# Position Details

## Research Projects- CSOF6

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| The following information is for applicants |
| Advertised Job Title | Space Technologies Development Engineer |
| Job Reference | 91540 |
| Tenure | Up to 31 December 2025 Full-time, Part-time (0.8 FTE min), or Job-share |
| Salary Range | AU$121,455to AU$142,321per annum (pro-rata for part-time)plus up to 15.4% superannuation |
| Location(s) | Marsfield (Sydney) NSW or Canberra, ACT. Other locations may be considered |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | * Australian/New Zealand Citizens and Australian Permanent Residents
* Either hold, or be able to obtain, a valid working visa for the duration of the specified term (without the requirement for sponsorship by CSIRO).
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| Position reports to the | Space Research Group Lead |
| Client Focus – Internal | 85% |
| Client Focus – External | 15% |
| Number of Direct Reports | 0 |
| Enquire about this job | Nick.carter@csiro.au or phone +61 467 964 895 |
| 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. |

**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

This role is within the CSIRO Space Program. In the role you will work with the Space Research Group leader to help develop a program that builds world-leading capability and drives cutting-edge research withinCSIRO. The Space Program seeks to achieve impact through novel mission-directed, multi‐disciplinary and collaborative science and engineering across Business Units in CSIRO and with external collaborators.

CSIRO’s space objectives are to:

1. Develop and manage national space facilities (such as the NovaSAR-1 satellite facility and the ISRU lunar testbed facility)
2. Apply the opportunities of space to solve the greatest national challenges (such as drought, water, climate change, food security, plastic waste, future industries, disasters)
3. Stimulate innovation by strengthening our role and capabilities in space science and space exploration.

Current CSIRO space activities span application areas including Earth observation, small satellite technologies, robotics, remote operations and resource utilisation, communications, space object tracking, materials and manufacturing, and space life sciences (for more information visit [www.csiro.au/space](http://www.csiro.au/space)). The portfolio of research within the Space Program will evolve over time on the basis of changing domain needs, strategy and performance.

The successful candidate will provide space engineering expertise to a multi-disciplinary portfolio of discrete space technology research projects within CSIRO’s Space Program. In conjunction with project leaders, you will develop pathways to implementation (including spaceflight) for key technologies, including verification, testing, and operations planning, and help to carry these out. The candidate will also play a significant role in the identification of opportunities for collaboration and expansion with internal and external partners. The role will also manage the review and milestone reporting processes for the space technologies portfolio. Technologies currently under development include:

* Radiation shielding materials
* Ultra-lightweight solar cells
* Satellite optical payloads
* Next generation batteries
* High-resolution 3D scanning technologies
* In situ resource utilisation and space robotics
* Lunar dust mitigation coatings
* High-speed satellite-to-satellite communications technologies

### Duties and Key Result Areas

* Be responsible for the development and verification of cutting-edge space technologies alongside project leaders and research scientists. This includes:
	+ Defining the verification process and model philosophy
	+ Writing and implementing test plans and procedures
	+ Identifying and mitigating key technological and programmatic risks
	+ Providing space environment expertise to research scientists across CSIRO
* Work closely with project leaders, research scientists and business development managers to identify paths to impact, implementation, and commercialisation within the space domain
* Act as the primary technical interface between space technology project leaders and external launch providers and regulators
* Assist with financial management, contract management, communications, and intellectual property portfolio for the Space Research Group as required
* Maintain confidentiality and appropriately manage commercially sensitive information of CSIRO and/or research or commercial partners
* Play a key advisory role in decisions concerning technological direction of the CSIRO Space Program
* Contribute to project scoping, planning and engineering design for new space technology projects where relevant
* Contribute to the development of research papers related to the space technologies projects
* Address ill-defined problems and make critical choices between options that require knowledge of the most recent scientific and/or technological developments or novel methodologies in relation to space engineering
* Work collaboratively as part of a multi-disciplinary, regionally dispersed team to carry out tasks in support of CSIRO’s scientific and commercial objectives
* Adhere to the spirit and practice of CSIRO’s Values, Code of Conduct, Health, Safety and Environment procedures and policy, Diversity initiatives and Zero Harm goals
* Communicate openly, effectively, and respectfully with all staff, clients and suppliers in the interests of good business practice, collaboration and enhancement of CSIRO’s reputation
* Foster collaboration and interactions between scientists across CSIRO and clients
* Represent the Space Program in relevant external activities as required
* Other duties as directed.

## **Selection Criteria**

#### Essential

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

1. Relevant degree in an engineering or applied physics field together with at least 5-10 years’ experience in engineering of spacecraft or space products
2. Strong technical understanding of spacecraft systems, subsystems and the space environment
3. Excellent interpersonal skills, including high quality written and oral communication skills.
4. Demonstrated success working in a multidisciplinary team

## **Desirable**

1. An understanding of the Australian space regulatory requirements for launch, such as licencing and export controls
2. Strong knowledge and understanding of relevant NASA, ESA or other international space system standards, requirements and implementation processes

## **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 team as well as industry colleagues.
* **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:** Sets up and maintains effective and efficient work teams and manages performance and resources, to achieve objectives. Chooses appropriate management strategies and communication styles to maintain high levels of motivation and productivity. Gives feedback for development purposes and provides support and direction for improvement.
* **Judgement and Problem Solving:** Anticipates and manages problems in ambiguous situations. Develops and selects an appropriate course of action and provides for contingencies. Evaluates, interprets and integrates complex bodies of information and draws logical conclusions, synthesises proposals and defends options with reasoned arguments.
* **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:**Demonstrates flexibility in thinking and adapts to and manages the increasing rate of organisational change by adjusting strategies, goals and priorities.

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.

Include if relevant:

* 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.
* The successful candidate must be able and willing to travel approximately two‐monthly, within Australia.

## **About CSIRO**

We solve the greatest challenges through innovative science and technology. Visit [CSIRO Online](file:///C%3A%5CUsers%5CONE075%5CAppData%5CLocal%5CMicrosoft%5CWindows%5CINetCache%5CContent.Outlook%5CF4SBYDP8%5CCSIRO%20Online) and <https://www.csiro.au/en/work-with-us/industries/space> 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