

Future detector technologies for ultimate X-ray spectroscopy applications

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Canberra Specialty Division is an established partner in designing and manufacturing state-of-the-art custom made detection systems for challenging X-ray spectroscopy and imaging applications, with a recognized expertise in multichannel detectors based on monolithic segmentation or discrete arrays reaching ultimate energy resolutions.

Willing to accompany our partners in pushing the limits of the scientific achievements, we shall present current and new technical solutions that will lead to improved detection performance (energy resolution, throughput, peak-to-background). We shall also give our vision on future technologies that will enhance the user-friendliness of radiation detection systems (such as multichannel detectors on electrical cryo-coolers, improved mechanical configurations and footprint, reduced thermal and vibrational impact of the detector on its environment, EMI immunity).