

THE CONCISE HANDBOOK OF ANALYTICAL SPECTROSCOPY

Theory, Applications, and Reference Materials

Volume

5

Raman Spectroscopy

Jerry Workman

Unity Scientific, USA and National University, USA

 **World Scientific**

NEW JERSEY • LONDON • SINGAPORE • BEIJING • SHANGHAI • HONG KONG • TAIPEI • CHENNAI • TOKYO

Contents

<i>Preface</i>	v
<i>Author Biography</i>	ix
<i>References and Tables</i>	xiii
Chapter 1. Introduction to Raman Spectroscopy	1
Chapter 2. Theory of Raman Spectroscopy, Light Interaction with Matter	51
Chapter 3. Raman Instrumentation	69
Chapter 4. Sampling Considerations for Raman Spectroscopy	99
Chapter 5. Data Acquisition for Raman Spectra	119
Chapter 6. Raman Data Analysis and Presentation	125
Chapter 7. Applications and Spectral Examples for Raman Spectroscopy	173
Chapter 8. Raman Reference Material Spectra and Tables	229
Chapter 9. Glossary of Raman Spectroscopy Terms	251
<i>Volume 5 Index</i>	257
<i>Master Index</i>	265