2. UV PHOTOPROTECTIVE SCREENS FOR OBJECTS BELONGING TO CULTURAL HERITAGE

Narcisa Vrinceanu*, Aurelia Grigoriu*, Sorin Ciovica*, Doina Mihai**, George Ervant Grigoriu**

 * ''Gh. Asachi'' Technical University, Bd. D. Mangeron, nr. 71A, 700050, Iasi, Romania
** The Romanian Academy - ''Petru Poni'' Institute of Macromolecular Chemistry, Aleea Grigore Ghica Voda, nr. 41A, 700487, Iasi, Romania

Abstract

Protective screens made of cellophane coated with thin films of poly(vinylcinnamate) and (vinylalcohol–vinylbenzoate–vinylcinnamate) copolymer (43:7:50), are used for UV protection of C.I. Direct Blue 71 dye.

The UV protection level has been followed by color difference measurement and IR, UV-VIS Spectroscopy.

The photocycloaddition level of polymer is evaluated from FT-IR and UV spectra.

Due to the strong UV absorption, the analyzed cinnamic polymers are able to provide photoprotection of artifacts.