



Wepal-Quasimeme Workshop on Quality Assurance for inorganic carbon system measurements in context of ocean acidification monitoring

Timing and venue: 22nd-24th October 2024; National Oceanography Centre, Southampton (NOC), United Kingdom

8 years after the first Wepal-Quasimeme Ocean Acidification (OA) workshop in Southampton and after 3 years of the AQ15 Wepal-Quasimeme intercalibration exercise, it's time to bring the Ocean Acidification community back together.

The first OSPAR QSR on OA was published in 2023 but there is still, more than ever before, a need for high quality data (TA, DIC, pH, pCO2) to strengthen all scientific output on OA. OSPAR, as well as other international initiatives such as ICOS, GOA-ON and AMAP, indicate that strong international collaborative monitoring programmes on OA need to continue, to facilitate meaningful data gathering, collation and assessment.

A consistent approach to sampling, sample pre-treatment, analysis, quality control, validation of methods, calculation of derived variables and an understanding of methodological limitations is required; methods should be fit for purpose. Many monitoring agencies, with varying levels of experience are analysing samples for carbonate chemistry parameter on different types of instruments but also using new techniques, as more sensors are installed on buoys or ships, or more automated analysers are set up.

There's still a gap in availability of CRMs, standards, buffers for quality control and calibrations when analysing marine samples. Worldwide, Scripps reference materials are used for QC or calibration for total alkalinity (TA), dissolved inorganic carbon (DIC) and pH analysis without having a separate way of ensuring that their measurement system is in control and has a calibration with known linearity. Thus, even when reference materials are used there are likely to be unidentified uncertainties showing up on a well-designed proficiency study like the QUASIMEME AQ15.

Aims of the Workshop

- To obtain a consistent approach to sampling, sample pre-treatment sample storage across the OSPAR contracting parties and AMAP countries for all four carbonate parameters (TA / DIC / pCO2 / pH) and discuss sample preservation alternatives for HgCl2.
- 2. Discuss the key analytical techniques for all four carbonate chemistry parameter measurements; challenges, limitations and misconceptions affecting quality of results. The emphasis of the workshop will be on the parameters of TA/DIC/pH since these are likely to progress to the OSPAR CEMP but considerations will also be given to pCO2. Discuss new more automated





analytical techniques and measurements with sensors. Can these instruments provide data that obtain the weather or climate goals? Are the methods fit for purpose?

- 3. To obtain a consistent approach to the analysis of TA/DIC/pH, and correct use of reference materials/standards across the OSPAR and AMAP regions.
- 4. The role of Quasimeme exercises in Quality assurance and Quality assessment. What are the results after 3 years AQ15 intercalibration exercises and what is the way forward?
- 5. Consider the limitations of reference materials across the OSPAR and AMAP regions i.e. salinity ranges, open oceans and coastal waters. New initiatives?
- 6. Address data quality objectives needed for various assessment purposes. GOA-ON identified the need for two different levels of data quality to ensure the availability of data and permit assessment of short-term variability as well as longer term trends. To be inline with recent years Accreditation Bodies.

Your contribution and questions

There is room for contributing presentations and posters. For submission of abstracts, see under registration. Send specific questions on analytical issues, to the Wepal-QUASIMEME Project Office prior to the workshop, together with your registration, to include those in the discussion sessions at the Workshop. Your participation in round table discussions and practical demonstrations are an important part of the workshop.

To submit an abstract or poster please click here

Who should attend?

The workshop will be beneficial for technicians and scientists working in the field of Ocean Acidification in seawater

Registration

Participants should register before 30th September2024. Your registration is only complete after payment of the registration fee is received in full. The registration fee includes attendance of the workshop, report of the workshop, coffees, teas, lunches and dinners on two nights .

Registration Fees

Early Bird £410.00 will close 01/05/2024 (please apply coupon code "Quasimeme 2024 EB")

Standard Registration £516.00 will open 02/05/2024 and close 30/09/2024

To register please <u>click here</u>





Organising Committee

Helen Findlay (PML, GOA-ON), Amy Kenworthy (PML, GOA-ON), Sue Hartman (NOC), Steven Crum (Wepal-Quasimeme) Koen Parmentier (RBINS) Marc Knockaert (RBINS)

Accommodation

NOC has preferential rates with some local hotels

Leonardo Royal Hotel Southampton Grand Harbour

Known for its character and ambience, our Leonardo Royal Hotel is ideally situated on the Southampton waterfront, just five minutes by car from Southampton Port.

NOC has a preferential rate with this hotel, by using the group code **Event** this will bring up the best available rate at any time of the year

click here to access the online booking portal

The Leonardo Hotel Southampton

With an enviable position in the heart of the city centre, formerly Jurys Inn, Leonardo Hotel Southampton is an ideal place to stay whether you're visiting this beautiful coastal city with family and friends, or on business. An easy 15-minute walk from the central train station, and under four miles from the city airport, Leonardo Hotels offers the best of all Southampton hotels: comfort and convenience, complete with style and a warm welcome.

NOC has a preferential rate with this hotel, by using the group code **Event** this will bring up the best available rate at any time of the year

click here to access the online booking portal

Moxy Southampton

Meet Moxy Southampton, a stylishly designed eco-friendly hotel which is centrally located and near Westquay shopping centre and restaurants. You'll find yourself at home in one of our 208 bedrooms all with ensuite bathrooms where you can relax on our comfy beds or check your emails from your private workspace. Our tech-savvy guest rooms are also equipped with Chromecast TVs (so you can catch up on your latest Netflix binge), USB charging points and WiFi. Our bright and open lobby is





where you check-in at the bar (with a complimentary cocktail) and provides an ideal space to meet and mingle with business colleagues, network or play games. For fitness enthusiasts, we have a 24-hour gym. You'll never go hungry with our daily breakfast; a selection of food and drinks are served all day or snacks at our 24/7 Grab and Go station. Super-fast WiFi is included throughout our hotel for everyone to stay connected.

Click here to access the online portal directly to the NOC rates

Alternative hotels are located throughout Southampton a list is available please click here