Tasmania

University of Tasmania

LE0989539 Prof AJ Canty; Prof GM Peterson; Prof Dr PN Nesterenko; A/Prof TW Trull; Prof CG Carter; Dr CM Crawford; Dr AR Bowie; Dr AT Townsend; Dr AJ Seen; Dr I Snape; Dr EC Butler

Approved Project Title **Purchase of a state-of-the-art high resolution inductively coupled plasma mass spectrometer**

2009 : $ 250,000

Primary RFCD 2504 ANALYTICAL CHEMISTRY

Partner Organisations & Collaborating Organisations

University of Tasmania
Australian Antarctic Division
Antarctic Climate and Ecosystems CRC
CSIRO Marine and Atmospheric Research

Administering Organisation University of Tasmania

Project Summary

This new state-of-the-art mass spectrometer with enhanced capability will allow Tasmanian researchers to accurately determine the elemental composition of their samples of interest. The instrument will be extremely sensitive and will be able to detect elements to very low concentrations. It will be used to support a diverse range of local research projects of international significance, for example the environmental assessment of clean and contaminated sites, chemical synthesis on a miniature scale using micro-chips, and the monitoring of selected elements of key importance for human health.

LE0989828 A/Prof LV Danyushevsky; Prof RR Large; Prof AJ Crawford; Prof V Kamenetsky; A/Prof DR Cooke; Prof JB Gemmell; Dr TJ Falloon; Dr RF Berry; Dr GJ Davidson

Approved Project Title **An X-ray fluorescence analysis system to replace an existing 16 year old instrument**

2009 : $ 245,000

Primary RFCD 2601 GEOLOGY

Partner Organisations & Collaborating Organisations

University of Tasmania

Administering Organisation University of Tasmania

Project Summary

X-ray fluorescence spectrometry is a basic analytical tool for the accurate and precise determination of the chemical composition of rock samples. Access to this technology is essential for the successful operation of the ARC Centre of Excellence in Ore Deposits. The Centre undertakes cutting-edge research on the geology, genesis, discovery and recovery of new mineral resources and equipping the Australian minerals industry with world-class graduates. These activities are within National Research Priorities ((An Environmentally Sustainable Australia - Discovering Deep Earth Resources) and at the core of Australian national interests.

LE0989491 Prof PR Haddad; Prof PJ Marriott; Dr RA Shalliker; Prof Dr PN Nesterenko; Dr GW Dicinoski; Dr EF Hilder; Dr MC Breadmore; Dr J Quirino; Dr RM Guijt; Dr RA Shellie

Approved Project Title **Multi-Purpose Mass Spectrometry Facility**

2009 : $ 172,025

Primary RFCD 2504 ANALYTICAL CHEMISTRY

Partner Organisations & Collaborating Organisations

University of Tasmania
RMIT University
University of Western Sydney

Administering Organisation University of Tasmania

Project Summary

The Australian Centre for Research on Separation Science (ACROSS) has been established using focused research themes to provide both fundamental and applied research outcomes in separation science. The requested Time of Flight Mass Spectrometer (TOFMS) will be utilised extensively by a large team of researchers working across the broad areas of analytical chemistry, pharmaceutical science, materials science, biochemistry, microfluidics, industrial chemistry and hydrometallurgy, aquaculture, forensic analysis, Antarctic studies, and environmental monitoring. This will directly support our work falling under National Research Priorities 1 An Environmentally Sustainable Australia, 2 Promoting and Maintaining Good Health, 3 Frontier Technologies for Building and Transforming Australian Industries, and 4 Safeguarding Australia.