



## Draft Agenda for the Workshop Quality Assurance for Inorganic Carbon Measurements

**A poster exhibition room will be available, there will be time to discuss poster content during the breaks.**

Timetable	Tuesday 18 March 2025
	<b>WE PAL-QUASIMEME INTERCALIBRATION Chair Koen Parmentier</b>
<b>9:30-10:00 AM</b>	<b>Registration</b>
10:00 -10:15	Welcome by NOC + housekeeping (Jon Blower and Susan Hartman)
10:15 -10:30	Presentation 1: Introduction to Wepal-Quasimeme Quality assurance and Quality assessment (W-Q Representative Célia Bento)
10:30 – 11:00	Presentation 2: AQ15 – Results of 4 years intercalibration exercises for TA and DIC (Koen Parmentier)
11:00 – 11:30	Coffee Break + Poster session
11:30 - 12:00	Presentation 3: The results of the 2017 interlaboratory comparison (Andrew Dickson)
12:00 - 12:30	Round table discussion/questions Future intercalibration exercises/needs/evaluation/ ... Chair Koen Parmentier + Andrew Dickson
12:30 – 13:30	Lunch + Poster
	<b>Scientific output - why measure TA DIC pH pCO<sub>2</sub> - needs of the scientific world; which data; which quality; uncertainties</b> <b>Chair Amy Kenworthy</b>
13:30 – 13:50	Presentation 4: OSPAR - QSR Ocean Acidification (Helen Findlay)

13:50 – 14:10	Presentation 5: Update on global efforts for metadata, data naming conventions and a federated database for the SDG14.3.1 (Kirstin Isensee or Katherina Schoo)
14:10 – 14:30	Presentation 6: Uncertainty analysis and the MINKE ILC on pH (Florence Salvetat)
14:30 - 14:50	Presentation 7: Uncertainty quantification of Total Alkalinity and pHT measurement results and their propagation to other variables of the carbonate system (Gaëlle Capitaine)
14:50 – 15:10	Presentation 8: Calculation of pH and CO <sub>2</sub> (Matthew Humphreys)
15:10 – 15:40	Coffee Break + Posters
	<b>Obtaining consistent approach to analysing samples - use of CRMs, for calibration and quality control</b> <b>Chair: Susan Hartman</b>
15:40 – 16:00	Presentation 9: IAPSO Study preparation of Na <sub>2</sub> CO <sub>3</sub> solution for the calibration of DIC (Maribel Carcia)
16:00 – 16:20	Presentation 10: Progress for a European hub for Carbon-CRMs (Tobias Steinhoff)
16:20 – 16:40	Presentation 11: The optimal use of our RMs to assist in the quality control of seawater CO <sub>2</sub> measurements (Andrew Dickson)
16:40 – 17:00	Presentation 12: Production of in-house RM for DIC/TA (Tobias Steinhoff)
17:00-17:10	Wrap up, closure of the day Koen Parmentier/Andrew Dickson
<b>19:30</b>	<b>Dinner Evening 1</b>
<b>Wednesday 19 March 2025</b>	
	<b>Obtaining consistent approaches to sampling, sample pre-treatment sample storage, good laboratory practice.</b> <b>Chair: Marc K.</b>
9:00 – 9:10	Introduction of Day 2 By Marc AM Break up groups + rotation Item 1: Sampling, sample handling, sample bottles, sampling storage (chair Susan – Co-chair Matthew) Item 2: Analysis methods (procedures, guidelines, preparation of reagents) and calibration (use of Na <sub>2</sub> CO <sub>3</sub> ) – (Chair Maribel – Co-chair Marc) Item 3: CRM (production, use, alternatives, ...) (Chair Andrew – co-Chair Tobias) Item 4: Validation, calculation of uncertainties, ... accuracy, precision (Chair Florence – Co-Chair Gaëlle)
9:10 – 9:50	Rotation 1
9:50 – 10:30	Rotation 2
10:30 – 11:00	Coffee Break + Posters
11:00 – 11:40	Rotation 3
11:40 – 12:10	Rotation 4
12:10 - 12:40	Wrap - up (max 10 minutes/item) + Plenary Discussion Koen P. + Chairs
12:45 – 13:30	Lunch + Posters

	<b>Instrument Session and Laboratory tours</b> SKALAR HydroFia Apollo/Vindta Lab on chip systems
13:30 – 13:50	Intro session Short intro company SKALAR (10 min) (Luc Uyterhoeven) Short intro company 4H-Jena (Nadja Kinski)
13:50 – 14:50	Rotation 1
14:50 – 15:50	Rotation 2
15:50 – 16:05	Short Coffee Break
16:05 – 17:05	Rotation 3
17:08 – 18:05	Rotation 4
18:05 – 18:15	Wrap up, closure of the day Marc Knockaert
<b>19:30</b>	<b>Dinner Evening 2</b>
<b>Thursday 20 March 2025</b>	
	<b>New (adapted analysis) methods, techniques, &amp; sensors</b> <b>Chair: Socratis Loucaides</b>
9:00 - 9:20	Presentation 13: pH analysis, use of m-cresol purple (Martha Alvarez)
9:20 – 9:40	Presentation 14: Analysis TA/DIC/pH on a SKALAR autoanalyzer (Marc Knockaert)
9:40 – 10:00	Presentation 15: Measuring TA - upgrading the VINDTA system; this is ongoing (Tobias Steinhoff)
10:00 – 10:20	Presentation 16: New automated TA/DIC analyser (Gavin Sim)
10:20 – 10:50	Coffee Break + poster session
10:50 – 11:20	Presentation 17: New techniques, sensors (Socrates Loucaides)
11:20 – 11:50	Presentation 18: New techniques, sensors (Emily Hammermeister)
11:50 – 12:20	Presentation 19: Intercalibration ICOS pCO <sub>2</sub> sensors (Tobias Steinhof)
<b>12:20 – 13:00</b>	Plenary Final Discussion about sensors
<b>13:00 – 13:15</b>	<b>Closure of the Workshop (Koen Parmentier)</b>

**Poster Sessions:** these sessions will be planned once we know the number of participants who wish to submit a poster session. For specific questions on analytical issues please send them to the WEPAL-QUASIMEME Office prior to the workshop, together with your registration, so that we can include those in the discussion sessions at the Workshop.

In addition to the aforementioned presentations there will be ample time for discussions and exchange of information between delegates. For further questions on the programme, contact the WEPAL-QUASIMEME Office ([wepalquasimeme@wur.nl](mailto:wepalquasimeme@wur.nl)).