

# The PIER Review



Welcome to the August 2018 issue of the PIER Review, the monthly GOA-ON Pier2Peer newsletter. The Review highlights accomplishments, provides updates for our members, highlights open-access research on ocean acidification, and shares funding or job opportunities. Please send all of your ideas for the newsletter to Meredith Kurz ([meredith.kurz@noaa.gov](mailto:meredith.kurz@noaa.gov)) and we will be sure to incorporate your feedback into future editions of The PIER Review.

## P2P FEATURE

The nonprofit [Global Ocean Health](#) released the tenth issue of their [Ocean Acidification Report](#), a widely read publication on recent OA science and news with a special focus on potential impacts to stakeholders like the seafood industry.

For this issue, the Ocean Foundation's President Mark J. Spalding wrote a feature about the Foundation's International Ocean Acidification Initiative, their work with GOA-ON, and the GOA-ON in a Box project. The issue also has stories that will be of particular interest to those interested in OA impacts on shellfish, and a profile on shellfish farmer and scientist Joth Davis who is researching the mitigation potential of aquatic vegetation. There is also a review of the 110<sup>th</sup> Annual Meeting of the US National Shellfisheries Association, which had several presentations and discussions on OA.

## BECOME A Pier2Peer RECRUITER

We are always recruiting senior and experienced OA observing experts to serve as mentors and early career scientists from emerging regions to become mentees. If you know someone who would be a good mentor or mentee, direct them to the [Pier2Peer website](#) or put them in contact with Meredith Kurz ([meredith.kurz@noaa.gov](mailto:meredith.kurz@noaa.gov)).

If you are attending a meeting or event, are interested in sharing a few slides on the program and disseminating sign-up information, please email Meredith and we will send you communication materials and sign-up sheets for your upcoming event. And thanks!

## UPCOMING EVENTS and CONFERENCES

[The International Council for the Exploration of the Sea \(ICES\) Annual Science Conference 2018](#) will be held on 24-27 September 2018 in Hamburg, Germany. Abstract submission is closed but registration is still open.

[The Sustainable Ocean Summit](#) organized by the World Ocean Council will be held on 14-16 November 2018 in Hong Kong.

[The American Geophysical Union \(AGU\) Fall 2018 Meeting](#) will be held on 10-14 December 2018 in Washington, D.C., U.S.A. Abstract submission is closed but registration is still open.

[The American Geophysical Union \(AGU\) Geoscience and Society Summit](#) will be held on 12-21 March 2019 in Stockholm, Sweden. Abstract submission and registration will open soon.

[OceanObs'19](#) is part of a decadal conference series on setting ocean observation priorities to be held on 16-20 September 2019 in Honolulu, Hawaii, U.S.A. Abstract submission for white papers is closed; registration and a call for posters will be open in the fall of 2018. OceanObs'19 will announce some scholarships to attend for early career scientists and those working in developing nations at a later date.

## UPCOMING OA Workshops

### Advanced training on the application of nuclear and isotopic techniques in ocean acidification research

Organization: The International Atomic Energy Agency (IAEA)

Host and Location: Kuwait Institute for Scientific Research, Kuwait City, Kuwait

Dates: 18-29 November

Description: The aim of this training is to provide the knowledge required to design and perform a laboratory experiment in order to study impacts of ocean acidification on selected marine organisms and the use of radiotracers to assess the effect of ocean acidification on physiological processes and contaminant transport. A joint experiment will be performed during the training with the objective of publishing the results in an international scientific journal.

Requirements: Applicants must come from member states participating in the IAEA Technical Cooperation project INT7019. Please contact Lina Hansson ([l.hansson@iaea.org](mailto:l.hansson@iaea.org)) for more information about eligibility and application procedures.

Application details: A maximum of 15 applicants will be selected based on a short CV and a letter developing their future planned activities related to biological responses to ocean acidification as well as their needs and motivation to attend the training. Priority will be given to early-career scientists who have begun to work in the ocean acidification area.

Application deadline: 30 September 2018

## FUNDING and JOB OPPORTUNITIES

### The Ocean Foundation Pier2Peer Scholarships

Organization: The Ocean Foundation

Description: Small grant program providing funds to Pier2Peer matches to collaborate on a project, conduct training visits, collect data for GOA-ON submission, etc.

Requirements: Applicants must be in a Pier2Peer partnership and applying to use funds to support this collaboration.

Amount: USD 5,000

Application Deadline: October 16<sup>th</sup> is the due date for the Fall 2018 review period; applications are accepted on a continuing basis; submit to [avalauriorton@oceanfdn.org](mailto:avalauriorton@oceanfdn.org) and [meredith.kurz@noaa.gov](mailto:meredith.kurz@noaa.gov).

Application Details: Attachment with this email

### **Western Indian Ocean Marine Science Association Marine Research Grant Programme**

Organization: Western Indian Ocean Marine Science Associated (WIOMSA)

Description: The award is designed to enhance the capacity of scientists in the Western Indian Ocean region to conduct marine research. There are three tiers (MARG I, II,III) that vary in duration and amount. MARG I applications are closed.

