Australian Postgraduate Award (Industry)

Short-Pulse Laser Cleaning for Australian Heritage Conservation

This is an exciting opportunity to participate in a novel approach to conserving historical objects of national importance, using a state-of-the-art ultrafast laser ablation process at the Australian National University. The project is funded by a 3-year Australian Research Council Linkage grant that includes the Australian War Memorial, the Art Gallery of NSW, the Army History Unit, the Naval Heritage Collection, Artlab Australia and the RAAF Museum. We are seeking a highly motivated honours graduate with a degree in physics/chemistry to further develop this new technique for precise control of the laser/surface interaction process which selectively removes layers of material from the valuable original surface. This will involve determining optimum laser parameters for ablation of contaminants, developing real time ablation plume diagnostics and performing surface characterisation of Australian heritage artefacts. The student will be expected to interact with all the major stakeholders, and will have the opportunity to travel to an international conference in the field.

Applicants:

Candidates must be Australian citizens or permanent residents. They should possess a strong background in physics and/or chemistry, and should have excellent analytical and experimental skills. An interest in art and heritage object conservation is desirable, as are good communication skills. The applicant should be committed to complete their PhD programme during the tenure of the scholarship.

Stipend: $24,650 p.a tenable for 3 years. Additional funding is available for travel and conferences.

Commencement date: Early 2006

Closing date for applications: 4 January 2005