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| ANU_LOGO_mono black_FA.jpg | Position Description |

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| **College/Division:** | ANU College of Science |
| **Faculty/School/Centre:**  | Research School of Astronomy and Astrophysics |
| **Department/Unit:**  | Advanced Instrumentation and Technology Centre |
| **Position Title:**  | Instrument Scientist |
| **Classification:** | Academic level A  |
| **Position No:** | TBA |
| **Responsible to:** | AITC Technical Program Manager |
| **Number of positions that report to this role:** | 0 |
| **Delegation(s) Assigned:** | D5 |

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| **PURPOSE STATEMENT:**The Advanced Instrumentation Technology Centre (AITC) program at the Research School of Astronomy and Astrophysics (RSAA) requires high-level scientific and engineering teams to develop innovative state-of-the-art instrumentation for astronomical observations from ground and space based telescopes, as well as the increasingly important field of Remote Sensing Earth Observation. The Instrument Scientist provides specialist scientific and technical advice and skills in support of the program in the area of astronomical and space instrumentation from laboratory exploration to development of the new technologies. Instrument Scientist will be expected to make original contributions to the research enterprise in these or related fields.**KEY ACCOUNTABILITY AREAS:****Position Dimension & Relationships:** Under the broad direction of the AITC Director, the Instrument Scientist will conduct research and supervise development of relevant technologies and instruments as a part of the team of scientists and engineers. The work will occur in the context of AITC projects both commercial and research.A close working relationship is required with engineers in Optical, Electronics, Software, Detector and Systems areas. The Instrument Scientist will follow AITC technical management procedures to ensure optimum results for complex, multi-disciplinary instrumentation projects, often within the framework of international consortia.**Role Statement:**Under the broad direction of the AITC Director and Technical Program Manager, the Instrument Scientist will:* Provide advice and technical expertise on complex instrumentation projects from concept through to implementation, entailing technical specifications, detailed planning and supervision of internal and external technical personnel.
* Undertake independent research in the area of astronomical and space instrumentation with the view of publishing original and innovative results in refereed journals, present research on academic seminars and conferences, and collaborate with other researcher groups nationally and internationally.
* Collaborate with senior staff to actively seek and secure external funding, assist to prepare and submit research proposals to external funding bodies as appropriate.
* Supervise students and interns working working on individual and group projects at undergraduate, honours and graduate coursework level. Assist with supervision of research students.
* Subject to the requirements of the funding source and where an opportunity exists, the occupant may be encouraged/asked to contribute
* Subject to the requirements of the funding source and where an opportunity exists, the occupant may be encouraged/asked to contribute to educational activities of the School at the undergraduate and graduate levels. This includes, but not limited to, the preparation and delivery of lectures and tutorial, the preparation of online material, marking and assessments, consultation with students and acting as subject coordinators.
* Prepare technical documentation and descriptive articles for general publication.
* Actively contribute to all aspects of the operation of the School
* Maintain an awareness of and help promote Work Health and Safety (WH&S), Equal Employment Opportunity(EEO), Diversity, Gender balance and other policy priorities of the university.
* Maintain high academic standards in all education, research and administrative endeavours
* Comply with all ANU policies and procedures, and in particular those relating to work health and safety and equal opportunity
* Undertake other duties as required, consistent with the classification of the position.
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| **SELECTION CRITERIA:**1. PhD in physics, astronomy, space science or related areas, with a track record of independent research as evidenced by publications in the peer-reviewed journals. Experience working in structured system engineering environments is highly desirable.
2. The ability to perform and establish innovative research agenda in the field of optical/infrared instrumentation.
3. Proven ability to problem solving and lead technical solutions for complex projects in collaborative manner.
4. Ability and willingness to teach at all levels or if project specific within the scope of the project
5. The ability to assist in the supervision of students working on research projects
6. Excellent oral and written English language skills and a demonstrated ability to communicate and interact effectively with a variety of staff and students in a cross-disciplinary environment and to foster respectful and productive working relationships with staff, students and colleagues at all levels
7. A demonstrated understanding of equal opportunity principles and policies and a commitment to their application in a university context.
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| **Supervisor/Delegate Signature:** |  | **Date:** |  |
| Printed Name: | Prof Anna Moore | **Uni ID:** |  |

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| **References:** |
| [General Staff Classification Descriptors](http://info.anu.edu.au/hr/Salaries_and_Conditions/Enterprise_Agreement/2010-2012/Schedule_5) |
| [Academic Minimum Standards](http://info.anu.edu.au/hr/Salaries_and_Conditions/Enterprise_Agreement/2010-2012/Schedule_4) |

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|  | Pre-Employment Work Environment Report |

# Position Details

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| **College/Div/Centre** | CoS | **Dept/School/Section** | RSAA |
| **Position Title** | Senior Opto-Mechanical Engineer | **Classification** | SM1 (Engineering) |
| **Position No.** |       | **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.

1. 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.
2. This form is used to advise potential applicants of work environment issues prior to application.
3. 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
4. ‘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

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| 1. 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.
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| **TASK** | **regular** |  | **occasional** |  | **TASK** | **regular** |  | **occasional** |
| key boarding | [x]  |  | [ ]  |  | laboratory work | [x]  |  | [ ]  |
| lifting, manual handling | [ ]  |  | [ ]  |  | work at heights | [ ]  |  | [ ]  |
| repetitive manual tasks | [ ]  |  | [ ]  |  | work in confined spaces | [ ]  |  | [ ]  |
| catering / food preparation | [ ]  |  | [ ]  |  | noise / vibration | [ ]  |  | [ ]  |
| fieldwork & travel | [ ]  |  | [x]  |  | electricity | [ ]  |  | [ ]  |
| driving a vehicle | [ ]  |  | [ ]  |  |  |  |  |  |
| **NON-IONIZING RADIATION** |  |  |  |  | **IONIZING RADIATION** |  |  |  |
| solar | [ ]  |  | [ ]  |  | gamma, x-rays | [ ]  |  | [ ]  |
| ultraviolet | [ ]  |  | [ ]  |  | beta particles | [ ]  |  | [ ]  |
| infra red | [ ]  |  | [ ]  |  | nuclear particles | [ ]  |  | [ ]  |
| laser | [ ]  |  | [ ]  |  |  |  |  |  |
| radio frequency | [ ]  |  | [ ]  |  |  |  |  |  |
| **CHEMICALS** |  |  |  |  | **BIOLOGICAL MATERIALS** |  |  |  |
| hazardous substances | [ ]  |  | [ ]  |  | microbiological materials | [ ]  |  | [ ]  |
| allergens | [ ]  |  | [ ]  |  | potential biological allergens | [ ]  |  | [ ]  |
| cytotoxics | [ ]  |  | [ ]  |  | laboratory animals or insects | [ ]  |  | [ ]  |
| mutagens/teratogens/carcinogens | [ ]  |  | [ ]  |  | clinical specimens, including blood | [ ]  |  | [ ]  |
| pesticides / herbicides | [ ]  |  | [ ]  |  | genetically-manipulated specimens | [ ]  |  | [ ]  |
|  |  |  |  |  | immunisations | [ ]  |  | [ ]  |
| **OTHER POTENTIAL HAZARDS (please specify):** |

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| **Supervisor’s Signature:**  |  | **Print Name:** | **Prof Anna Moore** | **Date:** |  |