

# SPECTROPHOTOMETRIC DETERMINATION OF BIOLOGICALLY ACTIVE SUBSTANCES AMONG THE DERIVATIVES O-HALOGEN NITROBENZOIC ACIDS

Danylich K.

Scientific supervisor: Associate Professor Bryzytsky O. A.

National University of Pharmacy, Kharkiv, Ukraine

alexchemis@rambler.ru

**Introduction.** Among the aromatic acids important are replaced nitrobenzoic acids and their derivatives, interest that is due to high chemical activity that allows them to synthesize a number of structures. Based nitro-, bromo-, chloro-, 3-oxamoyil (suktsynoyil) - and 3- or 5-sulfamoyil substituted o-halogen benzoic acids synthesized and studied the biological activity of the following compounds: D - (+) - glucosylammonium salt; D - (+) - glucosamine; methyl esters; alkyl, aryl and heterylamides; hydrazides and their derivatives - R-edenhydrazides, arensulfohydrazides,  $\beta$ -N-atsylhydrazides,  $\beta$ -N- (o-tolylsuktsynamido) hydrazides; hydrazides, R-idenhydrazides 3-carboxy-2-chloroksanile and 3-carboxy-2-chlorsuktsynanile acids and their campaign, they, benzoyl peroxide and perbenzoic acid with chloro-, bromo-, sulfamoyil- and nitrosubstitutes at benzene ring.

**Aim.** The results of our research was discovered the possibility of using azo dyes derived imidazole for simultaneous extraction separation and spectrophotometric determination of o-halogen derivatives nitrobenzoic acids.

**Materials and methods.** The method of formation of derivatives assigned o-nitrobenzoic acids with halogen compounds such as azo dyes ionic associates that are able to be removed with chloroform. Important factors that affect the conditions of formation of associates, the difference in chemical properties of o-halogen nitrobenzoic acids and azo dyes.

**Results and discussion.** The dominant factor in the formation of ion associates in the aqueous phase is to create conditions for dominance anion nitrobenzoic acid derivative (A-) and azo dye cations (K +). Since azo dyes can exhibit properties amfolites and halogen derivatives of o-nitrobenzoic acids are weak organic acids is an important factor that affects the mechanism of extraction separation and spectrophotometric determination is to create an appropriate pH environment. An equally important factor is the selection of reagent concentrations of reagents and kinetic factors reaction.

**Conclusions.** Was studying the dependence extraction capacity of the location of substituents in the benzene ring, which allows extraction separation and spectrophotometric determination of orthohalogen derivatives nitrobenzoic acid in mixtures.