

Position Description

College/Division:	ANU College of Science
Faculty/School/Centre:	Research School of Physics
Department/Unit:	Department of Nuclear Physics
Position Title:	Senior Technical Officer
Classification:	ANU Officer Grade 7
Position No:	TBC
Responsible to:	Accelerator Research and Operations Manager
Number of positions that report to this role:	NA
Delegation(s) Assigned:	NA

PURPOSE STATEMENT:

The ANU College of Science (CoS) comprises: the Research School of Astronomy and Astrophysics, the Research School of Biology, the Research School of Chemistry, the Research School of Earth Science, the Fenner School of Environment and Society, the Mathematical Sciences Institute, the Research School of Physics, and the Centre for the Public Awareness of Science. Staff and students within the ANU College of Science conduct research and deliver a research-led education program that encompasses the entire breadth of the sciences, supported by extensive international networks and by world-class facilities. The College has a strong tradition of research excellence that has fostered distinguished Nobel Laureates and Kyoto Prize winners and that trains scientific leaders in disciplines in which the ANU is consistently ranked in the top twenty in the world.

This position is essential to the effective development of the heavy-ion accelerators and associated experimental apparatus upon which the research of Nuclear Physics academic staff and students, as well as Australian and overseas physicists. The Senior Technical Officer will fulfil an important role in deriving the maximum benefit from significant recent NCRIS funding to upgrade the Facility over four years and in maintaining ongoing high level technical support in the Department.

The Senior Technical Officer work closely with the engineers, researchers, post-graduate students and other technical officers of the Department in the development of ideas into practical technical solutions. The Senior Technical Officer will also provide technical support to a significant number of national and international users of the Facility. In addition, the Senior Technical Officer will be expected to carry out some routine maintenance and basic repairs of the accelerator systems and laboratory equipment.

Position Dimension & Relationships:

The Senior Technical Officer will liaise closely with researchers in the Department of Nuclear Physics and Department of Electronics Materials Engineering and also with the School's Mechanical and Electronics workshop staff. The Senior Technical Officer, although based in the Nuclear Physics department, may be moved to other departments within the School for short periods.

Role Statement:

Under broad supervision the Senior Technical Officer will:

1. Provide high level technical advice to stakeholders on a range of functions including experimental design and implementation, risk assessments and the general operation of the ion sources and accelerators.
2. Lead the periodic maintenance and development of ion sources, accelerator components and systems and develop proposals for resource allocation as required. Diagnose faults in the HIAF including high voltage insulation, charging systems, voltage distribution and vacuum components.
3. Establish new techniques within the laboratory, collates, investigate and interpret experimental data, produces research reports and regularly presents data at meetings.

4. Complete general administration duties associated with ion sources and accelerators including the preparation of reports, ensuring safe working practices, WHS requirements and compliance protocols for regulatory requirements are met.
5. Oversee the management of inventories, including the preparation and/or ordering of supplies and collating cost estimates on laboratory purchases.
6. Analyse experimental outputs to assist in the preparation of data for research publication.
7. Ensure all users have been inducted and provided the required training and support to work in the facility and that training materials for ion sources and accelerators are readily available and updated.
8. Develop and maintain networks amongst other School and College Technical staff on lab/facility capabilities or facilities and/or with lab/facility managers and the building maintenance staff on building/equipment maintenance issues.
9. Take a lead role in Work Health and Safety (WHS) and make active contribution towards the practice and compliance process in the WHS space.
10. Other duties as required, consistent with the classification of this position.
11. Comply with all ANU policies and procedures, and in particular those relating to work health and safety and equal opportunity

SELECTION CRITERIA:

1. A Degree with subsequent relevant specialist experience or extensive experience (minimum 4 years) in technical field or an equivalent combinations of relevant experience and/or education/training.
2. Demonstrated expertise in the design, manufacture and assembly of mechanical equipment under broad direction, experience in providing highly specialised technical services and success in delivering projects on time and within budget.
3. A proven ability to contribute to leadership of a teaching or research laboratory with demonstrated experience assisting honours and postgraduate students with laboratory equipment and instrumentation, including ion sources and accelerators equipment, and a strong understanding of WHS and regulatory requirements.
4. A demonstrated ability to communicate effectively and concisely, both orally and in writing, and to work both independently with limited supervision and harmoniously in a team environment with a diverse range of people.
5. Strong information technology and organisational skills with demonstrated ability to keep accurate records and prioritise tasks, exercising sound judgement to meet tight timelines.
6. A demonstrated general knowledge and understanding of equal opportunity principles as they relate to employment.

