

### POSITION DESCRIPTION Academic Positions (In addition to the Position Classification Standards)

Position Title:	Associate Research Fellow	Level:	А
Faculty/Division:	Australian Institute for Innovative I	Materials (AIIM)	
Department/Location:	ARC Centre of Excellence for Elec	ctromaterials Scienc	e (ACES)

#### Primary Purpose of the Position:

To carry out research funded by the ARC Centre of Excellence in Electromaterials Science (ACES) (<u>www.electromaterials.edu.au</u>) on the development of hydrogels for application in ACES projects in soft robotics, synthetic energy systems and synthetic biosystems. This research will involve polymer synthesis, polymer (especially hydrogel) characterisation including mechanical and physical properties, and processing such as fibre formation, printing and 3D fabrication.

### **Position Environment:**

You will be a member of ARC Centre of Excellence in Electromaterials Science (ACES) located within the lead node the Intelligent Polymer Research Institute at the University of Wollongong (UOW). ACES is composed of 6 Australian nodes: UOW, Deakin University, Monash University, University of Tasmania, Melbourne University and Australian National University and 5 international partner organisations: Dublin City University; University of Warwick; Friedrich Alexander University; Hanyang University and Yokohama National University.

The vision is to create the next generation of electrochemical devices via the precision assembly of nano-/micro-dimensional components into macroscopic structures to deliver unprecedented device performance. In doing so we will create the preeminent world centre for electromaterials science.

ACES is steered by Australian Laureate Fellows Wallace as Centre Director and Forsyth as Associate Director, and with the assistance of a group of inspirational researchers and expert guidance by eminent persons drawn from the science, business, academic and government communities. A Research Strategy Group (comprising the Centre Director, Associate Director and 6 Theme Leaders) will review strategic directions for each of the Theme areas on a quarterly basis.

## Major Accountabilities/Responsibilities:

Res	sponsibilities	Outcome	Office Use Only
1.	Designing and implementing an experimental research program related to ACES objectives under limited supervision either as a member of a team or, where appropriate, independently, in the area of polymer and hydrogel chemistry, characterisation and processing.	Reproducible, accurate and appropriate experimental data achieving targets or milestone outcomes in a timely manner.	
2.	Preparation of scientific papers, conference presentations and other reports describing the results of the research program.	Papers published in ISI journals and conference presentations at national	

		and international events. Publication targets will be set annually, but will be	
		at least 2 journal papers and one	
3.	Assistance with project management and administration, including preparation of reports, assisting with workshops, preparation of newsletter items and maintenance of publications records.	conference presentation per year. Proper functioning of the project and meeting ACES objectives.	
4.	Assistance with training students and supervision of student projects.	Students working in the area of polymer chemistry and characterisation for ACES are properly supported.	
5.	Assistance with ACES researcher, industry and public visits including laboratory tours and the preparation of laboratory demonstrations	ACES Polymer research demonstrated	
6.	Assistance with the preparation of grants and other funding applications	Further funding obtained	
7.	Perform other duties as required	Other duties performed	
8.	Supervisory roles: Communicate and consult with staff on workplace and staffing matters.	To foster direct relationships with staff and enhance engagement with the organisation.	Ongoing
9.	Observe principles and practices of Equal Employment Opportunity	To ensure fair treatment in the workplace	
10.	Have WH&S responsibilities, accountabilities and authorities as outlined in the <a href="http://staff.uow.edu.au/ohs/commitment/responsibilities/">http://staff.uow.edu.au/ohs/commitment/responsibilities/</a> 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 David Officer
The position supervises the following positions:	-
Other Key Contacts:	Prof Geoffrey Spinks, Prof Gordon Wallace (ACES Director) ; Prof Marc
	in het Panhuis (ACES UOW CI)

## Key Relationships:

#### Contact/Organisation:

Prof David Öfficer and Prof Geoff Spinks Prof David Officer/3D Electromaterials Theme Leader Dr Toni Campbell, ACES COO Prof Gordon Wallace, ACES Director

#### Purpose & Frequency of contact

Monthly technical reporting meetings Weekly -ACES group meetings Monthly for ACES administrative matters As required for ACES

## Key Challenges:

- 1. Research and development in polymer and hydrogel chemistry, characterisation and processing.
- 2. Ensuring that research outcomes are in line with ACES milestones.
- 3. Collaborating within a large team to efficiently deliver research outcomes.
- 4. Preparation of high quality journal papers.

## SELECTION CRITERIA - Knowledge & Skills:

#### Essential:

- Ability to work both independently and in a team environment.
- Highly developed written and verbal communication skills in English, as evidenced by peer-reviewed research publications and presentations at conferences.
- Demonstrated knowledge of OH&S regulations and procedures.
- Demonstrated competence in polymer synthesis.
- Demonstrated competence in polymer characterisation.
- Knowledge of polymer chemistry and engineering.

#### Desirable:

- Demonstrated competence in preparing and mechanical / physical testing of hydrogels.
- Demonstrated competence in polymer processing techniques, such as 3D printing or fibre spinning.

### **SELECTION CRITERIA - Education & Experience:**

#### Essential:

- PhD in relevant field such as polymer chemistry/polymer engineering.
- Experience in developing novel polymers, including synthesis, characterisation, processing and/or property measurements.
- Experience in multi-disciplinary research.
- Experience in report writing/manuscript preparation.

#### Desirable:

- Experience or knowledge of polymer mechanical properties measurement, processing and fabrication.
- Experience or knowledge of electromaterials or electrochemical devices.
- Strong publication track record relative to opportunity.
- Demonstrated capacity to undertake collaborative research.
- Experience training students and co-supervising student projects.

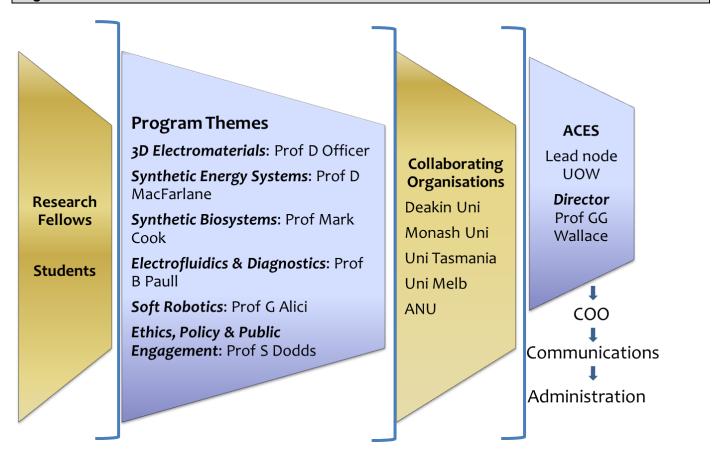
## **Personal Attributes:**

- Work independently without constant supervision.
- Enthusiasm for research and team work.
- Willingness to receive positive feedback and constructive criticism.
- Look for solutions, rather than merely presenting problems.
- Flexible approach to work assignments.
- Responsive to change.

## **Special Job Requirements:**

OH&S inductions to workplace and laboratory procedures. This person must adhere to safe laboratory practices of AIIM /IPRI.

### **Organisational Chart:**



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.