

Global Ocean Acidification Observing Network

Newsletter of the Global Ocean Acidification Observing Network (<u>GOA-ON</u>) Issue 10, October 2019

GOA-ON news

Save the date: 5th International Symposium on the Ocean in a High CO2 World

The 5th International Symposium on the Ocean in a High-CO2 World will be held in Lima, Peru during 7-10 September 2020. The previous symposia in this series were held in Paris in 2004, Monaco in 2008, Monterey in 2012, and Hobart in 2016, each proving to be essential for the international community of researchers studying ocean acidification. The 5th symposium will focus on ocean acidification, interactions with other stressors, and associated impacts on marine organisms, ecosystems, and biogeochemical cycles. The symposium will be centred around the following themes:

- Changing carbonate chemistry in coastal to open ocean waters
- Organism responses and consequences of living in a High CO₂ World: responses to ocean acidification, including in a multi-stressor framework
- Ecological effects of ocean acidification and other stressors in a changing ocean
- Insights from natural ocean acidification analogues
- Ocean acidification and society
- Global to regional policy, actions, communication and capacity building for ocean acidification



GOA-ON is involved in the planning for this symposium, with several of its Executive Council members contributing to the symposium's International Scientific Committee.

More information, including important deadlines and descriptions of each theme can be found on the symposium website. The official call for abstracts will open soon and GOA-ON members will be alerted!















GOA-ON welcomes new member to its Executive Council: Dr. Martin Hernandez

Dr. Martin Hernandez joined the GOA-ON Executive Council in July as a new science member and

regional hub representative. Dr. Hernandez completed his doctoral studies in Coastal Oceanography at the School of Marine Sciences of the Autonomous University of Baja California (UABC) in Mexico and was a postdoctoral fellow at the Scripps Institution of Oceanography in San Diego, California with Dr. Andrew Dickson. In his present role at the UABC, Dr. Hernandez's research focuses on studying the role of coastal zones in the carbon cycle, including the effect of ocean acidification on marine ecosystems. Dr. Hernandez will be acting as the representative of the Latin American Ocean Acidification Network (LAOCA) in his role as a member of the GOA-ON Executive Council.

Ocean acidification highlighted at OceanObs'19 decadal conference

GOA-ON was well represented at the OceanObs'19 conference, held 16-20 September 2019 in Honolulu, Hawaii. 1500 experts from more than 70 countries communicated the decadal progress of ocean observing networks and charted innovative solutions to society's growing needs for ocean

information in the coming 10 years. Ocean acidification was featured throughout the conference with GOA-ON representatives actively participating in sessions and panels focusing on information, innovation, interoperability and integrations, topics at the core of the network. The outcomes of the conference as well as 130 Community White Papers will be the roadmap for future ocean observation and its products, tailored to user needs. Read the GOA-ON Community White paper here.

Near real-time data from Chilean moorings available now on GOA-ON portal

The first near-real-time time-series data streams integrated from platforms in South America are now available on the GOA-ON Data Portal. Located off the coast of central Chile, the two stations are the Tongoy Balsa mooring in the Coquimbo region, managed by the Center for Advanced Studies in Arid Zones (CEAZA); and the Seno del Reloncaví mooring in northern Patagonia near Puerto Montt, managed by the University of Los Lagos i-mar Center. Data access was facilitated by the CEAZA Met regional system. GOA-ON is working with Chilean partners to integrate data from other stations in the upcoming months. If you are interested in having your ocean acidification data visualized on the GOA-ON Data Portal, please contact the GOA-ON Secretariat at secretariat@goa-on.org.









New research project launched to study impacts of ocean acidification on seafood

The IAEA Ocean Acidification International Coordination Centre (OA-ICC) has launched a new research project to better understand the impacts of ocean acidification on socioeconomically important seafood species. The first meeting for this project was held in Kristineberg, Sweden from 26-30 August. Throughout the 4 years of this project, scientists from 17 countries will test the effects of possible future ocean acidification conditions on different species of shrimp, sea urchins, fish, and molluscs using standardized



Participants of the new IAEA research project met in Kristineberg, Sweden to kick off the 4-year project. (Photo: University of Gothenburg Sven Lovén Centre for Marine Infrastructure)

experimental methods. More information on this project can be found here.

GOA-ON Resources: outreach material in different languages

Visit the GOA-ON Resources page for ocean acidification action plans, workshop reports, SDG 14.3.1 documents, and other useful resources. As of recently, the page now includes translations of the GOA-ON flyer in Arabic and French. Stay tuned for translations in Chinese and Spanish!



