

Virtual Reality Of Workplace Health And Safety Training

A new Virtual Reality (VR) programme, designed specifically for workplace health and safety training, has been launched by Technological University (TU) Dublin and BioPharmaChem Skillnet, one of 70 Skillnet Business Networks nationwide.

The programme is the third course co-developed by the Skillnet Business Network and TU Dublin, which harnesses the power of VR and offers an innovative approach to mixed reality training for diverse industries. The VR technology provides a seamless interface with existing simulations in a modular framework to train staff across many sectors in Ireland.

It follows on from the success of the previous two VR programmes 'Aseptic Techniques for Biomanufacturing,' and 'Power Handling', both of which were nominated for multiple innovation and industry awards.

The new programme was developed in collaboration with Dr Brian Vaughan, founder and director of the Virtual Interaction Research Lab (VIRal) at TU Dublin. VIRal is a cutting edge virtual and augmented reality R&D environment, in a large, dedicated space.

BioPharmaChem Skillnet provides upskilling to businesses of all sizes in the pharmaceutical, biopharmaceutical, medical device, and chemical supply sectors. The network's mission is to further advance Ireland's position as a world leader in health innovation through leading-edge talent development solutions.

Dr Paul Maguire, TU Dublin's Head of Innovation and Knowledge Transfer, acknowledged the importance of the ongoing collaboration between the research partners: "BioPharmaChem Skillnet is supporting one of the largest and most important sectors in Ireland, providing thousands of jobs.

"This partnership highlights the world-leading research capabilities of Dr Brian Vaughan and this team in the VR/AR space and their ability and desire to solve immediate industry challenges. It also spotlights the excellent working relationship that TU Dublin has with BioPharmaChem Skillnet, facilitated by David Gardiner in TU Dublin Innovation via our Open Labs R&D outreach initiative."

MIXED REALITY TRAINING APPLICATIONS

Dr Brian Vaughan, Founder and Director, VIRal, said: "This is our third time working with BioPharmaChem Skillnet and we have always found them to be an insightful forward-thinking organisation pushing the boundaries of training in the industry. It's always great to work with them to co-create mixed reality training applications that incorporate



Pictured at the programme launch were (l-r): David Gardiner (TU Dublin), Siobhan Broughan (Skillnet), Susan Costello and Brendan Kellet (BioPharmaChem), Dr Brian Vaughn and Jazheel Luna (TU Dublin VIRal), with Sinead Keogh (IBEC) and Dr Paul Maguire (TU Dublin).

cutting-edge technologies with robust pedagogical principles and methods."

Susan Costello, Network Director of BioPharmaChem Skillnet, said: "As the BioPharmaChem sector continues to embrace immersive technologies, we identified the potential for virtual reality to address some of the known key challenges in health and safety that are high risk and time consuming. VIRal at TU Dublin was able to provide the expertise required to transform the concept of a VR programme into a reality.

"Dr Brian Vaughan and the TU Dublin team ensured that the process ran seamlessly and were able to advise, adapt and reinvent when required. The programme would not have been possible without their expertise and the support of Skillnet Ireland, BioPharmaChem Ireland along with the expertise and time that industry members gave to articulate the needs around this training for the sector."

Ireland is the third largest exporter of complex pharmaceutical goods and medicines and the second largest exporter of vaccines in Europe, with over €100bn in annual exports. Over 84,000 people are directly and indirectly employed, with a further 10,000 jobs to be created over the next five years. The use of innovative technologies such as VR aims to increase engagement and knowledge retention while decreasing training time, engaging learners in real-world scenarios that teach important skills and concepts.

For more details about the VR Health and Safety programme and other supports offered by the Skillnet Business Network visit www.bpcskillnet.ie.