radical pair (geminate pair)

The term is used to identify two *radicals* in close proximity in solution, within a solvent *cage*. They may be formed simultaneously by some *unimolecular* process, e.g. peroxide decomposition, or they may have come together by diffusion. While the radicals are together, correlation of the unpaired electron spins of the two species cannot be ignored: this correlation is responsible for the *CIDNP* phenomenon. A radical pair is called geminate provided that each radical partner is a descendant of the same parental pair.

See also *geminate recombination.*

1994, *66*, 1156; 1995, *67*, 1363; 1996, *68*, 2270