



Position Description

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| College/Division: | College of Science |
| Faculty/School/Centre: | Fenner School of Environment and Society |
| Department/Unit: | College of Science |
| Position Title: | Postdoctoral Fellow |
| Classification: | Academic Level A |
| Position No: | TBC |
| Responsible to: | Prof Albert Van Dijk |
| Number of positions that report to this role: | Nil |
| Delegation(s) Assigned: | N/A |

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 delivers 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.

The Postdoctoral Fellow is expected to undertake work in all three areas of academic activity –research, education and service (including outreach). The allocation of time to each area will be discussed with the position supervisor annually and be reflective of the external funding conditions that support the appointment, the appointees research agenda, school and interdisciplinary teaching requirements and leadership opportunities within the School environment.

The Postdoctoral Fellow may also be choose to supervise or assist in the supervision of students, and contribute cooperatively to the overall intellectual life of the School, College and University.

KEY ACCOUNTABILITY AREAS:

Position Dimension & Relationships:

The Postdoctoral Fellow will be a member of Fenner Research School of Environment and Society, accountable to Prof Albert van Dijk of the Centre for Water and Landscape Dynamics and the Director of the School. The Postdoctoral Fellow will be expected to work collegially, leading by example to develop and maintain effective, productive and beneficial workplace relationships within the all academic and professional School and College staff, students and honorary appointees, as well as with industry stakeholders. This position will also have a mentoring role for students and will engage in collegial and productive collaborations with local, national and where possible, international colleagues.

Role Statement:

In their role as an Academic Level A the Postdoctoral Fellow is expected to:

- Undertake independent research in the area of environmental remote sensing with a view to publishing original and innovative results in refereed journals, present research at academic seminars and at national and international conferences, and collaborate with other researchers at a national level. This includes working as part of a team on an externally funded project subject to deadlines.
- Collaborate with senior staff to actively seek and secure external funding, assist to prepare and submit research proposals to external funding bodies as appropriate.
- Subject to the requirements of the funding source and where a suitable opportunity exists, the occupant

may contribute to the teaching activities of the School at the graduate level. This includes, but is not limited to, the preparation and delivery of guest lectures, Assisting in the supervision of research students.

- Assist to supervise research support staff in your research area.
- Actively contribute to aspects of the operation of the School where appropriate.
- Assist in outreach activities, where appropriate, including to research institutes, industry, government, the media and the general public.
- Maintain high academic standards in all education, research and administration endeavours.
- Take responsibility for their own workplace health and safety and not willfully place at risk the health and safety of another person in the workplace.
- A demonstrated understanding of equal opportunity principles and policies and a commitment to their application in a university context.
- Other duties as required that are consistent with the classification of the position.
- Comply with all ANU policies and procedures, and in particular those relating to work health and safety and equal opportunity

Skill Base:

A Level A academic will work with the support and guidance from more senior academic staff and is expected to develop their expertise in teaching and research with an increasing degree of autonomy. A Level A academic will normally have completed four years of tertiary study or equivalent qualifications and experience and may be required to hold a relevant higher degree.

Subject to funding requirements, a Level A academic may contribute to teaching at the institution, at a level appropriate to the skills and experience of the staff member, engage in scholarly, research and/or professional activities appropriate to their profession or discipline, and undertake administration primarily relating to their activities at the institution. Any contribution to teaching of Level A academics will be primarily at undergraduate and graduate diploma level.

