

CONTENTS

1. ELECTRONICS: PASSIVE ELEMENTS AND BASIC ELECTRICAL MEASUREMENTS	1
2. ELECTRONICS: VACUUM TUBES, SEMICONDUCTORS, AND ASSOCIATED CIRCUITS	15
3. ULTRAVIOLET AND VISIBLE ABSORPTION INSTRUMENTATION	32
4. ULTRAVIOLET AND VISIBLE ABSORPTION METHODS	74
5. THE ABSORPTION OF INFRARED RADIATION	120
6. NUCLEAR MAGNETIC RESONANCE SPECTROSCOPY	160
7. ELECTRON SPIN RESONANCE SPECTROSCOPY	189
8. X-RAY METHODS	198
9. RADIOCHEMICAL METHODS	239
10. EMISSION SPECTROSCOPY	280
11. FLAME PHOTOMETRY	309
12. RAMAN SPECTROSCOPY	357
13. FLUORESCENCE AND PHOSHOESCENT SCIENCE METHODS	370
14. REFRACTOMETRY AND INTERFEROMETRY	396
15. POLARIMETRY	412
16. MASS SPECTROMETRY	428
17. THERMOANALYTICAL METHODS	457
18. METHODS FOR THE ANALYSIS OF GASES	478
19. GAS CHROMATOGRAPHY	494
20. INTRODUCTION TO ELECTROMETRIC METHODS OF ANALYSIS	531
21. POTENTIOMETRIC METHODS	542
22. THE MEASUREMENT OF pH	582
23. SEPARATIONS BY ELECTROLYSIS	614
24. COULOMETRIC METHODS	650
25. POLAROGRAPHY	672
26. AMPEROMETRIC TITRATION METHODS	703
27. CONDUCTANCE METHODS	713
28. PROCESS INSTRUMENTS AND AUTOMATIC ANALYSIS	746