

Dissociative state of polymethine dyes

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Relaxation of molecules can occur not only through the direct transitions to S1 and T1 state, but also through such channels. Polymethine dyes and its derivatives are attractive for their interesting optical and photoelectric properties. They are used as very efficient spectral sensitizers and laser dyes.

It is already known that highly excited molecular states take an active participation in photoprocesses despite the fact that the relaxation of nonequilibrium excitation is predominantly nonequilibrium. Relaxation molecules can occur not only through direct referrals for S1 and T1 states, but also channels, such photogeneration of nonequilibrium carriers (electron transfer between the matrix and molecule) and dissociation of VZMS. Thus VZMS are achieved not only by direct excitation

A legitimate interest to further search for new light-sensitive materials, and study of their physical and chemical characteristics for understanding mechanisms of reactions in the matter in which it interacts with light and uses them for substances photographs raises. One of such environments are some dyes having a volatile bond between atoms belonging to the dye molecule. Such connection leads to the fact that the interaction of the dye with light causes destruction and changing the shape of the substance. Investigation of the processes of photo bleaching of certain dyes showed well enough that they can be used as a medium for recording information. As shown by recent studies, particular interest is given to practical applications of one-dimensional functional nanomaterials based on organic molecules. Separate place among a wide range of organic materials is occupied by supramolecular structures known as polymethine dyes.

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