

POSITION DESCRIPTION

Academic Positions

(In addition to the Position Classification Standards)

Position Title: Associate Research Fellow / Research Fellow Level: A/B

Faculty/Division: Australian Institute for Innovative Materials

Department/Location: Intelligent Polymer Research Institute

Primary Purpose of the Position:

In association with industry partner AquaHydrex Pty Ltd, IPRI has obtained an Australian Research Council Linkage Grant to develop a reversible fuel cell. The employee will carry out detailed and extended electrochemical experiments on a range of fuel cell – electrolyser combinations; test, study and characterise reversible fuel cells. The associate will be responsible for transferring these findings to industrial research partners.

Position Environment:

Energy involving hydrogen-oxygen fuel cells is one of the key research areas within the Intelligent Polymer Research Institute whose competencies lie in the design and synthesis of novel intelligent materials. IPRI is renowned for expertise in the group of multifunctional, stimuli-responsive materials – organic conducting polymers and more recently carbons used in a diverse range of applications. IPRI is also the lead node of the ARC Centre of Excellence for Electromaterials Science and housed within the AIIM building on innovation campus.

Currently 3 professors, 3 senior research and research fellows, and a number of PhD candidates are actively involved in energy work involving electrochemical transformations related to water.

Major Accountabilities/Responsibilities:

Responsibilities		Outcome	Office Use Only	
1.	Perform research and development work	Meet research and development aims for the project		
2.	Prepare regular reports/attend meetings and teleconferences with other researchers on the project and industry partners	Reports/meetings attended		
3.	Collaborate with other researchers on the project to achieve joint goals	Collaborate to achieve joint goals		
4.	Perform other duties as required	Duties performed		
5.	Maintenance of equipment	Maintain equipment as required		
6.	Supervisory roles: Assist and co-supervise PhD students.	To foster direct relationships with staff and enhance engagement with the organisation.	Ongoing	
7.	Observe principles and practices of Equal Employment Opportunity	To ensure fair treatment in the workplace		
8.	Have WH&S responsibilities, accountabilities and authorities as outlined in the http://staff.uow.edu.au/ohs/commitment/responsibilities/ document	To ensure a safe working environment for self & others.		

Inherent Requirements:

This position description outlines the major accountabilities/responsibilities and the selection criteria against which you will be assessed as suitable for the position. As such there will be specific job requirements that we refer to as Inherent Requirements.

Inherent Requirements refer to your ability to:

- Perform the essential duties and functional requirements of the job;
- Meet the productivity and quality requirements of the position;
- Work effectively in the team or other type of work organisation concerned; and
- Do the job without undue risk to your own or others health, safety and welfare at work.

If you have any injuries, illness, disorder, impairment, condition or incapacity that may affect your ability to perform the inherent requirements of the position, we encourage you to discuss this with the University to assist in the process of identifying reasonable adjustments to enable you to perform the duties of the position. The University wants to place you in the best situation to use your skills effectively in the position you are applying for at the University.

Reporting Relationships:

Position Reports to:	Prof Gordon Wallace via Toni Campbell
The position supervises the following positions:	nil
Other Key Contacts:	Prof Gerry Swiegers

Key Relationships:

Contact/Organisation:

Purpose & Frequency of contact

Prof Gordon Wallace Prof Gerry Swiegers Monthly or as required

As required; then regular updates to Industry Partner

Key Challenges:

- 1. Research and development
- 2. Prototype Development
- 3. Preparation of publications and patent applications
- 4. Assist with and co-supervise PhD students working on the project

SELECTION CRITERIA - Knowledge & Skills:

Essential:

- Understanding of research and development.
- Carry out electrochemical R&D in the field of hydrogen-oxygen fuel cells and electrolysis cells
- Ability to communicate with and respond to industry partner needs.
- Demonstrated research excellence in electrochemistry or electrochemical engineering
- Demonstrated skills in materials characterisation
- Demonstrated skills in manuscript / patent writing

SELECTION CRITERIA - Education & Experience:

Essential:

- A PhD in electrochemistry or electrochemical engineering either within the last 5 years, or awaiting conferment
- An ability to carry out electrochemical R&D in the field of fuel cells and / or electrosynthetic reactions
- An understanding of research and development.
- An ability to communicate with and respond to industry partner needs
- Demonstrated skills in the communication of science & technology via oral presentations, written reports, publications, or patents.

Desirable:

- Demonstrated research excellence in electrochemical studies of fuel cells and / or electrosynthetic reactions, preferably utilizing custom-made, desktop cells
- Demonstrated research excellence and experience using laboratory electrochemical instrumentation in electrochemistry and materials characterisation

Personal Attributes:

- Focus on results and targets.
- Fast thinker and adaptable.
- Ability to work independently as well as within a team.
- Good ability to communicate verbally and in writing

Special Job Requirements:

Must adhere to safe laboratory practices and undertake appropriate OH&S training prior to commencing work.

