

<b>AQ-15 Ocean Acidification</b>	
Year: 2024	Participants: 20 laboratories expected
Number of rounds: 1 per year	Start exercise: 1 April
Number of materials: 3 per round	Sample size: 500 ml

Participation form

Timetable

PT Scheme

Costs

This study covers the determination of total alkalinity and dissolved inorganic carbon in the seawater test materials. The test materials are prepared in bulk.

## Test Materials

Low nutrient seawater (LNSW), collected from the Eastern Atlantic Ocean and Baltic Sea during the late spring and summer months after the main plankton bloom, is used to prepare the test materials. This seawater is filtered to remove bacteria and particles.

Homogeneity testing is performed on each batch of test materials produced. The test materials are stable for the period of the test under the correct conditions following the storage instructions.

## Determinands and Concentration Ranges

The dissolved inorganic carbon (DIC) content and Total Alkalinity should be analysed in the distributed glass bottles. The table below also shows:

- The expected concentration range for DIC in the spiked seawater materials.
- The constant and proportional error that will be used for assessment of the results.

The proportional and constant error established by the SAB members based on the "Weather goal"

Determinand*	Unit	Concentration range	Error	
		Seawater (spiked)	Const	Prop
DIC	µmol/kg	10-5000	10	
Total Alkalinity	µmol/kg	100-5000	10	
pH				

\* This exercise is not in the scope of accreditation.