

New South Wales

Southern Cross University

DP0772050 Dr ED Burton; Dr RT Bush; Prof LA Sullivan

Approved Project Title **Unraveling the oxidative geochemistry of nanoparticulate mackinawite in acid sulfate soil landscapes**

2007 : \$97,000

2008 : \$90,000

2009 : \$90,000

Primary RFCD 3008 ENVIRONMENTAL SCIENCES

APD Dr ED Burton

Administering Organisation Southern Cross University

Project Summary

Acid sulfate soils impact over 8 million ha of valuable coastal land in Australia, and over 24 million ha throughout the world. Drainage from acid sulfate soil waterways is a major threat to water quality, ecosystem health, agricultural sustainability and fisheries productivity. The practical benefits of this project arise from an improved understanding of the processes controlling water quality and associated resources in these areas. The intellectual benefits include the development of novel geochemical concepts involving sulfur minerals that are central to coastal rivers, wetlands and estuaries. This project will enhance Australia's capacity for sustainable environmental management.

DP0770026 Dr RD Coyle; Prof MF Hannan; Prof PR Hayward

Approved Project Title **Music production and technology in Australian Film: enabling Australian film to embrace innovation**

2007 : \$28,000

2008 : \$40,000

2009 : \$36,000

2010 : \$32,125

Primary RFCD 4101 PERFORMING ARTS

Administering Organisation Southern Cross University

Project Summary

Given the increasing tendency of the US film industry to co-opt international talent and production bases into its global operation (New Zealand being a prime example), Australian cinema faces mounting hurdles in its quest for national and international success. While education centres such as AFTRS have contributed to excellence in key aspects of local production, Australian film music has been afforded minimal attention. Consequently, music industry training and production often proceeds on the bases of vague assumptions and inefficient precedents. In-depth research is vital to inform national training, production and policy making so as to allow Australian cinema to embrace innovation and engage creatively with the international market.

DP0773868 Dr JF Parr

Approved Project Title **Enhancing long-term soil organic carbon sequestration**

2007 : \$85,000

2008 : \$85,000

2009 : \$85,000

Primary RFCD 2799 OTHER BIOLOGICAL SCIENCES

APD Dr JF Parr

Administering Organisation Southern Cross University

Project Summary

This project addresses National Research Priority One areas, restoration of land surfaces through sustainable land management practices and sequestration of carbon. The resulting data will be transferable to domestic and international sustainable agricultural and land rehabilitation applications. The project specifically addresses an area of global significance, the long-term, millennia rather than short-term sequestration of terrestrial carbon. There will be spin-off benefits including the provision of a formula for sustainable agriculture resources and localised employment opportunities, educational and financial incentives for farmers to improve on-farm soil health as well as health benefits from the reduction of atmospheric CO₂.