



CSIRO Industry PhD Program

Development of new sorbent formulations for PFAS remediation

The CSIRO Industry PhD Program is a four-year research training program that focuses on applied research and working with the industry sector. Apply today to undertake this exciting project at the University of Adelaide.

Key details

Who can apply?

Australian citizens or Permanent Residents, or New Zealand citizens

Industry partners

CSIRO and Rembind

Program of Study

Doctor of Philosophy (PhD)

Total annual stipend amount

Scholarship package totalling approx. \$45,000 AUD p.a. over four years, with an additional Project Expense and Development package of \$13,000 p.a. over four years

Application closing date

31/03/2023

The University of Adelaide is partnering with the CSIRO and industry leader Rembind to offer a position in CSIRO's pathbreaking Industry PhD Program. This program 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:

- admission to a PhD program at the University of Adelaide
- a Scholarship Package totalling approx. \$45,000 p.a. over four years
- a structured professional development and training program
- a Project Expense and Development package of \$13,000 p.a. over four years
- an in-business industry engagement component
- supervision by CSIRO, an industry partner, and the host university

Successful students are subject to the policies, procedures, and guidelines of the University in addition to the CSIRO Industry PhD Program terms and conditions.

Project title

Development of new sorbent formulations for PFAS remediation

About the project

Australia is faced with a big contamination problem relating to chemicals used in firefighting foams, called per- and poly-fluoroalkyl substances or PFAS. PFAS are a large group of chemicals, with over 5000

different species. Their complexity has posed a challenge with existing remediation approaches based on sorbents, with varying success achieved for different PFAS species. For example, current sorbents available in the market cannot effectively immobilise short-chain PFAS.

This project aims to develop remediation materials that will be effective for a wider range of PFAS and allow tailored solutions for PFAS immobilisation in soil. This project will assist the PhD student to develop skills in material and soil science, environmental chemistry, analytical techniques and soil management. It also provides an opportunity for the student to work with the industry.

The successful student will be located at the University of Adelaide's Waite Campus, working at CSIRO's research facility as well as the School of Agriculture. The in-business component of the degree will be conducted at Rembind's Head Office (2 Ann Nelson Drive, Thebarton SA 5031), but will also involve some interstate travel to remediation projects and manufacturing facilities.

Supervisor details:

CSIRO

Dr Divina Navarro

CSIRO Land and Water unit

divina.navarro@csiro.au

University of Adelaide

Dr Shervin Kabiri

School of Agriculture, Food and Wine

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Eligibility requirements

The student must:

- a) be an Australian citizen or Permanent Resident, or a New Zealand citizen;
- b) meet host 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; and,
- g) be prepared to be located at the project location(s) that the host university has approved and, if required, comply with the host university's external enrolment procedures.

The ideal candidate would have a background in chemistry or materials science. Extensive knowledge or experience in materials synthesis, minerals, environmental science and analytical chemistry is also desirable.

Excellent communication and organization skills are required. Forward thinking, innovation and creativity are encouraged for this position

Application process

- a) Applicants are required to submit an expression of interest (EOI) to the University supervisor
- b) The EOI is assessed by the supervisory team and shortlisted applicants are interviewed
- c) The supervisory team nominates a preferred applicant
- d) The nominated applicant will be instructed to apply
- e) The application is then be assessed by the University against PhD admission criteria.

- f) The university will issue a letter of offer for the program if all conditions have been satisfied

Please note, this project is still in the contracting phase and there is no guarantee for the position until the formal collaboration agreement between the parties is in place. Nominated applicants will be notified as to when this occurs.

Further Information

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Ph: +61 8 8313 0262

Web: [CSIRO Industry PhD](#)

For project specific information please contact [Dr Shervin Kabiri](#).