# Position Details

## Technical Services- CSOF6

|  |  |
| --- | --- |
| The following information is for applicants | |
| Advertised Job Title | Senior Technical Modelling Manager |
| Job Reference | 92921 |
| Tenure | Specified Term of 1 year  Full-time (part-time would be considered for the right candidate) |
| Salary Range | $121,455 – 142,321 plus up to 15.4% superannuation |
| Location(s) | Melbourne, Sydney, Brisbane |
| 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 | Lead Economist, CSIRO Futures |
| Client Focus – Internal | 50% |
| Client Focus – External | 50% |
| Number of Direct Reports | Up to 5 |
| Enquire about this job | Contact Katherine Wynn via email at [Katherine.Wynn@csiro.au](mailto:Katherine.Wynn@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](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).

**Child Safety**

CSIRO is committed to the safety and wellbeing of all children and young people involved in our activities and programs. View our [Child Safe Policy](https://www.csiro.au/en/about/policies/child-safe-policy).

### Role Overview

[CSIRO Futures](https://www.csiro.au/en/Showcase/CSIRO-Futures) is the strategic and economic advisory arm of CSIRO – Australia’s national science agency.

**Why join CSIRO Futures?**

* Work on globally impactful challenges – We work with forward thinking industry and government customers to tackle the world’s most important challenges, including sustainable food production, energy transition, and resilient healthcare systems.
* Unparalleled access to scientific expertise – CSIRO sits at the cutting edge of science and technology. CSIRO Futures has direct access to over 5,000 world leading researchers and technologists to ensure our insights are deeper and more evidence-based than other consultancies.
* Innovate for Australia’s future – We draw on our extensive consulting and economic analysis capabilities to identify growth opportunities in existing and emerging industries and develop strategies for how Australia can pursue them.
* Professional development – Beyond CSIRO’s commitment to dedicated learning and development days, the complex and multi-stakeholder nature of CSIRO Futures projects provides significant senior leadership and management experience compared to other consultancies.
* Flexible working arrangements – Our team offers a variety of flexible working arrangements including working from home.

**The position**

The Senior Technical Modelling Manager will lead the delivery of both technical and economic components of industry roadmaps and bespoke advisory projects aimed at informing decisions made by senior government and industry leaders. This will involve the scoping of both technical and economic components for new projects, the coordination of staff working on technical modelling, client engagement, stakeholder consultation, report writing, and the implementation of technical and economic components of the team’s economic capability development strategy.

The projects and technical modelling activities will vary in complexity and may be oriented to diverse industries or technologies where CSIRO has current or emerging interests. Projects will typically:

* Use quantitative analysis to determine if proposed technologies are economically feasible, including those that may be technically or commercially speculative
* Link technical parameters such as efficiency and transformation rates of inputs with economic ones (e.g. factor prices, product prices) to derive economic metrics such as capital expenditure (capex), operational expenditure (opex), and revenue through an approach known as techno-economic assessment/analysis.
* Compare different technology solutions in CSIRO’s national scale industry roadmaps, as well as in the context of CSIRO’s [missions](https://www.csiro.au/en/about/challenges-missions)
* Inform sequencing decisions for technological adoption and processes
* Inform advice to government and industry clients for their strategic investment decisions.

### Duties and Key Result Areas

* Lead the delivery of complex, multi-stakeholder technical modelling projects to inform investment decisions, both at national scale and on behalf of corporate clients.
* Liaise with clients to determine their needs, tailoring solutions to potentially conflicting requirements, taking personal responsibility for client satisfaction, and correcting problems promptly and in a constructive manner.
* Actively seek new technical modelling project opportunities and lead the scoping and proposal development of these.
* Build and maintain strong external relationships with senior leaders and decision makers to identify new business opportunities and convert these into delivery projects.
* Build and maintain strong relationships with relevant CSIRO leaders and senior researchers to coordinate activities and develop a deeper understanding of CSIRO’s key science and technology domains.
* Lead consultations and communicate succinctly and professionally to senior decision makers and peers within and outside of CSIRO, providing detailed and accurate information/reports based on robust and transparent business, scientific and technical evidence.
* Perform modelling quality assurance and project reviews as required.
* Perform line management responsibilities for 2-5 team members, ensuring their development to achieve CSIRO Futures goals. Informally coach/mentor other team members where appropriate.
* Support the broader Futures’ team growth and operations by contributing to practice management activities.
* 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.
* Adhere to the spirit and practice of CSIRO’s Code of Conduct, Health, Safety and Environment procedures and policy, Diversity initiatives and Making Safety Personal goals.

## **Selection Criteria**

#### Essential

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

1. A degree in engineering, economics or a related field that includes significant quantitative and analytical components.
2. Strong interpersonal skills with a demonstrated ability to work effectively in a team environment and to identify and build positive relationships with internal and external stakeholders.
3. Demonstrated ability to build and foster relationships with senior decision makers to identify new opportunities and successfully convert them into high-impact projects.
4. Experience building techno-economic models in Microsoft Excel to quantitatively estimate the relative costs and benefits of different technology solutions, in addition to their timeframes, risks and uncertainties, to determine if proposed technologies are economically feasible and to compare different technology solutions and inform sequencing decisions.
5. Experience linking technical parameters such as efficiency and transformation rates of inputs with economic ones (e.g. factor prices, product prices) to derive economic metrics such as capital expenditure (capex), operational expenditure (opex), and revenue.
6. Experience in autonomously project managing small teams on strategic or technical consulting projects that include economic modelling and analysis to support strategic decision making.
7. Demonstrated experience or interest in science and technology.
8. Experience managing junior staff in a consultancy/advisory setting, including performance management, mentoring, and professional development.
9. Excellent oral communication skills and experience generating professional quality client-facing written reports and deliverables that clearly communicate economic analysis and key insights to a senior executive-level audience. This includes the ability to present a clear narrative to help communicate challenging or complex concepts to fellow team members and clients.

## **Desirable**

1. Experience in conducting flow sheeting, using simulation software (e.g. Aspen Plus) and undertaking sensitivity analysis.
2. Experience in related work such as Life Cycle Analysis (LCA) exercises, sustainability analysis, and decision frameworks (e.g. stage gates and real options analysis).

## **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 teams 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:** 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:** 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.

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. Visit [CSIRO Online](http://www.csiro.au/) and [CSIRO Futures](https://www.csiro.au/en/Showcase/CSIRO-Futures) 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