

The IQOE Task Team on Low-Cost Hydrophones for Research, Education, and Citizen Science is looking for industry partners to develop a

LOW-COST HYDROPHONE

- Modular equipment: cabled (cable optional and to be purchased separately) and autonomous settings, for example with an option to remove the cable, and attach it to an autonomous processor (including battery, memory and electronics for archival). Option to add a temperature sensor.
- Target market price: US\$100 for hydrophone only, \$200 with autonomous recorder
- Minimum frequency response: 10 Hz 40 kHz
- Minimum sensitivity: -180 dB re V/uPa
- Minimum depth rating: 20 m
- Including pre-amplifier
- Omnidirectional
- Calibratable (e.g. adaptor piece to fit into pistonphone)

The IQOE Task Team will work with the industry partner(s) to gather input and feedback from the user community, support prototype testing, and explore possible sources of funding.

Interested parties may contact lucille.chapuis@bristol.ac.uk for further information.

Expression of interest deadline:

31 January 2024







ABOUT THE TASK TEAM

The international Task Team on Low-Cost Hydrophones for Research, Education, and Citizen Science was created in 2023 under the auspices of the Partnership for Observation of the Global Ocean (POGO) and the International Quiet Ocean Experiment (IQOE). It has been surveying the need for low-cost hydrophones in different communities (research, education, public) and identified the necessity for a new hydrophone design which would benefit research, education and citizen science. The Task Team will also implement a platform to promote and educate on best practices to use hydrophones and report on its development.

This programme will contribute to the implementation of the <u>Ocean Sound Essential Ocean Variable</u>, providing guidance for the addition of acoustic observations to the Global Ocean Observing System (GOOS) with the aim to define a baseline of how ocean sound observations are collected, analysed, managed and reported.

Task Team Members

Mihai Burca

Lucille Chapuis (chair)

Tess Gridley

Xavier Mouy

Artash Nath

Sophie Nedelec

Rob Williams

Walter Zimmer

