

The PIER Review

Welcome to the September 2019 issue of the PIER Review, the monthly [GOA-ON Pier2Peer](#) newsletter! This edition showcases accomplishments of the Pier2Peer members, provides updates for our members, and shares funding, job opportunities and recently published open-access publications. Please send ideas and feedback for future Pier Review editions to Alicia Cheripka (alicia.cheripka@noaa.gov)

P2P FEATURE

Sand, Sun, and Science!

For two weeks at the end of August, the Pier2Peer program went mobile! Alicia Cheripka (NOAA OAP/GOA-ON P2P program) and Noah Howins (Masters Student in Chris Sabine's lab at



Noah Howins working with the National University of Samoa group on the Spec-pH system (Photo credit: Alicia Cheripka)

UH-Manoa), visited three GOA-ON kit recipient teams in the Pacific Islands. The journey started in Samoa with Dr. Patila's team at the National University of Samoa (NUS). The 5 day training was attended by 8 trainees representing NUS, Tokelau, and the South Pacific Regional Environmental Programme (SPREP). The days were spent in the lab going over pH analysis, total alkalinity titrations, study site selection, and troubleshooting any problems that had arisen during the research with the GOA-ON kits so far.

After that week, Alicia and Noah traveled to Suva, Fiji, where they held another 4 day training for the kit recipients, Dr. Soapi and Dr. N'Yeurt, and their teams at the University of the South Pacific (USP) Marine Campus. Much like Samoa, the trainings started with presentations and discussions on what the group was doing and the issues they had come across in their experience with the kit so far. There was one day during this training that Alicia and Noah traveled to the



Noah Howins working with the USP Fiji group on some iSAMI data management (Photo credit: Alicia Cheripka)

University of Fiji in Nadi. There they attended a few presentations at a Renewable Resources and Climate Change Symposium, hosted by the UF team, as well as discussed the best approaches to selecting sampling sites. While in Fiji, there were some fantastic opportunities for public engagement and outreach. Alicia met with staff at the US Embassy and was able to connect with some press (Fiji Times and Fiji Sun) to discuss the wonderful work the GOA-ON Kit recipients have been doing as well as the importance of OA research in the region. The adventures came to an end in Vanuatu, where Noah and Alicia did a whirlwind of troubleshooting and technical procedure reviews with Dr. Kotra and his team.



Noah Howins reviewing the methods for the Spec-pH system with the USP Vanuatu group (Photo credit: Alicia Cheripka)

This trip really highlighted some of the challenges that OA researchers have out in the Pacific Islands, issues which are being experienced in a variety of regions as well. Keeping those challenges in mind, Alicia and Noah, as well as TOF and the greater GOA-ON community, are hard at work creating new resources to help prepare for and resolve as many of the issues they saw being encountered. These resources will be posted on the GOA-ON

website as well as released on the OA Information Exchange in the upcoming months.

Do you have an exciting accomplishment or experience with the Pier2Peer program you would like to share? Send it to Alicia Cheripka (alicia.cheripka@noaa.gov) and you could be featured!

BECOME A Pier2Peer RECRUITER

We are recruiting senior and experienced OA observing experts to serve as mentors. If you know someone who would be a good mentor, direct them to the [Pier2Peer website](#) or put them in contact with Alicia Cheripka (alicia.cheripka@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 Alicia and we will send you communication materials and sign-up sheets for your upcoming event. And thanks!

JOIN THE OA INFO EXCHANGE

The OA Information Exchange (OAIE) is a place to swap ideas, share resources, and interact with people in a variety of disciplines across many regions. This includes your mentor or mentee!

Members can:

- post updates and comments with questions, answers or announcements
- share papers, media files, presentations and links
- add events and host webinars
- join teams based on regions and topics of interest
- meet new people from a variety of fields

Scientists, citizen scientists, educators, NGO and government employees, resource managers, fishers, aquaculturists, concerned citizens, and others are all welcome to take part in the OA Information Exchange community! You can join [here](#).

