

CONTENTS

Preface	v
Chapter 1 Introduction	1
Chapter 2 Review of Fundamental Concepts	4
Chapter 3 The Evaluation of the Reliability of Analytical Data	20
Chapter 4 Chemicals, Apparatus, and Techniques Employed in Analytical Chemistry	58
Chapter 5 Solubility of Precipitates	105
Chapter 6 Gravimetric Analysis	141
Chapter 7 Introduction to Volumetric Analysis: Methods Based upon Precipitate Formation	172
Chapter 8 Acid-Base Equilibrium; Titration Curves	211
Chapter 9 Applications of Neutralization Titrations	257
Chapter 10 Complex-Formation Techniques	280
Chapter 11 Oxidation-Reduction Titrations	301
Chapter 12 Applications of Oxidation-Reduction Titrations	345
Chapter 13 Potentiometric Methods	393
Chapter 14 Additional Electroanalytical Methods	431
Chapter 15 Spectrophotometric Methods of Analysis	467
Chapter 16 Atomic-Absorption and Atomic-Emission Spectroscopy	512
Chapter 17 Analytical Separations	524
Answers to Problems	552
Appendices A-1 Manipulations Involving Exponential Numbers	571
A-2 Logarithms	572
A-3 The Quadratic Equation	574
A-4 Solution of Higher-Order Equations	574
A-5 Simplification of Equations by Neglect of Terms	576
A-6 Some Standard and Formal Electrode Potentials	577
A-7 Solubility Product Constants	580
A-8 Dissociation Constants for Acids	581
A-9 Dissociation Constants for Bases	583
Index	585