# Position Details

## Research Management – CSOF8

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| The following information is for applicants |
| Advertised Job Title | Research Director, Sensing and Sorting |
| Job Reference | 70621 |
| Tenure | Specified Term of 3 years Full-time |
| Salary Range | AU$162,800 to AU$204,400 pa (pro-rata for part-time) + up to 15.4% superannuation |
| Location(s) | Lucas Heights, NSW |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | Australian Citizens Only |
| Position reports to the | Business Unit Director, CSIRO Mineral Resources |
| Client Focus – Internal | 30% |
| Client Focus – External | 70% |
| Number of Direct Reports | 3 |
| Enquire about this job | Contact Jonathan Law via email at jonathan.law@csiro.au orContact Brittany Boeck via email at brittany.boeck@csiro.au  |
| 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

Research Managers in CSIRO initiate, develop, lead and promote CSIRO's research capability for the benefit of Australia's economy, society and/or environment. While they often have an individual research component to their roles, their primary responsibility is the management and/or leadership of research, client relationships, staff and other resources. They are responsible for staff management and wellbeing, financial performance, delivery of scientific results to clients, and for taking the leadership in the commercialisation of research outcomes for impact. In accordance with Business Unit and Sector research plans, research managers undertake the establishment and facilitation of multi-team and multi-organisational, collaborative research programs leading to the delivery of results to clients.

CSIRO Mineral Resources is seeking to appoint a Research Director for the Sensing

and Sorting program. The program brings together world-leading capability in sensing for

improved control in exploration, mining and processing, the application of sensing in bulk ore sorting, and large-scale ore analysis and materials imaging.

The Research Director will define the vision, strategy and direction of the Sensing and

Sorting program, develop and manage a portfolio and pipeline of science, projects and

external relationships to ensure optimal science and deliver financial and impact goals to both internal and external stakeholders. A key responsibility is to promote collaboration across

boundaries to bring the best internal and external capability to projects and customers. The

Research Director will be part of the Mineral Resources Leadership Team and is accountable

for the delivery of specific elements of the Business Unit’s overall impact, science and

financial objectives.

The Research Director has a critical role in building the research capability to enable the program to build on its strengths and evolve to meet new industry challenges. They will also work to build upon new business models in research commercialisation for sustainable revenue and seek new opportunities that build strong external partnerships.

The Program has an annual budget of nearly $10m, of which approximately one third is delivered via industry funded project activities.

### Duties and Key Result Areas:

Impact from Science

* Through demonstrated deep knowledge of the challenges of the mineral processing industry, provide strategic direction and a clear focus for the Program that results in world class research and tangible industry outcomes.
* Initiate major research projects with the mining industry that significantly increase the impact of our current research.
* Lead the Program staff in producing high quality scientific and/or engineering papers suitable for publication in quality journals and for presentation at national and international conferences.

Capability Leadership

* Provide leadership of CSIRO's capabilities and strategy in the Sensing and Sorting program.
* Lead research projects of significant size and provide guidance in the execution of projects undertaken by Program staff, including the negotiation of resource requirements.
* Catalyse science thinking – form/support science networks, sponsor exploratory and capability development projects.
* Maintain a world class research capability to deliver on the goals of the Program.

Engagement and Partnership

* In consultation with stakeholders in the mining and METS sectors and in the research community, develop and continually review the Program’s research portfolio and development strategy.
* Lead engagement with mining and related METS companies with a view to developing collaborative or one-on-one projects.
* Lead engagement with cross-CSIRO initiatives, notably the Critical Energy Metals Mission, ensuring that the program is well placed to be a key contributor.
* Lead the engagement with other parts of CSIRO in areas that might be brought to bear on innovation in mineral processing.
* Communicate effectively and respectfully in the interests of good business practice, collaboration and enhancement of CSIRO's reputation.
* Lead, coach and supervise staff to ensure research projects are established and led in accordance with industry best practice.
* Adhere to the spirit and practice of CSIRO's Values, Health, Safety and Environment plans and policies, Diversity initiatives and Zero Harm goals.

Resource Leadership

* Work collaboratively as part of the Mineral Resources Executive and share responsibility for delivery of the Business Units impact areas.
* Manage projects and budgets to deliver planned outcomes.
* Lead external revenue activities to deliver strategically aligned projects and meet revenue targets.
* Work effectively as an integral member or leader of a multi-disciplinary, regionally dispersed research team, to undertake independent scientific investigations and carry out/delegate associated tasks.

## Other duties as directed.

## **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:** Uses complex influencing strategies, for example, assembling strategic coalitions, building behind the scenes support and the tactical use of information to gain support.
* **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.

## **Selection Criteria**

#### Essential

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

1. A PhD (or equivalent) in, or equivalent experience, in physics/applied physics, plus relevant research leadership experience.
2. Recognition within the industry as an experienced leader in the delivery of applied industrial physics research to sensing and sorting challenges.
3. Track record leading a multi-disciplinary research team, to build innovation culture and to foster best practice in diversity and inclusion to deliver impact.
4. Significant practical experience in the business of ‘sensing and sorting’, within Australian environments, with a broad knowledge of the industry specialisations and research areas.
5. Strong track record of business development experience for applied research activity with the minerals industry or with minerals related government programs.
6. Deep knowledge and track record of at least one area of specialisation within the broad field of real time sensor based analysis for the minerals industry.
7. Demonstrated skills and experience in successfully initiating and effectively managing large research, development or demonstration projects with the minerals industry and with collaborators.

## **Desirable:**

1. Experience in the role of digital / data science relevant to sensing for the minerals sector.
2. Excellent networks that include critical stakeholders

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 required to obtain and maintain a security clearance at the Negative Vetting Level 1.

## **About CSIRO:**

We solve the greatest challenges through innovative science and technology. To find out more visit us [online](http://www.csiro.au/)!

Find out more about CSIRO [Mineral Resources](https://www.csiro.au/en/Research/MRF)

**CSIRO Sensing and Sorting program**

The Sensing and Sorting program has a world leading reputation over several decades in the development and commercialisation of real time analysis systems for industry. These have been applied to exploration, mining, minerals processing, metal production, power generation, oil production and border security. A wide range of physical sensing technologies have been integral to these developments, including optical, laser, X-ray, nuclear, microwave, radio wave and ultrasonic sensing methods.

The program is specifically recognised for commercialisation of technology that has reached global markets and generated significant impact. The two most notable recent achievements in this category have involved the founding and growth of two successful companies.

Find out more: [www.csiro.au/en/Research/MRF/Areas/Selective-ore-management/Sensors-for-mineral-analysis](http://www.csiro.au/en/Research/MRF/Areas/Selective-ore-management/Sensors-for-mineral-analysis)

CSIRO is a values-based organisation. We expect our employees to demonstrate behaviours aligned to our values of:

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