

MEDIA RELEASE 19 May 2015

Wearable bionics on display in Dublin

A bionic bra, sweat-analysis watch and a movement-monitoring knee sleeve will be part of a display this week at a showcase of Irish-Australian research collaboration.

The wearable devices will be featured at the Australian Embassy, Ireland, and are being developed through a partnership between Dublin City University and Australian researchers, all part of the ARC Centre of Excellence for Electromaterials Science (ACES).

The collaboration has been a long and fruitful one, going back over 20 years, combining DCU strengths in sensing technologies and invaluable links to industry, with Australian materials development and fabrication expertise including state-of-the-art 3D printing technologies.

The results of the partnership are functional devices that address real needs. The sweat-analysis watch (or, sweatch, as it is called in the lab), constantly analyses the user's sweat to detect and monitor hydration status and health indicators.

The bionic bra has received worldwide attention for its ability to sense breast movement and respond by autonomously 'tightening' at various points.

Also on display will be the ACES BioPen, a handheld device designed to allow orthopaedic surgeons to '3D print' bio-materials directly into a patient in surgery.

All devices have been enabled by advances in 3D printing technology, which will also be featured in live demonstrations as part of an event to be held Thursday May 21, hosted by Ambassador Ruth Adler, a great supporter of the partnership.

"It is a pleasure to showcase the result of this collaboration and to see groups of like-minded researchers sharing ideas and working towards a common goal," she said.

"The future possibilities for these technologies seem to be limited only by the imagination."

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Media Opportunity
Event: Emerging 3D Printed Bio-Compatible Technologies
Thursday 21 May 2015, 4.30-6.30pm
Australian Embassy 7th floor, Fitzwilton House, Wilton Terrace, Dublin 2

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ABOUT ACES

The ARC Centre of Excellence for Electromaterials Science (ACES) is a global leader in advanced materials and electrochemical device development. Encompassing researchers, clinicians and industry partners workwide, ACES is uniquely positioned to translate materials research into next-generation solutions for clean energy and medical bionics.

ACES Organisations:

Australia: University of Wollongong Monash University Deakin University University of Tasmania Melbourne University Australian National University

International:

Dublin City University, Ireland University of Warwick, UK Friedrich Alexander University of Erlangen-Nuremburg, Germany Hanyang University, Korea Yokohama National University, Japan