THE COMPARISON OF THE PHOTOINITIATING EFFICEINCY OF DYEING PHOTOINITIATING SYSTEMS ACTING VIA PHOTOREDUCIBLE AND PARALLEL SERIES MECHANISM

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ABSTRACT *Due to the continuous searching for the highly efficient photoinitiating systems in modern technology and high speed imaging process, in the production of coloured polymer coatings acting in a Vis-NIR range there are many studies on the application of new sensitizers and co-initiators and optimization of the chemical structure of dyeing photoinitiating systems towards an increasing of the rate of free radical polymerization. The paper presents a comparison of the effectiveness of two- and three-component dyeing photoinitiating systems for free radical polymerization of acrylates. In such systems the initiating radicals are formed as a result of photoinduced electron transfer process.*

Keywords: *photoinitiator, free radical polymerization, mechanism*