



## Position Description

<b>College/Division:</b>	ANU College of Science
<b>Faculty/School/Centre:</b>	Research School of Chemistry
<b>Department/Unit:</b>	Organic Chemistry
<b>Position Title:</b>	<b>Postdoctoral Fellow</b>
<b>Classification:</b>	<b>Academic Level A</b>
<b>Position No:</b>	
<b>Responsible to:</b>	Assoc. Prof. Malcolm McLeod

### PURPOSE STATEMENT:

The Postdoctoral Fellow will conduct research in organic chemistry to contribute to the research laboratory of Assoc. Prof. Malcolm McLeod. The position will involve the development of new chemical and enzymatic methodologies for the synthesis and analysis of conjugated steroid metabolites to advance analytical chemistry relevant to sports drug testing or clinical diagnosis. The Postdoctoral Fellow will contribute to experimental design, hands-on laboratory work and data collection and is expected to provide innovative approaches to research objectives. The appointee will also provide support, advice and training to students and other staff members in the research group.

### KEY ACCOUNTABILITY AREAS:

#### Position Dimension & Relationships:

The Postdoctoral Fellow reports to Assoc. Prof. Malcolm McLeod and will work closely and collaboratively with the members of his research group, the wider academic and professional community within the Research School of Chemistry, and key project stakeholders.

#### Role Statement:

Under broad direction of Assoc. Prof. Malcolm McLeod, duties required 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;
- Design, setup and undertake computational simulations, perform data analysis of simulations to examine membrane transporter function and the effect of membrane phospholipid and sterol composition. These include the use of free energy and advanced sampling methods.
- Develop and benchmark simulation parameters for a range of compounds of interest
- experimental design, data collection and analysis under the broad direction of Assoc. Prof. Malcolm McLeod, and operation of advanced laboratory and technical equipment.
- supervision of research students working on individual or group projects at undergraduate, honours and postgraduate levels.
- Providing on-going and high-level advice on the maintenance and running of the research laboratories within which the appointee is working so as to ensure a safe and productive workplace.
- involvement in professional activities including, subject to availability of funds, attendance at conferences and seminars in the field of expertise;
- development of research-related material for teaching or other purposes with appropriate guidance from other staff, and occasional contributions to teaching, including, but not limited to, the preparation and delivery of lectures and tutorials, the preparation of online material, marking and assessment, and consultations
- some administrative functions primarily connected with the area of research of the academic;
- attendance at meetings associated with research or the work of the organisational unit to which the research is connected and/or at departmental and/or faculty meetings and/or membership of a limited number of committees;
- other duties as allocated by the supervisor or the Vice-Chancellor consistent with the classification of the position.

A **Level A 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 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 honors 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.

**SELECTION CRITERIA:**

1. A PhD (or significant progress towards the completion of a PhD) in Chemistry with a strong track record of independent research in the field of organic chemistry, as evidenced by publications in peer-reviewed journals and conferences.
2. Demonstrated research experience in:
  - Organic synthesis, including reaction design, implementation, purification and analysis.
  - Spectroscopic techniques (NMR, IR, MS, LC-MS)
  - Chemical analysis using LC-MS (optional)
3. Demonstrated ability to plan and execute high quality research both independently and as part of a small team in order to meet project deadlines.
4. An ability and willingness to assist in the supervision of students and laboratory user training.
5. Well-developed oral and written communication skills and a demonstrated ability to communicate and interact effectively with a variety of staff and students in a cross-disciplinary academic environment.
6. A demonstrated understanding of equal opportunity principles and a commitment to their application in a university context.

Supervisor Signature:		Date:	10/10/18
Printed Name:	Malcolm McLeod	Uni ID:	U4045340

**References:**

[Academic Minimum Standards](#)



Australian  
National  
University

# Pre-Employment Work Environment Report

## Position Details

College/Div/Centre	CoS	Dept/School/Section	RSC
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](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](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](http://info.anu.edu.au/Policies/_DHR/Procedures/Employment_Medical_Procedures.asp)

## Potential Hazards

- 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	TASK	regular	occasional
key boarding	<input checked="" type="checkbox"/>	<input type="checkbox"/>	laboratory work	<input checked="" type="checkbox"/>	<input type="checkbox"/>
lifting, manual handling	<input type="checkbox"/>	<input checked="" type="checkbox"/>	work at heights	<input type="checkbox"/>	<input type="checkbox"/>
repetitive manual tasks	<input type="checkbox"/>	<input checked="" type="checkbox"/>	work in confined spaces	<input type="checkbox"/>	<input type="checkbox"/>
catering / food preparation	<input type="checkbox"/>	<input type="checkbox"/>	noise / vibration	<input type="checkbox"/>	<input checked="" type="checkbox"/>
fieldwork & travel	<input type="checkbox"/>	<input checked="" type="checkbox"/>	electricity	<input type="checkbox"/>	<input checked="" type="checkbox"/>
driving a vehicle	<input type="checkbox"/>	<input type="checkbox"/>			
<b>NON-IONIZING RADIATION</b>			<b>IONIZING RADIATION</b>		
solar	<input type="checkbox"/>	<input type="checkbox"/>	gamma, x-rays	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ultraviolet	<input type="checkbox"/>	<input checked="" type="checkbox"/>	beta particles	<input type="checkbox"/>	<input type="checkbox"/>
infra red	<input type="checkbox"/>	<input type="checkbox"/>	nuclear particles	<input type="checkbox"/>	<input type="checkbox"/>
laser	<input type="checkbox"/>	<input type="checkbox"/>			
radio frequency	<input type="checkbox"/>	<input type="checkbox"/>			
<b>CHEMICALS</b>			<b>BIOLOGICAL MATERIALS</b>		
hazardous substances	<input checked="" type="checkbox"/>	<input type="checkbox"/>	microbiological materials	<input type="checkbox"/>	<input checked="" type="checkbox"/>
allergens	<input type="checkbox"/>	<input checked="" type="checkbox"/>	potential biological allergens	<input type="checkbox"/>	<input type="checkbox"/>
cytotoxics	<input type="checkbox"/>	<input checked="" type="checkbox"/>	laboratory animals or insects	<input type="checkbox"/>	<input type="checkbox"/>
mutagens/teratogens/ carcinogens	<input type="checkbox"/>	<input checked="" type="checkbox"/>	clinical specimens, including blood	<input type="checkbox"/>	<input checked="" type="checkbox"/>
pesticides / herbicides	<input type="checkbox"/>	<input type="checkbox"/>	genetically-manipulated specimens	<input type="checkbox"/>	<input checked="" type="checkbox"/>
			immunisations	<input type="checkbox"/>	<input type="checkbox"/>
<b>OTHER POTENTIAL HAZARDS (please specify):</b>					

Supervisor's Signature:		Print Name:	Malcolm McLeod	Date:	10/10/18
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