

University of Newcastle

The University of Newcastle has congratulated research and industry partners at today's official opening of a \$35 million Australian Research Council (ARC) Centre of Excellence focussed on transforming the minerals industry and securing a low-carbon future.



The ARC Centre of Excellence for Enabling Eco-Efficient Beneficiation of Minerals (COEMinerals) will develop and commercialise new and more sustainable mining technologies as demand for minerals – including those used in white goods, smart phones and solar panels – increases. COEMinerals is a national collaboration of multiple universities and industry partners headquartered at the University of Newcastle.

University of Newcastle's Laureate Professor Kevin Galvin will lead the Centre and oversee collaboration with researchers from seven other Australian universities, the CSIRO, industry partner organisations and leading international researchers.

COEMinerals was officially opened today by Liberal Patron Senator for the Hunter Region Hollie Hughes representing the Minister for Education and Youth via Zoom with representatives from the ARC, partner universities and industry representatives.

“A strong, successful and sustainable minerals industry makes for a stronger country,” Senator Hughes said.

“Today’s official opening and our significant investment in COE Minerals represents the Morrison Government’s support for transformative, research-led initiatives that help bring together industry and universities.

“This is a major boost in our efforts to prepare the minerals sector for the needs of the economy and the environment well into the future.”

University of Newcastle Vice-Chancellor Professor Alex Zelinsky congratulated the partners on the important milestone.

“A low carbon future will not be possible without minerals. We’re delighted to be hosting this Centre and playing a key role in bringing researchers together to find new sustainable technologies to reduce the environmental footprint of minerals recovery,” Professor Zelinsky said.

“I congratulate Laureate Professor Galvin on his work to date to bring together a research program that will help transform the minerals industry and bring together expertise across the country for a more sustainable future.”

Over the next seven years, more than 70 PhD students and 15 post-doctoral researchers together with consortia members will work across multiple research disciplines to achieve the Centre’s transformational solutions.

“We know this Centre will also play a role in developing the next generation of scientists and engineers and we can’t wait to see what they will achieve,” Professor Zelinsky said.

Researchers at the Centre will focus on developing new technologies and commercialising these technologies with industry partners in an effort to secure future availability of metals essential to modern living – like those used in smart phones and electric vehicles.

“It is becoming difficult to access and extract some minerals. Couple that with the high energy and water use in processing, and these processes can become very expensive and environmentally demanding,” Professor Galvin said.

“These pressures make it urgent that we transform the value addition of mineral processing, known as beneficiation, to achieve a step-change reduction in the environmental footprint.”

COE Minerals will seek to double energy and water productivity, reducing the loss of high value metals during processing by up to 90 per cent.

“Everyone along the mineral and renewable energy supply chain will benefit from the work coming out of this important research centre,” Professor Galvin said.

The ARC Centre of Excellence for Enabling Eco-Efficient Beneficiation of Minerals is funded by the Australian Government through the Australian Research Council Centres of Excellence funding scheme.

About the ARC Centre of Excellence for Enabling Eco-Efficient Beneficiation of Minerals

The ARC Centre of Excellence for Enabling Eco-Efficient Beneficiation of Minerals, based at the Newcastle Institute for Energy and Resources (NIER) at the University of Newcastle, develops transformational technologies for a competitive and environmentally sustainable future for Australia's mineral industries through reduced environmental footprint, reductions in energy and water use, high resources recovery, as well as supporting future leaders for the sector.

The Centre will transform the minerals industry, establishing a new generation of research leaders to support the innovation needed in creating a green economy for the future.

Partner universities

University of Newcastle

University of Queensland

Deakin University

University of South Australia

Monash University

University of Melbourne

Curtin University

University of NSW

The University of Sheffield

University of Colorado Boulder

Harvard University

Southern University of Science and Technology

Virginia Tech

The University of Utah

Imperial College London

Universidad de Concepcion

Industry partners

CSIRO

FLSmidth

Amira

Jord International