

Victoria

RMIT University

LP0883894 Prof SK Bhargava; Prof PN Johnston; Dr SC Grocott

Approved Project Title **Chemistry of uranium extraction - studies on the dissolution of uranium ores in a complex solution matrix**

2008 : \$ 75,500
2009 : \$ 152,500
2010 : \$ 147,000
2011 : \$ 177,000
2012 : \$ 107,000

Primary RFCD 2599 OTHER CHEMICAL SCIENCES

APA(I) Award(s): 2

Collaborating/Partner Organisation(s)

BHP Billiton

Administering Organisation RMIT University

Project Summary

Olympic Dam is the world's largest uranium deposit. With a planned massive expansion of the mine's operations, it could generate more than \$10b per year. The mineral ores found there, however, are highly complex and poorly understood. This project will investigate and determine the detailed characteristics and chemistry of the mineral ore and offer process improvements that will increase the productivity and improve the economics of extraction of the ore. This project will also address the serious deficiency of researchers in this field by creating a sustainable skills development program in mineral extraction and separation technology.

LP0883527 Prof SN Bhattacharya; Dr RK Gupta; Dr R Zheng

Approved Project Title **Modelling rheology and flow parameters of injection moulding of liquid crystal polymer materials**

2008 : \$ 22,500
2009 : \$ 46,000
2010 : \$ 46,500
2011 : \$ 23,000

Primary RFCD 2914 MATERIALS ENGINEERING

APA(I) Award(s): 1

Collaborating/Partner Organisation(s)

Moldflow Pty Ltd.

Administering Organisation RMIT University

Project Summary

Australian company Moldflow is a world leader in the modelling and simulation of injection moulding plastic parts, yet its sophisticated software is inadequate for liquid crystalline polymers. This research aims to redress this by appropriate rheological study of these materials, incorporating suitable rheological model in the simulation and by experimental validation. The benefit will be new knowledge of the injection moulding process, enhancement of Australia's scientific reputation in this field, extension of the Moldflow software to a wider polymer range, new markets nationally and internationally, competitive edge of the improved software and contribution to national economy due to new business.

Summary of Linkage Projects Proposals for Funding to Commence in 2008

LP0883291 Prof WE Cartwright; A/Prof CA Arrowsmith; Dr LK Vaughan; Dr BJ Morris

Approved Project Title **Geo-placed Knowledge: developing a methodology for provisioning stakeholders in natural environments management with integrated media tools**

2008 : \$ 12,813

2009 : \$ 25,627

2010 : \$ 25,627

2011 : \$ 12,813

Primary RFCD 2910 GEOMATIC ENGINEERING

APA(I) Award(s): 1

Collaborating/Partner Organisation(s)

Parks Victoria

Administering Organisation RMIT University

Project Summary

The objectives of this research are to employ the concept of a geo-knowledge tool to construct a virtual geographical information repository. It will build and evaluate the effectiveness of a Web-delivered GeoKnowledge tool to facilitate better access to (geo)information about the nation. It will develop 'rules' for guiding the design of content, information prospecting support, data mining and interface access within the context of a contemporary atlas. Finally, it has an underlying goal to understand the complexities of provisioning and providing a Web-delivered tool that can be employed by multi-disciplinary teams for understanding geographical information about national parks throughout Australia.

LP0884154 Prof PJ Coloe; Prof MP Jennings; Dr R Youil; Dr YG Abs EL-Osta; Dr PJ Blackall; Dr C Turni

Approved Project Title **Towards the development of a novel live vaccine for the control of Glässer's disease (Haemophilus parasuis), a globally significant respiratory disease of swine.**

2008 : \$ 79,328

2009 : \$ 156,440

2010 : \$ 171,250

2011 : \$ 94,138

Primary RFCD 2901 INDUSTRIAL BIOTECHNOLOGY AND FOOD SCIENCES

APA(I) Award(s): 1

Collaborating/Partner Organisation(s)

Bioproperties Pty Ltd

Administering Organisation RMIT University

Project Summary

Respiratory diseases are common in intensively housed pigs, costing the Australian industry millions of dollars in lost production annually. Glässer's is a highly contagious and often fatal respiratory disease of pigs. Antibiotic therapy is expensive and often results in the emergence of antibiotic resistant organisms. There is also a trend to move away from the use of antibiotics in food production animals. Current vaccines are based on inactivated preparations and do not offer a high level of immune protection. Therefore, there is a great need worldwide for a live vaccine for the effective control of Glässer's disease.

