



## CONTENTS

Acknowledgment of Support .....	v
Preface .....	vii
<i>Part I. Historical Aspects</i> .....	1
<i>Part II. Emission Spectra from the Inductively Coupled Plasma — Wavelength Scans and Prominent Lines</i> .....	2
A. Introduction .....	2
B. Apparatus and Procedures .....	2
C. Interpretation of Wavelength Scans .....	4
Reference blank scans .....	5
Analyte scans .....	5
D. Interpretation of Prominent Lines .....	7
<i>Part III. Spectral Coincidence Profiles of Selected Prominent Lines and Potential Interferents</i> .....	7
A. Introduction .....	7
B. Apparatus and Procedures .....	8
Sample solutions .....	10
Selection of analytical lines .....	10
Experimental procedures .....	11
Wavelength accuracy and reproducibility .....	12
Wavelengths .....	12
Impurities and memory effects .....	13
Second order spectra .....	13
C. Interpretation of Coincidence Profiles .....	13
Direct overlap, wing overlap, and line broadening interferences .....	14
Stray light .....	14
Recombination continua .....	14
Molecular bands .....	15
Unidentified and unlisted lines .....	15
Application of coincidence profile information .....	23
<i>References</i> .....	24
<i>Appendix A. Wavelength Scans</i> .....	26
<i>Appendix B. Prominent Lines Emitted by the Inductively Coupled Plasma</i> .....	260
B-1. Alphabetical Listing by Element .....	262
B-2. Serial Listing by Wavelength .....	287
<i>Appendix C. Spectral Coincidence Profiles</i> .....	309