# Research Scientist

Role summary for potential applicants

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| Advertised Job Title**:** | Research Scientist in Biomolecule Engineering |
| Reference Number**:** | 38724 |
| Classification**:** | CSOF5 |
| Salary Range: | $92,591-$100,199 plus up to 15.4% superannuation |
| Location**:** | Black Mountain (Canberra) OR Parkville (Melbourne) |
| Tenure: | Specified Term until June 2020 |
| Relocation assistance**:** | The successful candidate may apply for up to $15k |
| Applications are open to: | [ ]  Australian Citizens Only[ ]  Australian Citizens and Permanent Residents Only* [x]  All Candidates
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| Functional Area**:** | Research Scientist/Engineer |
| % Client Focus - Internal: | 100 |
| % Client Focus - External: | 0 |
| Reports to the: | Project Leader (Tom Peat) |
| Number of Direct Reports: | No direct reports  |

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| **Role Overview:** |
| [Future Science Platforms](http://www.csiro.au/en/About/Future-Science-Platforms) are an investment in science that underpins innovation and that has the potential to help reinvent and create new industries for Australia. FSPs will see us grow the capability of new generation of researchers and allow Australia to attract the best students and experts to work with us on future science. They are strategic investments aimed at developing capacity in areas of identified future importance for Australia. FSPs are both impact and science focused, developing innovative scientific solutions with industry, government and university partners. They support world class, coherent and creative research teams which integrate science and delivery over the long term, looking to the future science needs of CSIRO and our partners with a 5 to 10 year vision. To position Australia to build a vibrant synthetic biology research and development community to support the bio-based industries and ecoengineering activities of tomorrow, CSIRO has established the [Synthetic Biology FSP](https://research.csiro.au/synthetic-biology-fsp/) (SynBioFSP). Synthetic Biology (SynBio) is the design and construction of biological parts, devices, and organisms (usually based on DNA-encoded componentry); and their application for useful purposes. The SynBioFSP has a mission to develop capacity in synthetic biology within CSIRO and across Australia, in a collaborative and transparent manner. Science capability will be strongly aligned with CSIRO business unit capabilities and will allow CSIRO to deliver novel future outcomes for external partners. The program has a $13 million funding envelope over the first three years. We aim to:1. Build the foundational capabilities to advance SynBio research, including significant investment in social licence to operate
2. Drive national coordination by making these foundational capabilities widely available to the broad research community, governments, and industry for the development of novel industrial products, pharma, biocontrol agents, and strategies for building ecosystem resilience to environmental change, and
3. Build strong partnerships, collaborations, and connections across the innovation sector to develop these novel products and applications responsibly.

The Synthetic Biology FSP (SynBioFSP) is developing a research portfolio which will be spread across CSIRO and a wide variety of partner organisations (universities, industry, NGOs, other research organisations, etc.), both national and international. The research portfolio is dynamic and will evolve over time on the basis of strategy and performance. Research projects will sit within one or more priority [Application Domains](https://research.csiro.au/synthetic-biology-fsp/application-domains/) (Environment & Biocontrol, Chemicals & Fibres, Organelles & Endosymbionts) and one or more [Science Domains](https://research.csiro.au/synthetic-biology-fsp/science-domains/) (Integrative Biological Modelling, Engineering Novel Biological Components, Assembling Novel Biosystems, Maximising Impact). The SynBio FSP will embed a social and behavioural science agenda to address issues around social licence to operate.We are seeking a talented early-mid career scientist with a proven track record in macromolecular modelling and enzyme design to participate in a collaborative project in which we will develop a new engineering approach for *de novo* design of catalytic activities in enzymes, enabled by recent advances in Synthetic Biology. We see this as the first step towards an automated enzyme design platform. The successful candidate will have deep domain knowledge and a history of success in enzyme design. The project is based at CSIRO in either Canberra or Melbourne (to be negotiated), and is part of a larger collaboration between CSIRO and the Australian National University (Canberra). The successful application will have highly developed interpersonal skills and the capacity to collaborate with colleagues of diverse scientific backgrounds.  |

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| **Duties and Key Result Areas:** |
| * Design of new enzymes with novel functionality
* Collaborating with the broader research group to test enzyme designs
* Communication of results through the production of reports and scientific papers and contributions to appropriate scientific conferences.
* Interact productively with a diverse multidisciplinary, multi-institutional team (CSIRO and the Australian National University)
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| **Selection Criteria:** |
| *Under CSIRO policy only those who meet all essential criteria can be appointed****Pre-Requisites:*** * PhD and post-doctoral research experience in Enzyme Design/Engineer or Biological Engineering

***Essential criteria:**** Demonstrated capability in advanced modelling techniques for biological macromolecules
* Demonstrated coding proficiency; familiarity with operating systems such as Linux
* Proven proficiency in scientific communication through publication or equivalent delivery of outcomes in an industrial context.
* Ability to foster productive and inclusive interactions with colleagues from diverse scientific backgrounds and at a variety of levels of seniority (e.g. students, group leaders, professors etc).

***Desirable criteria**** A deep domain knowledge in reaction chemistry
* Experience in molecular biology and protein characterisation

**CSIRO is a values based organisation. You will need to demonstrate behaviours aligned to our values of:*** Integrity of Excellent Science
* Trust & Respect
* Creative Spirit
* Delivering on Commitments
* Health, Safety & Sustainability
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| **Other Information:** |
| **How to Apply**Please apply for this position online at [www.csiro.au/careers](http://www.csiro.au/careers). You will need to upload your cover letter and resume/CV as ONE document, expressing your interest in the role and addressing each of the Selection Criteria. Please provide sufficient relevant information to enable the selection panel to assess your suitability against the Selection Criteria. Should your application proceeds to the next step, you may be asked to provide additional information.If you experience difficulties applying online call 1300 984 220 and someone will be able to assist you. Outside business hours please email: csiro-careers@csiro.au**Referees**: If you do not already have the names and contact details of two previous supervisors or academic/ professional referees included in your resume/CV please add these before uploading your CV.**Contact:** If after reading the selection documentation you require further information please contact Tom Peat by email at tom.peat@csiro.au or by phone at +61 457 539 419.**About CSIRO**Australia is founding its future on science and innovation. Its national science agency, the Commonwealth Scientific and Industrial Research Organisation (CSIRO) is a powerhouse of ideas, technologies and skills for building prosperity, growth, health and sustainability. It serves governments, industries, business and communities across the nation. Find out more! [www.csiro.au](http://www.csiro.au). **About the SynBio FSP Future Science Platform** For more information, see the [Synthetic Biology FSP](https://research.csiro.au/synthetic-biology-fsp/) website. |