Developing capacity for SDG 14.3 in the West Asian Region

The Regional Education and Research Centre on Oceanography for West Asia (RCOWA) organised a workshop to develop regional capacity for ocean observation in support of the Sustainable Development Goal (SDG) Target 14.3 together with the Intergovernmental Oceanographic Commission of UNESCO (IOC-UNESCO) and GOA-ON. The workshop aimed to align ocean acidification research and monitoring in the region of the RCOWA, as well as to foster data collection and experimentation in support of SDG Target 14.3. The workshop, hosted by the Iranian National

Institute for Oceanography and Atmospheric Science (INIOAS) in Tehran, Iran, on June 8-9, 2019, served 29 scientists and other stakeholders from the region. The report on this successful workshop is available here.



Participants of the RCOWA Ocean Acidification Workshop in Tehran, Iran, in June 2019. (Photo: INIOAS)















Ocean acidification highlighted in major climate change reports

IPCC Special Report on the Ocean and Cryosphere in a Changing Climate



The Intergovernmental Panel on Climate Change (IPCC) published the first Special Report on the Ocean and Cryosphere in a Changing Climate (SROCC). The ocean and the cryosphere-the frozen parts of the planet-play acritical role for life on Earth and host a range of wide range of unique ecosystems. The Special Report highlights the role of the ocean in regulating the global climate and details the consequences of climate change for the ocean, including ongoing ocean acidification, decreased oxygen in the ocean, increased seawater temperature and sea level rise. These

changes are already affecting marine organisms, impacting ocean ecosystems and the people who depend on them. The Special Report outlines climate-related risks and consequences if no action is taken to address unprecedented and enduring changes in the ocean and cryosphere.

WMO multi-agency Report on the Global Climate in 2015-2019

The Report on the Global Climate in 2015–2019, released by the World Meteorological Organisation (WMO) to inform the United Nations' Climate Action Summit, presents a summary of the changes in the global climate over the last five years. Compared to the previous five-year assessment period 2011–2015, the current period 2015–2019 has seen a continued increase in carbon dioxide (CO₂) emissions and an increase in the global average temperature of 0.2°C, making these last five years the warmest five-year period on record. The report, with input from scientists, UN agencies, including IOC-UNESCO, and GOA-ON, shows that ocean acidification continues to increase, with observed pH values at open ocean observing stations steadily decreasing. The findings presented in the report were also included in the United in Science Report, presented by the Science Advisory Group to the UN Secretary-General's Climate Action Summit.

















Announcements/reminders

Upcoming international meetings

- UNFCCC Conference of Parties, 2-13 December 2019, Santiago, Chile
- AGU Fall Meeting: 9-13 December 2019, San Francisco, CA, USA
- Ocean Sciences meeting: 16-21 February 2020, San Diego, CA, USA
- International Indian Ocean Science Conference: 16-20 March 2020, Goa, India
- A Changing Arctic conference: 2-5 June 2020, Tromsø, Norway
- UN Ocean Conference: 2-6 June 2020, Lisbon, Portugal
- 5th International Symposium on the Ocean in a High CO2 World: 7-10 September 2020, Lima, Peru

Update your assets on the GOA-ON data portal The GOA-ON data portal includes over 600 assets monitoring ocean acidification parameters throughout the world's oceans. It is important for data providers to update their assets in order for this portal to include accurate metadata and links to data. If your assets need to be updated, or to add a new platform, please fill out this short survey. For any questions, please contact the GOA-ON Secretariat (secretariat@goa-on.org).

Join the OA Info Exchange (OAIE)

The OA Information Exchange (OAIE) is a website for the ocean acidification community to share ideas and resources, ask questions, and interact with people in a variety of disciplines around the world. Scientists, citizen scientists, educators, NGO and government employees, resource managers, concerned citizens, and others are all welcome to take part in the OA Information Exchange.

GOA-ON Pier2Peer Program

Pier2Peer is a scientific mentorship program that matches senior researchers with early career scientists to facilitate an exchange of expertise and to provide a platform for international collaborations. If you wish to join the GOA-ON Pier2Peer program as either a mentor or a mentee, please contact the GOA-ON Secretariat (secretariat@goa-on.org).

Subscribe to the OA-ICC news stream for daily posts with new OA publications, media coverage, upcoming events, job postings, etc.

Use the OA-ICC portal for ocean acidification biological response data to access over 1000 data sets.

Access over 5,700 ocean acidification publications from the OA-ICC bibliographic database.

















GOA-ON is a network comprised of 680 members from 97 countries! If you have colleagues who wish to join GOA-ON, they can do so on online here.

Are you involved in OA work that you would like to have included in future newsletters? Contact the GOA-ON Secretariat: secretariat@goa-on.org

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