



NZOAC and PI-TOA Newsletter - May/June 2023

Save the date: Registrations for the August **2023 NZOAC Conference** in Nelson will open on 1 June. This year the New Zealand Ocean Acidification Conference (17 August) is being held in conjunction with the Climate Change Resilience in Aquaculture Symposium (18 August), with a pre-conference experimental design workshop (16 August). See the [NZOAC website](#) for more information.

Ocean acidification observing in the Pacific region has recently received a boost, with the deployment of a monitoring buoy in Samoa. In collaboration with [KIOST](#) (Korean Institute of Ocean Science and Technology), the [Samoa Meteorology Division](#) installed an ocean acidification monitoring buoy at Mulinu'u Apia. Instruments on the buoy monitor the seawater temperature, salinity and pH, as well as atmospheric carbon dioxide levels. Grady Gatoloai and Iakopo Saumalu from Samoa Met received training from KIOST in taking water samples for calibrating the buoy. Grady and Iakopo also completed the [OA Training Course held at PIOAC](#) in January, and along with the team at the National University of Samoa are contributing to OA knowledge in Samoa.

Ocean acidification in the New Zealand and the Pacific

- Applications for a joint University of Otago / NIWA [Marine Carbonate Chemistry position](#) are now open. Applications close **2 July 2023**.
- SPC's new [map of the Pacific region](#) captures the countries and locations where OA observing activities are happening.
- A new open access article, [New Zealand's media and the crisis in the ocean: News norms and scientific urgency](#), notes that OA "failed to receive coverage commensurate with the level of concern expressed in either the 2019 IPCC report or New Zealand's 2012 survey of its scientists". In addition, the authors found that the coverage of OA as a primary threat has decreased, although the total number of articles related to climate change has increased.
- Fisheries New Zealand's [State of Knowledge: Climate Change and New Zealand's Seafood Sector](#) summarises the impact of OA and its relevance to the seafood sector.
- Dr. Chris Cornwall (Victoria University of Wellington), recipient of the Royal Society Te Apārangi's 2022 Hamilton Award, will give a [public lecture on coral reefs, OA and warming](#) in Wellington at 6 pm on 31 May.

Resources

- The new Pacific Islands Ocean Acidification Centre (PIOAC) [webpage](#) has links to downloadable flyers and maps related to OA in the Pacific Islands.
- Using Australian coral reefs as a case study, a new framework has been developed to help governments assess the readiness of OA policy. The full open-access Framework is available [online](#), or read the summary [here](#).
- A recent open access article presents a new model-data fusion product used to obtain [Global Surface Ocean Acidification Indicators From 1750 to 2100](#).
- A recent review article, [Current Trends of Analytical Techniques for Total Alkalinity Measurement in Water Samples: A Review](#), discusses the challenges and limitations of each alkalinity approach.

- A book chapter on [OA as a Governance Challenge in the Mediterranean Sea: Impacts from Aquaculture and Fisheries](#) discusses the role of regional adaptive governance in addressing OA risks in aquaculture and fisheries.
- May GOA-ON Webinar: [Multinational Effort in the Search for a Global Solution for the Production and Certification of Reference Materials for Measurements of the Seawater Carbonate System](#), **1 June 2023**

Selected recent articles from our members

- [Crustose coralline algae can contribute more than corals to coral reef carbonate production](#), Cornwall, C.E., Carlot, J., et al., Communications Earth & Environment
- [Observational evidence linking ocean sulfur compounds to atmospheric dimethyl sulfide during Icelandic Sea phytoplankton blooms](#), Lee, K., Kim, J.-S., et al., Science of the Total Environment
- [Coral adaptive capacity insufficient to halt global transition of coral reefs into net erosion under climate change](#), Cornwall, C.E., Comeau, S., et al., Global Change Biology,
- [Reconstructing ocean oxygenation changes from U/Ca and U/Mn in foraminiferal coatings: Proxy validation and constraints on glacial oxygenation changes](#), Hu, R., Bostock, H.C., et al., Quaternary Science Reviews
- [The potential of manipulating light for the commercial production of carotenoids from algae](#), Zarekarizi, A., Hoffmann, L., et al, Algal Research
- [Soil environmental DNA metabarcoding in low-biomass regions requires protocol optimization: a case study in Antarctica](#), Olmedo-Rojas, P., Jeunen, G.-J., Antarctic Science
- [The role of irradiance in controlling coralline algal calcification](#), Krieger, E.C., Nelson, W.A., et al., Limnology and Oceanography

ECOPs (early career ocean professionals) and outreach happenings

- [PhD opportunity in Australia](#): Investigating impacts and effectiveness of ocean alkalinity enhancement on coastal benthic systems. Apply before **1 July 2023**.
- [WEkEO Hackathon](#): Harnessing data towards climate resilience, **22 - 23 June 2023**.
- Time tracking for Early career researchers: [A practical guide](#).
- The [Swarovski Foundation Creatives](#) for our Future Program seeks young sustainability innovators (21-30 yrs old) to accelerate awareness, technology or solutions for Sustainable Development. Apply by **27 June 2023**.
- The International Ocean Institute Malta [Training Course on Regional Ocean Governance](#) in November and December 2023. Apply by **2 June 2023**
- ICONEC (International Carbon Ocean Network for Early Career) a new GOA-ON hub, aims to create a community of early career professionals with an interest in global marine carbon cycling, including OA. Watch this space for more information.