Join the Interdisciplinary Marine Early Career Network (IMCEN)

IMECaN aims to:

- Provide a networking platform for early career marine researchers to develop collaborations;
- Provide training and development in areas not traditionally provided through formal education and training programmes; and
- Provide leadership opportunities for ECR marine researchers, particularly from developing nations.
- IMECaN was officially launched at the IMBeR Future Oceans2 Open Science Conference in Brest, France on 16 June 2019

IMECaN activities:

Even before it was officially launched, members of the newly formed IMECaN Organising Committee undertook two very successful early career events.

In June 2018, a workshop was convened in Losinj, Croatia, to teach EU-based ECRs how to work efficiently at the Science-Policy-Society interface. Thirty students and early career researchers participated in the workshop.

The IMBeR ClimEco6 summer school was held in Yogyakarta, Indonesia and brought together 50 transdisciplinary ECRs to consider Transdisciplinary Approaches towards Sustainable Oceans. Plans are now underway for the ClimEco7 summer school that will be held in Mindelo, Cabo Verde in June 2020.

Several other activities are also being discussed, including a workshop on Multi-disciplinary Marine Management, a special issue in *Frontiers in Marine Science*.....

Join [HERE](#)

NEWS

Help share information and collaborate on ocean acidification research!

Would you like to know about on-going and planned ocean acidification research activities? Would you like to promote others to work with you? One of the goals of the Ocean Acidification International Coordination Centre (OA-ICC) is to promote collaborative research projects, such as joint experiments and access to research facilities. To this end, the OA-ICC is looking to compile a list of ongoing and planned research projects on ocean acidification where there is a possibility for other researchers to participate. The list will be shared online to promote information exchange and collaboration.

To contribute to this effort, please send an email including the information below to:

Lina Hansson & Marine Lebrec, OA-ICC Project Office, IAEA Environment laboratories
([oaicc\(at\)iaea.org](mailto:oaicc(at)iaea.org))

Information needed:

location

contact (name, institute, email)

brief research focus

potential collaborator focus

start date

end date

web link (if available)

OA-ICC bibliographic database is now Available!

The OA-ICC bibliographic database currently contains more than 5,520 references related to ocean acidification, and includes citations, abstracts and assigned keywords. In addition to being available in [Mendeley](#), this bibliographic database is now freely available on the platform [Zotero](#).

In order to access this database, go to the Zotero homepage and create a free account. Click on the Groups tab, search for the group “OA-ICC”, and join this group. For more information on how to access the database and its functions, please see the [“User instructions”](#).

UPCOMING EVENTS and CONFERENCES

[CERF 25th Biennial Conference](#) will be held from **3-7 November 2019** in Mobile, Alabama USA. The theme of the conference this year is Responsive, Ready, Relevant. Taken from the website: “With this year's conference theme, we endeavor to connect science and society in the collective goals of preserving the coastal and estuarine habitats, resources, and heritage. Through the conference, we will discuss the nature of research agendas that are directed at finding and solving problems, and how to engage stakeholders in that process. Our goal is to balance a natural and social scientific agenda with the food, music, and art emblematic of the Gulf Coast. In keeping with tradition, we hope to create a seriously fun and memorable 25th Biennial CERF Conference.” There is an OA session: Ocean acidification in a multiple climate change stressors context: science--based tools for management at the 2019 CERF Biennial Conference.

[The Santiago Climate Change Conference \(COP25\)](#) - the Blue COP. This is the 25th Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC) and this year the meeting is taking place from **2-13 Dec 2019** in Santiago, Chile. The meeting will focus on highlighting the response to climate change, including a need to consider how the ocean mitigates climate change and how marine ecosystems are in turn impacted by ocean acidification and other stressors such as warming and deoxygenation. The pre-session period will run from **26 November-1 December 2019**.

[American Geophysical Union Fall Meeting](#)

9-13 December 2019, San Francisco, California

As AGU marks its Centennial in 2019, we return to San Francisco, the home of the AGU Fall Meeting for more than 40 years. Join our diverse community at the newly renovated Moscone Center as we collaborate across borders and boundaries to explore and develop our research. Don't miss this once-in-a-lifetime opportunity to participate in Centennial presentations and special events that will bring to life the past, present and the future of our science.

