



# **Professor of Sustainable Chemistry**

Post number	MWA 004 - 092
Department	Green Chemical Futures, School of Chemistry, Monash University Department of Chemistry, University of Warwick
Faculty	Faculty of Science, Monash University Faculty of Science, University of
	Warwick
Level	Level E at Monash University Level 9 Professor at University of Warwick
Employment type	You will undertake duties at both Universities with the primary FTE split for the post envisaged to be with Monash University. The sum of your contracts with both Universities will ordinarily be 1.0 FTE.
Work location	Monash Clayton campus (80%) Warwick (20%)
Date document created or updated	27 September 2012 (MB)

Please note: appointment to this position will take place only after an appointment is made to the position of Director, Green Chemical Futures.

Monash University and the University of Warwick are seeking to recruit an outstanding scientist to pursue internationally leading research in chemistry and polymer/material sciences with applications including sustainable chemistry, green chemistry, nanomedicine development and biotechnology as part of the Monash Warwick Alliance.

You will primarily be based at Monash but are expected to spend a significant amount of time at Warwick, to direct substantial research efforts in both institutions and to contribute to teaching and leadership. Resources will be available to facilitate this international programme, including personnel, travel and other budgets.

Monash has a significant international reputation in green chemistry and outstanding facilities to support research in sustainable chemistry and engineering with significant recent investment in a \$72.8M Green Chemical Futures facility.

There will be opportunities to forge interdisciplinary collaborations between the two institutions.

You will have expertise in an area relevant to sustainable chemistry and you will have the ability to complement on-going research at Warwick or Monash.

Appointment to this post will take place only after appointment is made to the post of Director, Green Chemical Futures.

This post will be formally advertised early in 2013

Informal enquiries: Professor Steven Langford, Head, School of Chemistry, Monash University,

Steven.langford@monash.edu +61 3 9905 4569

# **Monash-Warwick Alliance**

The Monash-Warwick Alliance represents an innovative and unique advancement in the higher education sector. Two world-class institutions are coming together to accelerate the exchange of people, ideas and information, exploiting the opportunities offered by their different geographies. This joint venture is extraordinarily well-positioned to thrive in the globalised and technology-enabled world of international higher education.

Both Monash and Warwick have established reputations for research excellence.

The Monash Warwick Alliance offers a new model for research-led institutions to meet the global challenges of the 21<sup>st</sup> century. By accelerating the exchange of people, ideas and information and exploiting the opportunities offered by the geography of the two institutions in Europe, Asia-Pacific and Africa, we intend to create a new approach to global higher education.

A key aim of the Alliance is to help meet the increasing student, industry and government demand for universities to produce graduates with a global education, and to undertake research that addresses world-relevant and strategically important problems. Further information is available on monash.warwick.ac.uk

# **Organisational context**

# **Monash University**

Monash is an energetic and dynamic university committed to quality education, outstanding research and international engagement. A member of Australia's Group of Eight research intensive universities, it seeks to improve the human condition and is committed to a sustainable future. Monash has six campuses in Victoria, a campus in Malaysia, a campus in South Africa, a centre in Prato, Italy, and numerous international partnerships and cooperative ventures.

Monash has over 63,000 students spread across its Australian and off-shore campuses, and almost 7,200 full time equivalent staff. Approximately 3,000 of these staff members are academic staff.

#### The University of Warwick

Warwick is arguably the most successful of UK universities founded within the past half-century, and has earned an outstanding reputation both for research and teaching. Warwick is comfortably ranked within the top ten of all UK university league tables. The latest national UK newspaper tables all ranked Warwick in the top ten (The Times, Sunday Times, The Independent) and 3rd place (The Guardian) overall.

Warwick employs nearly 5,000 members of staff, of whom 1,400 are academic and research staff spread across 30 academic departments and 49 specialised research centres and institutes. The university has a total student population of 23,400 (full-time equivalent) of whom approximately 13,000 are undergraduates and 10,000 are postgraduates. The University is an international and cosmopolitan body which is committed to tackling major global problems through research and teaching. Many of Warwick's staff originate or were educated overseas and almost a third of the total student population comes from over 120 countries outside of the UK.

#### **Faculty of Science, Monash University**

The Faculty of Science is one of ten faculties at Monash University. It offers undergraduate courses and higher degrees by research to nearly 3,500 students at the Clayton, Gippsland and Sunway campuses; some programs are also available in off-campus mode. The faculty consists of six schools and includes major nodes of five national research centres funded by the Australian Research Council, in addition to three faculty research centres and involvement in six Cooperative Research Centres. Ten departments from other university faculties contribute to science teaching at all levels, allowing students to choose their studies from physical, chemical, biological, biomedical, behavioural, environmental, mathematical and computer sciences.

Staff within the Faculty of Science conduct internationally recognised high-quality research, which is reflected in our teaching programs through a research-led teaching approach; a prime advantage for students is our capacity to offer an extensive choice of subjects, with well-equipped laboratories and sophisticated, state-of-the-art equipment.

The faculty mission is "To be recognised as a leader in the design and delivery of high quality and comprehensive programs in science education and in the conduct of highly original and significant research at the best international standards".

