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Nota di contenuto	Determination of Trace Elements; Contents; 1. Systematic errors in trace analysis; 1.1 Introduction; 1.1.1 General aspects of extreme trace analysis; 1.1.2 Direct instrumental determination methods; 1.1.3 Multi-stage procedures; 1.1.4 Further general important statements; 1.2 Systematic errors and their avoidance; 1.2.1 Volatilization; 1.2.2 Adsorption; 1.2.3 Blanks from vessels, vessel materials and working tools; 1.2.4 Blanks from the reagents; 1.2.5 Blanks from airborne dust; 1.2.6 Contamination by sample handling; 1.2.7 Problems due to changes of the valency state 1.3 Systematic errors during the analytical procedure 1.3.1 Sampling, sample storage and Pretreatment; 1.3.2 Decomposition; 1.3.3 Separation; 1.4 Basic rules for the recognition and elimination of systematic errors; 1.5 Conclusion; 2. Limits of detection and accuracy in trace elements analysis; 2.1 Introduction; 2.2 Errors in analytical results; 2.3 Accuracy; 2.4 Measuring trace concentrations; 2.5 The problem of detection; 2.5.1 Random error of blank responses; 2.5.2 Errors of the first kind - the critical level (a posteriori detection) 2.5.3 Errors of the second kind - the limit of detection (a priori

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5. Determination of trace elements by atomic absorption spectrometry

Sommario/riassunto

The best way to determine trace elements! This easy-to-use handbook guides the reader through the maze of all modern analytical operations. Each method is described by an expert in the field. The book highlights the advantages and disadvantages of individual techniques and enables pharmacologists, environmentalists, material scientists, and food industry to select a judicious procedure for their trace element analysis.
