



Daresbury Science  
& Innovation  
Campus

Digital ICT

# Shaping the Future of Science & Innovation

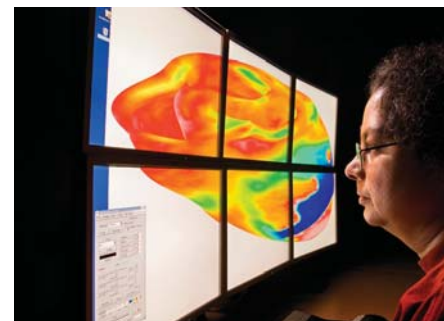
Daresbury Science & Innovation Campus (Daresbury SIC) is an internationally recognised location for hi-tech businesses and leading-edge science. It represents a fundamentally new approach to driving UK competitiveness in global science and innovation. Daresbury SIC was formed by the Northwest Regional Development Agency (NWDA), the Science & Technology Facilities Council (STFC), Halton Borough Council and the research intensive universities of Liverpool, Lancaster and Manchester.

The Campus provides a unique environment for innovation and business growth, with knowledge sharing, collaboration and networking, and offers major opportunities to the Digital ICT sectors for knowledge exchange and the development of collaborative activities.



## A National Technology Pool

Daresbury SIC occupies a powerful position in both the supercomputing and digital and creative industries. As a leading UK supercomputing facility it offers high performance and distributed computing & data services, suitable for small and large organisations. And as a focal point of digital and IT based commercial activity, it draws on its strong links with the communities that have grown around its stakeholder universities in Lancaster, Liverpool and Manchester.



## Industry Focus

The Campus enjoys a strong relationship with the digital and creative industries cluster in the Northwest co-ordinated by the NWDA. The NWDA has a strategic responsibility for sector development and inward investment into the range of businesses that include digital media, software, tv, film, advertising, marketing, music, graphic design, product design, designer fashion, visual and performing arts. Northwest Vision and Media is the cluster support organisation sponsored by NWDA and works on behalf of the digital and creative industries in the Northwest in growing a world-class digital and creative economy within the region. It is a member of the Daresbury SIC network.

## Technology Exchange

The facilities and services of STFC, managed by its leading research groups active in areas such as supercomputing and dynamic modelling, can be accessed through its knowledge transfer organisation, STFC Innovations Ltd, which progresses individual projects through various business models to the point of implementation as commercial licenses or spin-out companies.



**STFC Innovations Ltd**

[www.daresburysic.co.uk/sectors/digital](http://www.daresburysic.co.uk/sectors/digital)

# Connecting Science with Industry

Through Daresbury Laboratory, STFC operates a number of scientific departments that provide services to commercial and industrial organisations seeking to implement large projects.

The **Hartree Centre**: currently being developed, this major new computational science centre will enable the Campus to engage with partners in addressing global issues requiring large scale computing and modelling. It is part of a £65 million government investment in the Campus.

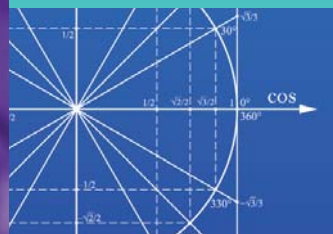
The **Computational Science & Engineering Department** provides world-class expertise and support for the UK theoretical and computational science communities in both academia and industry.

The **e-Science Centre**, vital to the successful exploitation of powerful next generation scientific facilities. Collecting data and metadata from scientific experiments carried out at facilities and making this data available for further analysis by collaborators through grid or cloud computing resources.

The **Electronic Systems Support Group** provides a complete instrument design service including PCB layout, manufacture and assembly.

## Did you know?

Daresbury SIC's most powerful computer could solve all the maths problems done by every secondary school pupil in the UK in one year, in less than one fifth of a second.



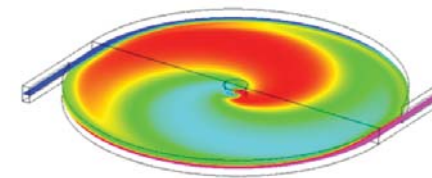
# From Computational Science to Computer Gaming

## Computational Science, Simulation & Modelling

Large scale data storage is a key benefit of Daresbury SIC with access to supercomputing, distributed computing and hosting, and large scale data storage capabilities in the Daresbury Laboratory. Another key benefit is accessibility of high end modelling and simulation capabilities which can be run on the Laboratory's Blue Gene computers. Daresbury SIC offers advanced simulation in science and engineering, providing leading edge computational facilities and evaluation of cost-effective and novel computing technologies, along with exploitation of a comprehensive suite of community and commercial science and engineering simulation codes in materials, life-science, engineering and environmental modelling applications.

## Digital and Creative

Positioned in a geographic triangle that has Salford Media City, Lancaster InfoLab 21 and Liverpool's International Centre for Digital Content at its corner points, Daresbury SIC is becoming an attractive home from home for companies in the digital and creative sector. This extends to companies applying digital technologies in areas such as telecommunications and airport security, with a range of companies active in these areas.



## From Start-ups to Multinationals

The Campus is also home to a rapidly growing list of companies in the digital, creative, IT and telecoms sectors, ranging from start-ups through to strategic project teams from the likes of SGI and IBM. One example of the array of hi-tech SMEs is digital mobile media specialists M-SEND, attracted to the Campus by the high quality environment, commercial network and support infrastructure.

At the blue chip level, IBM was initially attracted to Daresbury SIC by the presence of the supercomputing facility at Daresbury Laboratory, one of Europe's most productive high end supercomputing facilities. Its activity ranges from algorithm development in digital media to solving large scale scientific computing problems.

# The Future for Daresbury SIC

With simulation and modelling playing a key role in all areas of science, and the UK having world class expertise in computational science and engineering there is a need for a national focus and a centre of excellence for critical mass in this area. The Hartree Centre will provide this focus.



The Hartree Centre at the Daresbury Science & Innovation Campus will be a new kind of computational sciences institute for the UK.

This new 'technology gateway' centre will enable cutting edge research in computer modelling – valuable in understanding and predicting a vast range of issues ranging from climate change variability to how cells interact in the body.

The Centre will bring together academic, government and industry communities to focus on multi-disciplinary, multi-scale, efficient and effective computation. The goal is to provide a step-change in modelling capabilities for strategic themes including energy, life sciences, the environment and materials.

## Business at the Heart of Science

The Campus is home to a wide variety of hi-tech businesses, ranging from small start-ups to strategic units of large multi-national corporations.

For a rapidly growing number of digital and creative companies the Daresbury Innovation Centre has become a first-choice facility.

To date, there are around 100 companies on the Campus, with around 50% in the digital sector, attracted to the Campus by:

- A recognised research & development focussed environment with a dedicated STFC account manager and links to a wide network of research intensive universities
- Opportunities for technological and commercial collaboration and fast access to commercial and academic contacts through a hi-tech focussed ecosystem
- Excellent transportation links
- Strong regional, national and international networks, including leading digital, creative networks
- A spacious rural location in the heart of Cheshire
- Tailored business support and connections to major funding streams.

## Committed to the Digital Sector

The Campus has been a sponsor of the Big Chip Digital Awards, the largest digital/creative awards outside of London, as well as the Liverpool Software City digital and creative event, the i-tech Partner pan-European networking programme and the Northern Start Up 2.0 network for digital start-ups. All underlining its commitment to put the right networks in place for its Digital ICT/IT based organisations.

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[www.daresburysic.co.uk/sectors/digital](http://www.daresburysic.co.uk/sectors/digital)



Putting Business at the Heart of Science