

# **Position Description**

College/Division:	Joint Program - ANU College of Science (COS) and/or ANU College of Engineering & Computer Science (CECS)
Faculty/School/Centre:	Research School of Engineering/Research School of Chemistry
Department/Unit:	
Position Title:	Postdoctoral Fellow
Classification:	Academic Level A
Position No:	
Responsible to:	Head, Battery Storage & Grid Integration Program
Number of positions that report to this role:	
Delegation(s) Assigned:	

# **PURPOSE STATEMENT:**

This role is a cross institutional joint Program between the College of Engineering and Computer Science (CECS) and the College of Science (CoS).

The ANU College of Engineering and Computer Science & the ANU College of Science are dedicated to contributing to The Australian National University's reputation for excellence in research and research-led education. CECS is at the leading edge within numerous fields, including logic, algorithms and data, signal processing, artificial intelligence, computer vision and robotics, computational mechanics, materials, fabrication, big software systems, renewable energy, networked systems and quantum cybernetics. While CoS has a strong tradition of research excellence that has fostered distinguished Nobel Laureates and Kyoto Prize winners and that trains scientific leaders in disciplines in which the ANU is consistently ranked in the top twenty in the world.

The purpose of this appointment is to strengthen the Research School of Engineering and the Research School of Chemistry in the area of battery storage and grid integration.

The Postdoctoral Fellow will pursue a research program as part of the Battery Storage & Integration Program of the ANU Energy Change Institute (ECI). The position will carry out research that will contribute to the aims and objectives of the Program relevant to the understanding, development, integration, optimisation, control and widespread deployment of battery and energy storage systems to enhance the uptake of renewable energy and support the efficient, secure, and reliable operation of the grid.

# KEY ACCOUNTABILITY AREAS:

# **Position Dimension & Relationships:**

This position is located within the Research School of Engineering and/or the Research School of Chemistry (dependent on the discipline), associated with the Battery Storage & Integration Program Research Group. The appointee is accountable to the Head of the Research Group and the Director of the Research School.

As an academic member of the Research School of Engineering/Chemistry the appointee will be required to contribute to the overall intellectual life of the School, College and University. This includes contribution to research, education and outreach agendas of the School both nationally and internationally in a manner that is appropriate to the level of appointment.

The appointee is expected to undertake independent research activities that are aligned with the School's strategic priorities that emphasise relevant and translational research.

# ANU Academic Level A

Under the direction of the Head, Battery Storage & Grid Integration Program, the Postdoctoral Fellow will:

- 1. Undertake independent research in the area of Battery Storage & Grid Integration with a view to disseminating original and innovative results (through publication, technology development or policy engagement), present research at academic and industry seminars and at national and international conferences, and collaborate with other researchers and industry at a national level
- 2. Collaborate with senior staff to actively seek and secure external funding, assist to prepare and submit research and grants proposals to external funding bodies as appropriate
- 3. Subject to the requirements of the funding source and where an opportunity exists, the occupant may be encouraged/asked to contribute to the teaching activities of the School at the undergraduate and graduate levels. This includes, but is not limited to, the preparation and delivery of lectures and tutorials, the preparation of online material, marking and assessment, consultations with students or acting as subject coordinators
- 4. Supervise students working on individual or group projects at undergraduate, honours, graduatecoursework levels. Assist with supervision of research students
- 5. Assist to supervise research support staff in your research area
- 6. Contribute to aspects of the operation of the School if required
- 7. Assist in outreach activities including to prospective students, research institutes, industry, government, the media and the general public
- 8. Maintain high academic standards in all education, research and administrative endeavours
- 9. Comply with all ANU policies and procedures, and in particular those relating to work health and safety and equal opportunity
- 10. Undertake other duties as required, consistent with the classification of the position.

## ANU Academic Level B

In addition to the above:

- 1. Actively seek and secure external funding including the preparation and submission of research and grants proposals to external funding bodies.
- 2. Supervise less senior academic staff and research support staff in your research area
- 3. Actively contribute to aspects of the operation of the School, College and ANU Energy Change Institute as required

# ANU Academic Level C

In addition to the above:

- 1. Undertake high impact research in the area of Battery Storage & Grid Integration with a view to disseminating original and innovative results (through publication, technology development or policy engagement), present research at academic and industry seminars and at national and international conferences, and collaborate with other researchers and industry at a national and/or international level.
- 2. Actively seek and build relationships with industry and government to support and grow the Program.
- 3. Lead, supervise and develop less senior academic staff and research support staff in your research area
- 4. Proactively contribute to aspects of the operation of the School, College and ANU Energy Change Institute. This may include representation through committee memberships.
- 5. Lead outreach activities including to prospective students, research institutes, industry, government, the media and the general public
- 6. Maintain and actively promote high academic standards in all education, research and administrative endeavours

#### Skill Base

A Level A Academic will normally have completed four years of tertiary study in the relevant discipline and/or have equivalent qualifications and/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 that give evidence of research potential.

A Level B Academic will normally have completed a relevant doctoral qualification or have equivalent qualifications or research experience.

In addition he/she may be expected to have had post-doctoral research experience that has resulted in publications, conference papers, reports or professional or technical contributions that give evidence of research ability.

A Level C Academic will normally have a relevant doctoral qualification or equivalent accreditation and standing together with subsequent research experience.

A position at this level will require a demonstrated strong record of publications, conference papers, reports, funding success and/or professional and/or technical contributions in the relevant discipline area.

