# 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 Industrial Biotechnology and Microbial Process Development |
| Job Reference | 75642 |
| Tenure | Specified Term of 3 years  |
| Salary Range | AU$88,163 to AU$96,573 pa (pro-rata for part-time) + up to 15.4% superannuation |
| Location(s) | Clayton, VIC |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | * Australian/New Zealand Citizens and Australian Permanent Residents Only
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| Position reports to the | Research Team Leader – Industrial Biotechnology |
| Client Focus – Internal | 0% |
| Client Focus – External | 100% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Geoff Dumsday via email at geoff.dumsday@csiro.au or phone +61 3 9545 2344 |
| 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

**CSIRO CERC Fellowships** provide opportunities to scientists who have completed their doctorate and have less than three years relevant post-doctoral work experience. These fellowships aim to develop the next generation of future leaders of industry through:

* Research training via Research and Development projects with Industry Partners 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 and working with industry to effectively work within national and global multi/transdisciplinary and multi-stakeholder environments.

The successful CERC Fellow will work with CSIRO researchers and experimental staff to deliver on an array of commercial projects with multiple industry partners. This work includes, but is not limited to, engaging with commercial entities (biotechnology companies, start-ups and SMEs) to understand their needs, drafting experimental protocols and research proposals/agreements, performing and/or overseeing staff performing experimental work, assay development and/or troubleshooting, data collection and analysis, data interpretation and presentation as well as drafting research reports. Our clients include Australian researchers, biotechnology, pharmaceutical and biopharmaceutical companies and our mandate is to help support the development of new biologics and the growing biotechnology industry within Australia. The Industrial Biotechnology team functions in a complex, highly competitive commercial environment and has a research program directed towards the use of organisms and enzymes to manufacture a wide variety of different biological products. Leveraging state of the art equipment and infrastructure, a diverse array of skills and working in collaboration with many internal and external stakeholders, the team develops products and processes with diverse applications for the pharmaceutical, food, agricultural and chemicals industries.

### Duties and Key Result Areas:

Under the direction of senior research scientists, the successful Industrial Post-doctoral Fellow will:

* Develop and implement process optimisation protocols for a diverse range of microorganisms and application areas.
* Scale up of microbial production processes.
* Equipment management and maintenance, troubleshooting hardware and process issues.
* Work closely with external partners and deliver commercial and other projects in a timely fashion.
* Assist with the development and implementation of cell processing steps (e.g. separation, lysis, clarification, filtration, etc.) and both small and pilot-scale.
* Ensure a safe working environment and work is completed in compliance with gene technology regulations.
* Assist with technical transfer to external organisations as required.
* Carry out innovative, impactful research of importance to our industry partners that will, where possible, lead to novel and important scientific outcomes.
* Analysis, interpretation and reporting of data.
* Draft documents including client reports and standard operating procedures (if required, in adherence to the client’s Quality Management System (QMS)).
* Actively participate in client and project meetings and contribute to decision making.
* Accurate and timely completion of records (such as laboratory notebooks, including electronic notebooks).
* Participate in process reviews, drafting of safety documents such as activity risk assessments and safe work instructions.
* Communicate openly, effectively, and respectfully with all staff, clients, collaborators, and suppliers in the interests of good business practice as well as enhancement of CSIRO’s reputation.
* Oversee the activities of less experienced staff, providing guidance on experimental and/or technological techniques and protocols.
* Work collaboratively as part of a multi-disciplinary team to complete tasks in support of CSIRO’s scientific objectives.
* 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.
* Proactively undertake development to grow effective researcher capabilities to support career goals. When required, contribute to the maintenance of the laboratory (e.g. general cleaning, the purchasing and inventorying of reagents).
* 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:** 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.

## **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) in a relevant discipline area, such as Biotechnology, Chemical Engineering, Microbiology or Biochemistry.

Please note: To be eligible for this role you must have **no more than 3 years** (or part time equivalent) of post-doctoral research experience.

1. Demonstrated competence in development of microbial processes including aseptic techniques.
2. Knowledge in the use and operation of bioreactors for process development and process optimisation.
3. A high degree of mechanical aptitude and proven ability to problem solve and troubleshoot hardware and process issues.
4. The ability to effectively manage several competing priorities simultaneously and carry out non-routine tasks independently.
5. 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.
6. Proven ability to investigate and solve complex problems, present logical alternative solutions which can be discussed, tested and adopted.
7. High level of motivation to fulfill commitments in a timely manner without compromising quality.
8. A record of science innovation and creativity, including the ability and willingness to incorporate novel ideas and approaches into scientific investigations.

## **Desirable:**

1. Experience working with different groups of microorganisms (GM and non-GM).
2. Experience with cell processing equipment.
3. Working knowledge of GMP or other quality management systems.
4. Knowledge and experience in the application of design of experiments.
5. Demonstrated competence in drafting technical documents such as standard operating procedures and activity risk assessments.
6. Experience with leading and directing people and projects, co-operating with others to achieve team and organisational goals in a timely manner, showing flexibility and ability to re-prioritise work when required and to address issues promptly.
7. **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.**
8. Evidence of remaining productive, positive and resilient in complex, ambiguous and/or uncertain environments.
9. Prior experience with industry engagement and/or experience in business development.
10. A current Australian driver’s licence.

To be appointed as an Industrial Postdoctoral Fellow within CSIRO, candidates are required to have **submitted** their PhD 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 ($85,361). 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 the following conditions:

* The successful candidates 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 candidate will also be required to complete a Working with Children Check.
* The successful candidate may be required to prove they have been, or understand the risks and of their own choice not be, vaccinated for Hepatitis B.
* If the successful candidates are not an Australian Citizen or Permanent Resident, they may be required to undergo additional security clearances, which may include medical examinations and an international standardised test of English language proficiency (i.e. IELTS test). https://ielts.com.au/

**Our value proposition**

We want Industrial Postdoc 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.

## **About CSIRO:**

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

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