



## POSITION DESCRIPTION

School of Ecosystem and Forest Sciences  
Faculty of Science

### Research Fellow, Environmental Economics

POSITION NO	0041820
CLASSIFICATION	Level B
SALARY	\$95,434 - \$113,323 p.a.
SUPERANNUATION	Employer contribution of 9.5%
EMPLOYMENT TYPE	Full-time (fixed term) position available for two years Fixed term contract type: Research
OTHER BENEFITS	<a href="http://about.unimelb.edu.au/careers/working/benefits">http://about.unimelb.edu.au/careers/working/benefits</a>
CURRENT OCCUPANT	Vacant
HOW TO APPLY	Online applications are preferred. Go to <a href="http://about.unimelb.edu.au/careers">http://about.unimelb.edu.au/careers</a> , select the relevant option ('Current Staff' or 'Prospective Staff'), then find the position by title or number.
CONTACT FOR ENQUIRIES ONLY	Professor Tom Kompas Tel +61 3 8344 3503 Email <a href="mailto:tom.kompas@unimelb.edu.au">tom.kompas@unimelb.edu.au</a>  <i>Please do not send your application to this contact to this contact</i>

For information about working for the University of Melbourne, visit our websites:

[about.unimelb.edu.au/careers](http://about.unimelb.edu.au/careers)  
[joining.unimelb.edu.au](http://joining.unimelb.edu.au)

## ***Position Summary***

The Research Fellow, Environmental Economics in the School of Ecosystem and Forest Sciences is an active researcher with the ability to publish and co-author papers in high quality international journals, along with developing funding applications for external grants. The Research Fellow may assist with teaching courses in the School and assist in an active engagement portfolio in environmental economics in collaboration with appropriate industry, government and non-governmental organisations.

### ***1. Selection Criteria***

#### **1.1 ESSENTIAL**

- ▶ PhD in economics, environmental studies, or an appropriate related field.
- ▶ Proven ability to effectively undertake research projects and collaborations in applied economics, computational economics and environmental economics.
- ▶ Proficiency in the use of computational methods, particularly to undertake the analysis of economic, ecological and biological data and the design of optimization routines relevant to environmental economics.
- ▶ Expertise in the use of forest management models, natural resource management and cost-benefit analysis applied to environmental issues.
- ▶ History of or evidence of ability to publish in high quality, peer reviewed international journals.
- ▶ Developed organisational skills, ability to prioritise tasks, manage time effectively and exercise appropriate judgement when required.
- ▶ Excellent interpersonal skills, including the proven ability to liaise effectively with a variety of people, internal and external to the University.
- ▶ Excellent verbal and written communication abilities, including the preparation of written presentations and scientific publications.
- ▶ A high level of self-motivation and initiative, an ability to provide creative solutions to problems and an ability to be flexible in responding to changing work priorities.
- ▶ Ability to work harmoniously and collaboratively in a team environment.

#### **1.2 DESIRABLE**

- ▶ Experience in project management and economic and environmental modelling applied to specific projects in forestry and the environment.
- ▶ Experience of successful teaching in applied economics.
- ▶ Ability to design, prepare and teach courses in ecosystem sciences, forestry and environmental economics.

### ***2. Special Requirements***

- ▶ Undertake regular domestic and international travel to meet with key stakeholders from government and industry.

### **3. Key Responsibilities**

For Minimum Standards for Academic Staff Level B view

<http://www.policy.unimelb.edu.au/schedules/MPF1157-ScheduleB.pdf>

Under the supervision of senior staff in the School, the incumbent will be expected to:

#### **3.1 RESEARCH DESIGN AND ANALYSIS**

- ▶ Design, conduct and participate in research projects in applied economics relevant to ecological science, forestry and environmental economics, independently and/or as part of a team.
- ▶ Process, analyse and evaluate data, design optimization routines and interpret the results for the submission of written reports based on research findings with minimal guidance from key stakeholders.
- ▶ Publish in high-quality international academic journals and remain current with material, such as published articles and government policies, in relation to environmental and applied economics, with appropriate application to the particular research projects being undertaken.

#### **3.2 COMMUNICATION**

- ▶ Manage communication activities among the stakeholders involved in the research projects, including face-to-face meetings, teleconferences, emails, Skype, online blogs and contributions to reports.
- ▶ Prepare project deliverables for the funding body, i.e., project proposals, ethics applications, quarterly update reports, interim and final reports.
- ▶ Prepare technical reports resulting from computational work, surveys, analysis, investigations, and related activities
- ▶ Help identify areas of future research opportunities, including writing business cases and proposals for consideration by grant agencies.
- ▶ Undertake regular interstate travel to attend meetings and workshops with key stakeholders and to collect research data for the various research projects.

