

L1. Principal component analysis in photochemistry

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The method of singular decomposition is one of the most effective way for treatment a spectrophotometric data, which very often use in photochemical experiment. In the present lecture an application of this method is shown by some examples. One of them concerns with the identification of the rotational isomers of flexible organic molecules from fluorescence and absorption spectra. In the others examples the potentialities of this method is illustrated on an investigation of different photochemical processes. From it follows that the method of singular decomposition makes possible revealing very fine details of kinetics and mechanism of photochemical reactions.