

## **Abstract**

In this submitted thesis the possibility of creating a new laboratory task for advanced practical courses in biochemistry, concerning the binding of a low-molecular compound (dye) to a protein macromolecule, was experimentally verified.

First intention was to modify the existing task "Dialysis kinetics" with a binding of fluorescein to a protein. However, the experiments have proved, that fluorescence measurements of this kind are not reproducible in the conditions of practical courses laboratory and absorbance measurements have low sensitivity.

Therefor a whole new task was created: "Binding of bromophenol blue to serum albumin", in which the stoichiometry of this binding is studied using so-called Job plot. After the optimization of procedure a laboratory task instructions were created, which are attached to this thesis.

**Keywords:** fluorescein, bromophenol blue, serum albumin