Our innovative battery technology is designed to power sensors and devices in the most demanding environments, ensuring reliable performance and seamless connectivity.

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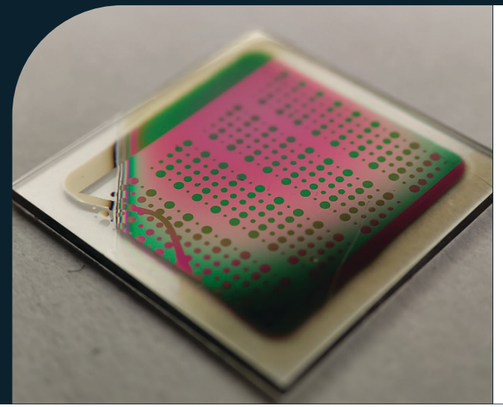

Get in touch

www.oxybatt.com

Funded by the European Union

The Oxybatt Project was funded by the EU Commission in the framework of the Horizon Europe – EIC Transition Open programme.
Grant agreement 101158721

OXYBATT

Beat the Heat

High-temperature oxygen batteries
for Industrial Internet of Things.

The Industrial Internet of Things (IIoT) is transforming industry as we know it. By integrating connectivity, real-time reconfiguration, and controlled production, IIoT is enhancing safety and boosting productivity across various sectors. However, IIoT solutions can nowadays not be applied in harsh environments such as energy-intensive processes due to safety concerns and technical limitations.

The EU-funded project OxyBatt will enable IIoT and Industry 4.0 approaches in diverse industrial settings where traditional IIoT solutions fall short.

High Temperatures

HT-OIBs can continuously operate at higher temperatures between the range of 200° and 400°C, without the need for costly and heavy cooling systems.

Safety

Our batteries present an all-solid state architecture based on ceramic, non-flammable materials, eliminating safety concerns.

Integrable

We use advanced thin-film technology to achieve a miniaturized, lightweight design that can easily be integrated for powering IIoT devices.

Maintenance Free

HT-OiBs work just like any other rechargeable battery. Uniquely to HT-OiBs, at the end of life the initial performance can be easily restored by exchanging oxygen with the atmosphere, ensuring exceptional device lifetime.

Minimized environmental impact

Energy is stored in the form of oxygen ions, with no use of scarce and geolocalized elements such as Li and Co, a current concern for the EU.

Storage Capacity

The energy storage capacity is comparable to state-of-the-art Li-based batteries.

During the project, the product will be integrated into a commercial IIoT device demonstrating the potential to enter the important market of predictive maintenance in harsh industrial environments as a safe and sustainable solution.

Smart piping

HT-OiBs enables the implementation of sensing devices for pipe health management or control of operation and the access to previously inaccessible data.

Aeronautics, aerospace and automotive

Implementing HT-OiBs allows for the monitorization of currently inaccessible information.

Oil and gas drilling

HT-OiBs enable the use of electronic sensors or gauges for measurement-while-drilling (MWD) and logging-while-drilling (LWD) applications.