About the Book

Although methods for determination of almost all elements are available in discrete way either in books covering specific ores or in encyclopedias, an exclusive book on methods of analysis for ores and minerals was not available. The present work is a sincere effort to fulfil this vacuum. This book exclusively covers well tested analytical methods for their accuracy and versatility for ores and minerals of most of the elements.

The present book covers methods of analysis of most of the minerals right from alkali metals to zirconium. The methods given in the book are well tested and in practice in various laboratories engaged in analysis of ores and minerals. The book also covers topics on fundamental principles of analytical chemistry, computation of analytical data, error and precision in analytical results, etc. A chapter is dedicated to the management of analysis and safety in laboratory in order to give an idea to chemists that how to proceed for analytical work in a well planned and systematic way with all precautions to be taken for safety. A chemist would understand how the chemical analysis can be performed in the shortest possible time with high accuracy. The principle of management applied for laboratory organization will definitely help the laboratory managers in ensuring smooth and speedy work with quality.

The principle of analysis is discussed in the beginning of each method to understand the theoretical aspects and reactions involved in the course of analysis. This will help the student to understand the theory of analysis and role of each reagent used. For determination of major radicals in the ore, conventional chemical methods of analysis are suggested whereas instrumental methods are suggested for elements present in minute quantity.

The book will be useful for students as well as analytical chemists engaged in the field of analysis of ores and minerals.

Salient Features

- Spread across 38 chapters, the book covers well-tested analytical methods for their accuracy and versatility for almost all the major varieties of ores and minerals, right from alkali metals to zirconium.
- Provides separate chapters on general principles of analysis, statistical treatment of analytical data, and management of laboratory and safety in the laboratory for carrying analytical work.
- Each method gives an outline on the principle of analysis, reagents involved, procedure and calculations.
- Chemical reactions and important notes have been given at appropriate places.

Table of Contents

- Ores, Minerals and Rocks – A Brief Introduction
- General Principles of Analysis
- Statistical Treatment of Analytical Data
- Management of Laboratory and Safety
- The Alkali Metals
- Aluminium Ores
- Antimony Ores
- Arsenic Ores
- Barium Ores
- Beryllium Ores
- Bismuth Ores
- Boron Minerals
- Cadmium Ores
- Calcium and Magnesium Minerals
- Chromium Ores
Cobalt Ores
Copper Ores
Fluorine Minerals
Germanium Ores
Gold Bearing Ores
Iron Ores
Lead Ores
Manganese Ores
Mercury Ores
Molybdenum Ores
Nickel Ores
Phosphorous Minerals
Polymetallic Ores
Selenium and Tellurium Minerals
Silicon and Siliceous Materials
Silver Ores
Sulphur Ores
Tin Ores
Titanium Ores
Tungsten Ores
Zinc Ores
Zirconium Ores
Index

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