



NZOAC and PI-TOA November/December Newsletter

It was great to catch up with many of you earlier this week at the 2022 NZOAC meeting (OA Day). Held at the University of Auckland, the open discussion focused on topics with communication and knowledge gaps: ocean alkalinity enhancement, ocean carbon capture, and OA adaptation and mitigation approaches. We also welcomed two new NZOAC Council members: Joanna Copedo (Cawthron) and Tyler Feary (University of Otago).

As expected, COP27 brought attention to the urgency of addressing OA. The Prime Minister of Samoa, Hon. Fiame Naomi Mata'afa, [highlighted OA in her call for action](#): "Increased acidification of our ocean is already destroying entire reef ecosystems which may never be recovered. Reef damage affects fish population which in turn affect entire fisheries upon which we rely. This is a stark reminder of how interconnected the effects of climate change are with our environments, and our daily lives." King of Tonga, His Majesty King Tupou VI, highlighted the difficulties faced by Tongans dealing with a [range of simultaneous stressors](#), including OA, coastal erosion, loss of coral reefs, and extreme weather events.

Congratulations to NZOAC's Christopher Cornwall, who was awarded The Royal Society's Hamilton Award. The award was given in recognition of Christopher's recent coral reef work, which was "the [first to estimate the effects of climate change](#) on the ability of hundreds of real-world coral reefs to grow".

Ocean acidification in the New Zealand and the Pacific

2022 has been a fruitful year for OA research in the Pacific and New Zealand. The Pacific Island Ocean Acidification Centre ([PIOAC](#)) is now fully established and held its [first in-person upskilling and planning activity in Fiji](#). In partnership with University of Otago, NIWA, The Ocean Foundation, and the OA Alliance, PIOAC also contributed to Pacific-focused programmes on OA monitoring, policy, and response that trained over 180 participants. Other regional news:

- New Zealand's [Our Marine Environment 2022](#) discusses the impact of OA on people and the environment.
- A session on OA monitoring in the Pacific was held in Port-Moresby during the National Ocean Science to Service Workshop (17 - 21 November). Hosted by the PNG National Weather Service, this was supported by the [COSPPac](#) project and co-implemented by SPC, PCCOS, SPREP, and the Australian Bureau of Meteorology.
- A National Ocean Science to Service Workshop is currently taking place in Tarawa, Kiribati, with a dedicated OA session organised by [COSPPac](#) and [PCCOS](#).
- Three new Pacific Island research groups have been [awarded GOA-ON in a box kits](#) by The Ocean Foundation.

Resources

- **Video:** GOA-ON's [Ocean acidification, climate and society: mitigation and adaptation opportunities and challenges](#)
- **Video:** [Ten Years of the Ocean Acidification International Coordination Centre](#)
- The [Copernicus Ocean State Report 6 Release](#) is now available.

Webinars

- GOA-ON's December webinar, [Carbon cycle monitoring in the extreme latitudes: the Southern Ocean and Arctic Ocean](#), Dr. Margaret Ogundare and Dr. Mohamed Ahmed, 14 December 2022
- **Streaming:** GOA-ON's November webinar, [Behavioural responses of fish to high CO₂/low pH conditions observed at natural analogue](#), Prof. Tim Ravasi and Dr. Davide Spatafora
- **Streaming:** [Coral reefs and potential tipping points](#), Dr. David Obura and Dr. Joanie Kleypas

Selected recent articles from our members

- [Chronic heat stress as a predisposing factor in summer mortality of mussels, *Perna canaliculus*](#), Ericson, J.A., Venter, L., et al., Aquaculture
- [Dimethyl sulfide cycling in the sea surface microlayer in the southwestern Pacific - Part 2: Processes and rates](#), Saint-Macary, A.D., Marriner, A., et al., Ocean Science
- [Freshening of Great Barrier Reef waters is deleterious for larval crown-of-thorns starfish, counter to the terrestrial runoff hypothesis](#), Clements, M., Selvakumaraswamy, P., et al., Marine Ecology Progress Series
- [Kelp nursery optimisation: density-dependent effects in early life-cycle stages of *Ecklonia radiata* \(Laminariales\)](#), Schwoerbel, J., Visch, W., et al., Botanica Marina
- [Reproduction, hatchery and culture applications for the giant kelp \(*Macrocystis pyrifera*\): a methodological appraisal](#), Le, D.M., Desmond, M.J., et al., Applied Phycology
- [Popular political attitudes in Samoa: Findings of the Pacific Attitudes Survey](#), Leach, M., Barbara, J., et al., Asia and the Pacific Policy Studies

ECOPs (early career ocean professionals) and outreach happenings

- The Commonwealth Blue Charter and the Commonwealth Youth Programme are looking for an [Ocean Youth Outreach Assistant](#).
- **Online Course:** [Certified Peer Review Course](#) by Elsevier Researcher Academy on how to write a helpful peer-review report.
- ECR self-nominations are open for the [2024 Ocean Sciences Meeting Planning Committee](#). Apply by **1 December 2022**
- **Workshop:** [CE2COAST Winter School](#), Downscaling Climate and Ocean Change to Coastal Services, Lisbon (Portugal), **13-17 February 2023**
- **Funding:** The global ECOP network program just updated their [external funding webpage](#), where ECOPs can find information and links to grants and opportunities for ECOPs.

