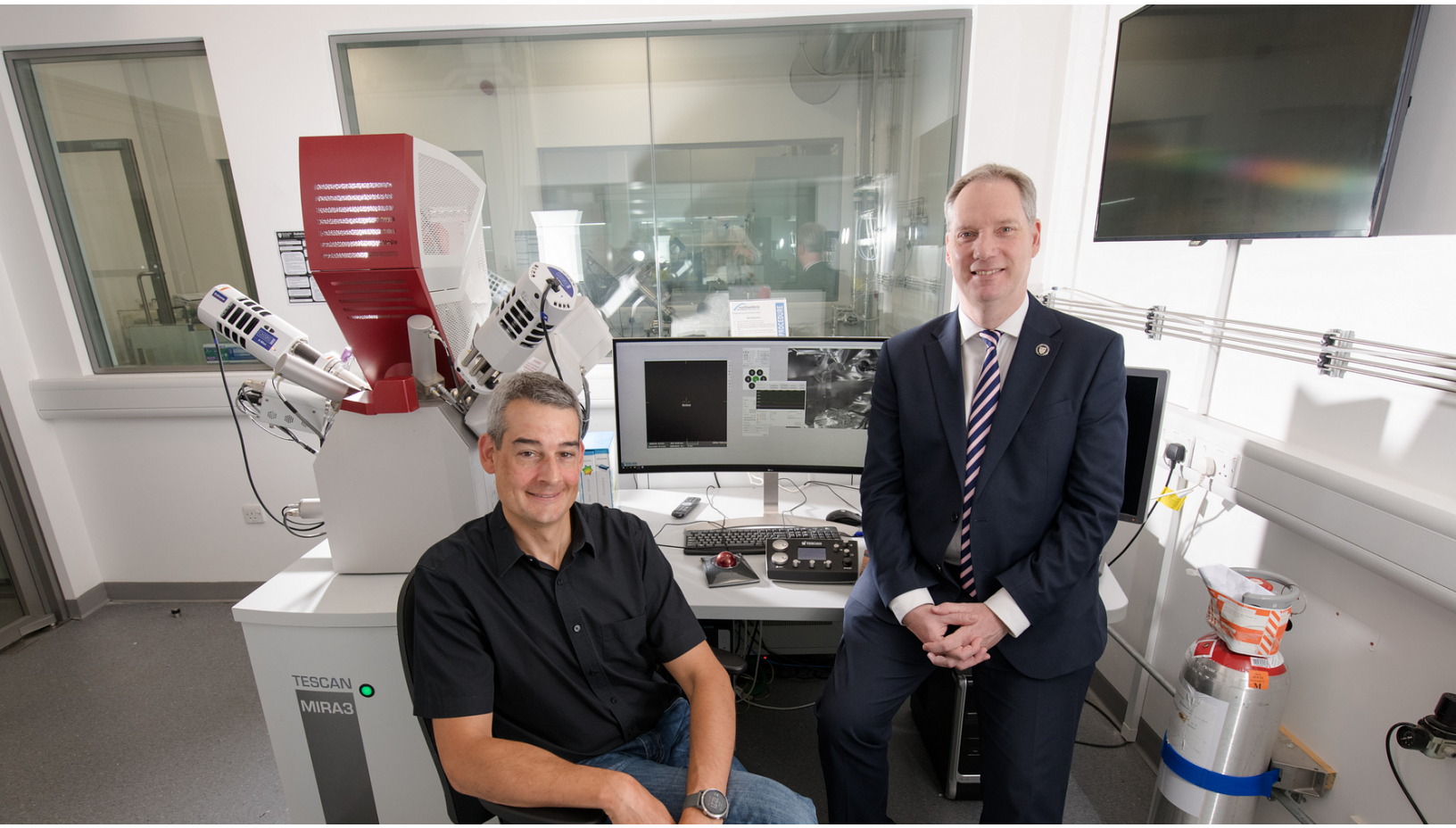
Northumbria University NEWCASTLE



Professor Guillaume Zoppi and Professor John Woodward are pictured in the Materials Characterisation Suite at Northumbria University.