Requirements: Applicants should be young scientists studying the Western Indian Ocean region

Amount: USD 3,000 (MARG III), USD 6,000 (MARG II)

Application Deadline: 30 September 2018 for MARG II, no deadline for MARG III

[Application Details](#)

### **IAEA Coordinated Research Project: Evaluating the Impacts of OA on Seafood**

Organization: International Atomic Energy Agency OA International Coordination Centre

Description: The IAEA is launching a new 4-year CRP starting in 2019 to advance understanding of the effects of OA on seafood around the world and to explore adaptation strategies for aquaculture and seafood industries using a standardized, collaborative, global approach.

Requirements: [More information about how IAEA CRPs work](#). Recipient institutions must be located in Member States to the IAEA.

Amount: No maximum specified

Application Deadline: 30 November 2018

[Application Details](#)

### **US Agency for International Development Partnership for Enhanced Education and Research**

Organization: US Agency for International Development and US National Science Foundation

Description: The award is intended to foster international partnerships between eligible developing country institutions and a partner US institution.

Requirements: Applications must be submitted together by representatives from either a higher education institution in the US or from a higher education institution in a developing country. Either institution may be the prime awardee and the two institutions must have well developed plans to collaborate. [Examples of previous awards](#)

Amount: USD 500,00 to 1,000,000

Application Deadline: Next deadline January 2019; proposals can take a while to develop

[Application Details](#)

### **EMBO Short-Term Travel Fellowships**

Organization: European Molecular Biology Organization

Description: The fellowship funds research exchanges of up to three months between laboratories in [eligible member countries and cooperation partners](#).

Requirements: Applicants must be from one of the member or cooperation countries and traveling to a lab in another member or cooperation country. Research must be related to life sciences. The travel must be associated with a larger project and not just limited to training in a technique, though it can include that type of training.

Amount: Travel and living costs of the traveling fellow

Application Deadline: Three months before proposed starting date of travel

[Application Details](#)

### **Jobs Lists:**

[The Global Marine Community Newsletter & Jobs List](#)

[Josh's Water Jobs List](#)

## **NEWS and links to select OPEN ACCESS ARTICLES on OA**

### **News:**

[The IAEA OA International Coordination Center ocean acidification news stream](#) is a great resource for all things OA!

[Version 6 of the Surface Ocean CO<sub>2</sub> Atlas \(SOCAT\)](#) has been released! Each version includes new data sets and updates of older ones. Version 6 has 23.4 million observations of in situ fugacity of CO<sub>2</sub> from 1957 to 2017 for the global oceans and coastal seas, with contributions from more than 100 scientists.

The US State of California released [the California Ocean Acidification Action Plan](#) for public review this week. Although this draft is not the final version, it is an interesting example of a policy response to OA at the sub-national level.

[Better Living Through Tide Pools](#) in *Inside Science* describes research linking algal blooms to relatively higher pH measurements in the tide pools of Greenland's coastline, which are described as a haven for marine life such as mussels, sea snails, and others with calcium carbonate shells. This press release describes research you can access if you have a subscription to the journal *Estuaries and Coasts*.

[New study explores the role nitrogen plays in coral reef fight against ocean acidification](#). Researchers at California State University have found that increasing the amount of nitrogen helps crustose coralline algae resist negative effects of ocean acidification. This press release describes research you can access if you have a subscription to the journal *Biology Letters*.

### **Open-access science:**

Archer, S.D., Suffrian, K., Posman, K.M., Bach, L.T., Matrai, P.A., Countway, P.D., Ludwig, A., and U. Riebesell. 2018. [Processes that contribute to decreased dimethyl sulfide production in response to ocean acidification in subtropical waters](#). *Front. Mar. Sci.* **5:245**. DOI: 10.3389/fmars.2018.00245.

- Can, R., Liu, Y., Wang, Q., Yang, D., Liu, H., Ran, W., Qu, Y., and J. Zhao. 2018. [Seawater acidification reduced the resistance of \*Crassostrea gigas\* to \*Vibrio splendidus\* challenge: an energy metabolism perspective](#). *Front. Physiol.* **9**:880. DOI: 10.3389/fphys.2018.00880
- Gammon, M.J., Tracey, D.M., Marriott, P.M., Cummings, V.J., and S.K. Davy. 2018. [The physiological response of the deep-sea coral \*Solenastrea variabilis\* to ocean acidification](#). *PeerJ*. DOI: 10.7717/peerj.5236.
- Gimenez, I., Waldbusser, G.G., and B. Hales. 2018. [Ocean acidification stress index for shellfish \(OASIS\): Linking Pacific oyster larval survival and exposure to variable carbonate chemistry regimes](#). *Elem. Sci. Anth.* **6**(1): 51. DOI: <http://doi.org/10.1525/elementa.306>
- Murray, C.S. and H. Baumann. [You better repeat it: complex CO<sub>2</sub> x temperature effects in Atlantic Silverside offspring revealed by serial experimentation](#). *Diversity* **10**(3): 69. DOI: 10.3390/d10030069
- Noona, S.H.C., Kluibenschedl, A., and K.E. Fabricius. [Ocean acidification alters early successional coral reef communities and their rates of community metabolism](#). *PLoS ONE* **13**(5): e0197130. DOI: 10.1371/journal.pone.0197130
- Triantaphyllou, M.V., Baumann, K.-H., Karasolis, B.-T., et al. 2018. [Coccolithophore community response along a natural CO<sub>2</sub> gradient off Methana \(SW Saronikos Gulf, Greece, NE Mediterranean\)](#). *PLoS ONE*. **13**(7): e0200012. <http://doi.org/10.1371/journal.pone.0200012>.



*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*