



POSITION DESCRIPTION

Faculty of Architecture, Building and Planning
VEIL

Post-doctoral Research Fellow: Visions of Low Carbon Urban Living

POSITION NO	0031360
CLASSIFICATION	Level A (The Post-doctoral position will commence at Level A.6)
SALARY	\$59,646 - \$80,939 p.a
SUPERANNUATION	Employer contribution of 17%
EMPLOYMENT TYPE	Full-time (1.0 FTE) Available for 3.5 years Fixed term contract type: Research
OTHER BENEFITS	www.hr.unimelb.edu.au/careers/info/benefits
CURRENT OCCUPANT	Vacant
HOW TO APPLY	Online applications are preferred. Go to www.jobs.unimelb.edu.au and use the Job Search screen to find the position by title or number
CONTACT FOR ENQUIRIES ONLY	Professor Chris Ryan, Director VEIL Tel. +61 3 8344 9175 Email cryan@unimelb.edu.au

Please do not send your application to this contact

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

www.hr.unimelb.edu.au/careers

Position Summary

This position is for a critical member of a team working on a flagship project for the Cooperative Research Centre for Low Carbon Living (CRC LCL) – to explore and articulate visions, scenarios and pathways for a low-carbon resilient urban environment. Through close engagement with industry and government, this project will provide CRC partners with strategic vision for their contribution to shaping the future of Australian cities and urban environments.

The challenge of the decarbonisation of the built environment involves no less than a transition from one set of technologies, infrastructures, practices, perceptions, values, policies and regulations to a (potentially very) different set. This research project, based in the Faculty of Architecture, Building and Planning at the University of Melbourne, in collaboration with researchers at University of New South Wales and Swinburne University, will utilise various tools to explore futures and investigate the diversity and complex systems dynamics of technological and societal changes required to pursue a low-carbon resilient society. The approach involves research and engagement to help ‘co-create our future’ as well as to build more robust decisions and strategies that are less brittle to the unfolding of key uncertainties.

The project will use scenario thinking within a twenty-five to thirty year horizon. It is based within the faculty’s Victorian Eco-Innovation Lab (VEIL), building on its history and a suite of projects that link research, scenario formation, engagement, visualisation and modelling for resilient ‘post-carbon’ futures. Over its life, the project will road-map potential transitions and disruptive change, articulate and refine scenarios for Australia’s future, guide designers in the production of visualisations of the future built environment, provide strategic input to the scoping of the CRC research program and opublish for academic, professional and general media.

This position will focus on the investigation and elaboration of approaches to the design of ‘eco-cities’ and the technological, social and infrastructural innovations that could provide the basis for the transformation of both new and existing built environments . It will require close liaison with the complementary research streams in the project - on economic, social and technological transitions and disruptive innovation (UNSW), on ‘precinct’ level modelling (Swinburne and other components of the CRC) and with action-research for engagement, visioning and ‘back-casting’ (University of Melbourne and Swinburne). In an iterative yearly cycle all this research will be brought together in a series of workshops involving built-environment industry and professionals, policy makers and development officers from government (local, state and federal).

1. Selection Criteria

1.1 ESSENTIAL

- ▶ A PhD in a relevant discipline with experience relevant to the dynamics of the project.
- ▶ A knowledge of environmental and sustainability issues (both Australian and global) with clear understanding of climate change, its projected impacts, approaches to mitigation and adaptation.
- ▶ Demonstrated knowledge of the issues involved in sustainable urban development, design, planning and policy, and of the literature – or practice – related to the creation of resilient, post-carbon cities and built-environments.
- ▶ Knowledge and/or experience with the formation of scenarios and their use in future visioning, engagement and back-casting.

- ▶ A demonstrated ability to conduct independent research with limited supervision and assume responsibility for the development and completion of research projects and papers and reports to stakeholders;
- ▶ Demonstrated competency to communicate complex information in a manner that is engaging and in a variety of forms (e.g. spoken, written, academic publications);
- ▶ Demonstrated ability to work independently as well as collaboratively, and engage positively with colleagues and external stakeholders, across distributed work sites.

1.2 DESIRABLE

- ▶ Demonstrated appreciation of systems approaches to 'wicked' problems (particularly in relation to cities and the built environment) and analysis of complex physical, technical and social systems.
- ▶ Demonstrated experience in working in an interdisciplinary field of research particularly involving the interconnection of social, technical and bio-physical systems.
- ▶ Experience of research that is communicated through images and visualisations
- ▶ Experience of collaborative multi-stakeholder deliberative processes and/or design atelier based collaborative work.

