

minimum-energy reaction path

Acronym: MERP

Path orthogonal to the equipotential contours of a potential energy surface that connects the energy minima through a saddle point (transition state) from which it slopes downwards along the steepest descending lines in $3N - 6$ configurational space (N is the number of nuclei in the reacting system).

Note:

MERP calculation allows the investigation of detailed changes in molecular structure describing the transformation of reactants to products.

Source:

PAC, 2007, 79, 293 (*Glossary of terms used in photochemistry, 3rd edition (IUPAC Recommendations 2006)*) on page 370