Preparation and modification of nanolayered polymer materials for preservation and restoration

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Abstract

The main aim of this work is to get and modify nanofiber materials for utilization in the process of preservation of cultural heritage objects. The topic deals with nanofiber materials made from polymeric substances (polyamide, polyethylene, polyethersulfone, polystyrene), their UV stabilization using light stabilizers and plasmochemical modification by organosilicon compounds (siloxane) for gaining greater ultrahydrophobicity. Other characteristics of nanofiber materials (accelerated ageing, IR spectra, high-performance liquid chromatography) were determined using physico-chemical methods.

Reference:

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