doi:10.1351/goldbook.O04351

# outer-sphere electron transfer

An outer-sphere electron transfer is a reaction in which the electron transfer takes place with no or very weak (4 - 16 kJ $mol^{-1}$) electronic interaction between the reactants in the transition state. If instead the donor and the acceptor exhibit a strong electronic coupling, the reaction is described as inner-sphere electron transfer. The two terms derive from studies concerning metal complexes and it has been suggested that for organic reactions the term 'nonbonded' and 'bonded' electron transfer should be used.
***See also:*** inner-sphere electron transfer

***Source:***
PAC, 1994, *66*, 1077 *(Glossary of terms used in physical organic chemistry (IUPAC Recommendations 1994))* on page 1148
PAC, 1996, *68*, 2223 *(Glossary of terms used in photochemistry (IUPAC Recommendations 1996))* on page 2257

 