

CONTENTS

1. The Effect of Water Structure on the Transport Properties of Electrolytes	1
2. Anions in Aqueous Solution	18
3. Some Effects of Trace Inorganics on the Ice/Water System	27
4. Aluminum Species in Water	98
5. Interaction Between Aluminum and Phosphate in Aqueous Solution	115
6. Mineral-Water Interaction During the Chemical Weathering of Silicates	128
7. Biological Studies of Manganese Solution from Its Dioxide	143
8. Cationic Concentration by Freezing	149
9. New Automated Microanalyses for Total Inorganic Fixed Nitrogen and for Sulfate Ion in Water	164
10. Polarographic Methods in Determination of Trace Inorganics in Water	172
11. Principles and Practice of Atomic Absorption	183
12. Extraction Techniques for the Determination of Cobalt, Nickel, and Lead in Fresh Water by Atomic Absorption	230
13. Water Analysis by Atomic Absorption and Flame Emission Spectroscopy	236
14. Analysis of Industrial Waters by Atomic Absorption	247
15. Evaluation of Laboratory Methods for the Analysis of Inorganics in Water	253
16. The Differentiation, Analysis, and Preservation of Nitrogen and Phosphorus Forms in Natural Waters	265
17. A Thioacetamide-Precipitation Procedure for Determining Trace Elements in Water	281
18. The Strontium and Barium Content of Sea Water	296
19. Neutron Activation Analysis of Lanthanide Elements in Sea Water	308
20. Atomic Fluorescence Flame Spectrometry	326
21. Controls on Mn, Fe, Co, Ni, Cu, and Zn Concentrations in Soils and Water: the Significant Role of Hydrated Mn and Fe Oxides	337
Index	389