

multi-centre reaction [obsolete]

A synonym for pericyclic reaction. The number of 'centres' is the number of atoms not bonded initially, between which single bonds are breaking or new bonds are formed in the transition state. This number does not necessarily correspond to the ring size of the transition state for the pericyclic reaction. Thus, a Diels–Alder reaction is a 'four-centre reaction'. This terminology has largely been superseded by the more detailed one developed for the various pericyclic reactions.

See: cycloaddition, sigmatropic rearrangement

Source:

PAC, 1994, 66, 1077 (*Glossary of terms used in physical organic chemistry (IUPAC Recommendations 1994)*) on page 1144