SELECTION CRITERIA:

- A PhD (or awarding of a PhD within six months of appointment commencement) in environmental science or engineering, or equivalent qualifications and experience in a related area of informatics or mathematics, with a track record of independent research in their field as evidenced by publications in peer-reviewed journals and conferences.
- Evidence of experience that is relevant to environmental research in some or all of the following areas: automated analysis of big data, remote sensing and high performance computing. Specific research experience in Australia's semi-arid and arid ecosystems, terrestrial or airborne LIDAR, and sub-1-m resolution imagery would be an advantage but is not essential.
- An ability and commitment to contribute to bids for competitive external funding to support individual and collaborative research activities.
- The ability to assist in the supervision of students working on research projects.
- The ability to work as part of a multi-agency and multi-disciplinary team as well as independently, and to meet deadlines.
- An ability and willingness to travel within and outside Australia as necessary, including for several weeks at a time to the US as part of the research collaboration.
- Excellent oral and written English language skills and a demonstrated ability to communicate and interact effectively with a variety of staff, peers and students in a cross-disciplinary academic environment and to foster respectful and productive working relationships with staff, students and colleagues at all levels.
- A demonstrated understanding of equal opportunity principles and policies and a commitment to their application in a university context.

The ANU conducts background checks on potential employees, and employment in this position is conditional on satisfactory results in accordance with the Background Checking Procedure which sets out the types of checks required by each type of position.

Supervisor/Delegate Name:

Albert van Dijk

Date:

14 June 2022

References:

[Academic Minimum Standards](#)



Pre-Employment Work Environment Report

Position Details

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| College/Div/Centre | College of Science | Dept/School/Section | FSES |
| Position Title | Postdoctoral Fellow | Classification | Academic Level A |
| Position No. | | Reference No. | |

In accordance with the Work Health and Safety Act 2011 (Cth) the University has a primary duty of care, so far as reasonably practicable, to ensure the health and safety of all staff while they are at work in the University.

- This form must be completed by the supervisor of the advertised position and appended to the back of the Position Description.
- This form is used to advise potential applicants of work environment and health and safety hazards prior to application.
- Once an applicant has been selected for the position they must familiarise themselves with the University WHS Management System via Handbook guidance <https://services.anu.edu.au/human-resources/health-safety/whs-management-system-handbook>
- The hazards identified below are of generic nature in relation to the position. It is not correlated directly to training required for the specific staff to be engaged. Identification of individual WHS training needs must be in accordance with WHS Local Training Plan and through the WHS induction programs and Performance Development Review Process.
- '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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|---|-------------------------------------|-------------------------------------|---------------------------|
| <ul style="list-style-type: none"> • 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 | |
| key boarding | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| lifting, manual handling | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| repetitive manual tasks | <input type="checkbox"/> | <input type="checkbox"/> | |
| Organizing events | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| fieldwork & travel | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| driving a vehicle | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| NON-IONIZING RADIATION | | | |
| solar | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| ultraviolet | <input type="checkbox"/> | <input type="checkbox"/> | |
| infra red | <input type="checkbox"/> | <input type="checkbox"/> | |
| laser | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| radio frequency | <input type="checkbox"/> | <input type="checkbox"/> | |
| CHEMICALS | | | |
| hazardous substances | <input type="checkbox"/> | <input type="checkbox"/> | |
| allergens | <input type="checkbox"/> | <input type="checkbox"/> | |
| cytotoxics | <input type="checkbox"/> | <input type="checkbox"/> | |
| mutagens/teratogens/ carcinogens | <input type="checkbox"/> | <input type="checkbox"/> | |
| pesticides / herbicides | <input type="checkbox"/> | <input type="checkbox"/> | |
| TASK | regular | occasional | |
| laboratory work | <input type="checkbox"/> | <input type="checkbox"/> | |
| work at heights | <input type="checkbox"/> | <input type="checkbox"/> | |
| work in confined spaces | <input type="checkbox"/> | <input type="checkbox"/> | |
| noise / vibration | <input type="checkbox"/> | <input type="checkbox"/> | |
| electricity | <input type="checkbox"/> | <input type="checkbox"/> | |
| IONIZING RADIATION | | | |
| gamma, x-rays | <input type="checkbox"/> | <input type="checkbox"/> | |
| beta particles | <input type="checkbox"/> | <input type="checkbox"/> | |
| nuclear particles | <input type="checkbox"/> | <input type="checkbox"/> | |
| BIOLOGICAL MATERIALS | | | |
| microbiological materials | <input type="checkbox"/> | <input type="checkbox"/> | |
| potential biological allergens | <input type="checkbox"/> | <input type="checkbox"/> | |
| laboratory animals or insects | <input type="checkbox"/> | <input type="checkbox"/> | |
| clinical specimens, including blood | <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/Delegate Name: | Albert Van Dijk | | Date: 14 June 2022 |



