**On the optical image formation in the massively self-induced Chrisophenine molecules aggregations**

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D:\fotoebi\ob.40.cdebi, naj\130712124645.tifIn our previous work were studied the aspects of optical image formation in gelatin films in the presence of Chrisophenine and Acridine dye molecules associates.

It was shown that by mixing the saturated water solutions consisting of Chrisophenine and Acridine Yellow and Chrisophenine and Acridine Orange, by weight ratio of 1:1 in gelatin films, the massive self-induced luminescence particles with polarization sensitivity were obtained. Therefore, the particles were induced during film preparation and drying [1-3].

In this work, when only Chrisophenine saturated water solution is used, we obtained completely similar results like those which have been demonstrated in case of 2-component water solution presented in [1-3].

Here are presented the microstructure of such a film, observable in the crossed polarizers and the scheme-picture of optical image formation in the film. Herewith, it is shown that the film opens the crossed polarizers by rotating it in any positions. By irradiating with the active non-polarized light, the film is darkened in the crossed polarizers. By secondary irradiating the darkened area with active light, but linearly polarized in this case, the anisotropy photoinduction in the form of “grains” takes place in the film.

Here the anisotropic grains concentration is a function of light exposition.

The presented picture is a snapshot taken in the crossed polarizers. Difference between the particles located in the central part and on the outer ring is that particles in the center have the same oriented optical axes.

The obtained results are actual for practical applications of this phenomenon in display and other information technologies.

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