

College/Division:	ANU College of Science
Faculty/School/Centre:	Research School of Physics
Department/Unit:	Electronic Materials Engineering
Position Title:	Postdoctoral Fellow
Classification:	Level A
Position No:	
Responsible to:	Head, Department of Electronic Materials Engineering
Number of positions that report to this role:	
Delegation(s) Assigned:	

PURPOSE STATEMENT:

The ANU College of Science (CoS) comprises: the Research School of Astronomy and Astrophysics, the Research School of Biology, the Research School of Chemistry, the Research School of Earth Science, the Fenner School of Environment and Society, the Mathematical Sciences Institute, the Research School of Physics, and the Centre for the Public Awareness of Science. Staff and students within the ANU College of Science conduct research and delivers a research-led education program that encompasses the entire breadth of the sciences, supported by extensive international networks and by world-class facilities. The College 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 Research School of Physics (RSPhys) represents Australia's largest university based research and teaching activity in the physics discipline. Hundreds of academics, technical staff and students form the School's greatest asset, its people. This critical mass of researchers is of fundamental importance in fostering the kind of interdisciplinary interactions that create modern research excellence. The underlying impetus of our research is a belief in the fundamental importance of physics to all of science and technology and the key role physics must play in addressing the challenges facing the modern world.

The Postdoctoral Fellow is expected to undertake work in all three areas of academic activity –research, education and service (including outreach). The allocation of time to each area will be discussed with the position supervisor annually and be reflective of the appointees research agenda, school and interdisciplinary teaching requirements and leadership opportunities within the School environment. The Postdoctoral Fellow may also be required to supervise or assist in the supervision of students, and contribute cooperatively to the overall intellectual life of the School, College and University.

POSITION DIMENSION AND RELATIONSHIPS:

The Postdoctoral Fellow will be a member of Research School of Physics accountable to the Head, Department of Electronic Material Engineering and Director of the School. The Postdoctoral Fellow will be expected to work collegially, leading by example to develop and maintain effective, productive and beneficial workplace relationships within the all academic and professional School and College staff, students and honorary appointees, as well as with industry stakeholders. This position will also have a mentoring role for students and will engage in collegial and productive collaborations with local, national and where possible, international colleagues.

Role Statement:

In their role as an Academic Level A the Postdoctoral Fellow is expected to:

- 1. Undertake independent research in the area of material science with a view to publishing original and innovative results in refereed journals, present research at academic seminars and at national and international conferences, and collaborate with other researchers at a national level.
- 2. Collaborate with senior staff to actively seek and secure external funding, assist to prepare and submit research proposals to external funding bodies as appropriate.

- 3. 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, and with students or acting as subject coordinators.
- 4. Supervise students working on individual or group projects at undergraduate, honours, graduate-coursework levels. Assist with supervision of research students.
- 5. Assist to supervise research support staff in your research area.
- 6. Actively contribute to all aspects of the operation of the School.
- 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 administration endeavours.
- 9. Take responsibility for their own workplace health and safety and not willfully place at risk the health and safety of another person in the workplace.
- 10. A demonstrated understanding of equal opportunity principles and policies and a commitment to their application in a university context.
- 11. Other duties as required that are consistent with the classification of the position.

Skill Base

A Level A academic will work with the support and guidance from more senior academic staff and is expected to develop their expertise in teaching and research with an increasing degree of autonomy. A Level A academic will normally have completed four years of tertiary study or equivalent qualifications and experience and may be required to hold a relevant higher degree.

A Level A academic will normally contribute to teaching at the institution, at a level appropriate to the skills and experience of the staff member, engage in scholarly, research and/or professional activities appropriate to their profession or discipline, and undertake administration primarily relating to their activities at the institution. The contribution to teaching of Level A academics will be primarily at undergraduate and graduate diploma level.

SELECTION CRITERIA:

- A PhD (or awarding of a PhD within six months of appointment commencement) in material science or plasma-surface interactions, or equivalent qualifications and experience in a related area, with a track record of independent research in the field of material science or plasma-surface interactions as evidenced by publications in peer-reviewed journals and conferences.
- 2. Experience in at least one and preferably several of the following areas:
 - a. characterisation of materials and devices
 - b. plasma surface interactions,
 - c. material processing and characterisation,
 - d. fusion relevant materials science,
 - e. device fabrication
- 3. An ability and commitment to contribute to bids for competitive external funding to support individual and collaborative research activities.
- 4. The ability to assist in the supervision of students working on research projects.
- 5. The ability to work as part of a team and to meet deadlines.
- 6. 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 academic environment and to foster respectful and productive working relationships with staff, students and colleagues at all levels.
- 7. A demonstrated understanding of equal opportunity principles and policies and a commitment to their application in a university context.

Background Checking:

The ANU conducts background checks on potential employees, and employment in this position is conditional on satisfactory results in accordance with the <u>Background Checking Procedure</u> which sets out the types of checks required by each type of position.

Delegate Signature:	Date:	
Printed Name:	Position:	

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