

**Western Australia**

**Curtin University of Technology**

**LP0776265** Prof R Alexander; A/Prof K Grice; Dr AP Murray

**Approved Project Title** **Reduction of risk in exploration for petroleum liquids**

**2007 :** \$ 35,000

**2008 :** \$ 67,500

**2009 :** \$ 32,500

**Primary RFCD** 2603 GEOCHEMISTRY

**Collaborating/Partner Organisation(s)**

Woodside Energy Ltd

**Administering Organisation** Curtin University of Technology

**Project Summary**

Australia has an urgent need to establish additional reserves of crude oil. A feature of petroleum exploration in recent decades has been discovery of vast reserves of natural gas but an inability to replace our diminishing reserves of crude oil. Clearly new technology is required to enhance our capability to recognise crude oil-prone rather than gas-prone source rocks. The proposed project will establish the fundamental geochemical processes that will support the potential exploration techniques, developed with Woodside Energy Limited support.

**LP0776652** Prof BB Lamont; Prof JD Majer; A/Prof GI Metternicht; Dr CE Cooper; Dr MH Parsons

**Approved Project Title** **Dynamics of animal mediated vegetation establishment and persistence in disturbed landscapes**

**2007 :** \$ 93,000

**2008 :** \$ 181,500

**2009 :** \$ 178,500

**2010 :** \$ 90,000

**Primary RFCD** 3008 ENVIRONMENTAL SCIENCES

APA(I) Award(s): 1

APDI Dr MH Parsons

**Collaborating/Partner Organisation(s)**

Barrick Gold of Australia

Iluka Resources Enneaba Operation

Whiteman Park (State Planning Commission)

Chemistry Centre (WA)

Roo Gully Wildlife Sanctuary

Specialty Feeds Pty. Ltd.

Perth Zoo

**Administering Organisation** Curtin University of Technology

**Project Summary**

This project aims to provide strategies and commercial products for the best management of animals in plant community restoration. Ensuring effective seed dispersal and minimizing levels of herbivory will reduce resources expended on restoration and ensure sustainable ecosystems. A small reduction in the costs of individual plant protection not only improves the success of rehabilitation programs but save millions of dollars throughout the mining industry and rural areas generally. It will also save thousands of dollars in culling programs. An extension of our study will target roadside hazards where kangaroos and traffic have high impact rates.

## Summary of Linkage Projects Proposals for Funding to Commence in 2007

**LP0776766** Dr A Sathasivan; A/Prof A Heitz; Dr CA Joll; Dr JJ Plumb; Dr R Trolio; Mr L Koska

**Approved Project Title** **Novel Technology for Improving Disinfection Outcomes in Regional and Remote Drinking Water Distribution Systems**

**2007 :** \$ 24,859  
**2008 :** \$ 49,718  
**2009 :** \$ 49,718  
**2010 :** \$ 24,859

**Primary RFCD** 2599 OTHER CHEMICAL SCIENCES

APA(I) Award(s): 1

**Collaborating/Partner Organisation(s)**  
Water Corporation

**Administering Organisation** Curtin University of Technology

### Project Summary

Climate shifts have led to water supply shortages in many areas of Australia, both in rural and remote regions and in cities. To ease water shortages, transportation of water over long distances is becoming increasingly necessary. A major impediment to transfer of water through long mains is management of the disinfectant: most disinfectants decay too rapidly, leaving consumers at risk of pathogen exposure. Chloramination, the most viable disinfection technology for this purpose, suffers from a process called nitrification which accelerates disinfectant decay. In this project, we are developing an innovative, patented process to prevent nitrification, which will allow safe and effective disinfection of water supplies in long pipelines.