Today we stand at the intersection of history and our future. Fall Meeting 2019 will prepare you for what's ahead: rapid developments in our science, new approaches to observing our Earth and beyond, the introduction of new data streams, growing demand for accessible science, the expansion of convergent science, and more. AGU will celebrate our past and inspire the future by bringing together the people, the imagination, and the science that will ignite our next hundred years to make our planet safer, cleaner, and more sustainable.

This year's AGU Fall Meeting will include a session entitled "Marine-Based Management of Atmospheric Carbon Dioxide and Ocean Acidification", which will include presentations on methods of restoring, enhancing, or augmenting naturally-occurring marine processes for regulating oceanic and atmospheric CO₂ and ocean acidity levels. More information is available [here](#).

[Ocean Sciences Meeting, San Diego, CA](#)

16-21 February 2020

The Ocean Sciences Meeting (OSM) is the flagship conference for the ocean sciences and the larger ocean-connected community. As we approach the UN Decade of Ocean Science for Sustainable Development, beginning in 2021, it is increasingly important to gather as a scientific community to raise awareness of the truly global dimension of the ocean, address environmental challenges, and set forth on a path towards a resilient planet. The Ocean Sciences Meeting 2020 is co-sponsored by AGU, the Association for the Sciences of Limnology and Oceanography (ASLO), and The Oceanography Society (TOS). Through the combined power of these three organizations, along with the broader conservation-focused community, this meeting provides attendees the opportunity to bridge disciplines, connect communities, and make lasting partnerships.

The Ocean Sciences Meeting will include nine sessions related to the theme titled "Ocean Change: Acidification and Hypoxia". These sessions will focus on human impacts, interactions of multiple stressors, modeling, mitigation techniques, and other relevant topics. For more information on these sessions, visit [here](#). Abstract submissions will open 10 July 2019 and close **11 September 2019, 11:59 PM EDT**.

[International Indian Ocean Science Conference \(IIOOSC\)-2020](#)

March 16-20, 2020

The International Indian Ocean Science Conference 2020 (IIOOSC-2020) sponsored by Ministry of Earth Sciences (MoES), Govt. of India, will be held during 16-20 March, 2020 at Goa India co-hosted by National Institute of Oceanography (NIO) Goa, National Centre for Polar Ocean Research (NCPOR) Goa, Goa University and Indian National Centre for Ocean Information Services (INCOIS) Hyderabad, India. The conference aims at assessing the progress and scientific knowledge gained during the last 4 years of IIOE-2 (during 2016-2020). It is also an opportunity for scientists working on different facets of the Indian Ocean to present their ideas and discuss the outstanding issues, identify the knowledge gaps and plan a way forward to address such issues.

Scientists and colleagues who are interested in the Indian Ocean may kindly take note of this and freeze their dates for the conference.

Venue: CSIR-National Institute of Oceanography (NIO) – Goa, India

Website: <https://iiosc2020.incois.gov.in/>

More information: [PDF](#)

[A Changing Arctic Conference](#)

June 2-5 2020***Clarion Hotel The Edge, Tromsø, Norway***

Robust evidence now exists for anthropogenically-forced shifts in the Earth's environment. Observations in the Arctic reveal dramatic reductions in the extent and thickness of the sea ice, rising atmospheric temperatures, widespread permafrost degradation and ocean acidification. These changes bring with them implications for biology, ecosystem services and society in general.

