



Position Description

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| College/Division: | ANU College of Science |
| Faculty/School/Centre: | Research School of Chemistry |
| Department/Unit: | Physical Chemistry |
| Position Title: | Postdoctoral Fellow (Organic Synthesis) |
| Classification: | Level A |
| Position No: | TBC |
| Responsible to: | Professor Michelle Coote |
| 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 Engineering, 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 Postdoctoral Fellow will be located within the Computer Aided Design Research Group in the Research School of Chemistry, ANU College of Physical and Mathematical Sciences. The Postdoctoral Fellow is expected to carry out specific tasks relating to projects funded by Professor Coote's ARC Laureate Fellowship, as well as contributing, where relevant, to other research projects of interest to the Group

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 external funding conditions that support the appointment, 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 Chemistry, accountable to the Professor Michelle Coote 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 Professor Coote's ARC Laureate Fellowship 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. This includes working as part of a team on an externally funded project subject to deadlines.
2. Develop, design and carry out research experiments including synthesis and characterisation of novel organic compounds, measuring reaction rates and determining reaction mechanisms using techniques such as NMR, FTIR, cyclic voltammetry and laser flash photolysis.
3. Collaborate with senior staff to actively seek and secure external funding, assist to prepare and submit research proposals to external funding bodies as appropriate.

4. Subject to the requirements of the funding source and where an opportunity exists, the occupant may be required 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, and with students or acting as subject coordinators.
5. Supervise students working on individual or group projects at undergraduate, honours, graduate-coursework levels. Assist with supervision of research students.
6. Assist to supervise research support staff in your research area.
7. Actively contribute to all aspects of the operation of the School.
8. Assist in outreach activities including to prospective students, research institutes, industry, government, the media and the general public.
9. Maintain high academic standards in all education, research and administration endeavours.
10. 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.
11. A demonstrated understanding of equal opportunity principles and policies and a commitment to their application in a university context.
12. 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:

1. A PhD (or awarding of a PhD within six months of appointment commencement) in Organic Synthesis or related discipline, or equivalent qualifications and experience in a related area, with a track record of independent research in the field of Organic Synthesis as evidenced by publications in peer-reviewed journals and conferences.
2. Evidence of experience in the synthesis and characterisation of novel organic compounds. A good working understanding of the links between chemical structure and reactivity in standard organic transformations is essential, and specific experience in organocatalysis is highly desirable.
3. Experience in measuring reaction rates and determining reaction mechanisms using techniques such as NMR, FTIR and laser flash photolysis is desirable, and a willingness to develop these skills is essential. Experience in electro-organic synthesis is also desirable, and a willingness to develop these skills is essential.
4. An ability and commitment to contribute to bids for competitive external funding to support individual and collaborative research activities.
5. Evidence of an ability and willingness to teach at all levels, and the ability to assist in the supervision of students working on research projects.
6. Demonstrated ability to plan and execute high quality research both independently and as part of a small team, as well as the ability 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 academic environment and to foster respectful and productive working relationships with staff, students and colleagues at all levels.
8. A demonstrated understanding of laboratory safety standards, and a commitment to maintaining a safe working environment.
9. A demonstrated understanding of equal opportunity principles and policies and a commitment to their application in a university context.

Delegate Signature:

Date:

Printed Name:

Position:

References:

[Academic Minimum Standards](#)