# Position Details

## Research Projects- CSOF3

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| The following information is for applicants |
| Advertised Job Title | Synthetic Organic Bioconjugation Chemist |
| Job Reference | 80341 |
| Tenure | Indefinite Full-time |
| Salary Range | AU$66k to AU$84k pa (pro-rata for part-time) + up to 15.4% superannuation |
| Location(s) | Clayton |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | Australian/New Zealand Citizens and Australian Permanent Residents Only |
| Position reports to the | Bioconjugation Chemistry Team Leader |
| Client Focus – Internal | 20% |
| Client Focus – External | 80% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Dr Charlotte Williams via email at Charlotte.Williams@csiro.au or phone +61 3 9662 7299 |
| 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 or call 1300 984 220. |

### Role Overview

The role of Research Projects staff in CSIRO is to collaborate in scientific activities with other research staff usually by assisting with detailed planning, undertaking, or assisting with experimental and observational work, and in carrying out the practical aspects of the work.

As part of the Bioconjugation Chemistry Team in the Manufacturing Business Unit, the Synthetic Organic Bioconjugation Chemist will contribute to chemistry projects that may involve; a) polymer chemistry, b) manufacturing of bioactive small molecules and c) simple protein chemistry and protein purification.

The role will involve applying organic chemistry knowledge towards the solution of problems relating to the isolation, identification, synthesis, and purification of organic compounds. The role will also include applying organic chemistry knowledge to develop skills in polymer and protein chemistry techniques (bioconjugation chemistry).

### Duties and Key Result Areas

* Under limited supervision, design and perform straightforward experiments and routine laboratory analyses, design new processes or apparatus by adapting existing techniques and components to meet special circumstances or undertake modifications to methods requiring some innovation.
* Plan, propose and perform chemical reactions to known and novel, small molecule, monomer, polymer and protein chemistry targets.
* Monitor and analyse chemical reactions using chromatographic techniques, such as TLC, HPLC, SEC and LCMS.
* Prepare and purify compounds using chromatographic techniques such as column chromatography, SEC and HPLC.
* Elucidate the purity and structure of organic compounds using techniques such as NMR, MS, HPLC.
* Maintain safe working practices when working with analytical instruments and hazardous materials or chemicals.
* Communicate research results through laboratory notebooks, written reports and oral presentations.
* Undertake general laboratory maintenance, including restocking laboratory consumables and assisting in instrument maintenance.
1. Provide instruction on activities pertaining to the immediate work area and responsibilities, as required.
2. Maintain confidentiality when working with commercially sensitive or client information.
3. Communicate effectively and respectfully with all staff, clients and suppliers in the interests of good business practice, collaboration and enhancement of CSIRO’s reputation.
4. Work as part of a multi-disciplinary, regionally dispersed research team, to carry out tasks under limited direction in support of scientific research.
5. Work collaboratively with colleagues within your team, the business unit and across CSIRO, to reach objectives.
6. Adhere to the spirit and practice of CSIRO’s Values, Health, Safety and Environment plans and policies, Diversity initiatives and Zero Harm goals.
7. Other duties as directed.

## **Required Competencies:**

* **Teamwork and Collaboration:** Proactively seeks and considers the ideas and opinions of others from within and outside the team to help form decisions, plans or actions.
* **Influence and Communication:** Puts forward ideas by presenting factual information supported by data, definitions, examples, illustrations or other aids, which will assist in conveying meaning.
* **Resource Management/Leadership:** Provides instruction and assists other staff to complete allocated tasks and activities.
* **Judgement and Problem Solving:** Identifies and considers the implications of a range of available alternatives in order to select the most appropriate response to problems of a familiar or recurring nature.
* **Independence:** Recognise and makes immediate changes to improve performance (faster, better, lower cost, more efficiently, better quality, improved client satisfaction).
* **Adaptability:**Willingness to change ideas or perceptions based on new information, contrary evidence or other people's points of view. Prepared to try out different approaches.

## **Selection Criteria**

#### Essential

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

1. A relevant bachelor’s degree or equivalent relevant work experience in chemistry.
2. Demonstrated ability in synthetic chemistry techniques and a sound theoretical knowledge of organic chemistry.
3. Experience in chromatographic techniques, such as HPLC, column chromatography, SEC, coupled with experience in the elucidation of organic structures using techniques such as NMR and MS.
4. Knowledge or experience with protein chemistry and knowledge around appropriate purification techniques for proteins.
5. Good oral and written communications skills coupled with the ability to offer factual information supported by proven data and provide appropriate feedback when required.
6. The ability to work effectively as part of a multi-disciplinary, regionally dispersed research team, and carry out tasks under general direction from Scientific Researchers and to manage a number of competing priorities.
7. Proven ability to investigate routine problems by identifying and considering the implications of a range of available alternative solutions**.**
8. A history of professional and respectful behaviours and attitudes in a collaborative environment.

## **Desirable**

1. Demonstrated experience in polymer chemistry and knowledge of appropriate polymer purification techniques.
2. Experience in an academic or industrial synthesis laboratory.

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 candidate 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.
* This role has child safety obligations. Accordingly, the successful candidate will be required to obtain or provide evidence that they hold a working with children check prior to confirmation of appointment.

## **About CSIRO:**

We solve the greatest challenges through innovative science and technology. To find out more visit us [online](http://www.csiro.au/)!

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

* 1. People First
	2. Further Together
	3. Making it Real
	4. Trusted

Find out more about CSIRO [Manufacturing](https://www.csiro.au/en/Research/MF)

**About CSIRO Biomedical Manufacturing**

Biomedical Manufacturing work with biomedical companies to deliver new medical treatments and technologies that benefit millions of people in Australia and overseas, helping them live longer, healthier and more productive lives.

**The Biomedical Synthetic Chemistry Group** is part of the Biomedical Manufacturing Program.

Working in partnership with biotechnology, biomedical and pharmaceutical companies, the group is concerned with molecular synthesis, including small molecules, polymers, biomaterials, bio-conjugates, and peptides with the intention of eliciting a biological response. Examples include medicinal chemistry, peptide chemistry, drug delivery systems, polymer-drug conjugates, biocompatible and bioactive polymers and biomaterials.

For details: <http://www.csiro.au/en/Research/MF/Areas/Biomedical>