Summary of Linkage Projects Proposals for Funding to Commence in 2008

LP0883615 Prof JF Fien; Prof RR Wakefield; Dr ER Charlesworth; Dr R Horne; Prof JC Altman; A/Prof M Christie; Ms PR Sullivan; Mr S Hamilton

Approved Project Title **More than a Roof Overhead: Meeting the Need for a Sustainable Housing System in Remote Indigenous Communities**

2008 : \$ 38,440

2009 : \$ 76,881

2010 : \$ 76,881

2011 : \$ 38,440

Primary RFCD 3101 ARCHITECTURE AND URBAN ENVIRONMENT

APA(I) Award(s): 3

Collaborating/Partner Organisation(s)

Department of Housing and Works, WA

Territory Housing, NT

Indigenous Business Australia

Bawinanga Aboriginal Corporation

Centre for Appropriate Technology

Administering Organisation RMIT University

Project Summary

Many Indigenous Australians live in substandard and over-crowded accommodation, and experience poor health, education, family stability and child-safety outcomes as a result. The lack of improvement in this situation is largely due to levels of funding and approaches to construction and management inadequate to the scale of the problem. This situation is changing and new funding and policies are being established. The researchers will work alongside housing providers and selected Indigenous communities in Western Australia and Northern Territory to develop procurement, construction and housing management practices that will meet the critical need for more affordable, appropriate and sustainable housing.

LP0883371 A/Prof AJ McMurray; Prof K Hindle; Dr RJ Inbakaran; Mr B Stevens

Approved Project Title **Indigenous Entrepreneurship in Victoria, Australia: Reconciling Mainstream Business Practice and Indigenous Community Values**

2008 : \$ 35,500

2009 : \$ 71,000

2010 : \$ 35,500

Primary RFCD 4203 CULTURAL STUDIES

APA(I) Award(s): 2

Collaborating/Partner Organisation(s)

Koori Business Network

Administering Organisation RMIT University

Project Summary

Indigenous entrepreneurship is a mechanism for addressing 'reconciliation' one the Nation's major issues. This study recognises the interrelations between Indigenous Australians as individuals and members of wider community groups and organisations and addresses key strategic documents including 'A Fairer Victoria' which is concerned about the disadvantaged in a developed society. Identifying Indigenous cultural values and the exigencies and pressures (including mainstream cultural pressure) impacting on Indigenous entrepreneurs assists with removing those impediments and will strengthen key strategic Indigenous Policies and programs in the interests of national economic prosperity and national reconciliation.

Summary of Linkage Projects Proposals for Funding to Commence in 2008

LP0883288 A/Prof K Zhang; Dr F Wu; Prof C Rizos; Dr S Lim; Prof J Le Marshall; Dr A Rea; Dr Y Kuleshov

Approved Project Title **Satellite-Based Radio Occultation for Atmospheric Sounding, Weather Forecasting and Climate Monitoring in the Australian Region**

2008 : \$ 87,409

2009 : \$ 177,802

2010 : \$ 180,752

2011 : \$ 90,359

Primary RFCD 2910 GEOMATIC ENGINEERING

APA(I) Award(s): 2

Collaborating/Partner Organisation(s)

Australian Bureau of Meteorology

Administering Organisation RMIT University

Project Summary

Global climate change and its associated risks are serious issues because the resultant storms, fires, floods, droughts and cyclones are weather events affecting Australia. However, the predictability of such phenomena is seriously limited due to sparse atmospheric sensor distribution. This project will investigate new space-borne and ground-based radio occultation techniques, atmospheric sounding technologies and their fusion to overcome such constraints. This project is dedicated to developing superior national capabilities in anticipating, analysing and investigating critical meteorological threats to Australia. This research will significantly upgrade Australia's meteorological services and contribute to the global community.