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Tuneable Materials and Material Dynamics

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Characterisation of tuneable and adaptive materials at the Australian Synchrotron has enabled an understanding of non-equilibrium processes such as solute partitioning and phase competition in alloys [1-6], architecturing of free volume in polymers [7-9], and biomineralisation of metal-organic-frameworks (MOFs) [10-16]. In situ small angle X-ray scattering (SAXS) and in-situ powder X-ray diffraction (PXRD) have been used to gain insight into the dynamic processes that lead to superior performance of materials for use as structural alloys, corrosion resistant alloys, gas separation membranes, and for use in encapsulation of biomolecules and biological units.

The talk will highlight the work of CSIRO and collaborators (all work has been advanced by Australian Synchrotron results).

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Keywords or phrases (comma separated)

Are you a student?

No

Do you wish to take part in</br>the Student Poster Slam?

No

Are you an ECR? (<5 yrs</br>since PhD/Masters)

No

What is your gender?

Female

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