# Position Details

## Research Scientist/Engineer- CSOF5

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| The following information is for applicants |
| Advertised Job Title | Research Scientist – Bioconjugation Chemistry  |
| Job Reference | 75641 |
| Tenure | Indefinite, Full-time  |
| Salary Range | AU$100,710 to AU$108,985 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 | Australian/New Zealand Citizens and Australian Permanent Residents Only |
| Position reports to the | Research Team Leader |
| Client Focus – Internal | 20% |
| Client Focus – External | 80% |
| Number of Direct Reports | 0  |
| Enquire about this job | Contact 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 Scientist Staff in CSIRO is to conduct innovative research leading to scientific achievements that are aligned with CSIRO’s strategies. You may be engaged in scientific activity ranging from fundamental research to the investigation of specific industry or community problems. You will have the opportunity to build and maintain networks, play a lead role in securing project funds, provide scientific leadership and pursue new ideas and approaches that create new concepts.

CSIRO Manufacturing is seeking to appoint a highly motivated research scientist in the Biomedical Manufacturing team in the area of bioconjugation chemistry. The successful candidate will have expertise in synthetic organic chemistry, antibody bioconjugation, protein modification and protein purification, polymer chemistry, bioconjugation of small molecules and polymers to proteins, conjugation of small molecules to polymers, and polymer-protein conjugates. The candidate will contribute to a wide range of bioconjugation projects. The candidate has the opportunity to develop a state-of-the-art research program within CSIRO's Manufacturing business unit, building innovation within chemical biology and bioconjugation techniques.

### Duties and Key Result Areas:

* Under the direction of senior research scientists, carry out innovative, impactful research of strategic importance to CSIRO that will, where possible, lead to novel and important scientific outcomes.
* Apply bioconjugation chemistry techniques to new areas of science as guided by client projects and the strategic direction of the BU.
* Apply organic chemistry, bioconjugation chemistry, protein and polymer chemistry to prepare compounds and materials as required to deliver upon the research goals of the BU, including for clients.
* Apply novel bioconjugation chemistry and protein chemistry for covalent attachment of functional small molecules, at a pre-defined site on a protein. Develop methods to analyse the conjugate for determination of the site and number of functional small molecules attached.
* Apply bioconjugation chemistry to a range of polymers to install small molecules as needed by clients or for internal strategic project development.
* Contribute to the development of innovative concepts and new ideas to further bioconjugation chemistry research within the BU.
* Contribute to the effective functioning of the research team and help deliver CSIRO’s organisational objectives and plans.
* Work collaboratively with colleagues within your team, the business unit and across CSIRO to carry out tasks in support of CSIRO’s scientific objectives
* Liaise with clients to determine their needs and take personal responsibility for client satisfaction.
* Under limited direction, assist in the planning and preparation of research proposals and carry out research investigations, requiring originality, creativity and innovation.
* Present results in a meaningful format, prepare reports for clients and/or write scientific papers for publication.
* Address problems promptly and in a constructive manner, selecting the most profitable lines of attack upon a problem, preparing detailed design proposals and experimental protocols.
* Undertake in experimental and/or observational research activities, often requiring the supervision and/or training of others to ensure experiments are established in accordance with research design, or as required.
* Draw on professional expertise, knowledge of other disciplines and research experience, recognise opportunities for innovation and generate new theoretical perspectives by pursuing new ideas/approaches and networking with scientific colleagues across a range of disciplines.
* Communicate openly, effectively and respectfully with all staff, clients and suppliers in the interests of good business practice, collaboration and enhancement of CSIRO’s reputation.
* Adhere to the spirit and practice of CSIRO’s Code of Conduct, Health, Safety and Environment procedures and policy, Diversity initiatives and Making Safety Personal goals.
* Other duties as directed.

## **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:** Plans, sets and works to meet challenging standards and goals for self and/or others. Recognises where endeavours will make the most impact or difference, decides on desired outcome and sets realistic goals to reach this target.
* **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.

## **Selection Criteria**

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

***Pre-Requisites***

1. **Education/Qualifications:** A doctorate in a relevant discipline area, such as chemistry with experience in protein chemistry and conjugation, and postdoctoral or industry experience using/developing bioconjugation chemistry techniques.
2. **Communication: High level written and oral communication skills with the ability to represent the research team effectively internally and externally, including at national and international conferences.**
3. **Publications: A record of publications in quality, peer reviewed journals.**
4. **Collaboration:** A history of professional and respectful behaviours and attitudes in a collaborative environment.

#### Essential

1. Demonstrated expertise in synthetic chemistry.
2. Demonstrated ability to perform labelling of proteins or antibodies and ability to perform protein chemistry, purification, and analysis.
3. Demonstrated ability to perform conjugation of small molecules and proteins to polymers, including purification and analysis methods.
4. **The ability to work effectively as part of a multi-disciplinary, regionally dispersed research team, plus the motivation and discipline to carry out autonomous research.**
5. A record of science innovation and creativity, plus the ability & willingness to incorporate novel ideas and approaches into scientific investigations.

## **Desirable:**

1. Experience with synthetic polymer chemistry.
2. A working knowledge of enzyme cascade reactions, biocatalysis, and enzyme assays.
3. A working knowledge of surface chemistry especially as applied to flow chemistry.
4. A general understanding of GMP manufacturing requirements.

Special 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.

## **About CSIRO:**

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