

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

## Victoria

### Swinburne University of Technology

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**Approved Project Title** **Molecular spectroscopic 2D and 3D imaging systems at sub-micron spatial resolution**

2010 \$350,000.00

Primary FoR 0301 ANALYTICAL CHEMISTRY

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

Monash University, RMIT University

**Administering Organisation** Swinburne University of Technology

#### **Project Summary**

High-resolution chemical imaging systems are powerful tools for understanding the detailed make-up of a wide range of important high-tech materials. They allow researchers to map the distribution and form of separate chemical components, as well as the interactions between them. This information is critical for the design and formulation of the next generation of pharmaceuticals and drug delivery systems. It will allow the investigators to develop new biomedical materials for implants and prostheses, while new surface coatings will also improve the performance of aerospace structures. Novel sensors and process monitoring techniques will be used to develop new medical diagnostics and to control the quality of pharmaceuticals production.