

Summary of Successful Linkage - Projects Proposals for Funding to Commence in 2010 by State and Organisation

Victoria

Victoria University

LP100200242 A/Prof Mikel C Duke, Prof Stephen R Gray, A/Prof Gayle E Morris, Mr Kenichi Nishizu, Dr Domun Choi, Prof Il-shik Moon

Approved Project Title **Development of advanced ceramic membranes: a robust solution to sustainable water treatment**

2010	\$45,000.00
2011	\$90,000.00
2012	\$90,000.00
2013	\$45,000.00
2014	
2015	

Primary FoR 0912 MATERIALS ENGINEERING

Partner/Collaborating Organisation(s)

Chosun Refractory Co Ltd, C.I. CERAMICS (AUST.) PTY. LTD.

Administering Organisation Victoria University

Project Summary

Australia is one of the driest nations on Earth. While available fresh water supplies dwindle, options to treat 'used' water for reuse are gaining rapid popularity. Membranes are now state-of-the-art for water treatment, including all new desalination plants, but as they are polymeric based, they must be routinely cleaned with chemicals and replaced. The outcomes of this research will demonstrate innovative functional ceramic membranes which last longer and have lower requirement for cleaning chemicals and expert maintenance. This, in turn, will deliver water at lower cost and reduced environmental burden (chemical and membrane disposal), giving industry more sustainable solutions to treat water, which has now become an essential practice in society.

LP100200682 Prof Yanchun Z Zhang, A/Prof Xun Yi, Dr Jing He, Dr Chaoyi Pang, A/Prof Michael Steyn

Approved Project Title **Real-time and self-adaptive stream data analyser for intensive care management**

2010	\$57,500.00
2011	\$115,000.00
2012	\$115,000.00
2013	\$57,500.00
2014	
2015	

Primary FoR 0806 INFORMATION SYSTEMS

APAI_IT 1

Partner/Collaborating Organisation(s)

Australian e-Health Research Centre, Royal Brisbane and Women's Hospital Research Foundation (RO)

Administering Organisation Victoria University

Project Summary

The clinical benefit of this project will be in improved success rates and reduced mortality and risk in surgery and intensive care units. The Information and communication technology (ICT) benefit of this project is associated with the novel online algorithms and models aligned with the stream data research, and will be enhanced by our stream compression techniques. The stream data analyser developed in this project will be suitable for more than medical surveillance data; it will also improve the processing of other kinds of massive stream data (for example data from remote sensors, communication networks and other dynamic environments). The project involves a scientifically rich collaboration that will enhance the skills of PhD students and staff and drive the field forward.