

quenching

Also contains definitions of: dynamic quenching, static quenching

Deactivation of an excited molecular entity intermolecularly by an external environmental influence (such as a quencher) or intramolecularly by a substituent through a non-radiative process.

Notes:

1. When the external environmental influence (quencher) interferes with the behaviour of the excited state after its formation, the process is referred to as dynamic quenching. Common mechanisms include energy transfer, electron transfer, etc.
2. When the environmental influence inhibits the excited state formation the process is referred to as static quenching.

Source:

PAC, 2007, 79, 293 (*Glossary of terms used in photochemistry, 3rd edition (IUPAC Recommendations 2006)*) on page 407