

The Scientific Committee on Oceanic Research (SCOR)

Advancing ocean sciences across disciplines and through international cooperation since 1957





Nighttime sampling – WG 143 on dissolved N_2O and CH_4 measurements: Intercomparison Cruise to the Baltic Sea on board the R/V Elisabeth Mann-Borghese, image by Damian L. Arévalo-Martínez.

Approach Goals

- Address global ocean issues
- Plan and conduct research
- Solve methodological and conceptual problems
- Build capacity in developing countries

• Engage SCOR National Committees - more than 30

- Support international Working Groups and large-scale Projects
- Supported by SCOR National Committees, funding agencies and foundations
- **Develop capacity -** visiting scholar, fellowships, travel support
- International collaboration and partnerships project offices supported by Australia, Canada, China, France, Germany, Japan, Netherlands, New Zealand, Poland, Sweden, UK, and USA

Engagement

- Promotes equity, diversity, inclusion in oceans sciences • Encourages and supports involvement of students and
- early career scientists
- Co-sponsor of the Ocean KAN (Knowledge Action Network)
- Contributor to the UN Decade Approved observer at the Intergovernmental Oceanographic Commission (IOC) and Intergovernmental

Panel on Climate Change (IPCC)



https://scor-int.org/



@SCOR_Int



Public Group

Marine biogeochemical cycles of trace elements

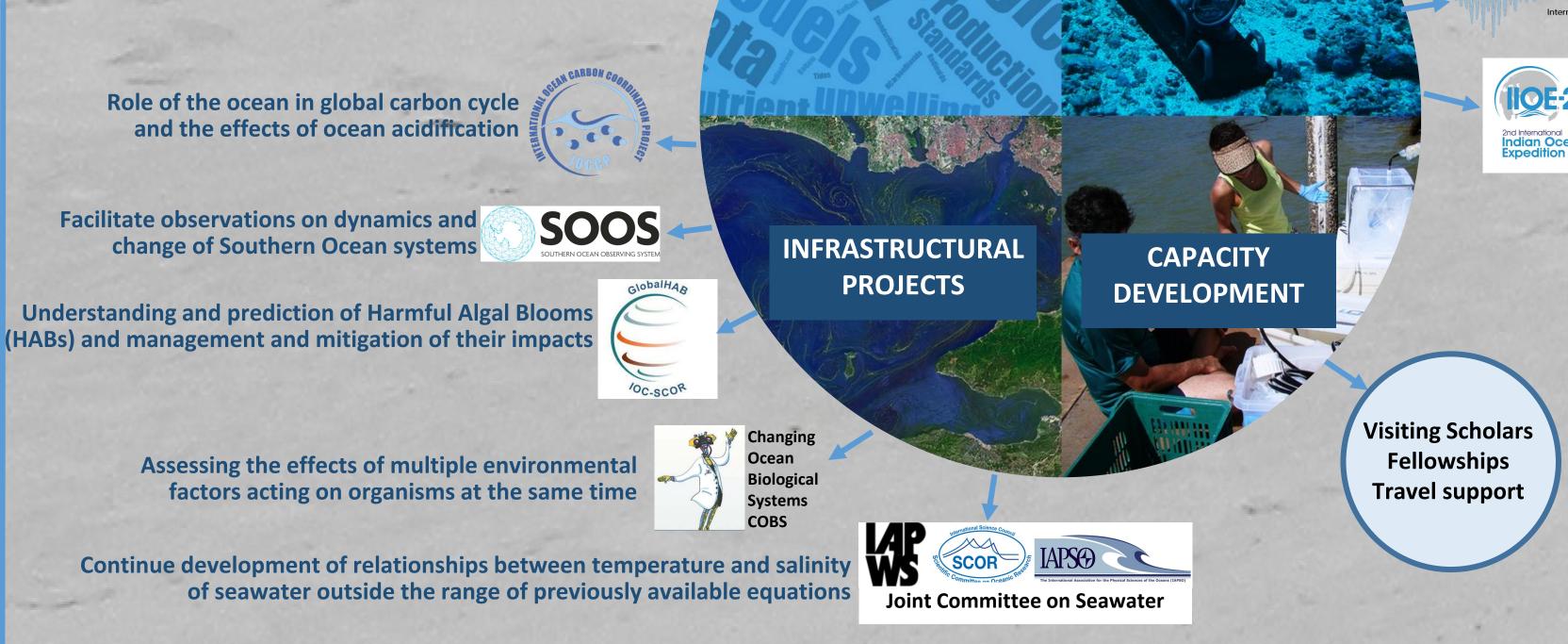


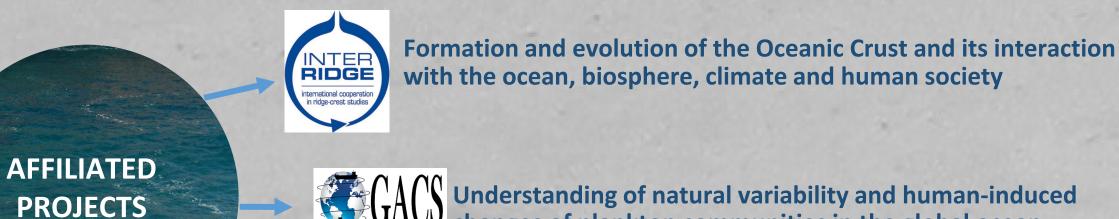
secretariat@scor-int.org













Understanding of natural variability and changes of plankton communities in the global ocean Understanding of natural variability and human-induced



CCG Application of remotely-sensed ocean-colour/inland water radiometry data across all aquatic environments





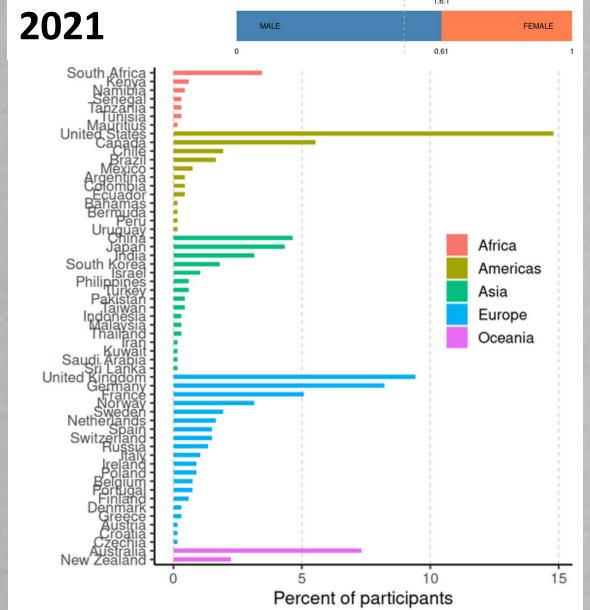
Clean container laboratory on board GEOTRACES cruise GP13, image by Melanie Gault-Ringold, Taryn Noble and Andy Bowie

Shaping modern oceanography

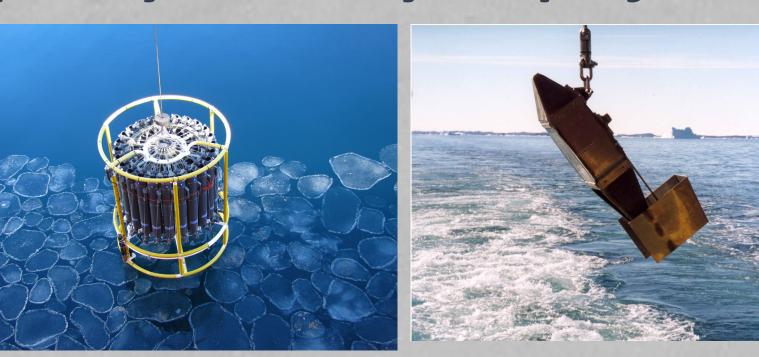
Past projects:

- International Indian Ocean Expedition (IIOE)
- World Ocean Circulation Experiment (WOCE)
- Tropical Ocean-Global Atmosphere Study (TOGA)
- Global Ocean Ecosystem Dynamics (GLOBEC) Joint Global Ocean Flux Study (JGOFS)
- Global Ecology and Oceanography of Harmful Algal Blooms (GEOHAB)

