

global analysis

Method for kinetic analysis of time-resolved emission or absorption data.

Note:

Typical for the analysis of emission (or transient absorption) data. Upon excitation with a particular wavelength, radiant intensity of the emission (or transient absorbance difference) decays are observed as a function of a variable parameter, e.g., the observation wavelength, but otherwise under the same condition. All decays are then analysed together (globally) under the constraint that the lifetimes of the transient species do not vary with the variable parameter, e.g., the observation wavelength in the given example. Lifetime-associated spectra (LAS), also called decay-associated spectra (DAS), are thus obtained. In the case of transient absorption data, the resulting spectra are often called lifetime-associated difference spectra (LADS).

Source:

PAC, 2007, 79, 293 (*Glossary of terms used in photochemistry, 3rd edition (IUPAC Recommendations 2006)*) on page 349