

OPTIMIZATION STRATEGIES FOR BENCHTOP EDXRF SYSTEMS

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In recent years the wider availability of simple and compact thermoelectrically-cooled Si PIN diode detectors has expanded the range of application for low power benchtop EDXRF instrumentation. Despite these advances the use of optimised excitation conditions combined with conventional gas proportional counters and carefully selected secondary beam filters has much to offer for the sensitive and precise determination of the lighter elements.

This paper will describe recent instrumentation advances that seek to optimise these two types of excitation and detection system for a number of key industrial applications.