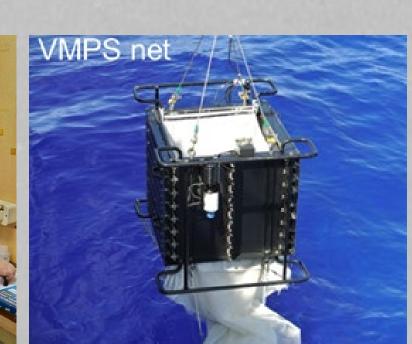
SCOR community



From the field to the lab, from data analysis to global synthesis building capacity at every step of the way

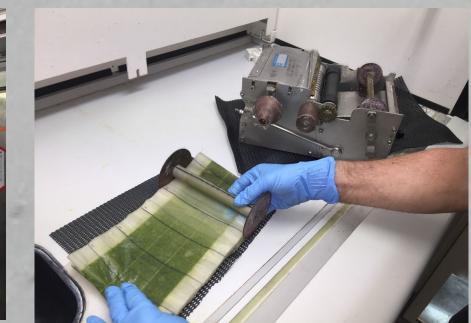






From left to right: (1) Sea-glider deployment from South African Agulhas II on voyage to the Southern Ocean, image by Emma Bone; (2) Deployment of CTD Rosette System from South African vessel Agulhas in the Southern Ocean, image by Seb Swart; (3) Retrieving the Continuous Plankton Recorder (CPR) from the Aurora Australis in Eastern Antarctica, image by the Australian Antarctic Division; (4) The Southern Ocean Carbon and Climate Observatory (SOCCO) scientists at work, image by Sandy Tomalla; (5) Vertical Multiple-opening Plankton Sampler (VMPS) collecting plankton for metabarcoding up to 1000 m depth for Working Group 157 MetaZooGene, image by Junya Hirai.









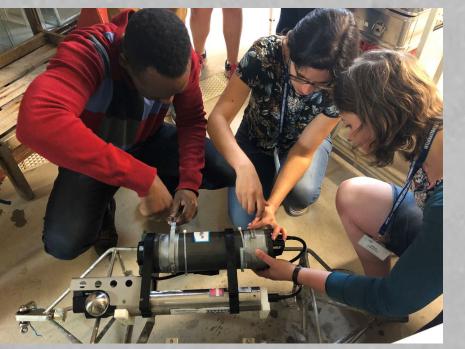




From left to right: (1) Measuring photosynthetic activity on board the R/V L'Atalante, TONGA cruise across the South Pacific Gyre, image by Hubert Bataille; (2) Getting silk from the Continuous Plankton Recorder (CPR) cassette on board of the RV Investigator. The silk shows a phytoplankton bloom on the Eastern Coast of Australia (Melbourne to Sydney Transit), image by Julian Uribe-Palomino; (3) Filtration stand for phytoplankton community characteristics (with student instructions), image by Sandy Tomalla; (4) USCGC Healy and RV Polarstern historical meeting at the North Pole on a GEOTRACES crossover station, image by Stefan Hendricks; (5) A subsample of particles after trawling a Manta net in surface waters in the Southern Mediterranean in 2013. Tiny coloured plastic fragments are visible in the Petri dish, image by Giuseppe Suaria; (6) Inter-comparison exercise for cross-instrument calibration/standardization of chlorophyll induction fluorometer to assess phytoplankton primary production in real time non-invasively, image by Chelsea Technologies Group – Kevin Oxborough.













From left to right: (1) Getting ready to deploy a GO-FLO-CTD for trace metal sampling in the Southern Ocean, onboard SA Agulhas II, image by Raimund Rentel; (2) Glider deployment from South African vessel Agulhas II in the Southern Ocean, image by Seb Swart; (3) IOCCP 2019 Training Course in Kristineberg, Sweden, image by Nancy Williams; (4) SOLAS Summer School 2018 in Corsica, France, image by SOLAS; (5) Working Group 159 (DeepSeaDecade) discussing a roadmap for a standardised global approach to deep-sea biology for the Decade of Ocean Science for Sustainable Development at their first meeting of Working Group 158 (C-GRASS) aimed to complete a scientific synthesis of the drivers and trajectories of seagrass ecosystems under global change, and to provide a framework for future coordinated observation and research on seagrass systems, image by Jessie Jarvis.