Research Engineer



Faculty/Portfolio	Office of the Deputy Vice-Chancellor Research
School/Centre	Institute for Frontier Materials (IFM)
Basis of Employment	Fixed term and full-time
Primary Location of Work	Geelong Waurn Ponds Campus
Classification	HEW 7
Reporting Line	Professor Of Applied Electrochemistry And Corrosion Technologies

ABOUT DEAKIN

Deakin University is proud to be recognised as an organisation that offers a friendly, supportive and challenging working environment. Our staff are committed to making a genuine difference to people's lives through excellence in education and research. We acknowledge the importance of providing a dynamic and diverse working environment and offer variety in day-to-day roles as well as professional development opportunities to assist staff to grow and progress their careers. Deakin University staff have the opportunity to interact with colleagues from a diverse range of cultures and professional backgrounds, all of whom share a common interest in lifelong learning.

Deakin is Australia's sixth largest university and ranks first in Victoria for both student satisfaction and graduate employment. Deakin operates five campuses; the Cloud Campus, Melbourne Burwood Campus, Geelong Waurn Ponds Campus, Geelong Waterfront Campus, and the Warrnambool Campus. We have corporate centres in Melbourne's CBD, and at the Burwood, Waterfront and Waurn Ponds campuses, as well as offices in South Asia, China, Indonesia, Latin America, Europe, Malaysia, Vietnam, Pakistan and Singapore.

WHY WORK FOR OUR UNIVERSITY?

Institute for Frontier Materials

Deakin Research

<u>Benefits of working</u> <u>at Deakin</u> <u>Deakin's Strategic</u> <u>Plan – LIVE Agenda</u>

DEAKIN'S PROMISE TO EQUITY, DIVERSITY AND INCLUSION

At Deakin we value diversity, embrace difference and nurture a connected, safe and respectful community. Deakin is an Employer of choice for Gender Equality, a proud member of the SAGE Athena SWAN program seeking gender equity for Women in STEMM, and a Gold award holder in the Australian Workplace Equality Index for LGBTI inclusion. We strongly encourage applications from Aboriginal and Torres Strait Islander people and people of all cultures, abilities, sex and genders.

deakin.edu.au/about-deakin/careers-at-deakin



POSITION OVERVIEW

The purpose of this position is to provide specialist engineering research support to the Institute for Frontier Materials. The research engineer will support IFM in its industry engagement initiatives, by undertaking industry specific project activities and developing and commercialising new products and technologies in one or more of the following core research areas:

- Alloy design and processing
- Biomaterials and biomimicry
- Corrosion and protection
- Electromaterials and membranes
- Fibres, polymers, composites and textiles
- Materials and processing modelling
- Nanotech and plasma technology

Key Relationships:

Internal	 National Facility for Pipeline Coating Assessment School of Engineering, SEBE Deakin Research Innovations
External	 Future Fuels Cooperative Research Centre (FFCRC, major research partner) Australian companies in the pipeline and coating industries (major coating assessment clients) Australasian Corrosion Association

PRIMARY RESPONSIBILITIES

- Contribute effectively to all aspects of industry projects as required, including proposal preparation, design, development, and maintenance of experimental equipment and systems, ordering experimental components, equipment and supplies.
- Manage the activities, personnel, communications with clients and reports of the National Facility for Pipeline Coating Assessment (NFPCA), more specifically,
 - Effectively communicate with NFPCA clients on providing quotes & reports in a timely and professional manner.
 - Communicate findings through oral and written reports.
 - Co-ordinate testing activities with the coating facility efficiently to ensure client requirements are meet
 - Ensure equipment is maintained and calibrations of equipment up to date
 - Manage project timelines and deliverables and identify corrective actions.
 - Ensure OH&S requirements within coating facility meet university and statutory requirements.
 - Manage the NATA accreditation requirements of the NFPCA
- Support Future Fuels CRC projects
 - Provide support to CRC projects related the Future Fuels CRC
 - Manage OH&S inductions of staff / students for the corrosion and coating labs
 - In collaboration with industry partners, generate creative and feasible technical product solutions and identify/resolve testing design issues.
- Support research student and final year project student projects working in the corrosion and coating labs.
- Participate in the development and/or maintenance of links and partnerships with industry and relevant professional bodies and the community.
- Comply with occupational health and safety policies and procedures as developed by Deakin University in accordance with current legislation.
- Perform administrative tasks commensurate with position responsibilities and contribute to processes that enable the effective operation of the Institute.
- Any other duties as directed, commensurate with the scope and classification of the position.

ABOUT YOU

To be successful at Deakin you are willing to enthusiastically embrace the Deakin Offer and Promise as expressed in the Deakin University Strategic Plan, and must share the University's values.

You will be a person who is ambitious for Deakin University's success and optimistic about its future; and will display diligence, have great resolve and a focus on producing results.

SELECTION CONSIDERATIONS

Experience:

- Experience with a range of materials characterisation and mechanical testing techniques, in particular corrosion testing and the testing of polymer coatings.
- Experience with at least one industry sector that is aligned with IFM's core research areas, ideally in metals and coatings areas
- Demonstrated ability to work effectively as a member of an interdisciplinary team.
- Demonstrated ability to plan and conduct high quality applied research in a timely manner.
- Demonstrated ability to liaise with industry and researchers.

Skills/Techniques:

- Demonstrated organisational skills, including the demonstrated ability to maintain a high standard of laboratory and data record keeping.
- Good interpersonal skills, including the ability to interact well with research and technical staff and students; and excellent oral, written communication and presentation skills.
- Ability to problem-solve and think laterally.
- Demonstrated ability to work well both independently and with teams.

Qualifications and Experience:

• Honours or higher level degree in mechanical engineering, materials engineering or chemical engineering

Capabilities and Personal Attributes:

- Demonstrated communication and interpersonal skills with the ability to produce clear and accurate communications that are appropriate for their intended audience.
- Proven capability to work positively and effectively as part of a collaborative work team, to accommodate and work well with different working styles and to work independently where required,
- Demonstrated ability to managing OH&S of work places,
- Demonstrated ability to organise and plan, and to meet rigid and conflicting demands and deadlines, along with the ability to adapt to changed priorities,

SPECIAL REQUIREMENTS

- Infrequent work outside business hours is required (*e.g. work at evening or weekend events is required*)
- Victorian Driver Licence

DISCLAIMER

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.