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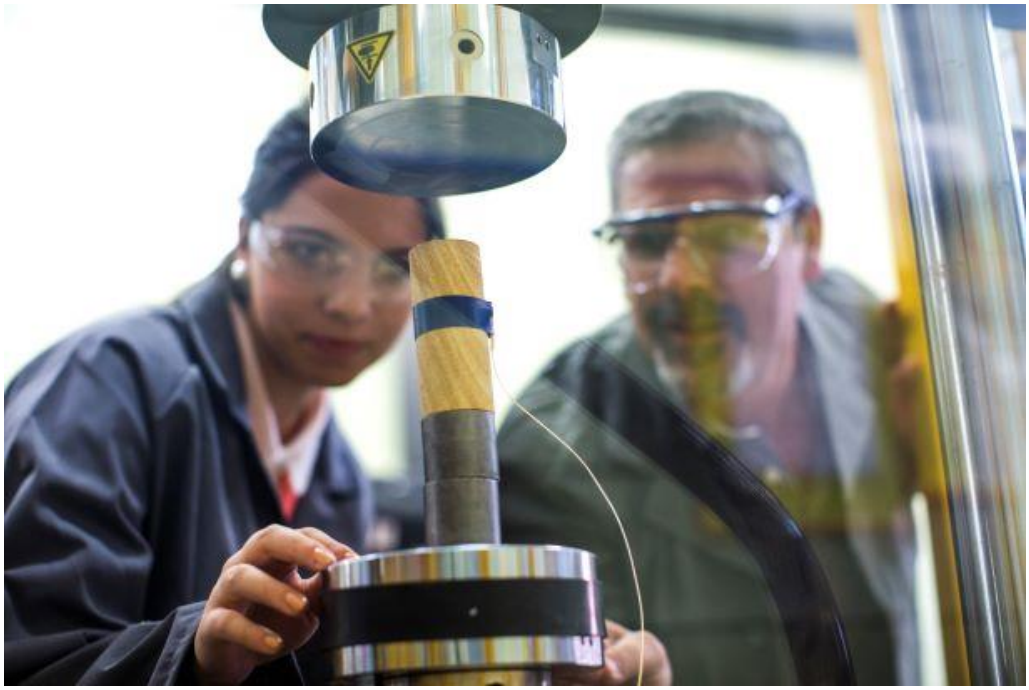

Faculty of Sciences, Engineering and Technology

ARC PHD PROJECT - DEVELOPMENT OF NOVEL BIOMOLECULES FOR MINERAL PROCESSING

Up for a challenge? Join us to work on a research project with the School of Chemical Engineering & Advanced Materials

At a Glance

Who can apply?

- Australian Citizens & Permanent Residents
- Onshore International students
- International applicants
- New Zealand Citizens

Industry partner or funding body

- ARC Centre of Excellence

Program of Study available

- Doctor of Philosophy (PhD)

Total annual stipend amount

- A base scholarship of $28,854pa plus $5000pa top-up scholarship

Start date

- Plan for a start date no later than 27/05/2022

About the project

This PhD project is part of the ARC Centre of Excellence (CoE) for Enabling Eco-efficient beneficiation of minerals. The Centre will develop transformational technologies for enabling a competitive and environmentally sustainable future for

Australia's minerals industry through: reduced environmental footprint, significant reductions in energy and water use, higher resources recovery, future leaders to support the sector.

This Centre will transform the minerals industry, establishing a new generation of research leaders to support the innovation needed in creating a green economy for future generations.

Control and processing of clay suspensions remains a major issue in mineral processing. This project aims to design and synthesize novel biomolecules for improved handling and processing of clay suspensions. Specifically, these biomolecules can be targeted to flocculate clay particles and make the flocs easy to be removed via different processes.

Eligibility criteria

- Applicants with strong knowledge and experience in biotechnology, bioengineering, protein design or mineral processing, chemical engineering will be considered favourably.
- Excellent students who hold a Bachelor of Bioengineering, Biotechnology, or a degree with Chemical Engineering would be suitable and encouraged to apply.
- Applicants with well-developed written and verbal communication skills will be considered favourably.
- Have experience in laboratory works (protein expression, purification, etc.) will be considered favourably.

Benefits

- Access to authorised travel and research project funds available
- Work alongside world leading researchers in the ARC Centre of Excellence
- Our CaRST program: Free professional development to enhance your employability skills
- Exposure to industry networks and experts in the field
- No Tuition fees! These are waived for eligible candidates
- Access state of the art technology
- Become a field expert and make a real and contribute to solving global challenges
- Publish your contributions and impact our communities and society.

How to apply

- Complete an expression of interest and email together with a copy of your CV and transcripts to chunxia.zhao@adelaide.edu.au
- Once your initial eligibility assessment is approved, formally lodge an application for admission only via the Adelaide Graduate Centre 'How to Apply' link. **Application dates are listed on the website.**

Researcher Profiles

- Use our Researcher Profiles to find out more about potential supervisors

More about SET

The Faculty of Sciences, Engineering and Technology is home to world-class research institutes and centres, and internationally renowned academics at the cutting edge of research and discovery.

The faculty is committed to delivering outstanding research that helps solve complex global problems and contributes to national priorities.

We're home to a number of world-class research institutes and centres, where our students learn from internationally renowned academics at the cutting edge of research and discovery.

We address global needs in collaboration with industry, government and the broader community.

Our campuses are home to a number of co-located industry partners, affiliated researchers and research institutes of international significance. This close proximity offers a unique opportunity for our students to gain practical and theoretical knowledge through dynamic national and international research projects.

Many of our academic staff are leaders in their fields and graduates are highly regarded by employers.

Learn more about the Faculty of Sciences, Engineering and Technology Research capabilities at: https://ecms.adelaide.edu.au/research-impact

The University of Adelaide is an Equal Employment Opportunity employer. Women and Aboriginal and Torres Strait Islander people who meet the position requirements are strongly encouraged to apply.

FURTHER INFORMATION

For a confidential discussion contact:

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