Position Description

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| College/Division: | College of Science |
| Faculty/School/Centre: | Fenner School of Environment and Society |
| Department/Unit: | College of Science |
| Position Title: | Research Fellow / Lecturer |
| Classification: | Academic Level B |
| Position No: | TBC |
| Responsible to: | Prof Albert Van Dijk |
| Number of positions that report to this role: | Nil |
| Delegation(s) Assigned: | N/A |

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 delivers 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.

The Fenner School of Environment & Society is a leading centre for cross-disciplinary environmental and sustainability research, education and policy-relevant advice in Australia. Through cutting-edge research and insightful analysis, our academic experts create social, economic and environmental impact and deliver real-world solutions to address complex environmental challenges.

The Research Fellow may undertake work in all three areas of academic activity –research, education and service (including outreach), but the emphasis is on innovative and publishable research. The allocation of time to each area will be discussed with the position supervisor annually and be reflective of the conditions of the external funding, the appointees research agenda, and opportunities within the School environment. The Research Fellow may also be required to supervise or mentor less senior staff, and undertake leadership roles as applicable. The staff member will contribute cooperatively to the overall intellectual life of the School, College and University.

KEY ACCOUNTABILITY AREAS:

Position Dimension & Relationships:

The Research Fellow will be a member of Fenner School of Environment & Society, accountable to Prof Albert van Dijk of the Centre for Water and Landscape Dynamics and the Director of the School. The Research Fellow will be expected to work collegially, leading by example to develop and maintain effective, productive and beneficial workplace relationships within the all-academic and professional School and College staff, students and honorary appointees, as well as with industry stakeholders. This position will also have a mentoring role for students and will engage in collegial and productive collaborations with local, national and where possible, international colleagues.

Role Statement:

In their role as an Academic Level B the Research Fellow is expected to:

- Undertake independent research in the area of environmental remote sensing with a view to publishing original and innovative results in refereed journals, present research at academic seminars and at national and international conferences, and collaborate with other researchers at a national and/or international

level. This includes working as part of a team on an externally funded project subject to deadlines and being primarily responsible for project delivery in some areas.

- Actively seek and secure external funding, including the preparation and submission of research proposals to external funding bodies.
- Subject to the requirements of the funding source and where a suitable opportunity exists, the occupant may contribute to the teaching activities of the School at the graduate level. This includes, but is not limited to, the preparation and delivery of guest lectures and supervision of research students.
- Supervise Postdoctoral Fellows and research support staff in your research area.
- Actively contribute to aspects of the operation of the School where appropriate.
- Assist in outreach activities, where appropriate, including to research institutes, industry, government, the media and the general public.
- Maintain high academic standards in all education, research and administration endeavours.
- Take responsibility for their own workplace health and safety and not willfully place at risk the health and safety of another person in the workplace.
- A demonstrated understanding of equal opportunity principles and policies and a commitment to their application in a university context.

Skill Base:

A Level B academic will undertake independent teaching and research in their discipline or related area. In research and/or scholarship and/or teaching a Level B academic will make an independent contribution through professional practice and expertise and coordinate and/or lead the activities of other staff, as appropriate to the discipline.

Subject to funding requirements, a Level B academic may contribute to teaching at undergraduate, honours and postgraduate level, engage in independent scholarship and/or research and/or professional activities appropriate to their profession or discipline. The academic will normally undertake administration primarily relating to their activities at the institution.

