ELECTRONIC SPECTRA OF DYES MOLECULES ADSORBED ON SURFACE OF SILICA MODIFIED BY DENSE GRAFTING OF FLUORINATED HYDROCARBONS

V. N. BEGER, *St-Petersburg State Institute of Fine Mechanics and Optics, St-Petersburg, 197101, Russia*;
A. YU. FADEEV, G. V. LISICHKIN, *Moscow State University, 119899, Russia*.

Absorption spectra and fluorescence spectra of various dyes molecules have been studied for the case of adsorption on silica surface modified by preliminary grafting of fluorinated hydrocarbons. Comparison of obtained spectra of adsorbed dyes with the spectra of the same dyes molecules on nonmodified silica surface as well as on silica surface modified by grafting of hydrocarbons groups without atoms of fluor has been made. Diverse factors connected with discovered differences of these spectra are discussed. Influence of the density of grafting (degree of surface modification) and methods of deposition of dyes molecules on electronic spectra of adsorbed dyes are considered.