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""2.2.4. In Framework of the Above Theoretical Considerations There is a Very Important Question Regarding the Role of the Secondary Structure of Nucleic Acids in an Appearance of Intense Bands in the CD Spectra """"2.3. The CD Spectra of the CLCD Formed by ds DNA Molecules First Treated with Compounds Carrying Positively Charged Groups ""; ""2.3.1. The CD Spectra of the CLCD Formed by ds DNA Molecules First Treated with Colored Cationic Intercalator ""; ""2.3.2. The CD Spectra of the CLCD Formed by Ds DNA Molecules First Treated with Polycation ""

""PART 3. THE CD SPECTRA AT a€?LIQUID-RIGIDA€? STRUCTURAL TRANSITION IN THE PARTICLES OF THE DOUBLE-STRANDED DNA CLCD

""""3.1. The CD Spectra of the a€?Rigida€? CLCDs Containing Nanobridges between Neighboring Double-Stranded DNA Molecules ""; ""3.2. The CD Spectra of the a€?Rigida€? CLCDs Formed by (DNA-Gadolinium) Complexes ""; ""CONCLUSION ""; ""ACKNOWLEDGMENT ""; ""REFERENCES ""; ""VIBRATIONAL CIRCULAR DICHROISM STUDIES OF BIOLOGICAL MACROMOLECULES AND THEIR COMPLEXES ""; ""ABSTRACT ""; ""1. INTRODUCTION ""; ""2. ORIGIN OF VIBRATIONAL SPECTRA ""

""3. THEORETICAL BACKGROUND OF VCD SPECTROSCOPY ""

Sommario/riassunto

Circular dichroism (CD) refers to the differential absorption of left and right circularly polarised light. This phenomenon is exhibited in the absorption bands of optically active chiral molecules. CD spectroscopy has a wide range of applications in many different fields. Most notably, UV CD is used to investigate the secondary structure of proteins. This book presents current research in the study of circular dichroism, including a study of the peculiarities of the circular dichroism spectra of double-stranded DNA cholesteric liquid-crystalline dispersions; magnetic circular dichroism in electron microscopy; and, the application of CD spectroscopy for short peptides such as the human immunodeficiency virus type 1 (HIV-1) inhibitor.
