

## THE HEAT IS ON FOR UKAEA TO NOMINATE UK COMPANIES FOR ITER THE INTERNATIONAL TOKAMAK EXPERIMENTAL REACTOR PROGRAMME

*UKAEA was contacted by the Close Support Unit (CSU) of the European Fusion Development Agreement (EFDA) to nominate UK companies for their forthcoming calls for tender for six engineering service contracts in areas of:*

*Civil and General Plant Engineering, Mechanical Engineering/ Components, Mechanical Engineering/ Systems and Plants, Remote Handling and Machine Assembly, Electrical Engineering and Nuclear and Safety Engineering.*



formal tender documents. Additionally, UKAEA has nominated 25 UK companies for contracts covering the detailed design and manufacture of a cantilevered cassette handling "Cassette Multifunctional Mover" or "CMM" used to install and remove divertor cassettes. The ITER divertor is made up of a number of cassettes which are designed to be ultimately manipulated by a remote handling device. The successful company will be responsible for establishing the most efficient fabrication approach for the major structural elements - the CMM body, adaptor, cantilever arm and hook plate.

"The number of requests from EFDA is very encouraging, as has been the response from UK industry," said Dan Mistry, UKAEA's Fusion & Industry Manager.

*This is a great opportunity for companies who want to get involved with supplying to this landmark energy project. To ensure we respond effectively to EFDA's requests, I would urge companies to register their company profile at the Fusion and Industry web site," said Dan Mistry.*

EFDA is responsible for delivering the European Union's Fusion Research & Development design activities for the multi billion Euro ITER project and plans to place six servicing contracts to cover ITER engineering support design activities. UKAEA responded with a list of 50 companies who, after speaking with UKAEA requested to be put forward to receive the

### How do I find out more about these Opportunities?

Please register on our database if you wish to be informed of any future contract opportunities by visiting our website [www.fusion.org.uk/industry](http://www.fusion.org.uk/industry)

*Don't forget to check out the all NEW Fusion & Industry Website at [www.fusion.org.uk/industry](http://www.fusion.org.uk/industry)*

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# TECHNOLOGY Exhibition

Venue: UKAEA Culham Science Centre  
Date: 5th May 2005

The annual series of Technology Exhibitions which promotes innovation and technology transfer between nuclear, aerospace and defence markets sees it return to UKAEA Culham for the fourth consecutive year on May 5th 2005 with a line up of both new and regular exhibitors.



Organiser Lisa Jones-Taylor from Nu-Tech Associates said, "Interest in the exhibition has got off to a 'flying start' and within the first two weeks of the event being promoted to

potential exhibiting companies, more than 50% of the exhibition capacity had been secured. Situated within a marquee, the Culham exhibition has been a major draw for site employees and regularly attracts a large number of the workforce during its one-day opening period."



**During the course of the day, Dan Mistry, UKAEA Fusion and Industry Manager, will be giving a short overview on the status of the multi-billion Euro project, the International Tokamak Experimental Reactor (ITER), and how UK companies can compete for international supply contracts on this fusion project.**

For more information about exhibiting, please contact the exhibition organisers, Nu-Tech Associates. Tel: 01946-695554 or email: [sales@nu-techassociates.co.uk](mailto:sales@nu-techassociates.co.uk)

## MICROMECH SUPPLIES PRECISION MOTOR TABLE TO JET

Micromech supplies a wide range of motion control products plus associated equipment to industry and manufacturing. Following a recent supplier exhibition at Culham, Geoff Neill from Culham's Experiments Department purchased a precision motorised XY table from Micromech.



*A typical table assembly*

Geoff told Fusion Business, "I needed a table with a 200mm movement and Micromech was able to supply one with 1.0 micron linear feedback encoders at a competitive price. The table forms part of a JET Automated Tile Profiling Rig which has been developed to provide a means of measuring the surface deposition or erosion of carbon tiles installed on the JET machine. The method is to profile the tile surface over a set area before installation and again after removal from the machine. The time interval between measurements can be 2 years so precision and stability are important."

Micromech Ltd Director, Trevor De Wilde, said, "Micromech Systems has built a strong reputation for building and supplying quality cost effective motion systems. We were delighted with the interest from our exhibition at Culham last year where we took several specific application enquiries including this one from Geoff. Following on from this success we will be exhibiting at Culham in 2005."

For more information on Micromech please visit their website at [www.micromech.com](http://www.micromech.com)

# The Heat is ON - Register to be an ITER Supplier

## The Fusion and Industry team

invites UK companies to visit the "new look" Fusion and Industry web site ([www.fusion.org.uk/industry](http://www.fusion.org.uk/industry)) to find out more about the technologies and skills needed to construct and operate ITER. If you believe your company can provide equipment and/or consultancy to the project, **please register your details on the ITER Supplier database on our web site** in readiness for when they are required by the ITER procurement team.



