energy transfer

in photochemistry

From a phenomenological point of view, the term is used to describe the process by which a molecular entity absorbs light and a phenomenon originates from the excited state of another molecular entity. In mechanistic photochemistry the term has been reserved for the photophysical process in which an excited state of one molecular entity (the donor) is deactivated to a lower-lying state by transferring energy to a second molecular entity (the acceptor) which is thereby raised to a higher energy state. The excitation may be electronic, vibrational, rotational or translational. The donor and acceptor may be two parts of the same molecular entity, in which case the process is called intramolecular energy transfer.

See also: Dexter excitation transfer, Förster excitation transfer, radiative energy transfer, spectral overlap

Source:

PAC, 1996, 68, 2223 (Glossary of terms used in photochemistry (IUPAC Recommendations 1996)) on page 2240