

GIRLS IN PHYSICS BREAKFAST FRI, 1st MAY



Nuclear Magnetic Resonance (NMR) enables the structure and function relationship of large biomolecules to be determined. This talk will include a brief introduction to NMR spectroscopy, which led to the development of MRI, and how it is used to determine the 3D atomic structure of molecules. We are using NMR to determine the interaction of antibiotics with cell membranes and unravel the interactions of biomolecules from Alzheimer's disease.

Prof Frances Separovic is Emeritus Professor of Chemistry and Deputy Director of the Bio21 Molecular Science & Biotechnology Institute, University of Melbourne. After obtaining a BA from Macquarie University, Frances was awarded a PhD in Physics from University of NSW. She has held several honorary positions at international institutions including Harvard Medical School; University of London; San Diego State University; and University of Oxford. Her research interests range from membrane biophysics to determining the structure of biological macromolecules with a focus on antibiotics and toxins. Frances is an editorial board member of several international journals and has published over 220 journal papers and organised 40 major scientific conferences. In 2012, Frances was elected to the Australian Academy of Science. In 2019 Frances received an AO for her distinguished service to science education, as an academic, and to young women scientists.

This event is sponsored by Bank Australia, the Laby Foundation, Vicphysics Teachers' Network, the Victorian Branch of the Australian Institute of Physics and supported by the Royal Society of Victoria.



**MRI of Molecules:
Biophysics meets Cell Chemistry'
with Prof Frances Separovic,
Melbourne University**

And ... have breakfast with women in a career in physics or engineering.

'I was talking to a guest at my table and her career sounded so amazing. Then I realised that in 8 years that could be me. I got so excited.'

Then two activities on careers in STEM

To sign up, see your Science teacher

Cost: \$15

Max: 12 students per school

Brother Fox, Deakin University,
7:30am - 10:00am