Supervisor/Delegate Signature:		Date:	
Printed Name:	Nikolai Lobanov	Uni ID:	

References:

[General Staff Classification Descriptors](#)



Australian
National
University

Pre-Employment Work Environment Report

Position Details

College/Div/Centre	College of Science	Dept/School/Section	Research School of Physics
Position Title	Senior Technical Officer	Classification	ANUO 7
Position No.	TBC	Reference No.	

In accordance with the Occupational Health and Safety Act 1991 the University has a duty of care to provide a safe workplace for all staff.

- This form must be completed by the supervisor of the advertised position and forwarded with the job requisition to Appointments and Promotions Branch, Human Resources Division. Without this form jobs cannot be advertised.
- This form is used to advise potential applicants of work environment issues prior to application.
- Once an applicant has been selected for the position consideration should be given to their inclusion on the University's Health Surveillance Program where appropriate – see . http://info.anu.edu.au/hr/OHS/_Health_Surveillance_Program/index.asp
Enrolment on relevant OHS training courses should also be arranged – see http://info.anu.edu.au/hr/Training_and_Development/OHS_Training/index.asp
- 'Regular' hazards identified below must be listed as 'Essential' in the Selection Criteria - see 'Employment Medical Procedures' at http://info.anu.edu.au/Policies/_DHR/Procedures/Employment_Medical_Procedures.asp

Potential Hazards

- Please indicate whether the duties associated with appointment will result in exposure to any of the following potential hazards, either as a **regular** or **occasional** part of the duties.

TASK	regular	occasional	TASK	regular	occasional
key boarding	<input checked="" type="checkbox"/>	<input type="checkbox"/>	laboratory work	<input checked="" type="checkbox"/>	<input type="checkbox"/>
lifting, manual handling	<input type="checkbox"/>	<input checked="" type="checkbox"/>	work at heights	<input type="checkbox"/>	<input checked="" type="checkbox"/>
repetitive manual tasks	<input checked="" type="checkbox"/>	<input type="checkbox"/>	work in confined spaces	<input type="checkbox"/>	<input checked="" type="checkbox"/>
catering / food preparation	<input type="checkbox"/>	<input type="checkbox"/>	noise / vibration	<input type="checkbox"/>	<input checked="" type="checkbox"/>
fieldwork & travel	<input type="checkbox"/>	<input type="checkbox"/>	electricity	<input type="checkbox"/>	<input type="checkbox"/>
driving a vehicle	<input type="checkbox"/>	<input type="checkbox"/>			
NON-IONIZING RADIATION			IONIZING RADIATION		
solar	<input type="checkbox"/>	<input type="checkbox"/>	gamma, x-rays	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ultraviolet	<input type="checkbox"/>	<input type="checkbox"/>	beta particles	<input type="checkbox"/>	<input checked="" type="checkbox"/>
infra red	<input type="checkbox"/>	<input type="checkbox"/>	nuclear particles	<input type="checkbox"/>	<input type="checkbox"/>
laser	<input type="checkbox"/>	<input type="checkbox"/>			
radio frequency	<input type="checkbox"/>	<input type="checkbox"/>			
CHEMICALS			BIOLOGICAL MATERIALS		
hazardous substances	<input type="checkbox"/>	<input checked="" type="checkbox"/>	microbiological materials	<input type="checkbox"/>	<input type="checkbox"/>
allergens	<input type="checkbox"/>	<input type="checkbox"/>	potential biological allergens	<input type="checkbox"/>	<input type="checkbox"/>
cytotoxics	<input type="checkbox"/>	<input type="checkbox"/>	laboratory animals or insects	<input type="checkbox"/>	<input type="checkbox"/>
mutagens/teratogens/ carcinogens	<input type="checkbox"/>	<input type="checkbox"/>	clinical specimens, including blood	<input type="checkbox"/>	<input type="checkbox"/>
pesticides / herbicides	<input type="checkbox"/>	<input type="checkbox"/>	genetically-manipulated specimens	<input type="checkbox"/>	<input type="checkbox"/>
			immunisations	<input type="checkbox"/>	<input type="checkbox"/>
OTHER POTENTIAL HAZARDS (please specify):					

Supervisor's Signature:		Print Name:	Nikolai Lobanov	Date:	
------------------------------------	--	--------------------	------------------------	--------------	--