

## circular dichroism (CD)

A spectroscopic method which measures the difference in absorbance of left- and right-handed circularly polarised light by a material, as a function of the wavelength. Most biological molecules, including proteins and nucleic acids, are chiral and show circular dichroism in their ultraviolet absorption bands, which may be used as an indication of secondary structure. Metal centres that are bound to such molecules, even if they have no inherent chirality, usually exhibit CD in absorption bands associated with ligand-based or ligand-metal charge-transfer transitions. CD is frequently used in combination with absorption and *MCD* studies to assign electronic transitions.

**Source:**

PAC, 1997, 69, 1251 (*Glossary of terms used in bioinorganic chemistry (IUPAC Recommendations 1997)*) on page 1265