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Microbeam analysis — Electron probe microanalysis — Quantitative point analysis for bulk specimens using wavelength dispersive X-ray spectroscopy

Analyse par microfaisceaux — Microsonde de Castaing — Analyse quantitative ponctuelle d'échantillons massifs par spectrométrie à dispersion de longueur d'onde



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ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

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Contents

	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Abbreviated terms	1
4 Procedure for quantification	2
4.1 General procedure for quantitative microanalysis.....	2
4.1.1 Principle and procedure of quantitative microanalysis.....	2
4.1.2 Coverage of the quantitative analysis.....	2
4.1.3 Selection of reference materials.....	3
4.2 Specimen preparation.....	3
4.3 Calibration of the instrument.....	3
4.3.1 Accelerating voltage.....	3
4.3.2 Probe current.....	3
4.3.3 X-ray spectrometer.....	3
4.3.4 Dead time.....	4
4.4 Analysis conditions.....	4
4.4.1 Accelerating voltage.....	4
4.4.2 Probe current.....	4
4.4.3 Analysis position.....	4
4.4.4 Probe diameter.....	5
4.4.5 Scanning the focused electron beam.....	5
4.4.6 Specimen surface.....	5
4.4.7 Selection of X-ray line.....	5
4.4.8 Spectrometer.....	5
4.4.9 Method for measurement of X-ray peak intensity.....	6
4.4.10 Method for measurement of background intensity.....	6
4.5 Correction method based on analytical models.....	6
4.5.1 Principles.....	6
4.5.2 Correction models.....	7
4.6 Calibration curve method.....	7
4.6.1 Principle.....	7
4.6.2 Selection of reference materials.....	8
4.6.3 Procedure.....	8
4.7 Uncertainty.....	8
5 Test report	8
Annex A (informative) Physical effects and correction	10
Annex B (informative) Outline of various correction techniques	12
Annex C (informative) Measurement of the <i>k</i>-ratios in case of “chemical effects”	14
Bibliography	15

Foreword

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The committee responsible for this document is ISO/TC 202, *Microbeam analysis*, Subcommittee SC 2, *Electron probe microanalysis*.

This second edition cancels and replaces the first edition (ISO 22489:2006), of which it constitutes a minor revision to update the references and to revise text in [4.4.1](#) and [4.4.8](#).

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Introduction

Electron probe microanalysis is widely used for the quantitative analysis of elemental composition in materials. It is a typical instrumental analysis and the electron probe microanalyser has been greatly improved to be user friendly. Obtaining accurate results with this powerful tool requires that it be properly used. In order to obtain reliable data, however, optimum procedures must be followed. These procedures, such as preparation of specimens, measurement of intensities of characteristic X-rays and calculations of concentrations calculated from X-ray intensities, are given for use as standard procedures in this International Standard.