

Girls in Physics Breakfast

Friday, 17th May, 7:30am to 9:30am *

Federation Room, Hotel Shamrock, Bendigo

To: Women in, or planning for, a career in Science or Engineering

Would you like to:

- Have breakfast with a table of keen students and like-minded women?
- Answer the students' questions about university or working in Science and Engineering?

Then you are invited to the Girls in Physics Breakfast in Bendigo and ... to also hear Dr Judy Hart from the University of NSW speak on:

'Developing new materials for renewable energy'

- * From 9:30am to 10:00am, there are Careers in STEM Activities which are of value to students and guests alike.

Abstract: *New materials are important for every area of technological development – from building and construction, to electronic devices, quantum computing and medical implants. This makes materials science an exciting area of research with broad practical applications.*

My area of research is materials for renewable energy applications. One of the problems with renewable energy is that we don't have efficient ways of storing and transporting the energy. One solution to this problem is photocatalysis, where energy from light is used to make chemical reactions occur. By this process, new materials can directly convert solar energy to chemical fuels such as hydrogen. This means that the energy can be stored and transported. However, current materials have low efficiencies, high costs and poor long-term stability. The challenge is to understand the reasons for these problems and to design improved materials.

Dr Judy Hart is a Senior Lecturer in the School of Materials Science and Engineering at UNSW. After completing undergraduate studies and a PhD in Materials Engineering at Monash University, she spent 7 years in the United Kingdom as a post-doctoral researcher. Her research interests are in the use of computational and experimental approaches to design new materials. She also has a passion for teaching and encouraging women to pursue careers in materials science.



To attend, please register at www.vicphysics.org/breakfast.html by Thursday, 9th May. **There is no cost to you.** Any queries to vicphys@vicphysics.org.

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