

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.

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