#### **3.3 SERVICE TO THE SCHOOL**

- ▶ Design, prepare and teach courses in forestry and/or environmental economics.
- ▶ Contribute to a range of administrative functions, including those connected with research responsibilities and the conduct of the academic affairs of the School.
- ▶ Be a good university citizen, including provision of advice within the field of expertise and mentoring and/or supervision of post-graduate students.
- ▶ Ensure an up-to-date record of University compliance courses, such as, but not limited to Promoting Positive Workplace Behaviour, PDF for Staff and Supervisors, OH &S training courses.
- ▶ Occupational Health and Safety (OH&S) and Environmental Health and Safety (EH&S) responsibilities as outlined in section 5.

## 4. Other Information

### 4.1 ORGANISATION UNIT

The School of Ecosystem and Forest Sciences (SEFS) is Australia's premier research and education provider dedicated to the study of ecosystem processes, sustainable land management, and environmental social science in forest and other ecosystems, covering the full range from natural to highly urbanised systems. SEFS combines expertise in the biological and physical sciences with environmental social science to provide research and teaching of applied ecosystem science that is relevant to society, delivering innovative solutions to the environmental issues faced by a rapidly growing global community. Our work spans from molecular to ecosystem scales, from technology to sociology, and from city to wilderness.

Established research strengths include 'Integrated Forest Ecosystem Research', 'Bushfire Science', 'Urban Horticulture and Landscape Management' and 'Ecohydrology'. SEFS features significant cross-institutional collaborations and engagement activities with many industries throughout Australia and South-east Asia.

As a School we provide leadership in applied sciences through our Postgraduate Coursework degrees, the 'Master of Forest Ecosystem Science' (MFES) and the 'Master of Urban Horticulture' (MUH). Our Graduate Certificates and Diplomas in 'Bushfire Planning and Management', 'Forest Systems Management', 'Garden Design', 'Arboriculture' and 'Green Roofs and Walls' provide individuals working in industry with opportunities for intensive and career-directed learning and skills development.

As one of seven Schools within the Faculty of Science, SEFS operates from three locations:

- ▶ the University's main Campus at Parkville;
- ▶ the suburban Burnley Campus with a century old tradition of excellence in urban horticulture, which today is a dynamic multidisciplinary research centre with a focus on green infrastructure, urban ecology, ecohydrology and forest science; and
- ▶ the regional Creswick Campus, the University's specialist campus for forest science and the birthplace of forest education and research in Australia, which today also is home to significant plant and crop science initiatives of other Faculties.

Our extensive teaching and research facilities at all three campuses are complemented by a number of long-term field research sites including 'Long Term Fire Effects Study Areas' established in the 1980s, the Little Stringybark Creek urban catchment experiment, and a 'Terrestrial Ecosystem Research Network Super Site' in the Wombat State Forest, close to Creswick, which represent a significant strength of the new School.

### 4.2 BUDGET DIVISION

<http://www.science.unimelb.edu.au>

Science at the University of Melbourne is the most highly ranked Faculty of Science in Australia.\* Science is defined by its research excellence in the physical and life sciences and is at the forefront of research addressing major societal issues from climate change to disease. Our discoveries help build an understanding of the world around us.

We have over 150 years of experience in pioneering scientific thinking and analysis, leading to outstanding teaching and learning and offer a curriculum based on highly

relevant research, which empowers our STEM students and graduates to understand and address complexities that impact real world issues and the challenges of tomorrow.

We aspire to engage the broader community with the impact that Science has on our everyday lives. Through the strength of our internships and research project offerings, our students are provided opportunities to engage with industry partners to solve real-world issues.

The Faculty of Science has over 40,000 alumni and is one of the largest faculties in the University comprising seven schools: BioSciences, Chemistry, Earth Sciences, Ecosystem and Forest Sciences, Geography, Mathematics and Statistics, and Physics.

The Faculty is custodian of the Bio21 Molecular Science and Biotechnology Institute, Office for Environmental Programs and home to numerous Centres.

Science manages more than \$280 million of income per annum, with a staff base in the order of 220 professional staff, and more than 540 academic staff.

We offer a range of undergraduate, honours, graduate and research degrees; enrolling over 7,500 undergraduate and graduate students. The Faculty of Science is the custodial Faculty for the BSc (Bachelor of Science) with enrolments of approximately 6,200 students.

The Faculty of Science is a leader in research, contributing approximately \$50 million in HERDC income per annum. The Faculty of Science is highly research focused, performing strongly in the ARC competitive grants schemes, often out-performing the national average. The Faculty of Science is currently growing its competitiveness and standing in the NHMRC space.

The Faculty of Science provides community services and industry partnerships based on a solid foundation of research in the pure and applied sciences. The Faculty has an endowment of approximately \$50 million. The annual income from the endowment supports more than 120 prizes, scholarships and research awards.

\*Figures from the latest available data for 2015, including published international rankings data.

