

Abstract

This bachelor's thesis deals with the issue of chlorophenols in waters. The theoretical part summarises the information about their characteristics, toxicity, sources and appearance in the environment. Further, there is described the fate of chlorophenols - bioaccumulation, transformation and ways of degradation in the environment. The emphasis is placed on methods for determination of these compounds in water samples, especially by the HPLC method with previous concentration by solid-phase extraction.

The experimental part deals with separation of certain isomers by high performance liquid chromatography in reverse mode. In this bachelor's thesis, limits of detection of these isomers under optimized conditions of analysis were determined. Found conditions were applied to the analysis of a water sample taken in Ústí nad Labem.