molecule, whereas the torus interior possesses a hydrophobic character. Cyclodextrins have found their use as receptors that include hydrophobic organic molecules of pesticides.

The main goal of our research was to study the rise of 1,4-dichlorobenzene solubility in the presence of α-cyclodextrin in water. 1,4-dichlorobenzene is used as a fungicide and a deodorant, most familiarly in mothballs in which it is a replacement for the more traditional napthalene because of its flammability.

For the determination of concentration of examined compounds we used UV-VIS spectrophotometer Specord 50. Our results confirm the effect of α-cyclodextrin on the solubility increase of 1,4-dichlorobenzene in water.

SPECTROSCOPIC STUDY OF THE INTERACTION BETWEEN CUCURBITURIL AND SELECTED DRUG IN AQUEOUS SOLUTION

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Cucurbiturils (CB) are macrocyclic compounds made of glycoluril (=$C_4H_2N_4O_2$=) monomers linked by methylene bridges (-CH_2-). The name of these macrocycles is derived from the latin word Cucurbitaceae meaning a family of pumpkin-like plants. These oligomers can find their use as carriers of toxic cationic drugs for biomedical applications.

Procainamide hydrochloride is an antiarrhythmic medicament used for the treatment of cardiac arrhythmias. The usage of it is however limited because of many side effects, like bradycardia, hypotension and shock.

The cavities and portals of cucurbituril macrocycles can bind cationic ligand which might be used to reduce side effects of transported drug. Curbiturils are non-toxic and well tolerated by organism.

The aim of our study was to assess the interactions between cucurbit[7]uril and procainamide hydrochloride molecules in aqueous solution at room temperature. UV spectroscopic results (Specord50, Analytic Jena) show that investigated drug molecules are combined by cucurbit[7]uril. The stoichiometry of pracainamide–cucurbit[7]uril supramolecular complex was estimated.