



30 JULY 2014

\$25 million for science research and innovation in the Illawarra

A 2020 vision for science research and innovation that provides solutions to the world's great challenges and puts Wollongong on the global stage will be launched at the University of Wollongong today (Wednesday 30 July).

Senator the Hon Concetta Fierravanti-Wells, Parliamentary Secretary to the Minister for Social Services will officially launch the new Australian Research Council Centre of Excellence for Electromaterials Science (ACES), which has received \$25 million funding that will make Wollongong the global headquarters of an international materials research effort.

"The Federal Government is supporting innovation in research around the country. As an Illawarra based Senator, I am particularly proud of and congratulate Wollongong University for yet again demonstrating its ability to lead a global partnership with the ACES program," the Senator said.

ACES and its five international partner organisations will embark on an ambitious program that will take materials science research, training, commercialisation and engagement programs into new dimensions through to 2020.

The centre will build on more than a decade of internationally recognised fundamental research to fast track development of new industries and manufacturing opportunities around the next generation of batteries, solar cells and medical implants.

Including partner and associate investigators, the new centre will combine research strengths from across nine countries, bringing together leading experts in materials, modelling, fabrication and device development.

ACES outstanding research outcomes to date include the development of nanotube yarn to power implantable biomedical devices; the manipulation of fishing line to produce artificial muscles with super human strength; and the acceleration of 3D printing to deliver solutions to a number of medical challenges.

The new centre will support the ongoing development of new industries including the spin-out renewable energy company AquaHydrex as it moves toward prototype manufacturing.

New education opportunities will be created through the commencement of a master degree in biofabrication in partnership with Australian and international institutions.

With the support of the Australian National Fabrication Facility (ANFF) and NSW Government funding ACES will take advantage of advanced customised 3D fabrication equipment and engineering expertise to provide the transition from fundamental research to a workable 3D product.

All applications will be supported by an ethics, policy and public engagement program to ensure the community is an integral part new and rapidly emerging technologies.

ACES Director Professor Gordon Wallace said transformative research would be supported by the right people to forge ahead and position the centre as a global leader in 3D electromaterials science.

"ACES will be a cauldron of research activity that would challenge the most gifted researchers attracted from around the globe as well as provide an excellent training ground for students," he said.

"Our holistic approach will ensure that fundamental discoveries can be translated into practical devices. Our commercialisation focus will be on creating new industries, and equipping our graduates to lead them.

"We already see opportunities in nanostructured carbon synthesis and processing, energy storage and wearable diagnostics. Other opportunities, including 3D bioprinting, will undoubtedly emerge. All of this can only be achieved with amazing people, and we have some of the best."

Australian Research Council CEO Professor Aidan Byrne said ACES was an example of how the *Centres of Excellence* scheme allowed research groups to tackle large-scale challenges and provide funding surety to undertake that work.

"The ARC is extremely proud of this scheme and its ability to foster and build highly innovative and potentially transformational research, as well as training our future generation of researchers in this environment. I wish Professor Wallace and the entire ACES team all the very best in their endeavours in the next seven years."

Note to media

Media are invited for photo and interview opportunities. All attending media must wear fully enclosed footwear, no high heels, for lab tours.

What: ACES launches vision for future research, industry and education

Who: The Parliamentary Secretary to the Minister for Social Services, Senator Concetta Fierravanti-Wells, UOW Vice-Chancellor Professor Paul Wellings and ACES Director Professor Gordon Wallace

When: Wednesday 30 July **11am to 11.40am** VIP lab tour (photo opportunity with official party) followed by interview opportunities at **12.30pm**

Where: Leon Kane-Maguire Theatre, AIIM building, Innovation Campus, Squires Way, North Wollongong

Media contact

Natalie Foxon-Phillips on +61 4221 3239 or nfoxon@uow.edu.au

About the University of Wollongong:

The University of Wollongong (UOW) is globally ranked as one of Australia's best modern universities and currently sits among the top two per cent of universities in the world.

UOW has built an international reputation for world-class research and exceptional teaching quality. It has a five-star status for its 'educational experience' and 'graduate outcomes'.