Contact: Libby Jewett (libby.jewett@noaa.gov)

Coordination Meeting on Standardized Methodology and Networking in Vienna (April 2017)

To build awareness of ocean acidification and to encourage collaboration between Member States on this topic, the IAEA held a meeting in Vienna, Austria, from 10 to 12 April. Scientists from twenty-seven countries and territories attended the meeting, including Algeria,



Argentina, Bangladesh, Belize, Brazil, Cambodia, Cameroon, Chile, China, Cuba, Ecuador, Egypt, Guatemala, Iraq, Kenya, Kuwait, Madagascar, Marshall Islands, Mexico, Namibia, Territories under the Jurisdiction of the Palestinian Authority, Palau, Peru, Philippines, Slovenia, Thailand and Turkey. The meeting aimed to allow counterparts to present their work, capacities and needs, based on a questionnaire circulated earlier in the year. In addition, possibilities for regional and interregional collaboration were explored, and participants discussed data sharing and management efforts, as well as data synthesis products, gaps in capacity building, and possible outreach activities. Project work plans were adapted accordingly.

IAEA technical cooperation support through this interregional project aims to foster collaboration and coordination among participating Member States, and to start a discourse with other interested countries and parties. The overall goal of the project is to help build capacity to measure and study ocean acidification, and to connect countries and regions with an interest in this emerging environmental problem. The project aims to promote standardization of methodology, and to support and encourage capacity building, regional and interregional networking, collaboration and data sharing, and outreach to key stakeholders. (Authors: Mulugeta Amha and Marc Metian).

Contact: Peter Swarzenski (p.swarzenski@iaea.org)

Ocean acidification monitoring and research in the Arabian Gulf (March 2017)

Dr. Saif Uddin, a Senior Research Scientist at KISR, participated in the OA-ICC training on “Best practices in ocean acidification research” held in Xiamen, China, in October 2015, where he first met Dr. Sam Dupont from the University of Gothenburg, one of the trainers. Together, they organized and taught a

course in Kuwait in March 2017 for 15 scientists on best practices for chemical and biological ocean acidification research.

The course was also an opportunity to summarize the ongoing work on ocean acidification in the region. The Arabian Gulf is a nearly 1000 km-long shallow sea. It is a rather extreme environment with high salinity (44) and extreme temperatures (8-36°C) and it is exposed to high nutrient input which results in very high productivity. The presence of large scale desalination plants using high-sulphur fuels leads to high SO_x and NO_x emissions that end up in the Gulf and may contribute to the rapid decrease in seawater pH. Dr. Uddin has been monitoring the pH in seven different locations around Northern Gulf and has observed a rapid decrease of pH over the last decade. He is also leading an ocean acidification initiative within the Gulf Cooperation Council States with the goal to evaluate existing data and infrastructure and to engage neighboring countries.



The next step is to investigate the biological impact of the observed changes on important species and ecosystems. KISR is already equipped with analytical laboratories as well as large scale and flexible experimental facilities for ocean acidification research. Two transgenerational experiments on local shrimps and copepods were designed during the course and will be implemented in the coming months.

The course was also an opportunity to develop a collaboration between the University of Gothenburg and KISR. Dr. Uddin and Dr. Dupont are now working on a joint project as well as a memorandum of understanding between the two institutions. They are also planning a follow-up course for 2018 with the idea to invite foreign scientists to join a large scale biological experiment, learn about best practices, and contribute to data collection.

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

Ocean acidification training workshop & networking event in Dakar, Senegal (February 2017)

In February 2017, concurrent training (13-16 Feb) and networking (14-16 Feb) sessions were held in Dakar, Senegal, to provide instruction on ocean acidification research



techniques and to frame and further develop the OA-Africa network, respectively. Approximately 15 trainees, 20 network members, and 15 trainers/facilitators were in attendance. [The workshop was run by Future Earth Coasts.](#)

The networking portion consisted of presentations from network members and facilitators, group discussions, and breakout sessions. There were three key objectives: (1) define a vision, focus, and



organizational structure for the nascent OA-Africa network, (2) outline white paper(s) and assign subsections to network members for completion, and (3) identify short- and medium-term next steps for local research objectives and network development and promotion.

The main product that emerged from this meeting was a vision document for the OA-Africa network that outlined specific goals, focus areas (policy engagement, fisheries & stakeholder concerns, and scientific objectives), network structure, including the duties of and voting procedures for electing a steering committee, and follow-up activities assigned to network members such as creating a website, writing a workshop summary, and making an OA-Africa slide deck to present at various regional meetings.

For those members in countries not currently conducting OA research, many appeared eager to start; however, three main barriers were identified: (1) lack of funding, (2) lack of infrastructure, and (3) lack of institutional support. Some network members are already writing proposals to try to overcome these barriers. The development of a robust OA-Africa network will help bring researchers together and will hopefully yield fruitful collaborations in the future.

Contact: Warren Joubert (warrenjou@gmail.com)

NEW: Membership Letter from GOA-ON Letter of support from GOA-ON available for all members

Several GOA-ON members have asked whether GOA-ON can provide a letter of support describing the network and underscoring the value of international coordination in collecting, analyzing, and sharing ocean acidification data. The GOA-ON Executive Council is excited to announce that such a letter has been approved and is now available by request for all members. This letter can be used to demonstrate international support for OA research to funders and governments.

Contact: Max Kaplan (maxwell.kaplan@noaa.gov)

Portal Update Request

Please submit your OA monitoring assets to the GOA-ON data portal

The [GOA-ON data portal](#) displays OA monitoring assets around the world and for some shows near-real-time data streams. However, there are several geographic gaps. If you are working in an area that is under-represented on the data portal, please [submit your asset information](#). The data portal helps researchers and policymakers around the world identify where there are monitoring gaps and where resources could be better directed.

Contact: Cathy Cosca (cathy.cosca@noaa.gov)



6-Apr-17

To Whom It May Concern,

[your name] is a member of the Global Ocean Acidification Observing Network (GOA-ON), a collaborative international network of 354 members representing 66 nations with a shared goal to increase global ocean acidification observing capacity.

The policy and scientific needs for coordinated, worldwide information-gathering on ocean acidification and its ecological impacts are now widely recognized. The importance of obtaining such measurements has been endorsed by the United Nations General Assembly, and by many other governmental and non-governmental bodies. The policy need relates to the requirement for robust evidence on ocean acidification and its worldwide impacts to inform appropriate management action at both national and international levels. The scientific need is for large-scale, long-term data, to improve understanding of relevant chemical and biological processes.

The development of a global observing system to detect ecosystem impacts of ocean acidification is underway. Observing assets are displayed on an interactive map on the GOA-ON website (<http://goa-on.org>). However, there are large geographic gaps in observing asset coverage, particularly in the southern hemisphere. The GOA-ON is facilitating additional measurement efforts in these areas of high concern by conducting training and capacity building workshops and by creating international networking opportunities for scientists through the Pier2Peer program (http://goa-on.org/GOA-ON_Pier2Peer.html).

The GOA-ON encourages all efforts to increase the global coverage of ocean acidification monitoring. [your name] has expressed an interest in advancing ocean acidification research in [your country] and we strongly support that goal.

If you have any questions about ocean acidification, GOA-ON, or the Pier2Peer program, please email us at info@goa-on.org.

Sincerely,

Libby Jewett
Co-Chair, GOA-ON

Bronte Tilbrook
Co-Chair, GOA-ON