Full understanding of current and projected Arctic environmental change is becoming an imperative in order to minimize and manage corresponding impacts. This conference aims to provide a forum for the three main themes of:

Land - incorporating ecological impacts, permafrost, and landscape evolution

Ocean (coastal and open) - incorporating physical changes, ocean acidification, and ecological impacts

The Future — covering social aspects and including mitigation, adaptation, exploration, and management

Abstract submission is now open

[5th International Symposium on the Ocean in a High-CO₂ World \(Lima, Peru\)](#)

The [SOLAS-IMBER Working Group on Ocean Acidification \(SIOA\)](#) is pleased to announce that the 5th International Symposium on the Ocean in a High-CO₂ World will be held in Lima, Peru, from **7-10 September 2020**. The lead organizers are Drs. Wilmer Carbajal (Pedro Ruiz Gallo National University, Peru) and Michelle Graco (Institute of the Sea of Peru, IMARPE) together with their colleagues, based on their successful bid that was submitted to the SIOA.

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 and multidisciplinary community of researchers studying ocean acidification. The same is expected for this 5th symposium, the first to be held in South America. Please save the dates! More detailed information will soon be available from the organizers.

FUNDING and JOB OPPORTUNITIES

POGO Shipboard Fellows

Organization: The Partnership for Observation of the Global Ocean (POGO)

Description: POGO offers a number of shipboard fellowship opportunities on ocean research vessels. Normally, specific calls for fellows working in certain sub-disciplines are issued six months before a cruise begins. However, POGO also fills available berths with qualified applicants on shorter notice. They have issued an open call for early career scientists, technicians, postgraduate students, and post-doctoral fellows involved in oceanographic work at centers in developing countries and countries with economies in transition. Qualified applicants will be contacted if an appropriate shipboard fellowship becomes available.

Requirements: Applicants must be involved in oceanographic work in a developing country or a country with an economy in transition. They must provide a fellowship proposal, intentions to build capacity for ocean observing, and a summary CV.

Amount: Round-trip ticket from home institute to the host institution; up to two months' stay at home institution to train prior to cruise; accommodation at ship port; ship messing fee; seafaring medical and sea survival course.

Application Deadline: Open call with no stated closure.

[Application Details](#)

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 and II applications are closed.

MARG-III: Intended to provide opportunities for individual researchers to travel to attend scientific meetings and conferences for the purpose of presenting their work and learning from others. The maximum amount offered is US\$ 3,000. Proposals for MARG III Grants are reviewed continuously through the year subject to availability of funds. MARG III grants are provided for the purchase of return tickets, accommodation or daily subsistence allowance.

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

Amount: USD 3,000 (MARG III)

Application Deadline: No deadline for MARG III

[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](#)

[Ocean Opportunities](#)

[Josh's Water Jobs List](#)

[International Ocean Carbon Coordination Project Jobs](#)

[OA-ICC Job News Stream](#)

Links to new OPEN ACCESS ARTICLES on OA

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- Moura, E., Pimentel, M., Santos, C. P., Sampaio, E., Pegado, M. R., Lopes, V. M., & Rosa, R. (2019). [Cuttlefish early development and behavior under future high CO₂ conditions](#). *Frontiers in physiology*, 10.
- Munday, P. L., Schunter, C., Allan, B. J., Nicol, S., Parsons, D. M., Pether, S. M., ... & Domingos, J. A. (2019). [Testing the adaptive potential of yellowtail kingfish to ocean warming and acidification](#). *Front. Ecol. Evol.* 7: 253. doi: 10.3389/fevo.
- Peng, M., Li, Z., Liu, X., Niu, D., Lan, T., Ye, B., ... & Li, J. (2019). [Tolerance, growth, and physiological responses of the juvenile razor clam \(*Sinonovacula constricta*\) to environmental Ca²⁺ and Mg²⁺ concentrations](#). *Frontiers in physiology*, 10.
- Schwieterman, G. D., Crear, D. P., Anderson, B. N., Lavoie, D. R., Sulikowski, J. A., Bushnell, P. G., & Brill, R. W. (2019). [Combined Effects of Acute Temperature Change and Elevated pCO₂ on the Metabolic Rates and Hypoxia Tolerances of Clearnose Skate \(*Rostaraja eglanteria*\), Summer Flounder \(*Paralichthys dentatus*\), and Thorny Skate \(*Amblyraja radiata*\)](#). *Biology*, 8(3), 56.

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