

## THE INTERNATIONAL OCEAN CARBON COORDINATION PROJECT

A joint project of **S**cientific **C**ommittee on **O**ceanic **R**esearch and **I**ntergovernmental **O**ceanographic **C**ommission of UNESCO and an affiliate program of the Global Carbon Project.

## **Terms of Reference**

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The International Ocean Carbon and biogeochemistry Coordination Project (IOCCP) promotes the development of a global network of ocean carbon and biogeochemistry observations, coordinates the development of globally acceptable strategies and provides technical coordination developing operating methodologies, practices and standards, homogenizing efforts of the research community and scientific advisory groups. IOCCP also provides communication services for marine biogeochemistry community as well as advocacy and links to a multidisciplinary sustained global observing system.

Here we consider the term biogeochemistry to include the Global Ocean Observing System (GOOS) Essential Ocean Variables (EOVs) for Biogeochemistry. These EOVs enable the understanding and quantification of the following phenomena: ocean acidification, ocean deoxygenation, eutrophication, exchanges between the atmosphere, surface ocean and deep ocean, and carbon and nutrient remineralization and sequestration.

- 1. Identify priority measurements for implementation of GOOS observations of ocean carbon and biogeochemistry, and promote development and adoption of necessary measurements and measurement technology.
- 2. Develop activities to implement the goals and recommendations set by international and intergovernmental bodies relevant to the work of IOCCP.
- 3. Develop and maintain a set of specifications, implementation goals, and progress metrics for EOVs for ocean carbon and biogeochemistry parameters for GOOS and corresponding Essential Climate Variables for the Global Climate Observing System (GCOS).
- 4. Promote international agreements on measurement methodologies and best practices, primary and secondary data quality control and quality assurance procedures, data and metadata formats, and development and use of certified reference materials.
- 5. Coordinate activities of individual networks and programs to streamline ocean carbon and biogeochemistry measurements.
- 6. Facilitate a dialogue with stakeholders to implement a scientifically and economically effective, fit-for-purpose observing system for ocean carbon and biogeochemistry.
- 7. Develop and support training activities for users of observing technologies (instruments, sensors and platforms) for ocean carbon and biogeochemistry.
- 8. Promote and develop interoperable data management activities and policies to ensure open access to, and preservation of, fully documented ocean carbon and biogeochemistry data.
- 9. Promote the integration of ocean carbon and biogeochemistry information into research and assessments including the use of relevant data synthesis products (e.g., SOCAT, GLODAP).
- 10. Serve as an international communication centre on ocean carbon and biogeochemistry observing activities.
- 11. Report to sponsors and the global ocean carbon and biogeochemistry observing community on the state of planning and accomplishments of IOCCP.
- 12. Raise funds to implement IOCCP activities.