SELECTION CRITERIA:

- A PhD in environmental science or engineering or a related area, with a track record of independent research in the field as evidenced by publications in peer-reviewed journals and conferences, a record of developing and maintaining collaborations and by other measures such as awards, and invitations to present at conferences.
- Evidence of experience that is relevant to environmental research in some or all of the following areas: automated analysis of big data, remote sensing and high performance computing, with the ability to articulate and prosecute innovative research in this field. Specific research experience in Australia's semi-arid and arid ecosystems, terrestrial or airborne LIDAR, and sub-1-m resolution imagery would be an advantage but is not essential.
- A demonstrated ability and commitment to apply for competitive external funding to support individual and collaborative research activities -
- An ability to supervise and graduate high quality PhD/Masters research students.
- The demonstrated ability to work as part of a multi-agency and multi-disciplinary team as well as independently, contributing to team management and meeting deadlines for project elements.
- An ability and willingness to travel within and outside Australia as necessary, including for several weeks at a time to the US as part of the research collaboration.
- Excellent oral and written English language skills and a demonstrated ability to communicate and interact effectively with a variety of staff, peers and students in a cross-disciplinary academic environment and to foster respectful and productive working relationships with staff, students and colleagues at all levels.
- A demonstrated understanding of equal opportunity principles and policies and a commitment to their application in a university context.

The ANU conducts background checks on potential employees, and employment in this position is conditional on satisfactory results in accordance with the Background Checking Procedure which sets out the types of checks required by each type of position.

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|---------------------------------------|------------------------|----------------|-----------------|
| Supervisor/Delegate Signature: | | Date: | 14 June 2022 |
| Printed Name: | Albert Van Dijk | Uni ID: | U5250651 |

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|---|---|---|
|  | Australian National University | <h1>Pre-Employment Work Environment Report</h1> |
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Position Details

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|---------------------------|--------------------|----------------------------|------------------|
| College/Div/Centre | College of Science | Dept/School/Section | FSES |
| Position Title | Research Fellow | Classification | Academic Level B |
| Position No. | | Reference No. | |

In accordance with the Work Health and Safety Act 2011 (Cth) the University has a primary duty of care, so far as reasonably practicable, to ensure the health and safety of all staff while they are at work in the University.

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Potential Hazards

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| <ul style="list-style-type: none"> • 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 type="checkbox"/> | <input type="checkbox"/> |
| lifting, manual handling | <input type="checkbox"/> | <input checked="" type="checkbox"/> | work at heights | <input type="checkbox"/> | <input type="checkbox"/> |
| repetitive manual tasks | <input type="checkbox"/> | <input type="checkbox"/> | work in confined spaces | <input type="checkbox"/> | <input type="checkbox"/> |
| Organizing events | <input type="checkbox"/> | <input checked="" type="checkbox"/> | noise / vibration | <input type="checkbox"/> | <input type="checkbox"/> |
| fieldwork & travel | <input checked="" type="checkbox"/> | <input type="checkbox"/> | electricity | <input type="checkbox"/> | <input type="checkbox"/> |
| driving a vehicle | <input type="checkbox"/> | <input checked="" type="checkbox"/> | | | |
| NON-IONIZING RADIATION | | | IONIZING RADIATION | | |
| solar | <input type="checkbox"/> | <input checked="" type="checkbox"/> | gamma, x-rays | <input type="checkbox"/> | <input type="checkbox"/> |
| ultraviolet | <input type="checkbox"/> | <input type="checkbox"/> | beta particles | <input type="checkbox"/> | <input type="checkbox"/> |
| infra red | <input type="checkbox"/> | <input type="checkbox"/> | nuclear particles | <input type="checkbox"/> | <input type="checkbox"/> |
| laser | <input type="checkbox"/> | <input checked="" type="checkbox"/> | | | |
| radio frequency | <input type="checkbox"/> | <input type="checkbox"/> | | | |
| CHEMICALS | | | BIOLOGICAL MATERIALS | | |
| hazardous substances | <input type="checkbox"/> | <input 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/Delegate Name: | | Albert Van Dijk | Date: | 14 June 2022 | |