Safe Path to Green Energy: Digital Catapult launches a new Hydrogen Sensor Accelerator Programme

Digital Catapult, the UK authority on advanced digital technology, announces five pioneering UK businesses chosen for a new Hydrogen Sensor Accelerator Programme.

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Aqueducts were built by the Romans throughout the entire Empire, in order to provide clean water to the population. This innovation was a revolution, for it connected cities to fresh water, improving global hygiene and therefore expanding the life expectancy and drastically reducing the risk of diseases.

This revolution was such that their impact is still measurable and visible to this day. Roman aqueducts can be found throughout Europe, North Africa, and the Middle East. These existing specimens are proof of their importance and pertinence.

However, modern studies have revealed that the water transported through the aqueducts carried important amounts of lead, which might have been harmful to the population.

In a world where the need for new green energy and technology grows bigger with each passing day, the need for regulator is also growing to avoid the flaws of past technology.

Our blue planet requires more green energy, and this green energy requires efficient watchdogs. It is in this state of mind that Digital Catapult might have the remedy to heal our sick globe.

In its mission to make hydrogen, the life-changing green energy, more accessible and more safe, *Digital Catapult* has announced five pioneering UK businesses chosen for a new Hydrogen Sensor Accelerator Programme.

Answering a growind demand

Digital Catapult, the UK authority on advanced digital technology, has launched a first of its kind accelerator programme to propel hydrogen into the UK's industrial landscape, amid greater demands from businesses to be able to use hydrogen to meet their sustainability objectives.

Digital Catapult's Hydrogen Sensor Accelerator is a first-of-its-kind eight-week programme to deliver the UK strategy for hydrogen technology. The aim is to accelerate the development of sensor products for UK industry, driving sustainable growth of the UK's Hydrogen energy sector. Five pioneering businesses have been selected for the programme and will be supported as they navigate the competitive investment landscape to secure funding and establish a strong market presence.

Support from industry mentors

As part of the *Hydrogen Innovation Initiative (HII)*, the Hydrogen Sensor Accelerator is a transformative programme supported by *Innovate UK* and the *Industrial Advisory Board* with a vision to make hydrogen technology a cornerstone of the UK's industrial landscape. Partners of the wider Hydrogen Innovation Initiative include the *Catapult Network*, the *Aerospace Technology Institute*, the *Net Zero Technology Centre*, and the *National Physical Laboratory*, demonstrating the value of industry-

wide collaboration to drive adoption of pioneering new hydrogen solutions.

With tailored support from industry mentors, the participating companies will receive access to state-of-the-art facilities to accelerate their market readiness, helping to sharpen the UK’s competitive edge in hydrogen innovation.

The accelerator will help meet growing demand from UK businesses that consider hydrogen to be a cornerstone of their sustainability strategies. These businesses require effective mechanisms to produce, store and use hydrogen safely and responsibly, and sensors are a critical tool to achieving this. The sensors and other solutions developed through the programme will ensure safety in hydrogen plants, optimise efficiency, maintain quality, monitor infrastructure, and support the overall growth of hydrogen as a reliable energy source in the UK.

"We’re thrilled to launch this groundbreaking programme to accelerate the development of sensor products in hydrogen, a catalyst for clean energy innovation." says Geraldina Iraheta, Chief Commercial Officer at Digital Catapult

A fine selection

The five companies joining the Hydrogen Sensor Accelerator Programme are:

- *eLansys*: eLansys solutions enable intelligent places through effective understanding and automation. eLansys detect and analyse the complex interactions that occur between the environment, infrastructure, assets, equipment and people within a space allowing a deep understanding of the effectiveness, productivity and resilience of a place.

- *Hy-Met*: a UK based deep-tech instrumentation startup established in January 2021 and based at Tyseley Energy Park, Birmingham. Hy-Met's cost-effective fluid flow/property measurement meter for hydrogen and other future energy gases uses proprietary novel ultrasonic sensor/hardware design and advanced signal processing algorithms to help tackle measurement challenges focusing on clean energy and manufacturing sectors.

- *Bohr*: established in August 2021 to bring fresh ideas and enabling technology to the emerging renewable gases market, drawing on a team of experienced innovators from related energy gas analysis and automation backgrounds. Bohr Limited, located in Stone, is a team of experienced engineers dedicated to green energy solutions. They offer innovative products, bespoke solutions, and plant optimisation services in the fields of natural gas, hydrogen, and biomethane. Committed to achieving net zero, Bohr invests in R&D to unlock clean energy.

- *DefProc Engineering*: DefProc Engineering, established in 2013 and based in Liverpool, is an innovation partner specialising in R&D, design for manufacturing, and small-run production. With a focus on IoT devices and sensor networks, they offer end-to-end services from concept to regulatory testing, delivering groundbreaking projects across various cities and sectors.

- *Gas Sensing Solutions*: based in Cumbernauld, UK, is a pioneering company in the development of innovative, robust and efficient solid-state sensing technologies for optimised, high-performance, ultra-low-power gas detection and monitoring. Thanks to their unique combination of advanced technologies and collaborative engineering support GSS help customers to simplify the design and speed the time to market of their gas sensing designs without compromising on

quality, performance and reliability.

> "*Together we propel the future forward, pushing at boundaries to empower a sustainable tomorrow, and this is one of several energy projects that we are working on right now at Digital Catapult." adds Geraldina*

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