2. *Special Requirements*

The position will require some travel for research collaboration in Sydney and for the six workshops over the life of the project (Sydney, Adelaide and Perth).

3. *Key Responsibilities*

- ▶ Successfully undertake day to day research on data relevant to the project, including regular scoping and refining of the research domain, as well as performance against a detailed work-plan;
- ▶ Contributing to the project team and the regular refinement of the overall project process in order to achieve its outcomes.
- ▶ Working with other team members (including a future project assistant and PhD's) to build a structured 'observatory' of technical, social and infrastructural innovations, as well as economic, political and policy shifts that could contribute to the shaping of a resilient post-carbon future
- ▶ Actively engage with key stakeholders to achieve the above;
- ▶ Actively engage and promote the sharing of information generated from research by delivering scholarly seminars and presentations. Contribute to newsletters, project reports and professional articles etc. and participate in workshops where appropriate; produce and contribute to academic publications.
- ▶ Contribute to the intellectual debate within the CRC, the Faculty and VEIL
- ▶ Other duties relevant to the project at the request of the Project Director.
- ▶ Fulfil 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

Victorian Eco-Innovation Lab (VEIL) www.ecoinnovationlab.com

The project sits in the Victorian Eco-Innovation Lab (VEIL), a research unit of the Faculty of Architecture, Building and Planning at the University of Melbourne.

The Victorian Eco-Innovation Lab (VEIL) is a future-focused 'design-research-engagement-action' laboratory, working towards a positive sustainable future for Melbourne, Victoria and Australia. VEIL has the explicit mission of 'changing expectations' of the future, envisioning and analysing potential new trajectories for development for the metropolis of Melbourne (and other cities within Australia and in other developed countries) over the next twenty-five years, in response to local and global environmental challenges.

VEIL has a history of engagement with local councils, communities, professionals, students and academics to create powerful, relevant projects that visualise, engage and seed interventions. Through research, published papers, design projects, exhibitions, studios, networks and seed projects, we work with our partners and stakeholders (and the public) to imagine, understand and implement the real positive change that is both possible and necessary.

4.2 BUDGET DIVISION

The Faculty of Architecture, Building and Planning is the leading regional educational institution addressing the design and realisation of inhabited environments. The Faculty prepares students to engage with the future as leaders through educational programs focusing on the planning, design and construction of centres of habitation. ABP maintains excellent and extensive relationships with members of the built environment professions, government, professional associations and the wider community, and actively seeks to extend the linkages between education, research and practice in the built environment.

The Faculty has 150 permanent staff and approximately 3300 students (one third of which are international). Students currently undertake courses across these professional disciplines – Architecture, Landscape Architecture, Property, Construction, Urban Planning, Urban Design and Design and Planning

The Faculty fosters an active and collegial research environment that brings together staff and students to exchange knowledge and engage in debates on key topics. Current research centres on several key themes, including: sustainable built environments; urban futures, with particular focus on housing, transport and communities; design, technologies, management and practice; and built environment history, heritage, theory and social critique in the Asia-Pacific region.

The Faculty has strong expertise in the architecture and urban environments of the Asia Pacific region, both contemporary and historical. Whilst teaching and academic staff research currently focus on architecture, urbanism, planning and development in east and South-east Asia, the Faculty attracts RHD students from throughout Asia and the Middle East. Our Faculty has a long standing engagement with Asia which we are seeking to enhance through this appointment.

As a result of the implementation of the Melbourne Model the Faculty is currently undergoing a period of significant change. New incoming undergraduate students will enter into the Bachelor of Environments, a cross-faculty degree into which the Faculty teaches whilst teaching out the current undergraduate degrees.

As part of a renewed focus on postgraduate studies, the Faculty launched its graduate school, The Melbourne School of Design, in 2008. The MSD is distinctive from its competitors in its aim to inspire discovery enhanced by interdisciplinary reflection, and its integration of research, teaching, and practice around the environmental demands of all forms of urbanisation. With opportunities to engage in the most advanced studio and seminar-based teaching and research, MSD students develop new methods of perspectives, critical reflection and modes of action to address the environmental, social and aesthetic challenges in producing sustainable centres of habitation, locally and internationally. Students can take part in field trips which examine the global context of habitable environments. More information about the Faculty can be found at www.abp.unimelb.edu.au.

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 www.futurestudents.unimelb.edu.au/explore/about/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 www.hr.unimelb.edu.au/careers.

4.4 GROWING ESTEEM AND THE MELBOURNE MODEL

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. www.growingesteem.unimelb.edu.au

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 Model. 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.

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 www.unimelb.edu.au.

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.