SWINBURNE UNIVERSITY OF TECHNOLOGY

Postdoctoral Research Fellow

- Conduct high quality research as part of a collaborative project with CSIRO
- Full time, 2-year fixed term position at our Hawthorn campus
- Academic Level B1 $96,808 - B3 $103,927 + 17% superannuation

About the Job

Looking for an opportunity in batteries that is out of this world?

We are looking for a dynamic and enthusiastic Post-Doctoral Fellow to work on a joint CSIRO-Swinburne collaborative research program to develop of a High Energy Lithium-Sulfur (Li-S) battery for use in Space applications. Located primarily at the Clayton campus of CSIRO, Manufacturing Business Unit, and funded via the CSIRO Space Future Science Platform, the Post-Doctoral fellow will have hands-on experience with the materials, construction, testing and characterization of Li-S batteries. The position will be physically located approximately one day per week in the Department of Chemistry and Biotechnology within the Faculty of Science, Engineering and Technology at Swinburne's Hawthorn campus. The initial appointment will be for 2 years (full time).

The successful applicant will work with the CSIRO / Swinburne team to identify materials and processes to enable the team to prototype devices that have energy densities exceeding those of lithium-ion batteries. The batteries will be tested both at CSIRO as well as under simulated space conditions with Jet Propulsion Laboratories (JPL), USA, in order to provide feedback on their performance.

About Swinburne University of Technology

Swinburne is a multi-sector university of science, technology and innovation with more than 54,000 students and 5,000 staff globally. We offer postgraduate, undergraduate, vocational education and online education to provide students with a variety of work-relevant pathways. Our mission is to be a world-class university, creating economic and social impact through science, technology and innovation. We aim to deliver future-ready learners, research with impact and innovative enterprise.

Swinburne's Faculty of Science, Engineering and Technology is at the forefront of the university's focus on developing innovative solutions to real-life problems. If you're interested in working on today's most exciting challenges, collaborating with leaders in their discipline and being supported by some of the best technology and facilities in the country, then you should be at Swinburne.

About you

To be successful in the role, you will have:

- PhD qualification within Chemistry, Physics, Materials Science, Materials Engineering or related disciplines specific to lithium battery technologies
- Proven experience in the fabrication of battery electrodes, battery assembly and testing
- Knowledge of to design (lithium) batteries for various applications specifically to meet energy requirements and the implications for electrode design
- Expertise in using characterisation methods, such as UV/Vis, Raman and FT-IR Spectroscopy, X-ray Photoelectron Spectroscopy, SEM to characterize various components within a battery

A full list of selection criteria is available within the position description.

Benefits

- Onsite childcare
- Onsite health services
- Weekly yoga and Pilates classes
- Discounted annual Myki cards are available to Swinburne staff

How to apply and further information

Please submit your application by clicking on the **further information web link below**, and submit a resume, cover letter **and a response to the Key Selection Criteria, as listed in the position description**.

For further enquires please contact **Dr Peter Mahon, Senior Lecturer, Department of Chemistry and Biotechnology on (03) 9214 4880**.

If you are experiencing technical difficulties with your application, please contact the Recruitment team on staffrecruitment@swin.edu.au

Should you require further support for an interview due to special needs or consideration, please contact our Diversity Consultant, Dr Walter Robles, on inclusion@swin.edu.au. For support or queries related to Aboriginal and Torres Strait Islander employment, please contact DeadlyCareers@swin.edu.au.

Swinburne is a large and culturally diverse organisation. We are proud of our commitment to equity and inclusion through key initiatives such as our Charter of Cultural Diversity, Pride@Swinburne Strategic Action Plan, Science in Australia Gender Equity (SAGE) Action Plan and our Reconciliation Action Plan. Equity and diversity are integral to our 2025 vision to be a world class university creating social and economic impact through science, technology and innovation.

Applications close at 5pm on 8 April 2020

Click for further information and to apply