

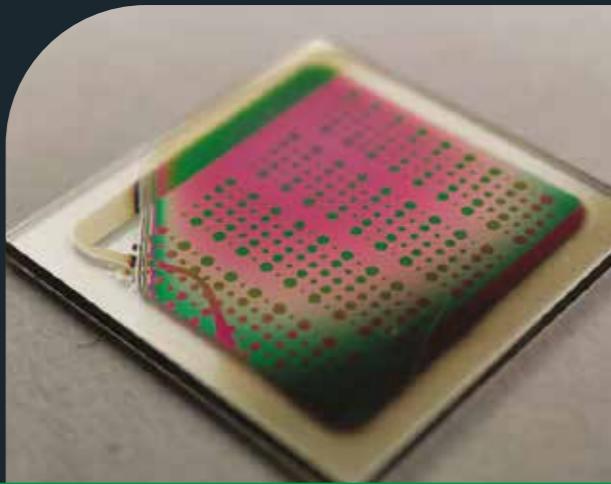
Our innovative battery technology is designed to power sensors and devices in the most demanding environments, ensuring reliable performance and seamless connectivity.

## Partners



# OXYBATT

Beat the Heat



## Get in touch



[www.oxybatt.com](http://www.oxybatt.com)



Funded by  
the European Union

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**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.



#### **Made for Harsh Environments**

Operates continuously at high temperatures (200 to 600 °C) without needing costly or heavy cooling systems.



#### **Flexible Design**

Integrates easily into any device due to a miniaturized and lightweight thin-film design.



#### **Sustainable**

Minimizes environmental impact by storing energy with oxygen ions, avoiding scarce elements like Lithium and Cobalt.



#### **Safe**

Ensures safety through an all-solid-state, ceramic architecture made of non-flammable materials.



#### **Maintenance Free**

Achieves an exceptionally long, maintenance-free lifetime by performing healing cycles that restore its initial capacity.



#### **High Capacity**

Delivers an energy storage capacity comparable to state-of-the-art lithium-based batteries.

**Our technology is designed for integration into various cutting-edge applications, demonstrating its potential across diverse and demanding environments.**



#### **Industrial IoT**

Enables robust sensing and control for critical infrastructure within harsh environments. Ideal for powering sensors in extreme conditions found in a variety of industrial settings, it provides access to previously inaccessible data for predictive maintenance and monitoring.



#### **Geothermal**

Provides a robust power source for electronic sensors and gauges used in measurement-while-drilling (MWD) and logging-while-drilling (LWD), enabling continuous data collection within superhot geothermal wells.



#### **Space**

Offers a reliable energy solution for powering scientific instruments in extreme heat environments, such as those found on Venus, where conventional batteries fail.



#### **Custom Engineering**

Delivers a durable power solution for electronics in a variety of extreme settings, such as jet turbines, exhaust manifolds, or the cooling systems of nuclear reactors, ensuring reliable and sustained performance where conventional options are not viable.