

2012 University Annual Learning & Teaching Conference

2012 & Beyond

Theme: Innovations 13:30 – 13:50

Impact of Immersive Technology on Chemistry

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Abstract:

The presentation will focus on our latest efforts to bring immersive 3D technology to student chemists to aid their understanding of complex data. Attendees of the presentation will be invited to don a pair of 3D glasses and experience for themselves 3D molecular structures.

This collaboration between the Department of Chemistry and the Department of Computer Science is an Innovation in Student Learning funded project, and will apply stereoscopic 3D techniques to the teaching of complex concepts in the Faculty of Science using technology available in HIVE (Hull Immersive Visualization Environment) focusing on Chemistry.

The presentation will not only comprise some of the immersive 3D technology that the students will be able to experience as part of their module, but will also address fundamental wider issues of the challenges with the content material and display devices currently employed to support teaching, and the potential impact of type of technology on the learning process.

As well as 3D glasses enabled technology, the presentation will also demonstrate how mobile devices such as iPads and iPhones can be used to provide a more portable experience for the student.

The potential impact of immersive technology and mobile devices could result in reducing the need for students to be provided with physical molecular models; and replace it with something they can experience anywhere anytime.