TRIPLE RESONANCE FOR A THREE-LEVEL SYSTEM OF A CHIRAL MOLECULE

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A new spectroscopic method of triple resonance is proposed for studying chirality of a molecule of C_1 symmetry. Each enantiomer of such a molecule is of mixed parity and thus exhibits all three a-, b-, and c-types of rotational spectra. The present study concludes, by using time-dependent perturbation theory, that the transition probability between two of the three rotational levels under triple resonance differs for different enantiomer. This result can thus be of some significance for enantiomer differentiation.