# Position Details

## CSIRO Early Research Career (CERC) Postdoctoral Fellowship– CSOF4

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| The following information is for applicants | |
| Advertised Job Title | CSIRO Postdoctoral Fellowship in Chemistry (Identified Role - Indigenous) |
| Job Reference | 84938 |
| Tenure | Specified Term of 3 years  Full-time |
| Salary Range | AU$89,926 to AU$98,504 pa + up to 15.4% superannuation |
| Location(s) | Clayton, Victoria |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | The position is only open to Aboriginal and/or Torres Strait Islander peoples with Australian Citizenship.  CSIRO considers the filling of this position is intended to constitute a special/equal opportunity/affirmative measure under *section 8(1) of the Racial Discrimination Act 1975 (Cth).*  The successful applicant is required to provide evidence to confirm that they are an Aboriginal and/or Torres Strait Islander person. |
| Position reports to the | Research Team Leader |
| Client Focus – Internal | 60% |
| Client Focus – External | 40% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Katherine Locock via email at [katherine.locock@csiro.au](mailto:katherine.locock@csiro.au) or phone +61 3 9545 8886 |
| How to apply | Apply online at <https://jobs.csiro.au/>  Internal applicants please apply via **Jobs Central**  If you experience difficulties when applying, please email [careers.online@csiro.au](mailto:careers.online@csiro.au) or call 1300 984 220. |

**Acknowledgement of Country**

CSIRO acknowledges the Traditional Owners of the land, sea and waters, of the areas that we live and work on across Australia. We acknowledge their continuing connection to their culture and pay our respects to their Elders past and present. View our [vision towards reconciliation](https://www.csiro.au/en/about/Indigenous-engagement/Reconciliation-Action-Plan).

### Role Overview

**CSIRO Early Research Career (CERC) Fellowships** provide opportunities to scientists and engineers who have completed their doctorate and have less than three years relevant research experience. These Fellowships aim to develop the next generation of future leaders of the innovation system through:

* A differentiated career development program to deliver capability excellence and breadth across all facets of the national innovation system;
* Research training via strategic research and development projects with a clear focus that will deliver real impact through science and engineering excellence;
* An innovative culture supporting the development and demonstration of original thinking and expertise leading to peer-recognition; and
* Opportunities to develop skills and experience in collaborative research teams to effectively work within national and global multi/transdisciplinary and multi-stakeholder environments.

CERC Fellows **are appointed for three years.**

CSIRO Manufacturing is seeking to appoint a CERC Fellow into the Biomedical Manufacturing Program, who will draw on their chemistry skills to help solve problems. The CERC Fellow will typically focus on the areas of natural products or medicinal chemistry, but there is scope to develop new project areas that align with the interests of the Program.

Biomedical Manufacturing focuses on growing the Australian biomedical industry through innovative research. Within the program, the Bioactive Small Molecules and Polymer Group, includes teams with skills across the following domains:

* Drug Discovery Chemistry
* Botanical Pharmaceuticals
* Chemical Process Development
* Polymers and Drug Delivery
* Biomedical Scaffolds

As part of our growth strategy, we will work with the CERC Fellow to strategically align their experience, skills, and expertise with our focus areas. This could involve projects such as:

* Australian native plant extraction and investigation – co-developed with Aboriginal and Torres Strait Islander groups to create valuable Indigenous controlled intellectual property
* Developing next generation antibiotic, antiviral or anticancer medicines through rational drug design, structure activity relationships or fragment-based approaches.

### Duties and Key Result Areas

Under the direction of senior research scientists, this CERC Fellow will:

* + Apply organic, natural product and/or medicinal chemistry to develop projects relevant to the Biomedical Manufacturing program.
  + Be encouraged to take ownership of the project and help shape the path of the work.
  + Carry out innovative, impactful research of strategic importance to CSIRO that will, where possible, lead to novel and important scientific outcomes.
  + Under limited supervision, plan, propose and perform experiments to synthesise and/or isolate organic compounds.
  + Where relevant, utilise methods to monitor reactions (e.g. thin layer chromatography (TLC), high-performance liquid chromatography (HPLC) and liquid chromatography-mass spectrometry (LCMS).
  + Where relevant, utilise methods to purify compounds (e.g. column chromatography and HPLC)
  + Utilise characterisation methods to elucidate the structure of organic compounds (e.g. nuclear magnetic resonance (NMR) and mass spectrometry).
  + Record, manage, and analyse data/information using relevant domain data science techniques.
  + Proactively undertake development to grow effective researcher capabilities to support career goals.
  + Work collaboratively with colleagues within your team, the business unit and across CSIRO, to reach objectives.
  + Adhere to the spirit and practice of CSIRO’s Code of Conduct, Health, Safety and Environment procedures and policy, Diversity initiatives and Zero Harm goals.
* Other duties as directed.