#### 4.3 THE UNIVERSITY OF MELBOURNE

The University of Melbourne is a leading international university with a tradition of excellence in teaching and research. With outstanding performance in international rankings, Melbourne is at the forefront of higher education in the Asia-Pacific region and the world. The University of Melbourne is consistently ranked among the world's top universities. Further information about our reputation and global ranking is available at <http://futurestudents.unimelb.edu.au/explore/why-choose-melbourne/reputation-rankings>.

Established in 1853, shortly after the founding of Melbourne, the University is located just a few minutes from the centre of this global city. The main Parkville campus is recognised as the hub of Australia's premier knowledge precinct comprising eight hospitals, many leading research institutes and a wide range of knowledge-based industries.

The University employs people of outstanding calibre and offers a unique environment where staff are valued and rewarded. Further information about working at The University of Melbourne is available at <http://about.unimelb.edu.au/careers>.

#### 4.4 GROWING ESTEEM, THE MELBOURNE CURRICULUM AND RESEARCH AT MELBOURNE: ENSURING EXCELLENCE AND IMPACT TO 2025

- ▶ Growing Esteem describes Melbourne's strategy to achieve its aspiration to be a public-spirited and internationally-engaged institution, highly regarded for making distinctive contributions to society in research and research training, learning and teaching, and engagement. <http://about.unimelb.edu.au/strategy-and-leadership>
- ▶ The University is at the forefront of Australia's changing higher education system and offers a distinctive model of education known collectively as the Melbourne Curriculum. The new educational model, designed for an outstanding experience for all students, is based on six broad undergraduate programs followed by a graduate professional degree, research higher degree or entry directly into employment. The emphasis on academic breadth as well as disciplinary depth in the new degrees ensures that graduates will have the capacity to succeed in a world where knowledge boundaries are shifting and reforming to create new frontiers and challenges. In moving to the new model, the University is also aligning itself with the best of emerging European and Asian practice and well-established North American traditions.
- ▶ The University's global aspirations seek to make significant contributions to major social, economic and environmental challenges. Accordingly, the University's research strategy *Research at Melbourne: Ensuring Excellence and Impact to 2025* aspires to a significant advancement in the excellence and impact of its research outputs. <http://research.unimelb.edu.au/our-research/research-at-melbourne>

The strategy recognises that as a public-spirited, research-intensive institution of the future, the University must strive to make a tangible impact in Australia and the world, working across disciplinary and sectoral boundaries and building deeper and more substantive engagement with industry, collaborators and partners. While cultivating the fundamental enabling disciplines through investigator-driven research, the University has adopted three grand challenges aspiring to solve some of the most difficult problems facing our world in the next century. These Grand Challenges include:

Understanding our place and purpose – The place and purpose grand challenge centres on understanding all aspects of our national identity, with a focus on Australia's 'place' in the Asia-Pacific region and the world, and on our 'purpose' or mission to improve all dimensions of the human condition through our research.

Fostering health and wellbeing – The health and wellbeing grand challenge focuses on building the scale and breadth of our capabilities in population and global health; on harnessing our contribution to the 'convergence revolution' of biomedical and health research, bringing together the life sciences, engineering and the physical sciences; and on addressing the physical, mental and social aspects of wellbeing by looking beyond the traditional boundaries of biomedicine.

Supporting sustainability and resilience – The sustainability and resilience grand challenge addresses the critical issues of climate change, water and food security, sustainable energy and designing resilient cities and regions. In addition to the technical aspects, this grand challenge considers the physical and social functioning of cities, connecting physical phenomena with lessons from our past, and the implications of the technical solutions for economies, living patterns and behaviours.

Essential to tackling these challenges, an outstanding faculty, high performing students, wide collaboration including internationally and deep partnerships with external parties form central components of Research at Melbourne: Ensuring Excellence and Impact to 2025.

#### 4.5 EQUITY AND DIVERSITY

Another key priority for the University is access and equity. The University of Melbourne is strongly committed to an admissions policy that takes the best students, regardless of financial and other disadvantage. An Access, Equity and Diversity Policy Statement, included in the University Plan, reflects this priority.

The University is committed to equal opportunity in education, employment and welfare for staff and students. Students are selected on merit and staff are selected and promoted on merit.

#### 4.6 GOVERNANCE

The Vice Chancellor is the Chief Executive Officer of the University and responsible to Council for the good management of the University.

Comprehensive information about the University of Melbourne and its governance structure is available at <http://www.unimelb.edu.au/unisec/governance.html>.

### ***5. Occupational Health and Safety (OHS)***

All staff are required to take reasonable care for their own health and safety and that of other personnel who may be affected by their conduct.

OHS responsibilities applicable to positions are published at:

<http://safety.unimelb.edu.au/topics/responsibilities/>

These include general staff responsibilities and those additional responsibilities that apply for Managers and Supervisors and other Personnel.