

DARTboard

newsletter of Daresbury Analytical Research & Technology Service

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www.darts.ac.uk

DARTS has RECORD YEAR

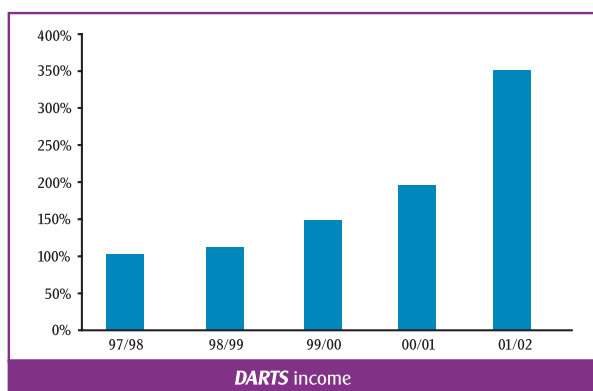
Welcome to the 3rd edition of **DARTboard** – the newsletter dedicated to commercial users of the facilities at Daresbury Laboratory. It's certainly been an eventful time for **DARTS** since the last publication, with significant growth in the **DARTS** activity on the synchrotron source (SRS). Since the **DARTS** relaunch in October 2000, we have experienced over 250% growth in commercial



activity on the facility. This is due to the commitment of staff within the **DARTS**

team who have worked hard to make the experience of commercial customers a satisfying one.

There have been personnel changes in the team and in August we saw the departure of Sam Jones, our life science virology expert, to pastures new. The team wish her well in her new post and welcome Anna Lawless, Paul Vernon and Mark Roberts to the team.



Anna heads up the Structural Biology Laboratory at Daresbury and complements the **DARTS** life science team with considerable biochemical expertise. Paul is the recently appointed Business Development manager for life sciences within CLRC and will work with the **DARTS** Sector team. Mark joins the **DARTS** Chemicals and Specialities team with considerable experience in areas of mineralogy and catalysis. There have also been senior management changes within the Synchrotron Radiation Department at Daresbury and in January 2002 Prof. John Helliwell started his new role as Science Director. John is keen to see commercial activity on the SRS flourish and is extremely supportive of **DARTS**.

DARTS continues to grow in its target sectors of pharmaceuticals and health, chemicals and specialities, oils and polymers and fast moving consumer goods. If you wish to find out more about **DARTS** and how we may be able to help you, please do not hesitate to give me a call.

Liz Towns-Andrews

Liz Towns-Andrews
General Manager



DARTS forms Transatlantic Strategic Alliances

In recognition of our customers' needs, particularly the requirement for rapid access to facilities, **DARTS** has pursued alliances with other like-minded synchrotron facilities committed to commercial service provision.

It is with great pleasure that I can announce that **DARTS**,

the Canadian Light Source and AXAS Inc. at the APS (Chicago) intend to form a tripartite alliance to do this.

Liz Towns-Andrews



AXAS



NEW INVESTMENT at Daresbury - An Update

Following the article in **DARTboard 2** (copies still available) in which we announced the £150 million of new investment on the Daresbury site, we can now report that all aspects of the developments described therein are progressing positively.

The submission for peer review of the CASIM (Centre for Accelerator Science Imaging and Medicine) proposal includes one of the world's first Fourth Generation Light Sources (4GLS). 4GLS is based on free electron laser technology covering the infrared to the soft X-ray wavelengths. Many existing **DARTS** customers attended a 4GLS industrial workshop where the potential of the instrument for novel imaging and spectroscopy measurements was presented. Industrial access to this internationally leading science facility on the Daresbury site will be available through **DARTS**.

The installation of the most powerful electron microscope in the world is also part of the further investment at Daresbury.

The 'SuperSTEM' (**Super** Scanning and **Transmission Electron Microscope**) facility will be built this year and will offer unique atomic resolution electron microscopy capability.

In conjunction with the University of Edinburgh and NuTec Sciences Ltd, Daresbury's Computational Science and Engineering Department is the preferred bidder for the next national high performance computing facility. This will be one of the world's most powerful computers. The synergy of state-of-the-art instrumentation together with powerful computational modelling capability will be a unique offering to **DARTS** customers. Key areas for commercial exploitation will be the modelling of a wide range of industrial processes and formulation conditions.

Alongside the scientific and technical developments at Daresbury we are establishing (together with the North West Development Agency) a business incubator and science park adjacent to the laboratory. Potential spin-out and spin-in opportunities have

already been identified. The vision for the future of the laboratory is a vibrant mixture of high quality leading edge research feeding into a growing commercial community. The **DARTS** team will play a significant part in this process and is looking forward to presenting an even wider range of capabilities to you, the customer.



The plan of new developments at Daresbury Laboratory. New build is indicated by the capital letters. The Science Park is on the left.

