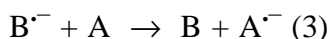
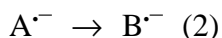
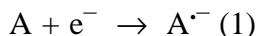


electron-transfer catalysis

The term indicates a sequence of reactions such as shown in equations (1)–(3), leading from A to B:



An analogous sequence involving radical cations ($A^{\cdot+}$, $B^{\cdot+}$) is also observed.

The most notable example of electron-transfer catalysis is the $S_{RN}1$ (or $T + D_N + A_N$) reaction of aromatic halides.

The term has its origin in a suggested analogy to acid-base catalysis, with the electron instead of the proton. However, there is a difference between the two catalytic mechanisms, since the electron is not a true catalyst, but rather behaves as the initiator of a *chain reaction*. ‘Electron-transfer induced chain reaction’ is a more appropriate term for the situation described by equations (1)–(3).

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