

Position Description

Radiochemical Engineer

Classification:	Grade 1
Business unit/department:	Department of Molecular Imaging and Therapy
Work location:	Austin Hospital <input checked="" type="checkbox"/> Heidelberg Repatriation Hospital <input type="checkbox"/> Royal Talbot Rehabilitation Centre <input type="checkbox"/> Other <input type="checkbox"/> (please specify)
Agreement:	Victorian Public Health Sector (Medical Scientists, Pharmacists and Psychologists) Single Enterprise Agreement 2021-2025 Victorian Public Health Sector (Biomedical Engineers) Single Enterprise Agreement 2024-2028
Employment type:	Full-Time
Hours per week:	40
Reports to:	Senior Cyclotron Engineer
Direct reports:	0
Financial management:	NIL
Date:	23 SEP 2025

Austin Health acknowledges the Traditional Custodians of the land on which we operate, the Wurundjeri Woi Wurrung People of the Kulin Nation. We pay our respects to Elders past and present and extend that respect to all Aboriginal and Torres Strait Islander peoples.

Position purpose

Equal parts science and engineering, the Radiochemical Engineer position will assist in all aspects of the day to day operation of the MIT Cyclotron & Solid Targetry team. Duties will including the routine operation, troubleshooting and maintenance of sophisticated radioisotope production equipment, such as cyclotrons, automated radiochemistry modules and hotcells. The position will also assist in the development and weekly operation of the solid target facility, including production, purification and QC of requested medical radioisotopes. This position is well suited for graduate or early career level.

About the Department of Molecular Imaging and Therapy

The Department of Molecular Imaging and Therapy is one of the largest academic Departments in

Australia, and has comprehensive clinical service activities, as well as an internationally renowned research program. The Department has four core clinical service components: Nuclear Medicine imaging, Radionuclide Therapy, Positron Emission Tomography (PET), and Bone Densitometry. The Department also produces radioisotopes on site with in-house Cyclotrons and radiochemistry and QC laboratories, and undertakes a wide range of diagnostic and therapeutic examinations and research studies.

The Department has 2 locations within Austin Health. Nuclear Medicine imaging, radionuclide therapy, and PET services are located at the Austin Campus on level 1 of the Harold Stokes Building. Bone Densitometry services are located at the Repat Campus on level 2 of the Centaur Building.

Patients are referred to the Department from the emergency department, inpatient wards, specialist clinics within the hospital and also from external general practitioners and specialist consultants within the community, and more broadly across Victoria.

The Department is a rapidly changing environment with new technology, research, and service developments.

The successful applicant will be based at Austin Campus and will work in co-operation with the Chemistry, Pharmacy, Technologist and Clinic Staff.

Position responsibilities

Role Specific:

- Participate in troubleshooting and repair of automated radiolabeling and analytical equipment to ensure efficacy and safety.
- Participate in the weekly production and quality control of solid target produced radionuclides, including I-124, Cu-64 and Zr-89.
- Participate in the operation, troubleshooting and maintenance of the department's cyclotrons.
- Develop and maintain the team's paperwork and record keeping in relation to qualification, production and maintenance.
- Undertake other related tasks in the Centre at the direction of the Senior Cyclotron Engineer.
- Be willing to work out of normal working hours, including weekends and early starts if required.
- To liaise in the above duties with other PET Staff as required.
- Attend and contribute to departmental meetings as required.
- Observe all radiation safety procedures and perform monitoring in a manner which is fully consistent with Departmental policy and the Austin Health Radiation Management Plan.

All Employees:

- Comply with Austin Health policies & procedures, as amended from time to time, which can be located on the intranet (The Hub): <http://eppic/>
- Report incidents or near misses that have or could have impact on safety - participate in identification and prevention of risks
- Comply with the Code of Conduct

Selection criteria



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Essential skills and experience:

- A Bachelor Degree in either Science (Physics or Chemistry), Chemical Engineering, Biomedical Engineering, Electrical Engineering or relevant field.
- A demonstrated interest in chemistry.
- A demonstrated interest in engineering, electronics or maintenance tasks.
- Demonstrated ability to acquire new knowledge on medium and high complexity equipment and processes.
- Ability to prioritise tasks.
- Excellent communication, organization and recordkeeping skills.
- A commitment to Austin Health values: Integrity, Accountability, Respect and Excellence.

Desirable but not essential:

- Experience with scientific and analytical laboratory instrumentation.
- Experience with cyclotrons.
- Knowledge in the field of radiation physics.
- Knowledge in the field of automation and programming.
- GMP experience
- Hold a valid Radiation Use License

Professional qualifications and registration requirements

- A Bachelor Degree in either Science (Physics or Chemistry), Chemical Engineering, Biomedical Engineering, Electrical Engineering or relevant field.

Quality, safety and risk – all roles

All Austin Health employees are required to:

- Maintain a safe working environment for yourself, colleagues and members of the public by following organisational safety, quality and risk policies and guidelines.
- Escalate concerns regarding safety, quality and risk to the appropriate staff member, if unable to rectify yourself.
- Promote and participate in the evaluation and continuous improvement processes.
- Comply with the principles of person-centered care.
- Comply with requirements of National Safety and Quality Health Service Standards and other relevant regulatory requirements.

Other conditions – all roles

All Austin Health employees are required to:

- Adhere to Austin Health's core values: *our actions show we care, we bring our best, together we achieve, and we shape the future.*
- Comply with the Austin Health's Code of Conduct policy, as well as all other policies and procedures (as amended from time to time).



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- Comply with all Austin Health mandatory training and continuing professional development requirements.
- Provide proof of immunity to nominated vaccine preventable diseases in accordance with Austin Health's immunisation screening policy.
- Work across multiple sites as per work requirements and/or directed by management.

General information

Cultural safety

Austin Health is committed to cultural safety and health equity for Aboriginal and/or Torres Strait Islander People. We recognise cultural safety as the positive recognition and celebration of cultures. It is more than just the absence of racism or discrimination, and more than cultural awareness and cultural sensitivity. It empowers people and enables them to contribute and feel safe to be themselves.

Equal Opportunity Employer

We celebrate, value, and include people of all backgrounds, genders, identities, cultures, bodies, and abilities. We welcome and support applications from talented people identifying as Aboriginal and/or Torres Strait Islander, people with disability, neurodiverse people, LGBTQIA+ and people of all ages and cultures.

Austin Health is a child safe environment

We are committed to the safety and wellbeing of children and young people. We want children to be safe, happy and empowered. Austin Health has zero tolerance for any form of child abuse and commits to protect children. We take allegations of abuse and neglect seriously and will make every effort to mitigate and respond to risk in line with hospital policy and procedures.



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