KEY

- A** Amenity Building
- B** SuperSTEM Building
- C** Proton Cyclotron Facility
- D** User/Visitor Centre
- E** HPC Technology Centre
- F** 4GLS
- G** Visitor Accommodation and Training Centre
- H** Refurbishment - Block B
- I** Refurbishment - Computer Building - Block C
- J** Proposed General Car Parking
- K** NWDA Site

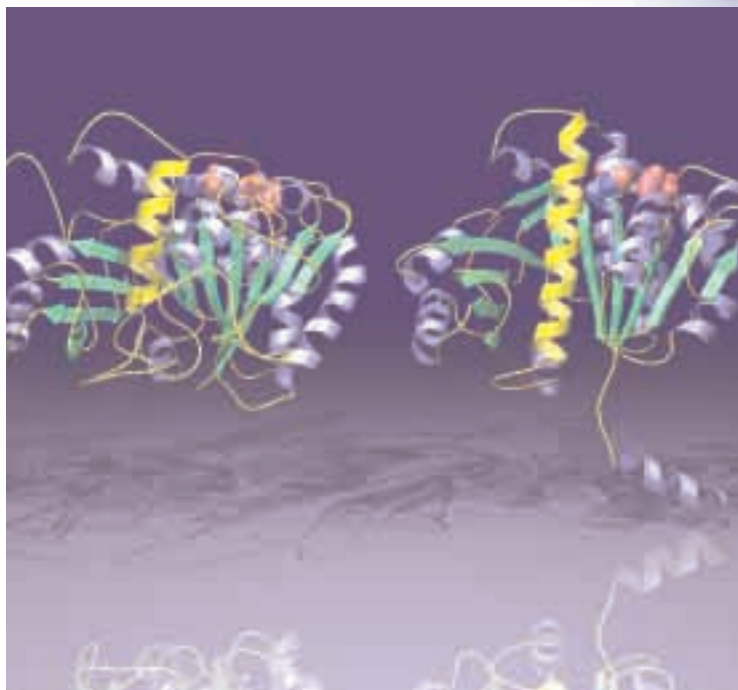
PROTEIN CRYSTALLOGRAPHY (PX) via **DARTS**

The World's First Turn-Key Protein Structure Determination Service

A growing number of **DARTS** customers are taking advantage of the full service capabilities of **DARTS PX**.

DARTS offers a full crystallographic service, from crystal growth, to data collection, structure solution and refinement. Professional operators complete the service in complete confidentiality and to the high standards that have become our hallmark. It is now a routine occurrence for samples to be couriered to Daresbury, where **DARTS** staff carry out the data collection. Why not outsource all your PX needs to **DARTS** ?

Off-line ancillary services operate from our Structural Biology Laboratory and other techniques, complementary to PX, include Infrared Microscopy and Circular Dichroism. You can find out more by logging onto the **DARTS** web site and going to the Pharmaceuticals & Healthcare section.



Where to meet the **DARTS** Team in 2002

DARTS will be attending the following events during 2002.

If you're going to any of these why not give us a call and make arrangements to meet up to find out what **DARTS** can do for you.



DARTS Stand at ChemSpec 2001

National NHS IP Conference 2002 "Partnerships in Innovation"	Manchester Metropolitan University	09 April
IN-COSMETICS	ExCeL, London	09-11 April
11th Annual Fibre diffraction and non-crystalline diffraction workshop	Keele University	19-21 June
ChemSpec Europe 2002	Basel	26-27 June
BACS speciality chemical conference	Basel	26-27 June
XIX Congress of the IUCr	Geneva	06-11 August
Synchrotron Radiation in Polymer Science II	University of Sheffield	04-06 September
SRS User Meeting	Daresbury	10-11 September
Convention of Pharmaceutical Ingredients	Paris	01-03 October
International Biotech Conference	ExCeL, London	19-20 November

*Items in bold indicate **DARTS** will be exhibiting (IUCr, SR in Polymer Science, SRS and IBC) or speaking (BACS) at these events.*

DARTS Web Site gets (Another) Face Lift



We have completely redesigned and improved the **DARTS** web site, from the new, easier to remember, url: **www.darts.ac.uk** to the direct response email facility.

The site also contains industrial case histories and links directly to the Synchrotron Radiation (SR) Department site from which you can access the new SR Annual Report containing many more items on the structural capabilities available commercially through **DARTS**.

Why not pay it a visit and let us know what you think?

Challenge **DARTS** for FREE

Yes, a chance to get something for nothing courtesy of DARTS.

You can get a free materials characterisation consultancy session with the top scientific brains at Daresbury by challenging us to solve your most difficult materials structure determination requirements. You can enter by contacting **DARTS** directly or via the web site **www.darts.ac.uk**

THE DARTS CHALLENGE - Show this to your R & D Manager

We are keen to learn how we can support your materials analysis requirements. This is likely to be in tackling characterisation issues which are beyond the power or sensitivity of your lab equipment. To help us interpret your needs and

match them to our capabilities we offer you a **FREE** consultancy on the material structure challenge of your choice. This could unlock a stalled R & D project, save waste on a process or help you de-mystify some hitherto 'black art'.



To find out how **DARTS** can help solve your materials research challenges contact:
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