

singlet–triplet crossing

Point of intersection between the potential energy surfaces of states of different multiplicity.

Note:

The intersection belongs to a $(3N - 7)$ -dimensional subspace of the $(3N - 6)$ -dimensional nuclear coordinate space and therefore appears as a line on a two-dimensional energy surface (N is the number of nuclei). In this case the branching plane is one-dimensional and is defined by the gradient difference vector x_1 .

Source:

PAC, 2007, 79, 293 (*Glossary of terms used in photochemistry, 3rd edition (IUPAC Recommendations 2006)*) on page 421