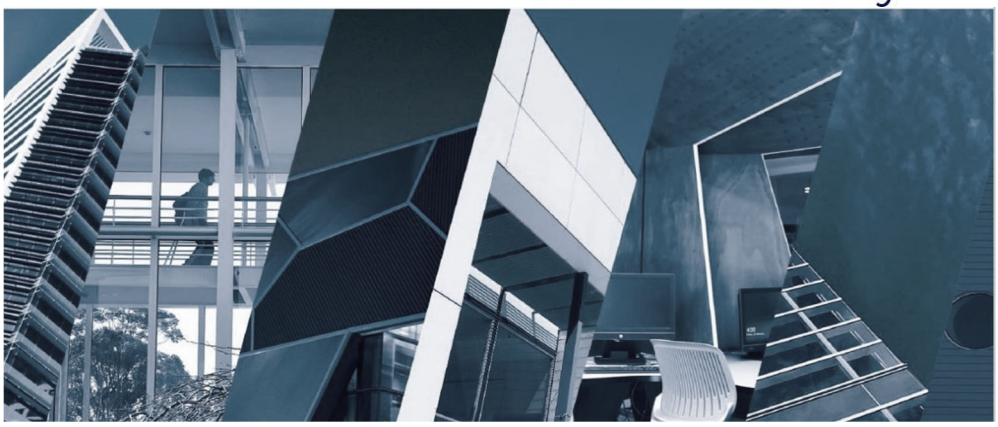
Position Description



Position title:	Research Associate, Carbon Technology Research Centre (CTRC)
School/Directorate /VCO:	School of Engineering, IT and Physical Sciences
Campus:	Gippsland Campus. Travel between campuses may be required.
Classification:	Academic Level A
Time fraction:	Part-time
Employment mode:	Fixed-term appointment
Probationary period:	This appointment is offered subject to the successful completion of a probationary period.
Further information from:	Dr Vince Verheyen, SEITPS Telephone: (03) 5122 6451 E-mail: vince.verheyen@federation.edu.au
Recruitment number:	850105

Background

At Federation University, we are driven to make a real difference to the lives of every student, and to the communities we serve.

We are one of Australia's oldest universities, known today for our modern approach to teaching and learning. For 150 years, we have been reaching out to new communities, steadily building a generation of independent thinkers united in the knowledge that they are greater together.

Across our university and TAFE campuses in Ballarat, Berwick, Brisbane, Gippsland, and the Wimmera, we deliver world-class education and facilities. With the largest network of campuses across Victoria, as well as a growing Brisbane base, we are uniquely positioned to provide pathways from vocational education and skills training at Federation TAFE through to higher education.

This position description is agreed to by

Employee name	Signature	Date

Portfolio

The School of Engineering, Information Technology & Physical Science is one of six schools at Federation University. The School conducts research and teaching in Engineering (Civil, Mechanical, Mechatronics and Mining), Mathematics, Geoscience, Information Technology and Science.

The successful applicant will support the research of the School's Carbon Technology Research Centre located at the Gippsland (Churchill) campus. In particular, the position will be providing support to the JPLV HESC Gasifier and Omnia Humate research projects as part of our partnership with Australian Carbon Innovation.

The Hydrogen Energy Supply Chain (HESC) is a world-first pilot project to produce and transport clean hydrogen from Victoria's Latrobe Valley (LV) to Japan, which is being delivered by J-Power Latrobe Valley (JPLV). The LV HESC Pilot Plant will be used to dry, mill and gasify Victorian lignite and produce purified hydrogen for export trials. The Omnia Humate research project involves the development of humic products by tailored chemical oxidation of lignite in collaboration with Omnia Specialities.

You will be part of a local multidisciplinary research team working on these projects, and you will prepare, analyse and evaluate samples and data, you will prepare and provide regular reports on results and trends to stakeholders. The position is based in Churchill, the incumbent may spend time at the JPLV gasifier site (AGL Loy Yang) and Omnia production plant (Morwell).

Appropriate to the level of the appointment, the Research Associate will have a degree in a chemical/mechanical engineering, chemistry or significant plant operations and laboratory experience. Other relevant industry experience or qualifications may also be considered.

Position summary

Appropriate to a Level A appointment, the Research Associate (CTRC) will be expected to:

- contribute to the collection and processing of samples and data;
- assisting with the operation of a chemistry laboratory;
- contribute to the School's research program by participating in research activities and developing or maintaining an active research profile; and
- contribute to the School's administrative functions.

