SPECTROCHEMICAL ANALYSIS

Emission Spectrochemical Analysis

by

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Preface

A great deal of effort has gone into this volume in an attempt to cover all aspects relating to the practice of chemical spectral analysis. A systematic treatment is given of the basic principles of sampling and sample preparation and of excitation effects influencing the intensity ratio of the spectral lines; such treatment is also extended to spectrographic, spectrometric and spectroscopic analyses, and to the calculation of the limits of error of the results. We have taken the somewhat unusual step of referring to our previous work in this Preface since relationships of practical importance based on the theory discussed in that book are pointed out. (Analytical Emission Spectroscopy - Fundamentals, Akadémiai Kiadó, Budapest and Butterworth, London, 1973.) Directions are given to help the reader select the most appropriate equipment, aids and instruments. The book is augmented with tables containing the necessary physico-chemical data for spectral analysis, the instructions and descriptions of procedures of qualitative, semiquantitative and quantitative spectrochemical analysis, conversion tables and numerical examples.

Each section ends with references which should enable the reader to find relevant details in the literature — although these reference lists are not claimed to be exhaustive.

The first author wishes to acknowledge his deep indebtedness to his wife for her great help throughout the various phases of completing the book.

The Authors

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