

## ABSTRACT

Bachelor thesis in its theoretical part is focused on the literature study of changes in concentrations of organic carbon in surface waters. The important part is finding the causes and consequences of these changes that could have a big impact on the entire global ecosystems. Uniform mechanisms controlling the process of increasing the concentration of organic carbon is not clearly defined yet, and therefore in the prediction of future consequences there exist disagreements. The practical part is devoted to research in experimental basins of the Department of Physical Geography and Geoecology (KFGG) of Faculty of Science, Charles University in Prague in the Otava river basin (central part of Šumava and upper basin of Blanice). The research was based on field survey of the area, water sampling and measurements of basic physical-chemical parameters. Samples of water, taken in several campaigns, were then analyzed in laboratory for determination of organic carbon in each sampling profiles. Simultaneously the preparation and processing of other data of KFGG from experimental basins took a place, focusing especially on rainfall-runoff process. This data has been linked to the measured values of organic carbon. Research results show a strong dependence of organic carbon concentration on precipitations and discharge rates.

Key words: organic carbon, rainfall, run-off, change