

Summary of Linkage Projects Applications for Funding to Commence in 2006

Western Australia

Curtin University of Technology

LP0669242 Prof E Chang; Prof TS Dillon; Dr H Dreher; Mr RF Williams; Ms J Cook

Approved Project Title **An Intelligent Automated Essay Marking Tool-MarkIT for Education Sector**

2006 : \$95,000

2007 : \$180,000

2008 : \$170,000

2009 : \$85,000

Primary RFCD 3301 EDUCATION STUDIES

APA(I) Award(s): 3

Partner Organisation(s)

WA State Government - Department of Education and Training

Macquarie Library Pty Ltd

Administering Institution Curtin University of Technology

Project Summary

Making and grading essays is estimated to cost around AUD\$2 Billion in Australia each year. It takes up approximately a third of the teachers' time. An Automated Essay Grading System would mean significant financial savings in the education sector both public and private. It would also free up teachers to concentrate on higher level pedagogical tasks resulting in a better quality of education. The potential for sales overseas for such a system are also great.

LP0669283 Prof G Craven; Dr A Fenna; Prof AW Parkin

Approved Project Title **Cooperation, competition or control? Public policy and the use of tied grants in Australian federalism**

2006 : \$32,500

2007 : \$65,500

2008 : \$71,500

2009 : \$38,500

Primary RFCD 3601 POLITICAL SCIENCE

APA(I) Award(s): 2

Partner Organisation(s)

Department of the Premier and Cabinet, Government of Western Australia

Department of Treasury and Finance, Government of Western Australia

Constitutional Centre of Western Australia

Administering Institution Curtin University of Technology

Project Summary

Tied grants account for \$26 billion worth of Commonwealth expenditure and cover everything from child care to aged care, environmental programs to road building. They crucially affect the capacity of Australian governments to make policy and deliver services. A better understanding of how they work in practice will be a great benefit in improving our capability to meet pressing social, economic, environmental and regional development challenges.

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LP0668908 Dr WR Richmond; Prof JD Gale; Mr W Tichbon

Approved Project Title **Structural studies of titanyl and zirconyl sulfate hydrates**

2006 : \$12,325

2007 : \$24,650

2008 : \$24,650

2009 : \$12,325

Primary RFCD 2502 INORGANIC CHEMISTRY

APA(I) Award(s): 1

Partner Organisation(s)

BHP-Billiton Innovation Pty Ltd

Administering Institution Curtin University of Technology

Project Summary

This project aims to provide knowledge that will inform the development of new methods of extraction and refining of titanium from ilmenite ores. In addition the knowledge gained in this research will aid the design and synthesis advanced ceramics and nanocomposites, and will provide the fundamental understanding of material structures that are required to adequately control the formation of such materials.

LP0669575 Prof D Zhang

Approved Project Title **Improvements and Optimisation of Water Electrolysis for Hydroxy Gas Production for Metal Cutting Applications**

2006 : \$42,500

2007 : \$82,500

2008 : \$80,000

2009 : \$40,000

Primary RFCD 2906 CHEMICAL ENGINEERING

APA(I) Award(s): 1

Partner Organisation(s)

Hydrogen Technology Limited

Administering Institution Curtin University of Technology

Project Summary

The current technique for metal cutting mainly uses oxygen-acetylene flames, which means for the large number of Australian remote communities oxygen and acetylene bottles have to be transported from major cities. This incurs significant transport costs and associated environmental emissions and presents major safety concerns. Hydroxy flames using electrolysis of water can alleviate these problems and, by utilising renewable electricity, the new technology to be developed in this research will transform tens of thousands of Australian metal workshops to be more environmentally friendly, safer and more cost-effective, thus contributing to the development of an environmentally sustainable Australia.