POSITION DESCRIPTION

THE UNIVERSITY OF MELBOURNE

School of Chemistry
Faculty of Science

Research Fellow in Perovskite Photovoltaics

POSITION NO	0043255
CLASSIFICATION	Level A
SALARY	$69,148 - $93,830 (PhD entry Level $87,415 p.a.)
SUPERANNUATION	Employer contribution of 9.5%
WORKING HOURS	Full-time
BASIS OF EMPLOYMENT	Fixed-term available for 12 months
OTHER BENEFITS	http://about.unimelb.edu.au/careers/working/benefits
HOW TO APPLY	Online applications are preferred. Go to http://about.unimelb.edu.au/careers, select the relevant option ('Current Staff' or 'Prospective Staff'), then find the position by title or number.
CONTACT FOR ENQUIRIES ONLY	Professor Ken Ghiggino or Dr David Jones Tel +61 3 83448939 or 61 3 83442371 Email ghiggino@unimelb.edu.au or djjones@unimelb.edu.au *Please do not send your application to this contact*

For information about working for the University of Melbourne, visit our website:
about.unimelb.edu.au/careers

Position Summary

A Research Fellow is required to undertake research on perovskite materials for solar cells as part of a new program under the ARENA funded Australian Centre for Advanced Photovoltaics (ACAP). The appointee will be required to undertake research in either or both of the following areas – theory of perovskite solar cells, synthesis and characterisation of perovskite photovoltaic materials. ACAP (http://www.acap.net.au/) comprises the Australian partners of the Australian-US Institute of Advanced Photovoltaics with the goal of developing the next generations of photovoltaic technology. The appointee will be located in the School of Chemistry, University of Melbourne but will be expected to liaise closely with researchers at other ACAP partner institutions.

1. Key Responsibilities

For Minimum Standards for Academic Staff Level A view
http://www.policy.unimelb.edu.au/schedules/MPF1157-ScheduleB.pdf

- Conduct original experimental research in theory and/or synthesis and characterisation of perovskite photovoltaic materials
- Liaison and collaboration with ACAP partners
- Write reports and journal articles on research outcomes and present the findings to students and colleagues
- Organise and contribute to weekly research group meetings
- Involvement in professional activities including, subject to availability of funds, attendance at conferences and seminars in the field of expertise
- Administrative functions primarily connected with the appointee's area of research
- Where required, check risk assessments of other co-workers- countersign and approve risk assessments that will be carried out by other PhD, postdoctoral workers and undergraduates in their execution of daily experiments. The risk assessment protocol is a necessary condition of safe working in the School of Chemistry and the procedure is carefully explained to each co-worker. Only postdoctoral and academic staff members may countersign such assessments
- Provide technical guidance, advice, and mentoring of postgraduate research students who work on projects within the field of the appointee's area of research
- Attendance at meetings associated with research or the work of the organisational unit to which the research is connected and/or at School, ACAP and/or Faculty meetings and/or membership of a limited number of committees
- Where required, manage day-to-day maintenance, running and safety of laboratories
- Occupational Health and Safety (OH&S) and Environmental Health and Safety (EH&S) responsibilities as outlined in section 4

2. Selection Criteria

2.1 ESSENTIAL

- PhD in chemistry, materials science or a related discipline
- A strong background in theory and/or synthesis and characterisation of photovoltaic materials
- A demonstrated ability to undertake high quality research and publish findings
- Excellent interpersonal and both written and oral communication skills in English
- High-level organisational and time-management skills and a demonstrated capacity to bring research projects to timely completion under limited supervision
- Demonstrated ability to interact positively and work co-operatively in a multi-disciplinary team environment and liaise with people from diverse backgrounds
- A willingness and ability to supervise graduate research students

2.2 DESIRABLE

- Background in theoretical studies or synthesis of perovskites or related materials
- Experience in collaborating with other researchers and disciplines
- Experience in mentoring students
- Experience in the preparation of grant applications and reports

3. Equal Opportunity, Diversity and Inclusion

The University is an equal opportunity employer and is committed to providing a workplace free from all forms of unlawful discrimination, harassment, bullying, vilification and victimisation. The University makes decisions on employment, promotion and reward on the basis of merit.

The University is committed to all aspects of equal opportunity, diversity and inclusion in the workplace and to providing all staff, students, contractors, honorary appointees, volunteers and visitors with a safe, respectful and rewarding environment free from all forms of unlawful discrimination, harassment, vilification and victimisation. This commitment is set out in the University's People Strategy 2015-2020 and policies that address diversity and inclusion, equal employment opportunity, discrimination, sexual harassment, bullying and appropriate workplace behaviour. All staff are required to comply with all University policies.

The University values diversity because we recognise that the differences in our people's age, race, ethnicity, culture, gender, nationality, sexual orientation, physical ability and background bring richness to our work environment. Consequently, the People Strategy sets out the strategic aim to drive diversity and inclusion across the University to create an environment where the compounding benefits of a diverse workforce are recognised as vital in our continuous deserve to service for excellence and reach the targets of Growing Esteem.

4. 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.

5. Other Information

5.1 SCHOOL OF CHEMISTRY

The School of Chemistry has 24 teaching/research staff, 30 professional staff and over 30 research only staff. It is one of the largest budgeting departments in the university. The school teaches approximately 2000 first year students, 300 second year students and 100 third year students. There are also about 35 Honours and Masters students and 100 PhD students who carry out research projects in one of the many advanced laboratories. The research in the School is supported by skilled technical staff who operate, maintain and develop complex instrumentation and equipment. Further information about the school is available at http://www.chemistry.unimelb.edu.au

5.2 FACULTY OF SCIENCE

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 50,000 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 $290 million of income per annum, with a staff base in the order of 270 professional staff, and more than 580 academic staff.

We offer a range of undergraduate, honours, graduate and research degrees; enrolling over 8,600 undergraduate and 2,440 graduate students. The Faculty of Science is the custodial Faculty for the BSc (Bachelor of Science). The Faculty of Science is a leader in research, contributing approximately $70 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 $56 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.

5.3 THE UNIVERSITY OF MELBOURNE

Established in 1853, the University of Melbourne is a leading international university with a tradition of excellence in teaching and research. The main campus in Parkville 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. With outstanding performance in international rankings, the University is at the forefront of higher education in the Asia-Pacific region and the world.

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.

5.4 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.

5.5 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/governance