# Position Details

## Research Projects- CSOF3

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| The following information is for applicants |
| Advertised Job Title | Electronic Technician – Radio Frequency |
| Job Reference | 72954 |
| Tenure | Specified Term of three years Full-time or Job-share (if circumstances permit) |
| Salary Range | AU$63k to AU$80k pa (pro-rata for part-time) plus up to 15.4% superannuation |
| Location(s) | Marsfield (Sydney) New South Wales |
| Relocation Assistance | Will be provided to the successful candidate if required (within Australia) |
| Applications are open to | * Australian Citizens and Permanent Residents
* New Zealand Citizens who usually reside in Australia
* Australian temporary residents who are currently residing in Australia and have the right to work for the expected duration of the term (at least to end of July 2024), with no requirement for sponsorship
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| Position reports to the | Team Leader in the Antennas and Receiver Technologies Group |
| Client Focus – Internal | 100% |
| Client Focus – External | 0% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact K Jeganathan (Jega) by email on Kanapathippillai.Jeganathan@csiro.au or telephone +61 9372 4613 |
| 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 Electronic Technician – Radio Frequency (RF) is a member of a skilled engineering team responsible for the development, production, and maintenance of low noise radio astronomy receiver systems together with associated RF, IF and electronic systems. The antennas and receiving systems operate over the frequency range 0.2 to 115 GHz and encompass the fields of cryogenically cooled microwave receivers, specialised RF and analogue electronics and highly integrated receivers.

The position provides technical, operational and maintenance support to a range of projects (both internal and external), including general RF electronics design and development, field installation, as well as fault-finding and repairs to RF and electronic modules. The position is also responsible for the maintenance of laboratory facilities, and provides support with installation, commissioning and maintenance of electronics systems at CASS observatories and other sites.

### Duties and Key Result Areas:

* Contribute to a team responsible for the design and development of room temperature and cryogenically-cooled, low noise radio astronomy receiver systems together with associated support electronics.
* Undertake procurement of electronic equipment, electronic components, and other laboratory items.
* Provide technical, operational and maintenance support in a range of technical disciplines.
* Fault find and repair RF and electronic modules to the component level.
* Provide general RF, analogue and digital electronics design, and construction support.
* Maintenance of laboratory facilities and inventory.
* Travel to the CASS observatories and other sites to assist with installation, commissioning, and maintenance of electronic systems.
* Work collaboratively with colleagues within a multi-disciplinary team, the CASS engineering program and across CSIRO, to reach objectives.
* Communicate effectively and respectfully with all staff, clients, and suppliers in the interests of good business practice, collaboration, and enhancement of CSIRO’s reputation.
* Undertake and complete tasks under technical direction, working with discretion to decide on the timing of operations within the work team’s plan and planning to meet experiment and/or project demands.
* Adhere to the spirit and practice of CSIRO’s Values, Health, Safety and Environment plans and policies, Diversity initiatives and Zero Harm goals.
* Other duties as directed.

## **Selection Criteria**

#### Essential

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

1. An Advanced Diploma (or equivalent) in electronics, with emphases on both analogue and digital techniques.
2. A demonstrated sound understanding of analogue, digital and radio-frequency techniques.
3. Excellent hands-on technical and problem-solving skills with a demonstrated ability to test, fault find, and repair at the component level.
4. Excellent practical skills including soldering; the assembly of printed circuit boards (PCBs), electronic modules and cable assemblies; and the use of general workshop equipment such as drill presses and hand tools.
5. Excellent written and verbal communication skills with the ability to work effectively within a multi-disciplinary team with proven high levels of initiative.
6. Demonstrated ability & willingness to contribute novel ideas and approaches in support of scientific investigations.

## **Desirable:**

1. Experience with the use of 3D mechanical design and electronic design/ layout CAD packages such as AutoCAD Inventor and Altium Designer and/or similar packages.
2. Familiarity with the fundamentals of Microwave, RF and electronic circuit design.

**Required Competencies:**

* **Teamwork and Collaboration:** Proactively seeks and considers the ideas and opinions of others from within and outside the team to help form decisions, plans or actions.
* **Influence and Communication:** Puts forward ideas by presenting factual information supported by data, definitions, examples, illustrations or other aids, which will assist in conveying meaning.
* **Resource Management/Leadership:** Provides instruction and assists other staff to complete allocated tasks and activities.
* **Judgement and Problem Solving:** Identifies and considers the implications of a range of available alternatives in order to select the most appropriate response to problems of a familiar or recurring nature.
* **Independence:** Recognise and makes immediate changes to improve performance (faster, better, lower cost, more efficiently, better quality, improved client satisfaction).
* **Adaptability:**Willingness to change ideas or perceptions based on new information, contrary evidence or other people's points of view. Prepared to try out different approaches.

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.

To be eligible for this position you must be willing and able to:

- work flexible hours when required;

- spend periods of up to two weeks at time working at locations away from Sydney;

- access and work at heights up to 100m above the ground and to work in confined spaces.

## **About CSIRO:**

We solve the greatest challenges through innovative science and technology. Visit [CSIRO Online](http://www.csiro.au/) and [CSIRO Astronomy and Space Science](https://www.csiro.au/en/Research/Astronomy) 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:

1. People First
2. Further Together
3. Making it Real
4. Trusted