Charles University in Prague  
Faculty of Pharmacy in Hradec Králové  
Department of Biological and Medical Sciences

*Study Field*: zbioanalytical chemistry

*Candidate*: Klára Pospíšilová

*Thesis Supervisor*: PharmDr. P. Jílek, PharmDr.

*Consultant*: RNDr. P. Řezáčová, MD., Ph.D., Institute of Organic Chemistry and Biochemistry, Academy of Sciences of the Czech Republic

*Thesis Title*: Study of some markers of human leukemia

**Abstract:**

Immunophenotyping of leukemia cells is an important part of leukemia diagnosis. Immunophenotype is determined by flow cytometry using monoclonal antibodies against antigens expressed by these cells. Antigen CD44 is one of many CD markers used in immunophenotyping of leukemias. Protein crystallography of a complex between CD44 antigen and its ligand, hyaluronate, bring more detailed information about the structure of the binding site, which may help develop strategies for influencing the binding and thus for potential therapeutic intervention.