# SELECTION CRITERIA:

## ANU Academic Level A

- 1. A degree in Engineering, Science or related area, with a track record of independent research in the field of battery and energy storage, renewable energy, power systems, distributed control, or data analytics.as evidenced by publications in peer-reviewed journals and presentations at conferences, technology development or policy engagement.
- 2. Evidence of the ability to articulate and prosecute innovative research in the field of Battery Storage & Grid Integration
- 3. An ability and commitment to win bids for competitive external funding to support individual and collaborative research activities, particularly with industry
- 4. Ability and willingness to teach at all levels if required
- 5. The ability to assist in the supervision of students working on research projects
- 6. The ability to work as part of a team and to deadlines
- 7. Excellent oral and written English language skills and a demonstrated ability to communicate and interact effectively with a variety of staff and students in a cross-disciplinary environment and to foster respectful and productive working relationships with staff, students and colleagues at all levels
- 8. A demonstrated understanding of equal opportunity principles and policies and a commitment to their application in a university context.

## ANU Academic Level B

- 1. A PhD or degree in Engineering, Science or related area, with a track record of independent research in the field of battery and energy storage, renewable energy, power systems, distributed control, or data analytics as evidenced by publications in peer-reviewed journals and presentations at conferences, technology development or policy engagement. Further evidence could include a record of developing and maintaining collaborations and by other measures such as awards, invitations to give talks at leading conferences etc.
- 2. Evidence of the ability to articulate and prosecute innovative research in the field of Battery Storage & Grid Integration and a vision for the activities they will undertake at the ANU Energy Change Institute
- 3. An ability and commitment to win bids for competitive external funding to support individual and collaborative research activities, particularly with industry
- 4. Ability and willingness to teach at all levels if required
- 5. The ability to supervise and graduate high quality PhD/Masters research students
- 6. The ability to work as part of a team and to deadlines and to coordinate some team activities
- 7. Excellent oral and written English language skills and a demonstrated ability to communicate and interact effectively with a variety of staff and students in a cross-disciplinary environment and to foster respectful and productive working relationships with staff, students and colleagues at all levels
- 8. A demonstrated understanding of equal opportunity principles and policies and a commitment to their application in a university context.

#### ANU Academic Level C

- 1. A PhD in Engineering, Science or related area, with a strong track record of independent research within academia, government agencies or industry in the field of energy storage, renewable energy, power systems, distributed control, or data analytics as evidenced by cited publications in peer-reviewed journals and presentations at conferences, technology development or policy engagement. Further evidence could include a record of developing and maintaining collaborations and by other measures such as awards, invitations to give talks at leading conferences etc.
- 2. A track record of articulating and prosecuting innovative research in the field of Battery Storage & Grid Integration and a vision for the activities they will undertake at the ANU Energy Change Institute
- 3. A record of winning bids for competitive external funding to support individual and collaborative research activities, particularly with industry
- 4. Evidence of effective teaching at all levels and the ability to contribute to setting the education agenda of the School in the area of Battery Storage & Integration if required
- 5. A track record of successfully supervising and graduating high quality PhD/Masters research students
- 6. Demonstrated ability to lead and work as part of a team and to meet deadlines
- 7. Excellent oral and written English language skills and a demonstrated ability to communicate and interact effectively with a variety of staff and students in a cross-disciplinary environment and to foster respectful and productive working relationships with staff, students and colleagues at all levels
- 8. A demonstrated understanding of equal opportunity principles and policies and a commitment to their application in a university context.

Supervisor/Delegate Signature:	Date:	
Printed Name:	Uni ID:	

# References: General Staff Classification Descriptors Academic Minimum Standards



Position Details						
College/Div/Centre	CECS/COS	Dept/School/Section				
Position Title	Postdoctoral Fellow	Classification	Academic Level A			
Position No.		Reference No.				

# In accordance with the Occupational Health and Safety Act 1991 the University has a duty of care to provide a safe workplace for all staff.

- This form must be completed by the supervisor of the advertised position and forwarded with the job requisition to Appointments and Promotions Branch, Human Resources Division. Without this form jobs cannot be advertised.
- This form is used to advise potential applicants of work environment issues prior to application.
- Once an applicant has been selected for the position consideration should be given to their inclusion on the University's Health Surveillance Program where appropriate see . http://info.anu.edu.au/hr/OHS/\_\_Health\_Surveillance\_Program/index.asp Enrolment on relevant OHS training courses should also be arranged see http://info.anu.edu.au/hr/Training\_and\_Development/OHS\_Training/index.asp
- 'Regular' hazards identified below must be listed as 'Essential' in the Selection Criteria see 'Employment Medical Procedures' at http://info.anu.edu.au/Policies/\_DHR/Procedures/Employment\_Medical\_Procedures.asp

#### Potential Hazards

Signature:

• Please indicate whether the duties associated with appointment will result in exposure to any of the following potential hazards, either as a **regular** or **occasional** part of the duties.

TASK	regular	occasional	TAS	SK	regular	occasional
key boarding	$\boxtimes$		laboratory work		$\boxtimes$	
lifting, manual handling			work at heights work in confined spaces noise / vibration			
repetitive manual tasks						
catering / food preparation						
fieldwork & travel		$\boxtimes$	elec	tricity		
driving a vehicle						
NON-IONIZING RADIATION			ION	IZING RADIATION		
solar		$\boxtimes$	gan	ima, x-rays	$\boxtimes$	
ultraviolet			beta	a particles		
infra red			nuc	ear particles		
laser		$\boxtimes$				
radio frequency		$\boxtimes$				
CHEMICALS			BIO	LOGICAL MATERIALS		
hazardous substances	$\boxtimes$		mic	obiological materials		
allergens			pote	ential biological allergens		
cytotoxics			labo	ratory animals or insects		
mutagens/teratogens/ carcinogens			clini bloc	cal specimens, including d		
pesticides / herbicides				etically-manipulated cimens		
			imm	unisations		
OTHER POTENTIAL HAZAR	DS (please s	pecify):				
Supervisor's		Pri	nt Namo		Date:	