

Industry PhD Scholarship: Circular economy transition governance for the waste management and resource recovery sector

UTS Institute for Sustainable Futures, CSIRO and Waste Management & Resource Recovery Association (WMRR)

Project title

Circular economy transition governance for the waste management and resource recovery sector

Project description

This industry PhD (iPhD) project will examine how circular economy strategies can strengthen the waste management and resource recovery sector's performance across environmental, economic, and social dimensions. This may include analysing the potential for waste avoidance, improved reuse and recycling, reduced dependence on virgin materials, and the creation of new business opportunities, jobs, and skills. The project will also consider the sector's contribution to emissions reduction, but this will be situated within a broader circular economy perspective.

A central focus will be the governance of transition processes. The research will explore what policies, programmes, market incentives, and institutional arrangements are needed to support change in the sector, and how collaboration across government, industry, and supply chains can enable more systemic circular outcomes.

The student will be able to draw on expertise and industry knowledge across three organisations – UTS, CSIRO and WMRR.

Ideal student skillset

We are seeking a student with a strong interest in the circular economy, sustainability, environmental policy, and industry transition. Suitable backgrounds may include environmental science, sustainability, industrial ecology, economics, public policy, geography, planning, engineering, or related disciplines. The ideal candidate would be interested in how waste management and resource recovery systems can contribute to waste minimisation, improved recycling and reuse, greenhouse gas abatement, economic development, and employment creation.

Experience or interest in one or more of the following would be valuable: quantitative analysis, policy analysis, systems thinking, circular economy, waste and resource recovery, sustainability transitions, or stakeholder engagement.

Strong written and verbal communication skills are important, as the project will involve engaging with government and industry partners and translating research into practical insights. The project would suit a student who enjoys interdisciplinary research and wants to contribute to real-world environmental and economic change.

Supervisory team

- Associate Professor Monique Retamal, Institute for Sustainable Futures, University of Technology Sydney
- Dr Heinz Schandl, Senior Principal Research Scientist, CSIRO Environment
- Gayle Sloan, CEO Waste Management and Resource Recovery Association of Australia Ltd

Project locations

Primary location of student	University of Technology Sydney, 235 Jones Street, Ultimo NSW 2007, Australia
Industry engagement component location	Waste Management and Resource Recovery Association of Australia Ltd, 57 St. John's Road, Glebe NSW 2037, Australia.
Other locations	CSIRO Black Mountain, Clunies Ross Street, Building 101, Acton ACT 2601, Australia.

CSIRO Industry PhD Program details

The Opportunity

The CSIRO Industry PhD Program (iPhD) is a four-year research training program, focusing on applied research that benefits industry by solving real-world challenges. It aims to produce the next generation of innovation leaders with the skills to work at the interface of research and industry in Australia.

The Program includes:

- a) Admission to a university PhD program.
- b) Supervision by the participating university, CSIRO, and an industry partner.
- c) A four year scholarship package totalling approximately \$48,000 per annum tax exempt (2026 rate).
- d) A four year Project Expense and Development package starting from \$13,000 per annum.
- e) A 60 day Industry Engagement component with the industry partner.
- f) A structured professional development and training program to develop your applied research skills.

Successful students are subject to the policies, procedures and guidelines of the participating university in addition to the CSIRO Industry PhD Program terms and conditions. Students will receive a standard PhD on completion.

Eligibility Requirements

The student must:

- a) Be an Australian citizen or Permanent Resident, or a New Zealand citizen.
- b) Meet participating university PhD admission requirements.
- c) Meet university English language requirements.
- d) Not have previously completed a PhD.
- e) Be able to commence the Program in the year of the offer.
- f) Enrol as a full-time PhD student. Part-time arrangements may be considered if approved by the supervisory team and in accordance with university policy.
- g) Be prepared to be located at the project location(s) and if required, comply with UTS's external enrolment procedures.
- h) Be prepared to undergo onboarding to CSIRO, which will include passing mandatory government background checks (allow for between 4 to 8 weeks) and complete any other CSIRO requirements.

Application Process

- a) In the first instance, interested applicants should fill out this [Expression of Interest form](#) and send their CV to: minnah.ahsan@uts.edu.au
- b) Suitable applicants will be contacted by the supervisory team to discuss a research proposal
- c) Shortlisted applicants will be asked to prepare a research proposal as required by UTS-ISF's Graduate Research Program
- d) The supervisory team will review research proposals and interview applicants
- e) The supervisory team will nominate a preferred applicant, at which point the applicant may proceed to a formal application with the UTS Graduate Research School.

Application closing date - Open until position filled

Further information

- Visit CSIRO's [website](#)
- Visit UTS-ISF's [website](#)
- Contact the [iPhD team](#) and [Subscribe to our newsletter](#)