Key responsibilities

1. Be prepared and able to observe and participate in activities at the HESC pilot plant and Omnia sites, including adhering to site-based OHSE requirements
2. Maintain accurate records of activities, calculations and observations and contribute to their critical analysis.
3. Set up, monitor and maintain lab based experimental and analytical equipment. Diagnose and, where possible, repair instrument faults, including associated computers.
4. Contribute to preparing literature reviews and technical reports.
5. Collaborate closely with the project team, project partners, academic and technical staff.
6. Contribute to developing and implementing controlled oxidation processing of lignites into humates.
7. Contribute to a safe, healthy work environment, including preparing and implementing risk assessments for technical and site-based activities.
8. Participate in meetings, activities and networks relevant to the position.
9. Other responsibilities applicable to a Level A academic under current minimum standards for Academic Levels, as assigned by the Dean and Head of School/Deputy Dean.
10. Reflect and embed the University's strategic purpose, priorities and goals when exercising the responsibilities of this position. For a more complete understanding and further information please access the Strategic Plan at: https://federation.edu.au/about-us/our-university/strategic-plan.

11. Undertake the responsibilities of the position adhering to:
    - The Staff and Child Safe Codes of Conduct and Conflict of Interest Policy and Procedure;
    - Equal Opportunity and anti-discrimination legislation and requirements;
    - the requirements for the inclusion of people with disabilities in work and study;
    - Occupational Health and Safety (OH&S) legislation and requirements; and
    - Public Records Office of Victoria (PROV) legislation.

Level of responsibility

The Research Associate will assist with JPower HESC Pilot Plant and ACI funded Omnia Humates projects.

Working in a small team, the Research Associate will implement processes, procedures and templates for data monitoring and reporting for the HESC project while conducting laboratory-based experiments, measurements and reporting for the Omnia Humate project. In addition, the Research Associate be an active contributor to research supervision and administrative functions within the school.

Training and qualifications

The Research Associate, CTRC will hold a degree either in chemical/mechanical engineering or chemistry, however applicants with similar industry experience should also apply.

A current, valid Victorian Driver's license is essential.

Position/Organisational relationships

The Research Associate, CTRC will work under the direction of the Research Leader and Analyst Coordinator and under the broad direction of the Dean and Head of School/Deputy Dean, School of Engineering, IT and Physical Sciences and work as part of the School's team of academic staff.

Key selection criteria

Applicants must demonstrate they are able to undertake the inherent responsibilities of the position as contained in the position description and are able to meet the following key selection criteria:

1. A degree in chemistry or chemical/mechanical engineering field or similar industry experience.
2. Demonstrated knowledge of Occupational Health and Safety (OH&S) and Environmental Health and Safety (EH&S) in laboratory and industrial settings
3. Demonstrated "in the field" problem solving aptitude and experience.
4. Demonstrated chemical laboratory experience including performing experiments, measuring chemical and physical properties, record keeping, data management, quality control and reporting.
5. Demonstrated ability to undertake literature searches, publication of research findings and preparation of industry reports.
6. Demonstrated ability to work in a team and develop relationships with internal and external stakeholders/industry partners.
7. A preparedness to undertake research and a capacity to develop an active research profile
8. Evidence of an ability to work collegially.
9. Excellent interpersonal, oral and written communications skills and an ability to relate well to students and other University staff.

The University reserves the right to invite applications and to make no appointment.

It is not the intention of the position description to limit the scope or accountabilities of the position but to highlight the most important aspects of the position. The aspects mentioned above may be altered in accordance with the changing requirements of the role.

Key Minimum Standards for Academic Levels (MSALs)

Research academic employees

Level A

A Level A research academic will typically conduct research/scholarly activities under limited supervision either independently or as a member of a team, and will normally hold a relevant higher degree.

A Level A research academic will normally work under the supervision of academic staff at Level B or above, with an increasing degree of autonomy as the research academic gains skills and experience. A Level A research academic may undertake limited teaching, may supervise at undergraduate levels and may publish the results of the research conducted as sole author or in collaboration. He or she will undertake administration primarily relating to his or her activities at the institution.

The standards are not exhaustive of all tasks in academic employment, which is by its nature multi-skilled and involves an overlap of duties between levels.

Federation University Australia
Union Enterprise Agreement
2019–2021
Academic and General Staff Employees