

CONTENTS

1. INTRODUCTION	1
2. THE EMISSION OF SPECTRAL LINES	6
3. THE PHOTOGRAPHIC PLATE AND ITS MEASUREMENT	11
4. FLAME EMISSION METHODS	35
5. ARC METHODS OF SPECTROGRAPHIC ANALYSIS I. THE NORMAL DIRECT CURRENT ARC	53
6. ARC METHODS OF SPECTROGRAPHIC ANALYSIS II. THE CATHODE LAYER ARC	77
7. ARC METHODS OF SPECTROGRAPHIC ANALYSIS III. INTERRUPTED AND ALTERNATING CURRENT ARCS	94
8. SPARK METHODS OF SPECTROGRAPHIC ANALYSIS	101
9. DIRECT PHOTOMETRY	104
10. NOTES ON THE DETERMINATION OF INDIVIDUAL ELEMENTS	108
11. PREPARATION OF SOILS, PLANTS AND OTHER MATERIALS	118
12. THE APPLICATION OF SPECTROGRAPHIC METHODS TO THE ANALYSIS OF SOILS, PLANTS, FERTILIZERS AND OTHER BIOLOGICAL MATERIALS	130