Organisational Chart:

Intelligent Polymer Research In (Prof G. Wallace, Director)	AquaHydrex Pty Ltd, Industrial Partner Dr Paul Barrett, CEO
Chief Investigator (Prof G. Swiegers)	
Post-Doctoral Fellow	

Approval:	
Approved by Head of Unit:	
Date:	
Approved by Human Resources:	
Date:	



POSITION CLASSIFICATION STANDARD - Research Only

Level: A

Title: Associate Fellow

Description

A position classification standard describes the broad categories of responsibility attached to research-only academic staff at different levels. The standards are not exhaustive of all tasks in research-only academic employment, which is by its nature multi-skilled and involves an overlap of duties between levels. The standards provide an adequate basis to differentiate between the various levels of employment and define the broad relationships between classifications.

Progression through an academic career will normally be based on research, teaching, administrative functions and contribution to the profession. The balance of functions will vary according to level and position over time. It is only in exceptional circumstances that promotion would be solely on the research only position classification standards.

- General Standard
- Specific Duties
- Skill Base

General Standard

A Level A research-only academic is expected to contribute towards the research effort of the institution, and to develop her/his research expertise through the pursuit of defined properties relevant to the particular field of research.

Specific Duties

Specific duties required of a Level A research-only academic may include

- The conduct of research under limited supervision either as a member of a team or, where appropriate, independently, and the production or contribution to the production of conference and seminar papers and publications from that research.
- Involvement in professional activities including, subject to availability of funds, attendance at conferences and seminars in the field of expertise.
- Limited administrative functions primarily connected with the area of research of the academic.
- Development of a limited amount of research-related material for teaching or other purposes with appropriate guidance from other staff.
- Occasional contributions to teaching in relation to his/her research project(s).
- Experimental design and operation of advanced laboratory and technical equipment or conduct of advanced research procedures.
- Attendance at meetings associated with research or the work of the organisational unit to which the research is connected and/or at departmental and/pr faculty meetings and/or membership of a limited number of committees.
- Advice within the field of the staff member's research to postgraduate students.
- A Level A research-only academic shall work with support, guidance and/or direction from staff classified at Level B and above and with an increasing degree of autonomy as the research academic gains in skill and experience.

Skill Base

A Level A research-only academic will normally have completed four years of tertiary study in the relevant discipline or have equivalent qualifications or research experience. In many cases a position at this level will require an honours degree or higher qualifications or equivalent research experience. Research experience may have contributed to or resulted in publications, conference papers, reports or professional or technical contributions which give evidence of research potential.



POSITION CLASSIFICATION STANDARD - Research Only

Level: B

Title: Fellow

Description

A position classification standard describes the broad categories of responsibility attached to research-only academic staff at different levels. The standards are not exhaustive of all tasks in research-only academic employment, which is by its nature multi-skilled and involves an overlap of duties between levels. The standards provide an adequate basis to differentiate between the various levels of employment and define the broad relationships between classifications.

Progression through an academic career will normally be based on research, teaching, administrative functions and contribution to the profession. The balance of functions will vary according to level and position over time. It is only in exceptional circumstances that promotion would be solely on the research only position classification standards.

- General Standard
- Specific Duties
- Skill Base

General Standard

A Level B research-only academic is expected to carry out independent and/or team research within the field in which he/she is appointed and to carry out activities to develop his/her research expertise relevant to the particular field of research

Specific Duties

Specific duties required of a Level B research-only academic may include

- The conduct of research either as a member of a team or independently, and the production of conference and seminar papers and publications from that research.
- Supervision of research-support staff involved in the staff members' research.
- Guidance in the research effort of junior members of research-only academic staff in his/her research area.
- Contribution to the preparation, or where appropriate individual preparation, of research proposal submissions to external funding bodies.
- Involvement in professional activities including, subject to availability of funds, attendance at conferences and seminars in the field of expertise.
- Administrative functions primarily connected with his/her area of research.
- Occasional contributions in the teaching program within the field of the staff member's research.
- Co-supervision, or where appropriate supervision, of major honours or postgraduate research projects within the field of the staff member's area of research.
- Attendance at meetings associated with research or the work of the organisational unit to which the research is connected and/or at departmental and/pr faculty meetings and/or membership of a limited number of committees.

Skill Base

A Level B research-only academic will normally have completed a doctoral qualification or have equivalent qualifications or research experience. In addition he/she may be expected to have had post-doctoral research experience which has resulted in publications, conference papers, reports or professional or technical contributions which give evidence of research ability.