



To celebrate the International Year of Crystallography 2014, the Institute of Advanced Studies and the School of Chemistry and Biochemistry are pleased to present this special lecture series, which aims to promote the general understanding of Crystallography in the wider community. This series, based at UWA, will feature three key lectures from our experts in the field.

The International Year of Crystallography 2014 commemorates not only the centennial of X-ray diffraction, which allowed the detailed study of crystalline material, but also the 400th anniversary of Kepler's observation in 1611 of the symmetrical form of ice crystals, which began the wider study of the role of symmetry in matter.

What is X-ray Crystallography and How Did It Transform Our View of the World?

A public lecture by Stephen Curry, Professor of Structural Biology, Imperial College London

Monday 25 August 2014, 6pm, Theatre Auditorium, University Club UWA | Cost: Free, but RSVP essential via www.ias.uwa.edu.au/lectures/crystallography

The technique of X-ray crystallography, first used to work out the atomic structure of simple crystals and minerals, is arguably one of the greatest scientific advances of the 20th century. In this lecture Professor Curry will recount the curious origin of the technique (including its Australian roots), explain how it works and discuss how crystallography opened up an entirely new landscape for scientists to explore.

Molecules in Crystals

A public lecture by Mark Spackman, Winthrop Professor and Head, School of Chemistry and Biochemistry, The University of Western Australia Wednesday 17 September 2014, 6pm, Woolnough Lecture Theatre, UWA | Cost: Free, but RSVP essential via www.ias.uwa.edu.au/lectures/crystallography

We all know what crystals are, but how much do we know about what lies within? And how do we know it? In this lecture Professor Spackman will trace some of this fascinating story, partly from the viewpoint of his novel partitioning of crystals into discrete molecular fragments, and the development of software now used worldwide for the identification, analysis and discussion of intermolecular interactions in molecular crystals. The link between this modern perspective and very early ideas on the internal structure of crystals will be presented through several studies on molecular crystals that have become landmarks in the development of modern X-ray crystallography.

Crystallography in Biology

Alice Vrielink, Professor of Structural Biology, School of Chemistry and Biochemistry, The University of Western Australia

Wednesday 15 October 2014, 6pm, Woolnough Lecture Theatre, UWA | Cost: Free, but RSVP essential via www.ias.uwa.edu.au/lectures/crystallography

In this lecture Professor Vrielink will give an overview of the impact crystallography has had in the area of biology and medicine. She will describe the seminal discoveries as a result of crystallographic studies of biological molecules and how these discoveries are helping us to understand the mysteries of life.

Institute of Advanced Studies

School of Chemistry and Biochemistry

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