## Research & Development in the UK – Be a part of the Innovation

In November 2021, the UK Government published its <u>Innovation Strategy</u>, with a vision to make the UK a global location for innovation by 2035. In March 2022, the largest ever budget of £39.8 billion for <u>research & development</u> for the period 2022-2025 was announced, with the aim to help deliver the government's innovation strategy and advance its ambitions as a scientific superpower.

Three key areas of this strategy are Net Zero, Healthy Living and Agriculture, and Digital and Technologies. The different elements that characterise innovation - discovery, invention, development and manufacturing require a complete ecosystem of companies, governments, research and development organisations, funders and international partners in order to succeed. This is why <u>UK Research & Innovation</u> was established in 2018, which is responsible for uniting the seven disciplinary Research Councils, Research England, supporting research and knowledge exchange in universities and Innovate UK, the UK's innovation agency.

In chemistry in particular, it is important to invest in innovation because it is only through this that it is possible to work on the development of new technologies from water treatment membranes and drought-resistant crops, to new antibiotics and vaccines, batteries and solar cells.

British chemical companies lead the way in innovation - not necessarily only the large companies but SME's which start at a University and manage the transition to becoming a company. The UK is home to the best universities in the world. In the field of chemistry in particular, the universities of Oxford, Cambridge, Imperial College London, York University and the University of Manchester are pioneers. One example of a University of Manchester spin-off is the company Holiferm. The company's founder, Ben Doleman, explored the possibilities of bringing environmentally friendly organic products to market. Holiferm's first process, developed from a research and development lab to a commercial plant, is a patented fermentation with integrated gravity separation technology, for the production of sophorolipids. Holiferm is the first company to use this technology. It uses natural raw materials in a process that produces significantly less CO2 and consumes less energy compared to conventional surfactant production methods using petrochemicals. The biosurfactants produced by Holiferm are more sustainable, milder and more efficient.

Since refining and optimising this process, Holiferm has worked on the rhamnolipid production process and the maximum loading threshold. These processes are currently being piloted and are due to be introduced commercially in 2024.

The UK has a long history of innovation and commitment to world-leading research and development. The need to research more and develop more, particularly in chemistry and biotechnology, is endless - without this we could not meet the challenges we face. The UK innovation landscape is optimal for companies looking to invest and grow in this area for many reasons.

Interested in finding out more about the above project or how to grow your idea into a company or get your product exportready? The UK's Department for Business and Trade (DBT) team are here to help you. Our mission is to advise, support and promote British businesses wanting to grow and export as well as open up new markets for businesses. We have staff all around in the globe based in British Embassies, Consulates and missions.

## For more information or assistance go to www.great.gov.uk or email: DBTGermany.enquiries@fcdo.gov.uk

Department for Business & Trade