

# Summary of Linkage Infrastructure, Equipment and Facilities Proposals by State and Organisation

## Western Australia

### Curtin University of Technology

**LE100100127** Prof Kliti Grice, A/Prof Daniel V Murphy, Dr Paul F Greenwood, A/Prof Anna Heitz, Dr Pauline F Grierson, Dr Francesco M Buseti, Dr David Wacey, Dr Deirdre Gleeson

**Approved Project Title** **High resolution liquid chromatography mass spectrometry (Orbitrap) for analyses of polar compounds in biomass, petroleum, potable and reclaimed water**

2010 \$300,000.00

Primary FoR 0402 GEOCHEMISTRY

#### **Partner/Collaborating Organisation(s)**

John de Laeter Centre for Mass Spectrometry , Water Corporation of WA  
The University of Western Australia

**Administering Organisation** Curtin University of Technology

#### **Project Summary**

Climate change and human impact can harm sensitive ecosystems, significantly threatening Australian biodiversity and water resources. Chemical and biological characterisation of aquatic and terrestrial environments is paramount to assessing and responding to these threats, as well as assisting natural resource utilisation. The high structural polarity of many environmentally occurring organics from biological, petroleum and anthropogenic sources, unamenable to gas chromatographic resolution, can now be accommodated by the advanced organic analytical technology sought in this proposal. This project will enable scholars and young professionals to be skilled in state-of-the-art technology, and prepare quality scientists, ready for employment.