# 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 Digital Innovation for Sustainability |
| Job Reference | 81021 |
| 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) | Brisbane, QLD  Canberra, ACT or Hobart, TAS considered |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | * Australian/New Zealand Citizens; * Australian Permanent Residents; and * Australian temporary residents currently residing in Australia (visa sponsorship may be provided to eligible onshore candidates) |
| Position reports to the | Team Leader, Agricultural & Digital Innovation, Sustainability Pathways Program, Land and Water |
| Client Focus – Internal | 100% |
| Client Focus – External | 0% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Simon Fielke via email at [Simon.Fielke@csiro.au](mailto:Simon.Fielke@csiro.au) or phone +61 4 3553 8903 / Aysha Fleming via email at [Aysha](mailto:Aysha).Fleming@csiro.au or phone +61 3 62325252 |
| 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 area 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) Postdoctoral Fellowships** provide opportunities to scientists and engineers who have completed their doctorate and have less than three years relevant postdoctoral work 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 Postdoctoral Fellows **are appointed for three years full-time or equivalent.**

The key research questions that will be addressed by the Postdoctoral Fellow are:

* What institutional systems and aspects have governed sustainability knowledge?
* How did these institutions evolve and support the rise of different forms of data acquisition, analytics, and information provision?
* How has digitalization altered the means of capture and insights garnered from above data through information provision?
* What is the value of sustainability knowledge to the various actors involved with digital platforms as part of broader knowledge supply chains?
* What resulting behaviour change matters for sustainability transitions?

The successful candidate for this position will play a pivotal research role in CSIRO’s **Valuing Sustainability Future Science Platform (VS-FSP)**. The VS FSPis a substantial new 5-year investment in cutting edge research by CSIRO that will recruit 15 post-doctoral fellows who will be embedded in diverse inter-disciplinary research teams. The VS FSP aims to co-produce future pathways, measures and indicators to underpin sustainable innovation and prosperity for current and future industries and communities. The VS FSP will bring together social, biophysical, economic and data science teams and work with diverse stakeholders to advance these outcomes, in part through developing measurement and assessment technologies that can support decision-making, attribute change to practice, and track progress.

Information - our ‘Knowledge Commons’ - is transforming rapidly, through digital technology and the recognition of the importance of collaboration and valuing multiple types of knowledge. To leverage this transformation to scale up impact, requires significant boundary work that remains poorly defined. This project examines how information, knowledge, collaboration, digital technology, and the boundary work that unites these, work currently and can be better enabled for a wider range of (social, environmental, economic) benefits. The project will consider how historic, current, and alternative (‘hard’ and ‘soft’) institutional arrangements, that flow through digital infrastructures, do and could impact the future trajectory of information for collaborative knowledge systems. This focus draws particularly on the institutions (rules and norms) associated with private property and common pool resources (e.g. in agriculture) and examines the implications of the pace of change of knowledge creation through technological advancements such as big data, AI and remote sensing, for stakeholder access, use and benefit/cost.

The Postdoctoral Fellow will take a social scientific approach to innovation studies to consider the social and economic institutions which determine how sustainability knowledge is generated and shared currently. This information can then feed into how digital platforms (and the data that fuel them) might be improved via considerations of social context as part of digital architecture.

The CERC Postdoctoral Fellows will work as part of a broader collaborative team with researchers at CSIRO several partner agencies and will be expected to regularly communicate with managers and other stakeholders.

### Duties and Key Result Areas:

Under the direction of senior research scientists, the Postdoctoral Fellow will:

* + Carry out innovative, impactful research of strategic importance to CSIRO that will, where possible, lead to novel and important scientific outcomes.
  + Recognise and utilise opportunities for innovation and the further development of approaches linking social values, environmental sustainability, and digital innovation.
  + Work with project stakeholders and collaborators to co-develop and design research questions, implement research activities and evaluate outcomes.
  + Translate outcomes of research activities to partners and end-users, for instance through participation in meetings, workshops, field visits and presentations.
  + Carry out research investigations requiring originality, creativity and innovation.
  + Produce high quality scientific papers suitable for publication in peer reviewed journals, and internal and external reports. Prepare appropriate conference papers and present those at national and international conferences as agreed with their supervisor.
  + 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 across the Valuing Sustainability Future Science Platform and across CSIRO, as identified and appropriate.
  + Adhere to the spirit and practice of CSIRO’s Code of Conduct, including ethical human research and privacy requirements, Health, Safety and Environment procedures and policy, Diversity initiatives and Making Safety Personal goals.

1. Other duties as directed.

[**The CERC Postdoctoral Fellow learning and development program**](http://www.csiro.au/en/Careers/Student-and-graduate-programs/Postdoctoral-fellowships)is developed between the CERC Postdoctoral Fellow and their CSIRO supervisor/s. The program will focus on enhancing the Fellows’ 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

## **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**

To allow assessment of your application, please address each selection criteria with a short paragraph demonstrating the relevance of your research experiences and achievements.

#### 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 cybernetics, human geography, human factors, anthropology, innovation studies, and/or social science more broadly.

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

1. Demonstrated experience in participatory research methods, knowledge co-production, values framing and elicitation, and stakeholder engagement.
2. Demonstrated experience in undertaking interdisciplinary research linking social and biophysical systems, ideally with experience linking qualitative and quantitative approaches.
3. Background knowledge in science and technology studies, digital user experience, anthropology, and/or innovation studies as well as an interest in how digital platforms can enable more sustainable (social, environmental and economic) accounting.
4. 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.
5. A sound history of publication in peer reviewed journals and/or authorship of scientific papers, reports, grant applications or patents, and conference presentations.
6. A record of science innovation and creativity, including the ability and willingness to incorporate novel ideas and approaches into scientific investigations.
7. The ability to remain productive, positive and resilient in complex, ambiguous and/or uncertain environments.

## **Desirable:**

1. Experience in the development and/or use of digital technology for decision-making.
2. Experience with social research field work (interviews, focus groups, workshops) and safety requirements and the willingness to travel.
3. **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.**

To be appointed as a CERC 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 (AU $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 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.
* If the successful candidate is 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).

**Our value proposition**

We want CERC 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.

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

## **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 [Land and Water](https://www.csiro.au/en/Research/LWF)