#### **Green Chemical Futures**

Green Chemical Futures (GCF) is the latest development of Monash's interests in sustainability. Borne out of the reputation of the Centre for Green Chemistry within the School of Chemistry, GCF is a joint initiative between the Faculties of Science and Engineering. Its goal is to produce high quality research and learning outcomes that impact across a wide range of industrial sectors, and in the process, produce graduates ready to undertake the challenges associated with implementing the sustainable practices required into the future. Monash is co-investing with the Federal Government through the EIF Scheme to construct a state-of-the-art \$75M building to house this initiative. Combining research and teaching laboratories in the purpose-built spaces of GCF allows Monash to provide a paradigm shift for chemical research and training in Australia. The State Government funded Victorian Centre for Sustainable Chemical Manufacturing (VCSCM) forms an integral mechanism to industry engagement within GCF and the wider Monash community.

# **Accountability**

The appointee will be accountable to the Head, School of Chemistry and Director, Green Chemical Futures.

# **Objectives**

- To establish a long term, self-sustaining collaborative research program targeting key fundamental challenges in sustainable chemistry.
- To become a globally recognised leader in sustainable chemistry.
- To establish a collaborative training program at both Masters and PhD level in the area of sustainable chemistry.
- To attract/retain top-class research leaders to Warwick and Monash.

#### **Duties**

#### Research and education

- Contribute to the leadership and long-term development of sustainable chemistry research and education at Monash and Warwick.
- Establish and maintain a strong program of research capable of attracting substantial external funding and research staff, publish research outcomes in the highest impact journals and foster postgraduate research training through the supervision of postgraduate students.
- Provide research leadership in a relevant field to sustainable chemistry and foster collaborative research at the highest international levels by working with other researchers on large scale projects.
- Encourage and facilitate cross-disciplinary research.
- Make a distinguished personal contribution to the teaching programs at undergraduate and postgraduate levels.
- Provide innovative and effective leadership for the expansion of HDR programs by attracting high quality HDR students.
- Participate in curriculum planning and development processes, academic committees, and relevant examination processes.
- Proactively maintain the quality of the teaching programs at a high level.
- Provide training for industry, commerce and government.

## Leadership, management and administration

- Contribute to academic and administrative leadership within the departments and faculties at Monash and Warwick and participate in the development of policy in the faculties and universities.
- Manage staffing and budgetary matters in the relevant discipline, where appropriate.
- Perform administrative and coordination duties that are necessary for the effective operation of the relevant Monash and Warwick departments' programs.

#### **External relationships**

- Strengthen links with relevant faculties and schools within both Monash and Warwick.
- Develop collaborative linkages and interact with industry, government agencies, professional bodies and the general community.
- Provide advice to government, industry and other relevant community organisations on the discipline and its applications.

# **Appointment period**

You will be appointed on two fractional contracts with Monash University and the University of Warwick respectively up until December 2016, thereafter you will ordinarily revert to a substantive, continuing professorial appointment in the School of Chemistry, Monash University.

## Selection criteria

#### **Qualifications**

• Research doctorate in a discipline relevant to sustainable chemistry.

## Achievements, qualities, capabilities

- An outstanding international reputation in a relevant field of chemistry.
- Significant publications in high impact journals, a consistent record of high level research engagement and productivity and a demonstrated ongoing commitment to one or more programs of research.
- Demonstrated ability to generate research income, including from both traditional and more innovative sources of research funding.
- Experience in coordinating multi-stakeholder programs and a record of successful collaborations either within or across disciplines and between organisations.
- Proven record of leadership of a team of science professionals with demonstrated ability to inspire creativity and a cohesive work environment.
- Evidence of innovative and effective education of undergraduate students, including curriculum design, delivery of lectures and assessment.
- Record of successful supervision of postgraduate research students and the ability to make a significant contribution to relevant postgraduate training.
- Highly developed skills of leadership, networking and management.
- Willingness and capacity to make a substantial contribution to all activities of a science department, including administration and planning.
- Proven professional leadership qualities and capacity for executive administrative responsibilities.
- Very high-level communication skills and ability to liaise well with other academics.
- Evidence of sustained relationships with industry, business, government agencies, and professional bodies.
- A vision for the future needs and development of sustainable chemistry from research and educational perspectives.
- Evidence of ability in, and commitment to, the promotion of sustainable chemistry as a discipline to potential students and the wider community.

# **Policies and Procedures**

The appointee must be aware of and adhere to legislation in both countries and University policy in both Universities as amended from time to time and relevant to the duties undertaken, including:

- Charter, Statutes, Ordinances and Regulations of the respective Universities
- Equal Employment Opportunity and Equality and Diversity supporting equity and fairness
- Health, Safety, and Welfare supporting a safe workplace
- Conflict of Interest (including Conflict of Interest in Research)
- Confidentiality
- Outside Work
- Financial Regulations
- Research Conduct
- Intellectual Property
- Any other joint Alliance procedures and policies as amended or updated from time to time

#### **Further information**

Confidential enquiries regarding the position may be made to Professor Steven Langford, Head, School of Chemistry, Monash University, telephone +61 3 990 54569, email steven.langford@monash.edu

Candidates, by making application for this role, consent that the Universities may transfer one to the other personal data provided for the purposes of recruitment and selection to the post and any subsequent employment related processes as appropriate. Both Universities undertake to safeguard the confidentiality of that data, and to take all reasonable steps towards that undertaking.

Monash University and the University of Warwick are committed to equal opportunities and the promotion of equality and diversity in employment