The aim of the bachelor thesis was to determinate distribution coefficients of 1H,1H,2H,2H-Perfluoro-1-octanol and 1H,1H,2H,2H-Perfluoro-1-decanol in 1-octanol/water system. Method used for measurement was the shake flask method. Measured substance is distributed between two immiscible liquids after intensive shaking. Concentration in both phases was measured after equilibration with Gas Chromatography – Mass Spectrometry.

Knowledge of distribution coefficients helps to estimate toxic potential of substance. Logarithm of distribution coefficient of measured substances was about 3,5. It means, that measured substances are lipophilic. It is associated with their high bioaccumulation potential. They accumulate in organism and their excretion is very difficult. They also accumulate in abiotic environment. So they have negative effects on it and their production is reduced.