# Position Details

## Research Scientist/Engineer- CSOF7

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| The following information is for applicants | |
| Advertised Job Title | Future Science Platform Director, Quantum Technologies |
| Job Reference | 91691 |
| Tenure | Indefinite, with the initial program of work being a 3 year allocation |
| Salary Range | Attractive salary package offered, plus up to 15.4% superannuation |
| Location(s) | Lindfield – Sydney or Clayton – Melbourne preferred |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | Australian/New Zealand Citizens and Australian Permanent Residents |
| Position reports to the | Deputy Director, Manufacturing |
| Client Focus – Internal | 50% |
| Client Focus – External | 50% |
| Number of Direct Reports | 1 |
| Enquire about this job | Contact Paul Savage via email at paul.savage@csiro.au or phone +61 3 9545 2523 |
| 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 areas 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

The Manufacturing Business Unit seeks to appoint a Future Science Platform Leader in Quantum Technologies. Quantum technologies are a major growth opportunity for Australia. CSIRO’s recently revised forecast following its *Growing Australia’s Quantum Technology Industry* roadmap forecasts that $6b in revenue and 19,000 new jobs could be generated in Australia by 2045. Many sectors will benefit from quantum technologies including healthcare and medicine, natural resources, financial services and defence.

The Leader of the Quantum Technologies FSP will set the vision, strategy and lead a program of research to develop future science capability aligned with the strategies of contributing CSIRO business units. Reporting to the Deputy Director of the Manufacturing Business Unit you will be responsible for project portfolio in Quantum technology that includes projects in quantum computation, quantum sensing, quantum communication and quantum biotechnology. Importantly, this role spans all of CSIRO and currently includes more than 30 researchers and growing. This is a senior role that will generate impact through facilitating the strategic development of organisational capability in partnership with industry, government, and the Australian and international innovation system.

The FSP Leader will create strong connections to other participating business units and have full responsibility for the day-to-day management of the FSP, supported (as needed) by Enterprise Support functions such as business development and communications. The FSP Leader will be impact-driven, entrepreneurial and collaborative. They will proactively develop and manage a pipeline and portfolio of innovative science and will build strategic external relationships to ensure optimal impact for Australia. They will promote collaboration across boundaries to bring the best internal and external capability to address the identified themes of the FSP.

Australia has a strong international position in quantum research, and CSIRO has an opportunity to expand its contribution to strengthen and support Australia’s global position. We have established a *Quantum Technologies Future Science Platform (FSP)* to build CSIRO’s capability at the cutting edge of quantum technology developments, in order to position CSIRO to achieve real-world impact by adapting emerging quantum advances to real-world problems.

Areas of potential focus identified for the Quantum Technologies FSP research portfolio include quantum devices, quantum security and cryptography, quantum materials and materials discovery, quantum algorithms, and quantum biology.

CSIRO’s Manufacturing Business Unit plays an important role in helping to catalyse the transition of the Australian manufacturing industry to high-tech, high-value businesses, including the creation of new industries and businesses, by supporting manufacturers to grow, scale-up, commercialise and adopt technology and become more agile, resilient and competitive.

### Duties and Key Result Areas

**Impact Science Leadership**

* Provide leadership for CSIRO’s Quantum Technologies FSP to generate significant impact for the economy, society and/or the environment.
* In consultation with internal and external stakeholders, review and refine the R&D strategy for the FSP.
* Develop and manage a portfolio of research projects to deliver capabilities and intellectual property to CSIRO business units over the next 3 years, with a view to providing solutions to external customers and stakeholders in the longer term.
* Consult with and influence relevant CSIRO business units to ensure resources required to execute the FSP strategy and work program are available.

**Capability Leadership**

* Build effective teams, support career development for staff and implement succession planning for the capabilities that the platform develops.
* Lead, coach and supervise a multi-disciplinary, regionally dispersed research team, to ensure that the FSP work program is delivered in accordance with key performance indicators, within agreed timelines and budget.
* Attract, develop and retain world class talent which will meet current and future needs of CSIRO.
* Adhere to the spirit and practice of CSIRO’s Code of Conduct, Health, Safety and Environment procedures and policy, Diversity and Inclusion initiatives and Making Safety Personal goals.