Conferences, events, and workshops

- [10th International Crustacean Congress](#), Wellington, **22 - 26 May 2023**
- [United Nations World Oceans Day 2023 Live Broadcast](#), **8 June 2023**
- [Southern Ocean in a Changing World](#) (SOOS inaugural Symposium), Hobart, Australia. **14 - 18 August 2023**
- [NZOAC: 2023 NZOAC Conference](#), Nelson, New Zealand, **17 - 18 August 2023**
- [Ocean Practices: OBPS Workshop VII](#) (virtual), **9 - 13 October 2023**
- [Pacific Islands Conference on Ocean Science and Ocean Management](#), Nadi, Fiji. **11 - 15 September 2023**

International opportunities

- Funding: [Mobility & Travel Grants in Partnership with Small Island Developing States](#). There is also funding for MSc scholarships. Submission deadlines **May 5, July 7, September 1, November 3, 2023 and onward**.
- Co-design capacity development for Small Island Developing States (SIDS). The [Irish Marine Institute - Foras na Mara](#) has a range of opportunities open for partners in Small Island Developing States (SIDS). Details can be found [here](#).
- [Call for Expressions of Interest](#) for collaborative research aboard R/V Falkor. Proposals seeking operations in 2024 must be received by **May 15 2023**.
- [CO2 removal technology research](#), especially for sinking biomass, Ocean Visions.
- [MasterClass UNESCO "Ocean Education"](#) for teachers and educators, **June 7 2023**. Request a Live [Ship-to-Shore Interaction](#) with E/V Nautilus for the 2023 Expedition Season. Interactions are available daily from **May 16 - December 19 2023**.

Jobs

- [Principal Marine Scientist](#) with RPS Group in Wellington/Auckland, New Zealand.
- [Marine Ecology Technician](#) with NIWA in Northland, New Zealand. Closes **4 June 2023**.
- [Environmental Monitoring Technician](#) with NIWA in Napier, New Zealand. Closes **28 May 2023**.
- [Fisheries Technician](#) with NIWA in Auckland, New Zealand. Closes **4 June 2023**.
- [Water Quality Technician](#) with NIWA in Hamilton, New Zealand. Closes **28 May 2023**.
- [Hydrographic Surveyor](#) with Ocean Infinity in Australia/New Zealand.
- [Research Scientist & Leader of Environment Bioanalytical Facility](#) with CSIRO in Hobart, Australia. Closes **11 June 2023**.
- [Chief Scientist](#) with Chandler Macleod in QLD, Australia. Closes **29 May 2023**.
- [Research Scientist – Marine Wildlife Surveys](#) with the Department of Climate Change Energy the Environment and Water in Hobart, Australia.
- [Research Scientist \(Ecotoxicology\)](#) with the Australian Institute of Marine Science in Darwin, Australia. Closes **17 June 2023**.
- [Principal Freshwater Scientist](#) with the Environment Protection Authority Victoria in Melbourne, Australia. Closes **30 May 2023**.
- [Fisheries Scientist](#) with AWX Executive in QLD, Australia.
- [Research Fellow – Aquaculture](#) with the University of Melbourne in Melbourne, Australia. Closes **7 June 2023**.
- [Senior Freshwater Ecologist](#) with Wildland Consultants in Auckland, New Zealand.
- [Climate Change Advisor](#) with The Pacific Islands Forum Fisheries Agency in Wellington, New Zealand. Closes **6 June 2023**.
- [Fisheries Scientist – Marine Spatial Planning](#) with the Pacific Community in Nouméa, New Caledonia. Closes **4 June 2023**.
- [RRAP Experimental Research Technician](#) with the Australian Institute of Marine Science in QLD, Australia. Closes **25 May 2023**.
- [Scientist – Stock Assessment](#) with IPA Cairns in QLD, Australia.
- [Graduate Aquatic Ecology Consultant](#) with Niche Environment and Heritage in NSW, Australia.
- [Postdoctoral Researcher in Palaeoceanography](#) with the University of Tasmania in Hobart, Australia. Closes **28 May 2023**.

If you have news, opportunities, resources, or a published article you'd like included in the next newsletter, let us know by replying to this e-mail.

If you would like to subscribe to the NZOAC / PI-TOA newsletter mailing list, reply with "Subscribe" in the subject line. If you would like to unsubscribe from this mailing list, reply with "Unsubscribe" in the subject line.

Cheers,

Christina McGraw (University of Otago), Rebecca Zitoun (GEOMAR), Kim Currie (NIWA), Lea Muetzel (University of Otago)