



## CASE STUDY

# QUANTUM SCIENCE AND HITACHI HIGH-TECH EUROPE

Since its inception, one of the key principles underpinning Sci-Tech Daresbury has been the importance of collaboration. The campus location attracts businesses from a range of different innovative sectors, and while all of them are experts in their respective fields, it is impossible to underestimate the possibilities brought about by a fruitful partnership with an organisation that can use their own skills to enhance another's offering. Indeed, 70% of campus companies collaborate with at least one other organisation on-site and this delivered around £20m of sales or cost savings for campus companies in 2019.

## OPPORTUNITIES FOR COLLABORATIONS

Sci-Tech Daresbury sees it as its duty to ensure such collaborations are given every opportunity to occur, and so organise regular networking events on-site, proactively facilitates introduction between companies and encourages businesses to socialise within the campus. However, sometimes all it takes is one e-mail to set off a fruitful and dynamic new working relationship.

That was the case for Quantum Science, a leading material science company and Hitachi High-Tech Europe.

Global giant Hitachi High-Tech set up a lab at Sci-Tech Daresbury in 2018 for its microscopy arm, with a particular view to being 'closer to science' – both in terms of the leading universities in the North West, and the many companies based on the campus itself.



Moving to Daresbury has proven to be a great decision for us. One of the most important reasons for our relocation was to find new collaborators and to apply our microscopy technology to new materials and challenges.

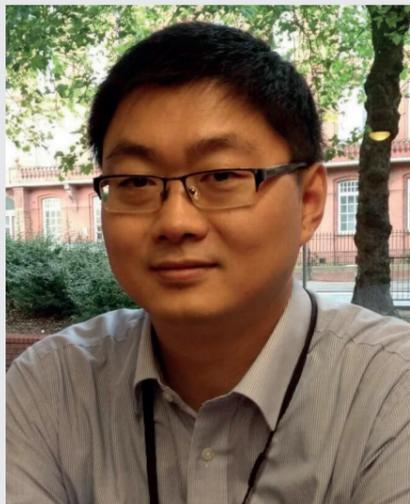


– MIKE DIXON, MICROSCOPY SECTION MANAGER,  
UK/IRELAND FOR HITACHI HIGH-TECH'  
NANOTECHNOLOGY SOLUTIONS BUSINESS

## QUANTUM SCIENCE

From its Daresbury base, Quantum Science has seen strong growth in recent years. Its fourteen strong team are developing novel nanomaterials for customers in Europe and Asia for use in semiconductor, biomedical and environmental applications.

Upon realising that there were certain synergies between Hitachi High-Tech's work in providing customers with easy to use solutions in electron microscopy and scanning probe microscopy and Quantum Science's work in advanced materials, Sci-Tech Daresbury's business development manager sensed an opportunity.



**DR HAO PANG**  
FOUNDER AND CEO OF  
QUANTUM SCIENCE

“John Leake, part of the Sci-Tech Daresbury team, saw the potential that could come from us working together and introduced us by e-mail, I then met Mike and his team and they talked me through their equipment and services. We then set about working together to get materials characterised and also purchased Hitachi High-Tech equipment.”

“ Our attitude to fellow companies at campus is simply to discuss the problem and see what we can do. We’re more than happy to spend a few hours on a problem. When we utilise our resources and expertise to develop something useful, and give easily interpretable results to help drive the development of a technology like we did with Quantum Science, that’s really exciting. There are many benefits to working so closely with a campus neighbour, Hitachi High-Tech has advanced instruments and quality people that can provide a cutting edge service, but also its team is able to share its knowledge and pass on the learnings that come from being an international leader in its field. As collaborators they were able to talk us through elements where we could improve our work and help shape our designs for the future. As a materials innovation company with less resources, we need this help – our time is critical and so Hitachi High-Tech can help our outputs be more efficient. ”

– DR HAO PANG

Having worked together to develop a microscopy solution already, Hao and Mike look forward to further collaboration in addition to continuing to tap into the resources at their disposal at Sci-Tech Daresbury.

“ The move to Daresbury has definitely paid off for us. We’re really grateful for the business support that’s on offer, especially the networking support which has opened doors which were previously closed. It’s the perfect location for us to have a collaboration hub where we can offer method development and work closely with partners from academia and industry – on campus, in the UK and throughout Europe. ”

– MIKE DIXON

“ I look forward to continuing to collaborate with Mike and Hitachi High-Tech. This is an exciting time for Quantum Science, with several opportunities on the horizon for integrating materials and introducing new features into analytical instruments – the support available on site at Sci-Tech Daresbury has been crucial for our ongoing development. ”

– DR HAO PANG



The collaboration between Quantum Science and Hitachi High-Tech illustrates perfectly the supportive and dynamic environment cultivated at Sci-Tech Daresbury, where the next step to getting an innovative new product to market or developing a scientific breakthrough can sometimes be sparked by a chat with your campus neighbour.