PRESS RELEASE

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University of Southampton to receive the first JBX-8100FS G3

With the exception of Japan, the University of Southampton will be the home to the world's highest Accelerating Voltage Direct Writing Electron Beam Lithography (EBL) System. The system has Gaussian Beam Optics designed to implement High Throughput and High Precision requirements from a wide range of applications. The machine will be housed in a state-of-the-art facility for microfabrication and high-spec nanofabrication, with a wide range of characterisation capabilities, housed in a purpose built, 820m^2 cleanroom in the Mountbatten Complex at the University of Southampton.

Commenting on the new investment, Prof. Martin Charlton of the University of Southampton said:

"We are highly privileged to be the first facility outside Japan to host this next generation 200KV Electron Beam Lithography System. Southampton has over 30 years of experience in electron beam lithography. We are very excited about the new research opportunities provided by this equipment, which will help catapult developments in the fields of quantum computing, silicon photonics and next generation electronic systems. The equipment is complemented by our existing suite of microfabrication equipment which enables research,

development and production of a diverse range of integrated nano-scale devices for electronics, photonics and bio-nano technology. The machine puts Southampton firmly at the forefront of this field."

JEOL UK Managing Director, Mr Shaun Quill, said:

"This is a wonderful opportunity for JEOL and we are excited to be supporting the University of Southampton as a global frontrunner in the field.

This new system will bring the latest EBL technology from JEOL to the UK, putting the University and the UK academic community on the map as the first centre to benefit from JEOL's cutting edge technology outside Japan, supporting a variety of fields from fabrication of advanced nanostructures, to production of silicon photonics devices, to components for quantum computing and communications.

To highlight the value of the University to JEOL UK, not only as a long term customer but also as a frontier in the field, JEOL UK is also providing the Centre with a three year loan of the JEOL JSM-IT800i Scanning Electron Microscope, the first to be installed in the UK. This advanced SEM is equipped with the latest technology and automations to meet all the requirements of an advanced Nanofabrication facility."

About University of Southampton

Southampton University is one of the UK's leading universities with a world-class research reputation. The School of Electronics and Computer Science is the largest school of its kind in the UK and is well recognised for the quality of its research, knowledge exchange and educational contributions.

The Sustainable Electronic Technologies group within ECS has pioneered research in MEMS, Bio-Sensors, CMOS, Bipolar devices, and Photonic Crystals, and has considerable expertise in the field of micro-fabrication and electron beam lithography.

The Zepler Institute is a world-leading institute for photonics research. It is led by some of the leading figures in the field of photonics, who have contributed significantly to the growth of the photonics industry. The Director of the Zepler Institute, Sir David Payne, was recently awarded the VinFuture Foundation Grand Prize in recognition of his invention of the erbium-doped fibre amplifier (EDFA), which made possible the internet optical backbone. Work in the Institute that will benefit from the new JEOL tools include integrated silicon photonics, picophotonics and quantum devices.

About JEOL

JEOL is a leading global supplier of scientific instruments used for research and development. Utilising its unique technologies, products, services, and knowledge, JEOL helps its customers make significant breakthroughs in product development and scientific research. JEOL pursues the world's highest technology based on creativity, research and development, thus contributing to progress in both science and human society through its products.

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