

# European research project to develop innovative sensing technology to improve water quality monitoring

*IBAIA - A new initiative to tackle the increased demand for improved water quality monitoring solutions to meet the European Green Deal objectives.*

BRUSSELS, BELGIUM, January 17, 2023 /EINPresswire.com/ -- On December 09th, 2022, a multidisciplinary team of European researchers launched a new, four-year research programme to develop cutting-edge in situ sensors for real-time water quality monitoring.

The IBAIA project draws on expertise in material science, microfluidics, data processing, and integration/packaging technology and aims to develop four novel optimally functionalized sensor modules based on complementary photonics and electrochemical technologies to improve water quality monitoring, enable the development of water pollution countermeasures, and facilitate efficient water treatment administration in support of the EU Zero Pollution for Air, Water, and Soil Action Plan, a key component of the European Green Deal.

The four modules will include photonic sensors in the visible and near-infrared for the detection of microplastics and salinity measurement, and mid-infrared for organic chemical detection; electrochemical sensors for nutrient salts and heavy metal detection; and chemical transducer coupled with an optical sensor (Optode) for sensing physicochemical parameters. Within the project, these four sensors will be designed, tested, and packaged into a modular advanced multi-sensing system that can monitor a broader range of parameters with greater accuracy than existing solutions while also being more cost-effective, reliable, environmentally friendly in manufacturing, and user-friendly in operation. The integrated multi-sensing system will be tested at the end of the project in real in situ conditions.

The IBAIA project is expected to result in a highly competitive product that will serve as a one-size-fits-all solution for many end users, with a highly EU-centric supply chain, and provide technological innovation that will aid in the achievement of the European Green Deal actions. For further details and to follow the work progress, please visit IBAIA's website at [www.ibaia.eu](http://www.ibaia.eu) or contact [ibaia-modus@modus.ltd](mailto:ibaia-modus@modus.ltd).

## CONSORTIUM AND FUNDING:

IBAIA has received €4.7 million in funding from the European Union's Horizon Europe Framework

Programme under grant agreement No 101092723.

Coordinated by the CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE (CNRS), the IBAIA consortium includes members from (in alphabetical order):

- Belgium (UNIVERSITE DE MONS)
- Czech Republic (ARGOTECH AS, UNIVERZITA PARDUBICE)
- Finland (TAMPERE UNIVERSITY, UNIVERSITY OF EASTERN FINLAND)
- France (BUREAU DE RECHERCHES GEOLOGIQUES ET MINIERES, CENTRE DE DOCUMENTATION DE RECHERCHE ET D'EXPERIMENTATIONS SUR LES POLLUTIONS ACCIDENTELLES DES EAUX, CNRS, INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER, KLEARIA, MIRSENSE, UNIVERSITE DE RENNES 1, SCIRPE)
- Germany (LEIBNIZ-INSTITUT FÜR PHOTONISCHE TECHNOLOGIEN E.V., UNIVERSITAET DUISBURG-ESSEN)
- Poland (VIGO PHOTONICS S.A.)
- Spain (MICROLIQUID SL)
- UK (MODUS RESEARCH AND INNOVATION LIMITED)

Izabella Otalega

MODUS Research and Innovation

IBAIA-modus.@modus.ltd

---

This press release can be viewed online at: <https://www.einpresswire.com/article/610741138>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2023 Newsmatics Inc. All Right Reserved.