## ITER - still no agreement

The impasse caused by a division between the parties on whether ITER should be built in France or Japan has still not been resolved. The EU and Japan have made similar proposals for what the eventual host should offer the non-host, but this has not yet led to a resolution. Both sides continue to hope that an agreement can be reached that involves all parties, but there is ongoing speculation that if agreement is not reached soon the EU might proceed to construct ITER in France with a subset of the partners.

# ITER Awareness Day



**The Fusion & Industry team** is holding its second ITER awareness day on April 21st 2005 at Culham Science Centre, for representatives from Regional Development Agencies and other key stakeholders about the business opportunities that may arise from ITER. The programme will comprise a brief introduction to the fusion programme at Culham, the UKAEA Fusion & Industry initiative and the ITER project, followed by a discussion on how we can help to engage UK industry for the ITER challenge.

*For further information please contact Dan Mistry, Fusion & Industry Manager on 01235 466607.*

# Enhancing JET's Capabilities

**The major purpose of the current JET shutdown is to further extend the plasma performance and diagnostic capabilities of JET before new experimental campaigns, which will be focused on ITER science and technology.**

Currently UKAEA, which operates JET for experiments by new teams of European scientists, is extremely busy with the delivery of components for installation. Amongst the most important of these European projects, the following deserve special mention:

- Installation of new divertor tiles to accommodate ITER-like plasmas

- Enhancement of JET neutron diagnostics (upgrade of Magnetic Proton Recoil spectrometer and installation of new Time-of-flight for Optimised Rate facility)
- Many new bolometer channels
- Installation of a High Resolution Thomson Scattering system
- Significant upgrade of Charge Exchange Radiation Spectrometers
- New antenna for studies of Alfvén Eigenmodes
- Several state-of-the-art diagnostics for edge plasma and plasma-wall interaction studies.

**To learn more about current JET enhancements, please visit the website at <http://www.jet.efda.org/>.**



*Maintenance work during the 2004 shutdown*



# Culham Innovation Centre

For more information about Culham Innovation Centre and its companies please telephone 01865 408300. The CIC is run by Oxford Innovation at Culham Science Centre, Abingdon, Oxfordshire OX14 3DB.

## Giving Innovation a Home

**C**ulham Innovation Centre has now been open for four years and successfully provides offices and support for 16 companies based at the Centre and one company that takes advantage of the OxiFlex, virtual office service available.

New Managers, Karen Morris and Charlotte Hulland, explain how Culham Innovation Centre is uniquely designed to allow companies to grow with the

minimum amount of risk and worry. "In the last month two companies based at the Centre have increased their office space to expand their businesses. Our aim is to take some of the pain out of getting a new business started. The services we provide mean that companies can concentrate solely on their business without the worry about premises, rates, utilities, security, cleaning and telecommunications."

Culham Innovation Centre is one of eleven similar Centres managed by Oxford Innovation Ltd. Facilities

available at the Centre include central reception and switchboard, telephone answering and messaging service in company name, secretarial support, central fax and photocopier, meeting rooms and conference facilities and access to the Oxford Innovation network of information sources, professionals and consultants.

*For further information on the Centre, or to arrange a tour of the facilities, please contact Charlotte Hulland on 01865 408300 or c.hulland@oxin.co.uk.*

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## Allied Group Gravel Extraction goes Hi-tech

The Allied Group comprises three very different companies, one of which is about to revolutionise gravel extraction in the UK. It has taken five years and over £2 million in research and development for Allied Salvage and Dredge to bring to the market a unique concept that allows for fully efficient and cost effective recovery of gravel from flooded gravel pits. "No one else in the UK offers a service that can compete with ours," claims Director Thomas Olunloyo, "with gravel in ever greater demand, our technology allows aggregate companies to recover millions of tonnes of sand and gravel that would otherwise have been lost."



*Amphibious gravel extraction platform*

"The Culham Innovation Centre offers instant professionalism. The Centre provides a stress free business environment that allows us to focus entirely on our primary business activity which really is to innovate."

**Two further companies have opened offices in the Culham Innovation Centre, both of which specialise in helping technology companies communicate with their respective markets.**

**1. Cyber.Park** has a wealth of experience in visual design and communications for the pharmaceutical sector. This ranges from software application through to case study videos and product launch materials. "Our design team helps pharmaceutical companies to overcome the challenge of communicating clearly and consistently with their customers," says Managing Director, John Hicks.

**Agenda PR & Marketing** on the other hand, has a wider technology remit. In addition to working with the Fusion and Industry team on a number of initiatives, Agenda provides PR & marketing support to engineering and IT companies in general. "The Culham Innovation Centre is an ideal location for anyone interested in engineering. It also has good travel links for reaching



*1. Cyber.Park's Managing Director John Hicks with Agenda PR Managing Director David Owen*

companies in the M4 corridor and London," says David Owen, Managing Director, Agenda PR.

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