

ABSTRACT

Charles University in Prague, Faculty of Pharmacy in Hradec Králové

Department of Biophysics and Physical Chemistry

Candidate Mgr. Petra Belatková

Consultant Ing. Vladimír Kubíček, CSc.

Title of Thesis Study of interactions between phenol red and cationic tensides with using spectral methods I

This diploma thesis deals with study of interactions between organic dye phenol red and tensides cetyltrimethylammoniumbromide, benzethoniumchloride, cetylpyridiniumchloride and carbethopendeciniumbromide with using fluorimetry with polarized light. In addition, in the case of the last two surfactants the interactions were studied by using extraction photometry, UV–VIS spectrofotometry and classic spectrofluorimetry. The obtained results show that premicellar aggregates, containing both the dye and the tenside species, are formed in the studied solutions due to the significant mutual interaction of both species.