# Position Details

## Research Scientist/Engineer- CSOF8

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| The following information is for applicants |
| Advertised Job Title | Future Digital Manufacturing Lead – Manufacturing BU |
| Job Reference | 74649 |
| Tenure | Specified Term of 24 months |
| Salary Range | AU$166,056 to AU$208,488 pa (pro-rata for part-time) + up to 15.4% superannuation |
| Location(s) | Clayton or Lindfield  |
| 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 | Director Manufacturing Business Unit  |
| Client Focus – Internal | 30% |
| Client Focus – External | 70% |
| Number of Direct Reports | 0 |
| Enquire about this job | Natasha.wright@csiro.au or phone +61 0428 864 058 |
| 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 Australian manufacturing sector is more important to Australia now than it has been for the last several decades, and so is the need to support companies build competitive sustainability in areas of high-value add advanced manufacturing which contributes strongly to national productivity,

economic growth and societal wellbeing. 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.

We are looking for an experienced Future Digital Manufacturing Leader with in-depth industry experience

to co-lead CSIRO’s research and innovation in Future Digital Manufacturing. Digital technologies are a key

enabler of Future Manufacturing – in particular, AI, automation, robotics, Internet of Things, data analytics,

Industry 4.0 /5.0 and cybersecurity. This has been recognized by the Government’s Modern Manufacturing

Strategy and within CSIRO where the organisation is investing significant funding to support a new R&D

initiative in Future Digital Manufacturing (FDM). FDM is a joint initiative between CSIRO's Manufacturing

and D61 Business Units therefore this role will work closely with a similar role in the D61 Business Unit to

co-lead the initiative. The FDM initiative will provide a “one stop shop” for industry access to CSIRO

expertise, research outputs and facilities to accelerate the advancement of modern digital manufacturing.

The role will report to the Director of CSIRO’s Manufacturing Business Unit and through to the Data61 /

Manufacturing Future Digital Manufacturing governance group and is jointly responsible for coordinating

the planning and early implementation of our new FDM program. This activity will position CSIRO at the

centre of Australian manufacturing innovation and research to support Australian manufacturers to

transform, including increasing their trust, familiarity, and adoption of digital technologies. The FDM will

co-manage a $18m budget, work plans and timelines to ensure key deliverables are met.

### Duties and Key Result Areas

Impact science leadership

* Provide science leadership and industry expertise in the Future Digital Manufacturing program.
* Coordinate all aspects of planning for the Future Digital Manufacturing program, including identification of implementation needs.
* Co-manage budget ($18M), work plans and timelines to ensure key deliverables are met
* Sustain and enhance the R&D culture of science excellence, creativity, innovation and flexibility.
* Ensure that the BU’s Digital science is globally competitive and addresses meaningful problems in the market.
* In consultation with research partners and research users, lead the Digital strategy and build capacity to innovate for science discovery.
* Build collaborative relationships both within CSIRO and with external stakeholders in relevant Manufacturing Industries
* Identify new opportunities and Digital markets in Australia and overseas and engage key stakeholders and clients to build support for investment in opportunities.
* Integrate science with project and impact delivery through an effective “Path to Impact” framework.
* Build a pipeline of contracts (3 to 5-year focus) including identification of cross-Business Unit opportunities and manage the Program’s portfolio of Intellectual Property.
* Guide the set of projects needed to deliver against the Manufacturing Business Unit’s strategy.
* Support the Manufacturing Business Unit Science Director in the Business Unit Science Reviews.

Engagement and partnerships

* Build strategic relationships through engagement with the domestic and international Digital Manufacturing ecosystems 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.

Capability leadership

* Strive for “Zero Harm” (physical and psychological) and actively promote a healthy, safe and environmentally sustainable workplace, in doing so model appropriate and professional behaviour in the workplace and manage people matters proactively.
* Inspire staff and sustain and nurture awareness of the Manufacturing business unit’s vision, science quality and impact in the broader Australian community.
* Attract, develop, and retain world class talent which meet current and future needs - in the short and longer term.

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.
* Build the long-term science capability to support the delivery of the Program’s research and impact, including forecasting demand, monitoring science trends and stakeholder needs, and building a high-performance culture.
* Effectively lead change initiatives across the Business Unit.
* Model appropriate and professional behaviour and manage people matters proactively.

## **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:** Contributes to, or defines Business Unit / organisational policy directions, strategic planning and operationalises the vision for staff and gains commitment to the direction chosen. Plans, seeks, allocates resources and monitors to achieve outcomes. Adopts a mentor role.
* **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:** Commits significant resources in the face of uncertainty and takes calculated risks to improve performance and achieve challenging goals. Uses personal energy to drive change strategies. Formulates and implements contingency plans to minimise the impact of potential risks. Accepts personal responsibility for the outcomes of decisions/risks taken.
* **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.

Key Capabilities

**CSIRO is a values-based organisation**

**People First:** We put the safety and wellbeing of our people above all else, and we know that

diversity is the compass to navigate innovation. (*Respect, Caring, Inclusive*)

**Trusted:** We earn trust everywhere, because we deal only in facts, and we operate with unwavering integrity. (*Partnering, Cooperative, Humble*)

**Further Together**: We collaborate widely and generously to boldly take on challenges that are bigger than ourselves. (*Curious, Adaptive, Entrepreneurial)*

**Making it Real:** We don't just do research – we deliver solutions that create change in our world. (*Accountable, Authentic, Courageous*)

## Selection Criteria

#### Pre-Requisite

A PhD (or an equivalent combination of qualifications and significant research experience) in a Digital technology such as AI, automation, robotics, Internet of Things, data analytics or Industry 4.0 / 5.0.

#### Essential

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

1. Demonstrated ability to undertake original, creative, and innovative research by generating and pursuing novel ideas and solutions to scientific research problems.
2. Demonstrated knowledge and understanding of global trends in the relevant global market.
3. Evidence of strong industry and/or government engagement and strategic relationship management that grows new impact opportunities and supports positive and sustainable commercial outcomes.
4. Demonstrated science leadership and excellence in a large technology function, with oversight of budget, project and risk management.
5. 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 digital manufacturing domain.
6. Excellent written and oral communication skills, evidenced by high-level reporting, presentation, stakeholder management and negotiation abilities.

## **Desirable**

1. An exceptional record of science innovation and creativity, plus the ability to apply well developed research skills to scientific investigations of significant consequence.

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**

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 [Manufacturing](https://www.csiro.au/en/Research/MF)

Find out more about CSIRO [Data61](https://data61.csiro.au/)