Jul 20, 2023 10:15 BST

Northumbria secures investment in research facilities from the Wolfson Foundation

An award of £1 million to support the expansion of engineering and surface science research facilities at Northumbria University has been announced today by the Wolfson Foundation.

Centred around the University's existing Materials Characterisation Suite, the investment forms part of a £3 million package which will transform and

upgrade laboratory facilities at City Campus in the heart of Newcastle upon Tyne, dedicated to the analysis and development of materials used in the renewable energy, healthcare, biomaterials and engineering sectors.

New state-of-the art equipment to support this scientific research will allow high resolution nano and microscopic imaging, and sensitive three-dimensional chemical mapping across longer ranges and parameters than is currently achievable.

The Wolfson Foundation is an independent grant-making charity with an emphasis on education and research which provides funding for projects across the UK.

The new technology will complement other facilities available within the region's universities while providing a unique concentration of advanced equipment available in one location. The facility will support the research of more than 100 academic staff and students annually.

Among the specific equipment funded by the award is a focused ion beam scanning electron microscope for the preparation and high-resolution imaging of samples, and a secondary ion mass spectrometer to probe the chemical information of inorganic materials.

Areas of research excellence already being undertaken using the Materials Characterisation Suite include thin film photovoltaic technologies for terrestrial and space applications, and coatings for more durable medical implants and prosthetics.

Professor Guillaume Zoppi, whose research specialises in photovoltaic materials used to absorb sunlight and generate electricity, led the funding proposal.

"This investment will allow us to upgrade or replace a number of key pieces of technology which will not only be crucial to engineering research but will also have varied and important applications for our specialists in geography and environmental studies, health and life sciences, and many others," explained Professor Zoppi.

"This is an important development in our research journey and will open up

further opportunities for collaborations to ensure we can continue developing solutions for the future."

Professor Guillaume Zoppi led the funding proposal which will allow Northumbria University to upgrade or replace a number of key pieces of technology.

The boost to research facilities follows a multi-million pound investment in Northumbria's Thin Film Laboratory, Microelectronics and Communications Laboratory and the Power Electronics and Space Laboratories in recent years.

Professor Andy Long, Vice-Chancellor and Chief Executive of Northumbria University, said: "Over the last decade, Northumbria has transformed into a research-intensive university with a focus on changing lives and unlocking potential for all. Northumbria's success was borne out in the Research Excellence Framework (REF) 2021 where the university recorded the biggest rise in research power of any UK university for the second time, moving up 27 places to 23rd.

"This award from the Wolfson Foundation will help us build on our success even further and cement the University's global reputation as a centre for research excellence."

Most of the engineering and materials research at Northumbria takes place within the Faculty of Engineering and Environment through the departments of Mathematics, Physics and Electrical Engineering and Mechanical and Construction Engineering.

Professor John Woodward, Faculty Pro Vice-Chancellor for Engineering and Environment, said: "We are excited that the Wolfson Foundation has been able to support the development of this important new resource for the North East of England at Northumbria.

"This is a significant award – the biggest philanthropic grant the University has received to date – which will provide transformational capacity in research facilities for all academics working on materials science."

Paul Ramsbottom, Chief Executive of the Wolfson Foundation said: "Northumbria is putting in place an impressive range of equipment to help design the advanced materials of tomorrow – materials which can drive

innovation in energy efficiency, carbon capture and healthcare, among other fields.

“We are delighted to make our first capital award to the University to underpin high quality research with potential benefits both for the region and well beyond.”

Discover more about the areas of research excellence at Northumbria by visiting www.northumbria.ac.uk/research

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UNIVERSITY OF THE YEAR 2022 (Times Higher Education Awards)

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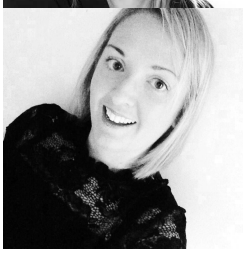

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