**Engagement & Partnership**

* Build strategic relationships through engagement with the domestic and international quantum technologies ecosystem including industry, academia and government.
* Produce or support the production of high quality scientific and/or engineering papers suitable for publication in quality journals and for presentation at national and international conferences.
* Communicate openly, effectively and respectfully with all staff, customers and suppliers in the interests of good business practice, collaboration and enhancement of CSIRO’s reputation.

**Resource Leadership**

* Lead and manage the Program’s financial resources, people, infrastructure and other assets to ensure their effective and efficient use.
* Ensure effective management of physical infrastructure and resources in an environmentally sustainable way.
* Ensure best practice governance and management of commercial activities and intellectual property in the platform.
* Manage financial performance of activities within the platform.
* Manage delivery against milestones and quality standards.
* Contribute to the development of science plans for future infrastructure.

## **Selection Criteria**

#### Essential

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

1. A postgraduate qualification or equivalent in science or engineering in a field relevant to Quantum Technologies combined with significant experience in at least one of the Quantum Technologies FSP focus areas from experience gained in R&D and/or industry.
2. International reputation and credibility underpinned by science excellence, creativity, innovation and flexibility.
3. Evidence of successful initiation, development and leadership of large, complex R&D projects or activities.
4. The ability to work effectively as an integral member and leader of a multi-disciplinary, regionally dispersed research team, and foster an environment in which there is a high level of co-operation within and between teams.
5. Evidence of strong engagement skills and strategic relationship management that grows new research partnerships and opportunities for future outcomes.
6. Demonstrated leadership in response to change or when faced with constraints.
7. Demonstrated track record in leading a complex, multi-site business including managing financial and physical resources and creating a safe and healthy workplace.
8. Strong leadership skills that demonstrate the ability to unite capability and to promote cross-organisational collaboration to transform CSIRO’s delivery to national and international challenges in the manufacturing domain.
9. Demonstrated knowledge and understanding of global trends in the relevant global market.

**Desirable:**

1. Experience in development of technology from a low Technology Readiness Level (TRL) to higher readiness level.

## **Required Competencies**

* **Teamwork and Collaboration:** Creates and fosters an environment in which there is a high level of cooperation within and between teams. Facilitates positive team relationships to build interactions across Business Units and the organisation.
* **Influence and Communication:** Identifies critical stakeholders and influences them via an influential third party, for example through an established network, to gain support for sometimes contentious proposals/ideas.
* **Resource Management/Leadership:** Provides leadership that fosters an environment that encourages new ideas and provides support for the development of emerging skills. Creates trust by displaying consistency, understanding, integrity and patience. Plans, seeks, allocates and monitors resources to achieve outcomes.
* **Judgement and Problem Solving:** Resolves major conceptual scientific, technical, commercial or management problems, which have a significant impact upon the field of research, professional function, the Business Unit or the Organisation. Situations faced have little or no precedent and require original concepts and approaches.
* **Independence:** Assesses the risk and opportunity of identified strategies, options and actions. Overcomes problems and setbacks in achieving goals. Invariably includes consideration of value-added future impact on bottom line when determining the optimal and efficient use of resources.
* **Adaptability:**Is flexible in response to external change or when faced with external constraints. Identifies and promotes the opportunities arising as a result of change.

Special Requirements

The successful candidate will be asked to obtain and provide evidence of a National Police Clearance or equivalent. Please note that individuals with criminal records are not automatically deemed ineligible. Each application will be considered on its merits.

## **About CSIRO**

We solve the greatest challenges through innovative science and technology. Visit [CSIRO Online](http://www.csiro.au/) and [CSIRO Manufacturing](https://www.csiro.au/en/about/people/business-units/Manufacturing) for more information.

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

* People First
* Further Together
* Making it Real
* Trusted