

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

Timing and venue: 18 - 20 March 2025; National Oceanography Centre, Southampton (NOC), UK

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

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.

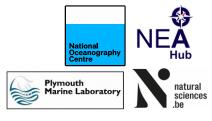
A consistent approach to sampling, sample pre-treatment, analysis, quality control, validation of methods, calculation of derived variables and an understanding of methodological limitations is required; methods should be fit for purpose. Many monitoring agencies, with varying levels of experience, are 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 in line 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

Registration

Participants should register before 10th March 2025. 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

£410.00
£516.00

To register please click here

Benefits

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

Accommodation

NOC has preferential rates with some local hotels.

Leonardo Royal Hotel Southampton Grand Harbour

Known for its character and ambience, 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 will bring up the best available rate at any time of the year.

click here to access the online booking portal

The Holiday Inn Southampton

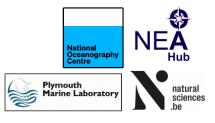
Situated just a short 5-minute drive from the city center's attractions and within easy reach of Southampton Central station, where direct trains to London await, accessing this hotel is both convenient and efficient. Plus, with on-site parking available and Southampton Airport a mere 20-minute drive away, your travel needs are seamlessly met. Located on the waterfront Souhampton 10 minutes walk from the NOC.

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