

ISO 15632:2021-02 (E)

Microbeam analysis - Selected instrumental performance parameters for the specification and checking of energy-dispersive X-ray spectrometers (EDS) for use with a scanning electron microscope (SEM) or an electron probe microanalyser (EPMA)

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Requirements	3
4.1	General description	3
4.2	Energy resolution	4
4.3	Dead time	4
4.4	Peak-to-background ratio	4
4.5	Energy dependence of instrumental detection efficiency	5
5	Check of further performance parameters	5
5.1	General	5
5.2	Stability of the energy scale and resolution	5
5.3	Pile-up effects	5
5.4	Periodical check of spectrometer performance	5
Annex A (normative) Measurement of line widths (FWHMs) to determine the energy resolution of the spectrometer		6
Annex B (normative) Measurement of the L/K ratio as a measure for the energy dependence of the instrumental detection efficiency		11
Bibliography		13