The CERC Fellow learning, development and training programis developed between the CERC Fellow and their CSIRO supervisor. The program will focus on enhancing the Fellow’s capabilities to the level expected of an independent researcher and will include on-the-job and course-based development encompassing:

* Discipline-specific techniques and protocols
* Professional growth
* Project management
* Communication and influencing skills
* Working and collaborating with others

## **Selection Criteria**

#### Essential

*Under CSIRO policy only those who meet all essential criteria can be appointed.*

1. A doctorate (or will shortly satisfy the requirements of a PhD). The doctorate must be in a relevant discipline area, such as organic chemistry, medicinal chemistry, natural product chemistry or pharmacology.

Please note: To be eligible for this role you must have **no more than 3 years** (full time equivalent) of relevant research experience.

1. Demonstrated experience in the isolation and characterisation of organic molecules using techniques such as NMR, chromatography, MS, HPLC.
2. Demonstrated creativity and problem-solving skills in chemistry.

## **Desirable**

*Note that applicants are encouraged to apply, even if they do not or only partially meet the following criteria.*

1. Experience in synthetic organic chemistry techniques and planning routes to novel compounds.
2. Experience in medicinal chemistry e.g. use of structure activity relationships to improve activity.
3. Experience with natural products e.g. preparation of extracts from natural sources, compound isolation from complex mixtures or elucidation of natural product structure.
4. Experience in ethnobotany or ethnopharmacology.
5. An interest in Indigenous led research that derives value for Aboriginal or Torres Strait Islander groups.
6. An interest in Indigenous Cultural Intellectual Property and how to apply this concept in ethical scientific research.
7. Exposure to *in vitro* and/or *in vivo* biological testing models.
8. The ability to remain productive, positive and resilient in complex, ambiguous and/or uncertain environments.
9. **The ability to work effectively as part of a multi-disciplinary, potentially regionally dispersed research team, plus the motivation and discipline to carry out autonomous research.**
10. High level written and oral communication skills with the ability to represent the research team effectively internally and externally, including the presentation of research outcomes at national and international conferences.
11. A sound history of publication in peer reviewed journals and/or authorship of scientific papers, reports, grant applications or patents.

## **Required Competencies**

* **Teamwork and Collaboration:** Cooperates with others to achieve organisational objectives and may share team resources in order to do this. Collaborates with other teams as well as industry colleagues.
* **Influence and Communication:** Uses knowledge of other party's priorities and adapts presentations or discussions to appeal to the interests and level of the audience. Anticipates and prepares for others reactions.
* **Resource Management/Leadership:** Allocates activities, directs tasks and manages resources to meet objectives. Provides coaching and on the job training, recognises and supports staff achievements and fosters open communication in the team.
* **Judgement and Problem Solving:** Investigates underlying issues of complex and ill-defined problems and develops appropriate response by adapting/creating and testing alternative solutions.
* **Independence:** Recognise and makes immediate changes to improve performance (faster, better, lower cost, more efficiently, better quality, improved client satisfaction).
* **Adaptability:**Copes with ambiguity or situations that lack clarity. Adapts readily to changing circumstances and new responsibilities (which may include activities outside own preferences) in the interests of achieving team objectives. Recognises the need for and undertakes personal development as a result of changes.

To be appointed as a CERC Fellow within CSIRO, candidates are required to have **submitted** their doctoral thesis at the time of commencement, as a minimum requirement, if PhD conferment has not been obtained. If a candidate has submitted, but their PhD has not yet been formally attained, the starting salary will be CSOF4-1 ($87,068). Upon CSIRO receiving written confirmation that the PhD has been awarded (within a six month period from commencement date), the salary will be increased to the negotiated level and the difference will be back-paid to the Officer’s start date.

Special Requirements

Appointment to this role may be subject to conditions including provision of a national police check as well as other security/medical/character clearance requirements.

* The successful applicant will be asked to obtain and provide evidence of a National Police Check or equivalent. Please note that people with criminal records are not automatically deemed ineligible. Each application will be considered on its merits.
* The successful applicant is required to provide evidence to confirm that they are an Aboriginal and/or Torres Strait Islander person.
* The successful applicant is required to provide contact details of at least one Aboriginal and/or Torres Strait Islander Cultural Referee.

**Our value proposition**

We want CERC Fellows to join our world class science, engineering and digital teams to solve big, complex problems that make a real difference to the future of Australia and the world.

You'll get to work with some of the most talented minds in their fields, not just in Australia, but in the world. At CSIRO, we spark off each other, learn from each other, trust each other and collaborate closely to achieve more than we could individually.

Find out more about our CSIRO Early Research Career (CERC) Fellow Experience Employee Value Proposition (EVP) [here](https://www.csiro.au/en/careers/postdoctoral-fellowships).

## **About CSIRO**

We solve the greatest challenges through innovative science and technology. Visit [CSIRO Online](http://www.csiro.au/) and [Manufacturing](https://www.csiro.au/en/Research/MF" \o "Manufacturing- CSIRO Website) for more information.

CSIRO is a values-based organisation.  In your application and at interview you will need to demonstrate behaviours aligned to our values of:

* People First
* Further Together
* Making it Real
* Trusted