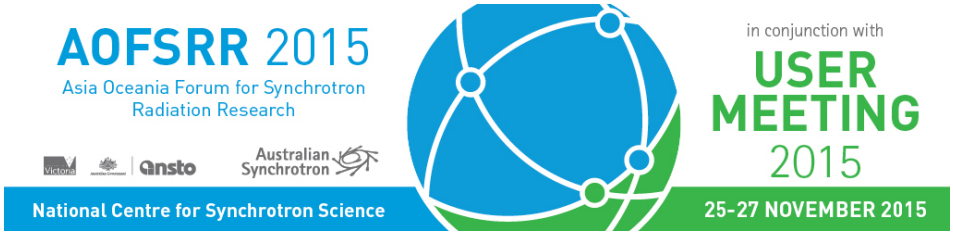

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New developments at the XFM beamline: Get more from your research, for free

Thursday, 26 November 2015 15:25 (20)

The XFM beamline at the Australian Synchrotron typically operates in the backscatter geometry using the Maia detector and fast scanning stages, allowing rapid and efficient collection of fluorescent X-ray photons. In most cases, the transmitted beam is collected by a photodiode to give at best a poor measure of the thickness of the specimen. However, the transmitted beam carries much more information than is currently being used. In this presentation, I will show you simultaneously collected fluorescence and ptychography data which not only gives you a sub 100 nm resolution phase contrast image of your sample but allows you to increase your fluorescence resolution as well. Further developments in this area will allow simultaneous ptychography data to be collected across a wide range of samples at no additional time cost to standard fluorescence data collection.

Keywords

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