Conferences, events, and workshops

- [5th International Marine Science Communication Conference](#) (hybrid) France, **30 November – 1 December 2022**
- [18th International Meiofauna Conference](#) (online only), **5 - 9 December 2022**
- [Coastal Futures Conferences 2023](#) London, **25 - 26 January 2023**
- [International Seaweed Symposium](#), Hobart, Australia, **19 - 24 February 2023**
- **New Zealand** - [11th International Abalone Symposium](#), Auckland, New Zealand, **27 February - 2 March 2023**.
- [UN 2023 Water Conference](#), New York, **22-24 March 2023**
- [Symposium on the Effects of Climate Change on the World's Ocean \(ECCWO5\)](#), Norway, **17-21 April 2023**
- [Southern Ocean in a Changing World](#) (SOOS inaugural Symposium), Hobart, Australia. **14 - 18 August 2023**

International opportunities

- Contribute to the Synthesis Report of the IPCC Sixth Assessment Report by contacting your [national focal point](#).
- Call for [ship-time proposals ANTARCTIC-2023-2024](#). Access to the Southern Ocean on board the Polar Expedition Ship "Le Commandant Charcot" (PONANT, France). **Deadline 20 December 2022**
- Call for [2023 SCOR Visiting Scholars](#). **Deadline 23 December 2022**
- [PhD Studentship - Southern Ocean](#) through Victoria University with the National Institute of Water and Atmospheric Research in Wellington, New Zealand. Closes **30 November 2022**.

Jobs

- [Senior Customary Fisheries Advisor](#) with the Ministry for Primary Industries in Dunedin, New Zealand. Closes **27 November 2022**.
- [Research Assistant - Living Sidewalls](#) with the Sydney Institute of Marine Science in Sydney, NSW, Australia. Closes **27 November 2022**.
- [Research Officer \(Fish Habitat Enhancement\)](#) with the Sydney Institute of Marine Science in Sydney, NSW, Australia. Closes **27 November 2022**.
- [Project Manager/Research Associate](#) with the Sydney Institute of Marine Science in Sydney, NSW, Australia. Closes **27 November 2022**.
- [Principal/Senior Scientist \(Fisheries\)](#) with the National Institute for Water and Atmospheric Research in Wellington, New Zealand. Closes **28 November 2022**.
- [Microbial Ecology and Ecotoxicology Technician](#) with the National Institute for Water and Atmospheric Research in Hamilton, New Zealand. Closes **30 November 2022**.
- [Fisheries Scientist with the National Institute for Water and Atmospheric Research in Auckland, New Zealand](#). Closes **30 November 2022**.
- [Greenhouse Gas Emissions Scientist](#) with the National Institute for Water and Atmospheric Research in Wellington, New Zealand. Closes **30 November 2022**.
- [Associate/Principal Marine Consultant](#) with SLR in Auckland, Nelson, and Wellington, New Zealand.
- [Microbial Ecology and Water Quality Technician](#) with the National Institute for Water and Atmospheric Research in Hamilton, New Zealand. Closes **30 November 2022**.
- [Senior Research Scientist: Environmental Decision Science](#) with the Australian Institute of Marine Science in Townsville, QLD, Australia. Closes **1 December 2022**.
- [Communications Advisor - Sustainable Seas National Science Challenge](#) with the National Institute for Water and Atmospheric Research in Wellington, New Zealand. Closes **4 December 2022**.
- [Senior Fisheries Scientist](#) with the Department of Regional NSW in Taylors Beach, NSW, Australia. Closes **19 December 2022**.
- [Science Research Leader](#) with Hays Sustainability in Aireys Inlet, VIC, Australia.
- [Senior Scientist](#) with Indo-Pacific Environmental in Perth, WA, Australia.
- [Marine Engineering & Automation](#) with the Minderoo Foundation in Perth, WA, Australia.
- [Marine Surveyor](#) with SGS in Auckland, New Zealand.
- [Senior Ecologist](#) with Boffa Miskell in Dunedin, New Zealand.
- [Marine Technician](#) with the Australian NAVY in Hobart, Tasmania, Australia.
- [Senior Principal Marine Scientist](#) with RPS in Sydney, NSW, Australia.
- [Postdoc - Modelling Coastal Dynamics](#) at the Australian Institute of Marine Science in Townsville, QLD, Australia. Closes **4 December 2022**.
- [Postdoc - Marine Mammal Distribution in California Current using eDNA](#) at the University of Washington in Seattle, WA, USA.
- [Postdoc - Remote Sensing and GIS](#) at the College of Earth & Ocean Environment with the University of Delaware in Newark, DE, USA.

- [Postdoc - Marine Microbial Biogeochemistry](#) with the University of New Hampshire at the Ocean Process Analysis Lab in Durham, NH, USA.
- [Postdoc - Responses of Farmed Shellfish to Multiple Stressors](#) with Rutgers University at the Haskin Shellfish Research Laboratory in Port Norris, NJ, USA.
- [Postdoc - Institute of Global Change Biology \(IGCB\)](#) with the University of Michigan in Ann Arbor, MI, USA.
- [Postdoc - MAP Shellfish Stock Assessment](#) with the Virginia Institute of Marine Science in Gloucester, VA, USA.

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), Pierre-Yves Charpentier (SPC), and Jesse Vance (Otago)