

## Media Release

### Chiefs of Staff, News Directors

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## University licences mineral exploration technology

New technology developed by the University of Tasmania will help mining companies detect valuable ore deposits faster and more accurately, deep underground.

Geoscientists use a technique called transient electromagnetics (TEM) to find mineral deposits hundreds of metres below the surface. They do this by creating magnetic fields and examining the way those fields interact with conductive minerals in the ground.

This technique creates large amounts of data that require 3D interpretation to pinpoint the ore bodies. This process normally requires significant computer power, making it slow and expensive.

However, thanks to new computer programs developed at the University's Australian Research Council Centre of Excellence in Ore Deposits (CODES), the data can now be processed much faster.

The key algorithms were developed at CODES in collaboration with Fullagar Geophysics (FGPL) and AMIRA International. AMIRA is an industry research organisation and their involvement in this project was sponsored by AngloGold Ashanti, Gold Fields, Rio Tinto, and Mira Geoscience.

University of Tasmania Director of Business Development and Technology Transfer, Dr Darren Cundy, said the intellectual property arising from this collaboration has now been licensed to FGPL.

"The University is committed to doing research that is relevant and aligned with industry but equally to translating those research outcomes into benefits that are accessible to industry," Dr Cundy said.

"Transferring intellectual property assets into the hands of businesses that can create real impact from our research is at the heart of our commercialisation strategy."

Dr Peter Fullagar, Director of FGPL, said his company would make the software available to mining companies and other end-users under sub-licence.

“We have a unique combination of technical capability and industry experience, which will allow us to take this product to the next level,” Dr Fullagar said.

“With further development of the algorithms, we’ll deliver rapid interpretation of TEM data and integration with geological and other data. Processing times will be reduced by a factor of 10 or more, something we expect the minerals industry will find very attractive.”

### **About Fullagar Geophysics**

Fullagar Geophysics Pty Ltd provides research and consulting services, and develops software, for the exploration and mining industry in Australia and overseas. It offers specialised geophysical software for modelling and inversion of magnetic, gravity, transient electromagnetic, radio imaging, wireline log, and borehole televiewer data.

### **About the University of Tasmania**

The University of Tasmania is ranked in the top ten research universities in Australia and in the top two per cent of universities in the world. For 125 years, the University has provided a creative and stimulating environment, providing opportunities for our students to engage in an international learning experience. In addition to the more than 30,000 students, the University’s community is strengthened by a network of more than 90,000 alumni spanning more than 120 countries, and is underpinned by collaborative partnerships with organisations that share its strategic outlook. While maintaining a distinctive Tasmanian identity, University programs and research are international in scope, vision and standards.

### **About CODES**

CODES is the Australian Research Council Centre of Excellence in Ore Deposits, based at the University of Tasmania. Formed in 1989, the Centre is widely regarded as a global leader in ore deposit research and postgraduate training. It is home to 35 highly qualified research staff and over 100 postgraduate students, working on projects in 30 countries around the world.

#### **Information released by:**

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