



inspiring
women

support
inspire
inform

**veski
inspiring
women
fellow**



Dr Cara Doherty

project summary

A **veski** inspiring women fellowship is awarded to Dr Cara Doherty from CSIRO Materials Science & Engineering to continue her outstanding track record as a multidisciplinary scientist in physics, chemistry and materials engineering. Through the synthesis, engineering and analysis of smart porous materials, Dr Doherty has achieved significant breakthroughs in energy production, water purification, gas separation and device fabrication.

While pregnant and on maternity leave, Dr Doherty published several high impact and highly cited review papers in the field of Metal Organic Framework research. However due to time away from the laboratory while having her two children, Dr Doherty has been restricted in the amount of new results she can produce. Particularly as her research involves working with radiation and various chemicals that are not safe for pregnant women to be exposed to.

The **veski** inspiring women fellowship will significantly enhance Dr Doherty's competitiveness in the Metal Organic Frameworks research field by allowing her to take on a PhD student and intern to accelerate her discoveries.

The fellowship will enable Dr Doherty to learn from internationally renowned scientists, through travel to international laboratories in Japan and ongoing collaboration in France.

Dr Doherty will also be able to return to work full-time in 2018 with childcare support for her two children. Having the childcare support will allow for greater flexibility to attend conferences and courses in leadership and entrepreneurship.

Ultimately the **veski** inspiring women fellowship will support Dr Doherty to achieve her long-term research goal of developing device technology so that smart devices can be manufactured here in Victoria. This is vital in ensuring the future of Australian manufacturing comprises design and fabrication of high-tech smart devices.

personal history

Dr Cara Doherty obtained her PhD in Physical Chemistry from The University of Melbourne and CSIRO Molecular and Health Technologies, under the supervision of Professor Calum Drummond and Professor Rachel Caruso.

During Dr Doherty's PhD, she investigated the benefits of building hierarchically porous electrode materials to improve the power capabilities of Lithium ion batteries.

She used self-assembly techniques to determine the optimal pore size to achieve high capacities at high loads. The outcomes resulted in high impact publications that were highly cited.

Dr Doherty undertook her postdoctoral studies at CSIRO Materials Science & Engineering, where she focused on the development and characterisation of adaptive porous materials.

Dr Cara Doherty

For Dr Doherty, currently undertaking her second period of maternity leave, the veski inspiring women fellowship allows her to take on a PhD student and intern to accelerate her discoveries in Metal Organic Frameworks.

As a result of her extensive background in physics, Dr Doherty quickly became the Principal Research Scientist on Positron Annihilation Lifetime Spectroscopy (PALS), and now runs an internationally recognised laboratory.

Over the past six years, Dr Doherty's work has been published in 62 articles in high impact journals. As a result of her achievements, Dr Doherty was recently awarded an Australian Research Council Discovery Early Career Researcher Award on 3D Metal Organic Framework biomedical device applications, and attained an ongoing position in CSIRO Manufacturing.

In 2014, Dr Doherty was awarded a CSIRO Julius Career Award and a L'Oréal For Women in Science Fellowship. In 2013, she was also awarded a Tall Poppy Science Award.

other inspiring women fellows:

- / Dr Natalie Hannan
- / Dr Maria Liaskos
- / Dr Emily Nicholson
- / Dr Catherine Satzke
- / Dr Emma Sciberras

host institution



further information

veski.org.au/inspiring-women

about the veski inspiring women fellowships

The Honourable Linda Dessau AC, Governor of Victoria announced the veski inspiring women fellows on Wednesday, 21 June 2017 at a reception held at Government House, Melbourne.

The veski inspiring women fellowships support outstanding female leaders who are planning for, experiencing, or returning from a career break.

