## **CONTENTS**

Preface		١
1. Dialys	sis and Ultrafiltration	1.1
1.1	The Membrane	1.1
1.2	Permeability	1.3
1.3	Ultrafiltration	1.3
1.4	Applications	1.4
	Suggestions for Further Reading	1.5
2. Color	imetry and Spectrophotometry	2.1
2.1	Absorption of Light	2.2
2.2	Instrumentation	2.6
2.3	Applications of Colorimeter	2.8
2.4	Spectrophotometry	2.8
2.5	Instrumentation	2.10
2.6	Monochromator	2.11
2.7	Diffraction Grating Monochromators	2.11
2.8	Sample Chamber	2.12
2.9	Specialized Types of Spectrophotometers	2.13
2.10	Applications	2.14
	Suggestions for Further Reading	2.18
3. Chron	matographic Techniques	3.1
	Classification of Chromatographic Techniques	3.3
3.1	Paper Chromatography	3.4
3.2	Thin Layer Chromatography	3.12

## Contents

	3.3	Gel Filtration Chromatography	3.22
	3.4	Ion-exchange Chromatorgaphy	3.32
	3.5	Affinity Chromatography	3.46
	3.6	Gas Chromatography	3.56
	3.7	High Performance Liquid Chromatography (HPLC)	3.68
		Suggestions for Further Reading	3.85
4. 1	Electr	rophoresis	4.1
	4.1	General Principles	4.1
	4.2	Factors Affecting Electrophoresis	4.5
	4.3	The Supporting Medium	4.7
	4.4	Types of Electrophoresis	4.9
	4.5	Apparatus and Methods	4.15
	4.6	Applications of Gel Electrophoresis	4.34
		Suggestions for Further Reading	4.36
5. (	Centr	ifugation Techniques	5.1
	5.1	Basic Theory of Sedimentation	5.2
	5.2	Basic Components of a Centrifuge	5.3
	5.3	Separation Methods in Preparative Ultracentrifuges	5.14
	5.4	Applications	5.20
		Suggestions for Further Reading	5.21
<b>6.</b> l	Radio	isotope Technique	6.1
	6.1	Why use Radioisotopes in Research	6.1
	6.2	What are Radioisotopes	6.1
	6.3	What kind of Radioisotopes are there	6.2
	6.4	Where to Obtain Radioisotopes	6.2
	6.5	What are the differences between	
		Beta- and Gamma-emitters	6.2
	6.6	What is Radioactive Decay	6.3
	6.7	What are the Isotopes most often Encountered	6.3
	6.8	What is Half-life Mean and why is it Important	6.3
	6.9	Interactions of Radiation with Matter	6.9
		Measurement of Radioactivity	6.12
	6.11	Clinical Applications	6.32
		Suggestions for Further Reading	6.33
Index			I.1