



Australian Microbeam Analysis Society

presents

The AMAS 2021 Online Seminar Series

Date: Thursday the 25th February 2021

Time: 12 pm AEDT / 9 am AWST / 11:30 am ACDT

Details: <https://utas.zoom.us/j/86276718510>



[1] Fraser HL, Smith DJ, Wittig JE (2017): The scientific careers of Robert Sinclair and Nestor Zaluzec – A brief sketch. *Ultramicroscopy* 176, p2–4.

Improving the XEDS MMF detectability limits in the AEM

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As part of the long term R&D effort at Argonne, we try to develop resources which push the bleeding edge of metrology. Single Silicon Drift Detectors (SDD's) have resulted in a revolution of x-ray spectroscopy, and can be enhanced by combining multiple detectors to increase the total effective solid angle of the system. This concept is not new and there are now multiple systems which are commercially available. Recent work using an array of SDD's in the Analytical Electron Microscope (AEM) at Argonne National Laboratories has allowed us to improve the minimum mass fraction in an AEM by ~10x.