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B Cryo: New Members and New Opportunities

July 2011

Dear Reader,

Now that Wimbledon is over, it's Cluster Season for British Cryogenics! With the Annual Cluster Summit in July, followed by Q3 Group Meetings in August, we then lead up to Cluster Day at Rutherford Appleton Lab in September, for which attendees are already registering faster and from further afield than last year!

The Cluster continues to grow and we welcome Boiswood and Oxeta in this issue. The University of Sheffield joined after Richard French took part in the Q2 Cluster Tech Meeting at Culham; and Safety Gas Detection are also new members, following their successful participation in the trade show at the first Cluster Day in 2010. And hot off the press, Quantum Production have joined the BCC too!

As always, you can get in touch via cluster@bcryo.org.uk. Let us know if there's anything you feel we should report, or if you have any news you want to share. And do pass B Cryo on – encourage new [readers to sign up by clicking here](#).

Best Wishes from B Cryo!

B Cryo Clips



Chart Gets Clever

A sign of the cryocooler industry growing up? Chart Industries, one of the world's biggest manufacturers of cryogenic equipment has acquired CFIC (Clever Fellows Innovation Consortium) known for its QDRIVE cryocoolers. CFIC is expected to add \$2m to Chart revenues and will operate as part of Chart's BioMedical business segment. [Click here to read more.](#)



World's Largest Concentrated Cryogenic System

The ITER Cryoplant will have an installed cooling power of 65kW at 4.5K and 1300kW at 80K, providing low temperatures for magnets, thermal shields, cryopumps and diagnostics. With each toroidal field coil weighing as much as a Boeing 747 it's no wonder cooling on this scale is required. Storage for quench recovery and use of centrifugal helium compression has never been deployed on this scale. Procurement of the system is progressing. [Click here for more details.](#)



After ITER Comes DEMO

Already scientists have been gathering at Karlsruhe Institute of Technology to discuss the High Temperature Superconductors needed for DEMO. HTS is expected to allow savings in cryogenic investment and operating cost, and simplify machine design by omitting cryogenic shielding. More detail on presentations at Karlsruhe, including discussion of HTS materials for 50K and up to 20T [can be found here.](#)



Commercial Quantum Computing

In May, Vancouver-based D-Wave announced that Lockheed Martin had entered into an agreement to purchase a quantum computing system to be applied to some of their most challenging computational problems. Oxford Instruments separately announced that its Triton dilution refrigerator provides the low temperature environment essential to the performance of its quantum processor. [Click here for more details.](#)



People News : Born to Be...

With a name like Frost, the vacuum sector could never have been expected to hold Richard (Frost) who has now joined Cluster member Sumitomo Cryogenics in the UK, succeeding fondly regarded Brian Pugsley. Happy retirement to Brian and Good Luck to Richard!

For other people stories, Alex Mason's cryogenic work experience is a [good read here.](#)

Do send in any news or stories you'd like to put in front of the cryogenic community round the world to cluster@bcryo.org.uk. Article for the next issue will be needed by 25 July 2011.

Cluster Events

July 13 : The annual Cluster Summit was addressed by Dr Martin Dare-Edwards.

As Chairman of the Local Enterprise Partnership, Martin is a great supporter of the Cryogenic Cluster. Over 20 Cluster Members took part in a very successful meeting on the Oxford Science Park.

August 17: Cluster Marketing – including discussing how to attract the International Cryogenic Engineering Conference back to the UK (last here in 1998).

August 18: Cluster Technical Group – to be joined by the Chief Executive of the BCGA, along with their Technical Head

August 22: Cluster Skills – being held at Siemens Magnet to gain insight to their assessment of Education & Training needs

September 28: all-day Cluster-Fest at Rutherford Appleton. Register **now** by [clicking here](#).

For table-top space, please contact john.vandore@stfc.ac.uk.

Other Events

A comprehensive guide to events with a cryogenic connection can be found on the British Cryogenic Council (BCC) website at www.bcryo.org.uk/events.php.

New Members

Welcome to Boiswood and Oxeta!



Boiswood has recently taken on the UK franchise for STÖHR Valves, also sold by Cluster Member Kelvin Technology in the USA. STÖHR manufactures bellows-sealed valves used in vacuum jacketed pipe and high purity gases. Boiswood say the valve insert can be removed for maintenance without breaking the vacuum seal. More detail at boiswood.co.uk



OXETA aspires to address the skills gap in advanced engineering sectors by providing technical courses in a variety of technological disciplines. It plans to deliver this utilising a unique blend of science and engineering expertise within the high-tech community. Oxeta has identified growing need for cryogenic training in new applications. More detail at oxeta.com

Organisations wishing to join the Cluster should get in touch via cluster@bcryo.org.uk. In return for British Cryogenics Council support for B Cryo, Cluster Members are required to become Corporate Members of BCC at www.bcryo.org.uk/join.php.

Vacancy

BOC are looking for a helium technician to work in Eynsham. They need someone mechanically biased with an HND. The job is advertised at www.bocjobs.com/uk.

www.bcryo.org.uk
cluster@bcryo.org.uk



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