

## **The Technology Demonstrator**

**George Rice, The Technology Demonstrator, UK**

The University of Nottingham Technology Demonstrator is a unique new initiative formed with support from the 2007 EPSRC Knowledge Transfer Challenge. The Technology Demonstrator is a one-stop physical showroom for the latest University inventions, which is attracting significant interest and supporting both awareness of KT and commercialisation.

George Rice manages the day to day operation of the Technology Demonstrator, a role which combines technology transfer with tour guide and refreshment preparation.

Interaction with technology prototypes (operational or not) can significantly enhance the quality and effectiveness of knowledge transfer by providing context. The University of Nottingham 'Technology Demonstrator' is a unique initiative aimed at enabling enhanced interaction with University developed technologies to a wide range of stakeholders.

Whilst commercial organisations often exhibit their product ranges in their reception or meeting spaces, the broad base, significant size and multi-campus (including international) layout of Universities such as Nottingham means there is no single visitor entry point. This limits the potential to draw together products (inventions) in a coherent, useful and impactful manner. The end result of this is that beyond the Technology Transfer Office, both internal and external audiences are relatively unaware of the broad range of expertise available, technologies looking for opportunities and ongoing success stories.

Initiated during late 2008 using EPSRC pump prime funding won from the 2007 Knowledge Transfer Challenge, the Technology Demonstrator comprises a blend of interactive technology exhibits and embedded knowledge transfer staff linked to the TTO. With support from the University the facility has been located in high profile space within the Sir Colin Campbell Building on the University of Nottingham Innovation Park (UNIP) [[www.nottingham.ac.uk/unip](http://www.nottingham.ac.uk/unip)]. Crucially, the Demonstrator is not simply a showroom, it works with and for the whole TTO to support technologies under exhibit towards commercialisation.

Since 2009 the Technology Demonstrator has been routinely used for external engagement resulting in new collaborations, leveraged development funding and very positive feedback from a wide range of groups including industry, foreign delegations, government departments and the general public.

Specific successes include microwave technology used in the treatment of a specialist mineral (vermiculite), which is now being implemented in a collaborative trial with Promat UK Ltd using financial assistance from the East Midlands Development Agency (emda). This success has built on the collaboration with Prof Sam Kingman (Faculty of Engineering), which saw a dedicated area for microwave processing education installed in the Demonstrator at the outset describing science fundamentals through to a strategic collaboration with e2v technologies that exists to accelerate the development of new ideas to commercial reality. This project team was awarded the 2009 UNICO Environmental Impact Award, which sadly they couldn't collect in person due to a diary clash that means they must attend a trade association event in Montana – it's a tough life.

Current exhibits are drawn from engineering and physical sciences, but this scope is now being expanded and many of the exhibits benefit from support from the integrated Design Council 'Innovate for Universities' (IfU) scheme. This scheme implements external design skills in commercialisation with the additional benefit of improving how technologies are effectively communicated. Important lessons have been learned from IfU including not using prototypes where it is also necessary to explain how it should be working to an audience of potential investors! Sometimes all a prototype needs to do is 'look-like' to have the desired effect.

Using the Technology Demonstrator to host external meetings has resulted in serendipitous interactions. For example a local chamber of commerce event placed a video conferencing company in contact with a prototype of a new 3d conferencing technology currently in development with subsequent follow up to the research group. The fully operational installation of 'Mixed Reality Architecture' (MRA) allows visitors to the Demonstrator to communicate directly with the MRA development team to find out more before they are able to wonder around a large virtual-open plan office interacting (annoying) other residents, playing with building blocks or looking in the picture gallery.

External organisations visiting the Technology Demonstrator during the previous 6 months is approaching 100 at time of writing this article (the IKT was no. 98). Future growth of the Technology Demonstrator will see its increased use by the University widening participation and outreach functions to enhance public and especially young person engagement. Initial forays into demonstrating microwave technology to a young audience proved that school teachers earn their money.

In response to a wide range of visitor feedback more invention development stories are being compiled following progress from 'eureka' to final product and all stops in-between. The link between the research & teaching areas of the University and the Technology Demonstrator are also being enhanced by installing exhibits into public spaces in departments (possibly expanding to Nottingham City and our international campuses), to engage students and visitors on a daily basis. Selected exhibits are being reproduced for display at the Shanghai EXPO, which is

expecting 70million visitors during May.

The Technology Demonstrator hosts a wide range of events, but is also open for ad-hoc unplanned visits and everyone is welcome.



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