

CONTENTS

Chapter 1 An Introduction to Optical Rotatory Dispersion and Circular Dichroism in Organic Chemistry	1
Chapter 2 The Role of Optical Rotatory Dispersion and Circular Dichroism in Organic Chemistry. Origin, Origin, Present Development and Future Prospects	16
Chapter 3 Theory I	41
Chapter 4 Theory II	71
Chapter 5 Instrumentation	85
Chapter 6 Inorganic I	101
Chapter 7 Inorganic II	116
Chapter 8 Comparison between the Optical Rotatory Dispersion and Circular Dichroism Techniques	126
Chapter 9 Saturated Carbonyl Compounds	139
Chapter 10 Absolute Configuration and Optical Rotatory Dispersion of Conjugated and Homoconjugated Systems	153
Chapter 11 Optical Rotatory Dispersion and Circular Dichroism of Chromophoric Derivatives of Transparent Compounds	173
Chapter 12 Carboxylic Acids, Lactones, and Related Compounds	193
Chapter 13 α,β - and β,γ -Unsaturated Ketones	208
Chapter 14 Optical Rotatory Dispersion of Polypeptides and Proteins	224
Chapter 15 Comparison of Optical Rotatory Dispersion and Circular Dichroism with other modern Physical Methods	301
Chapter 16 Solvent Effects on Circular Dichroism in Rigid Ketones	314
Chapter 17 Some Effects of Solvation Upon Optically Active Molecules	329
Chapter 18 Temperature Dependent Circular Dichroism	335
Chapter 19 Optical Rotatory Dispersion of Synthetic Polymers	341
Chapter 20 Chlorins, Lactones, and Lactams	355
Chapter 21 Episulphides and other Sulphur-containing Chromophores	366
Chapter 22 Optical Activity induced by a Magnetic Field	389
Chapter 23 Applications from the Steroid and Polyterpenoid Field	401
Index	411