

Summary of Linkage Infrastructure, Equipment and Facilities Proposals

Queensland

James Cook University

LE0775614 Dr MV Jacob; Prof CC Berndt; Prof ME Tobar; Prof JE Mazierska; Dr RD White; Prof ML Heron; Prof Y Ho; Dr JG Hartnett; Dr GS Woods; A/Prof CJ Kikkert; Dr V Jegatheesan; Prof J Krupka

Approved Project Title **National Electromagnetic Characterization Facility for Advanced Electronic and Biomaterials**

2007 : \$ 150,000

Primary RFCD 2917 COMMUNICATIONS TECHNOLOGIES

Partner Organisations & Collaborating Organisations

The University of Western Australia

Massey University

Warsaw University of Technology

Administering Organisation James Cook University

Project Summary

The proposed Material Characterisation Facility using non-destructive methods will be unique to Australia. Precise characterisation of advanced materials such as dielectrics and superconductors using the facility will progress emerging technologies within the electronic and communication research area. The inclusion of a microwave scanning test bed within the laboratory will allow engineers, scientists, biologists and medical scientists to safely detect the intrinsic electromagnetic properties of electronic materials and tumours in biological tissues or poor quality agricultural produce. This comprehensive material characterisation facility will therefore benefit the peoples of Australasia in many significant and diverse ways.