AQUARIUS: Providing transnational access to research infrastructures and training the next generation of marine researchers

Tonné Nathalie¹, Mcmeel Oonagh², Ní Chonghaile Bernadette³ and Caburlotto Andrea⁴

- N/A, Seascape Belgium
 E-mail: nathalie.tonne@seascapebelgium.be
- ² NA, Seascape Belgium, Louizalaan 331, 1050 Brussels (Belgium)
- Research Vessel Operations, Marine Institute, Rinville, Oranmore, Co. Galway, Ireland, H91 R673
- Geophysics section, OGS, National Institute of Oceanography and Applied Geophysics, Borgo Grotta Gigante 42/c, 34010 Sgonico, Italy

AQUARIUS is a four-year Horizon Europe-funded project providing researchers with transnational access to a comprehensive and diverse suite of integrated research infrastructures. The project runs from March 2024 - February 2028.

AQUARIUS' objective is to target and support research and innovation activities that contribute to the objectives, regional scope and implementation of the EU Mission 'Restore our Ocean and Waters by 2030'. The Mission Implementation Plan has informed the thematic (Mission objectives) and geographic (Mission Lighthouse regions) scope of AQUARIUS. Two Super Integration Transnational Access (TA) Funding Calls will be launched, the first call being 'topic-specific' will target themes and scientific challenges of each of the four lighthouse regions (open November 2024-January 2025). The second call will be adapted to the outcomes of the first call and focussed on new emerging issues (open September-October 2025).

The impressive searchable online catalogue (https://aquarius-ri.eu/research-infrastructures-catalogue/) of 57 research infrastructures available includes research vessels, mobile marine observation platforms (autonomous underwater and surface vehicles, gliders, remotely operated vehicles, and ferry boxes), aircraft, drones, satellite services, fixed freshwater and marine observatories, experimental facilities, and data infrastructures.

In parallel to the TA Calls, a variety of training opportunities for early career researchers and technicians will be offered throughout the project, including Marine and Freshwater Internships, Floating Universities and specialized courses onboard research vessels or at research facilities, Summer Schools, and internships onboard the Irish research vessels. Participants can either attend courses hosted by AQUARIUS partners, such as the PLOCAN Glider Summer School, or participate in AQUARIUS funded projects in a technical or scientific capacity.

AQUARIUS is committed to open science and open science practices are an integral part of all our training programmes, including to the scientific teams awarded transnational access projects, with a particular focus on open and FAIR data. As such, AQUARIUS provides a variety of training programmes, including scientific & technical training, training on data management and stewardship, and virtual access and analytics. Scientific teams will also be invited to make use of the Blue-Cloud Virtual Research Environment and all metadata & data will become part of the leading European & global data infrastructures such as EMODnet, Copernicus and EOSC, and contribute to the future EU Digital Twin Ocean. All training materials will be shared on the AQUARIUS online training repository.

More information on TA Calls: https://aquarius-ri.eu/access/, and AQUARIUS training opportunities: https://aquarius-ri.eu/training-resources/

Acknowledgements

AQUARIUS has received funding from the European Union's Horizon Europe Framework Programme for Research and Innovation under grant agreement No 101130915. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or European Research Executive Agency. Neither the European Union nor the granting authority can be held responsible for them.

Keywords

EU Mission; Ocean; Waters; Training; Research Infrastructures; FAIR Data