

# CCLRC Knowledge Transfer - Creating the Environment for Science and Innovation

The Council for the Central Laboratory of the Research Councils (CCLRC) is one of Europe's largest multidisciplinary research organisations operating the Rutherford Appleton Laboratory in Oxfordshire, the Daresbury Laboratory in Cheshire and the Chilbolton Observatory in Hampshire. The CCLRC manages fundamental research facilities in neutron scattering, high power lasers and synchrotron radiation alongside broad science and technology programmes ranging from space science and high performance computing to particle physics and advanced instrumentation. These facilities and programmes are operated on behalf of the UK's academic community and fellow Research Councils.

Given this remit, we are renowned for supporting and conducting excellent scientific and engineering research. Perhaps less well-known is our commitment to transferring the knowledge generated from our research programmes and facilities to the wider economy. This will enable economic growth in the UK and allow us to meet the challenges set out in the 10-Year Science and Innovation Investment Framework.

We have ambitious and exciting plans for our future Knowledge Transfer (KT) programme. The organisation will continue to build on the successful exploitation of intellectual property through CLIK Ltd, a wholly owned subsidiary of the CCLRC, through spin-outs, licensing and trading. We will also focus on closer engagement with industry through promoting wider usage of our large facilities by industry and other PSREs. This will require specialist marketing of our capabilities in appropriate market sectors. A dedicated team of sector-based marketing professionals is being recruited to take forward this initiative.

The CCLRC is responsible for access to, and development of, the UK's sources for neutrons, synchrotron radiation and high power lasers – all of which offer unique opportunities for materials characterisation and imaging. Data interpretation and subsequent imaging of experimental results are key aspects which allow industrial users to evaluate product performance and development and hence gain competitive advantage. We are currently developing projects which will offer a data

interpretation and analysis service for industrial users in combination with the provision of imaging solutions for industrial applications.

In addition to wider facility access provision, we intend to establish both an internal and external KT awareness programme. Externally this will promote the organisation's potential and capabilities in the KT arena to key stakeholders. Internally the aim is to engender a culture and environment which will lead to greater exploitation opportunities and a greater spirit of entrepreneurship. In combination, we are developing a significant education and training programme which will enable the flow of highly skilled and specialised people between the CCLRC's facilities, industry and universities.

The plans do not stop here. We recognise that in order to deliver this programme it is essential to create the appropriate environment in which to work and to host high technology programmes and industries. Perhaps the most ambitious and innovative aspect of the CCLRC's KT plan is the creation of multi-partner mixed-economy campuses centred around its two major sites.

Together with university and regional partners, we are establishing a new national concept for the delivery of world leading science, innovation and knowledge transfer. In parallel with the Chancellor's recent Budget statement, the Government has announced that the Daresbury Science and Innovation Campus (DSIC) and the Harwell Science and Innovation Campus (HSIC) will be established at the CCLRC's Daresbury Laboratory in Cheshire and Rutherford Appleton Laboratory in Oxfordshire.

In response to the announcement, the CCLRC Deputy Chief Executive, Professor Colin Whitehouse, who is leading the CCLRC KT programme,



*The CCLRC Rutherford Appleton Laboratory which will be the focus of the HSIC. Currently under construction at the site is the Second Target Station at ISIS and the Diamond Light Source.*



*The CCLRC Daresbury Laboratory showing the new Daresbury Innovation Centre and the Cockcroft Centre to the left of the site. The surrounding land has potential for further expansion.*

said “I am delighted with the Government’s announcement and the distinct opportunity that the CCLRC and its partners now have to make a significant contribution to UK wealth creation. I believe this is a truly unique model within the UK and one which I am certain will be a great success for all involved”.

The dual centre model is at the heart of our knowledge transfer plans and builds upon the unique nature of the organisation as a provider of large research facilities, science programmes and associated instrumentation and engineering capabilities. It takes advantage of the complementary activities on both sites and seeks to further strengthen these through co-location of university and industry partners on the sites. Through DSIC and HSIC, we will act as a catalyst for innovation and knowledge transfer.

### **Establishing the model**

In just 18 months, the DSIC has moved from concept to reality and reflects a highly successful partnership between the CCLRC, the North West Development Agency (NWDA), the universities of Lancaster, Liverpool and Manchester, and Halton Borough Council. DSIC aims to attract the cream of high technology companies whose activities will benefit from co-location with the CCLRC and its academic partners. At Daresbury, this “added value” was only possible by the NWDA developing land adjacent to the Daresbury Laboratory.

The first NWDA building opened in

April 2005 and there are already 21 new high tech companies based in the Daresbury Innovation Centre. The Centre Manager, Dr Paul Treloar, anticipates that it will be full well ahead of schedule; “We are negotiating with more than 40 small businesses who want to take advantage of the unique facilities that the Innovation Centre and wider campus have to offer. The current tenants have already attracted venture capital funding in excess of £5 million. It’s a very stimulating environment to work in!”

The second building, originally intended to provide expansion space for the Innovation Centre businesses, will now house the Cockcroft National Accelerator Science Centre funded by the Particle Physics and Astronomy Research Council, NWDA and CCLRC. The Cockcroft Centre will bring together accelerator scientists from the partner universities and ASTeC, the CCLRC’s Centre of Expertise for Accelerator Science and Technology, to create a critical mass of internationally recognised scientists – clearly beneficial to the academic partners, but also a distinct asset to DSIC. The Cockcroft Centre will provide the intellectual focus, educational infrastructure and the essential scientific and technological facilities for accelerator science and technology research and development in the UK.

There is now an urgent need for “grow on” space for the Daresbury Innovation Centre businesses and NWDA is seeking further funding to add two more buildings on the

campus. But this is still just the start. The original partners are planning to establish a company which will oversee the expansion of the campus and Professor Colin Whitehouse believes the future is very positive “We have a ten-year vision for the DSIC, with the CCLRC laboratory at the heart of the concept. DSIC will soon be a reality, placing the North West firmly on the international innovation map.”

### **Extending the concept**

Ambitious plans also exist for the CCLRC Rutherford Appleton Laboratory, based on the DSIC model, which already enjoys close working relationships with its neighbours who include the Diamond Light Source, the UK Atomic Energy Authority, Medical Research Council and the Health Protection Agency. Early masterplanning and concept designs have been developed which provide incubator space for new businesses, specialist research institutes and conference facilities, surrounded by the CCLRC’s existing experimental facilities. With strong backing from the government via its knowledge transfer agenda, it is anticipated that development of the HSIC will commence in the near future.

The CCLRC will be at the centre of each campus, providing the hub through which the partners and tenants at each science park can access the facilities and expertise at the other. This is an exciting prospect to develop a world class model for knowledge transfer, demonstrating better exploitation of public money and making a tangible contribution to the UK economy. We believe that our complete KT programme, including these exciting campus developments, will allow us to provide the step change in our KT programme required to meet the challenge of delivering increased levels of economic growth through innovation.

*Further information on the CCLRC’s KT activities is available by contacting -  
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