Abstract

This thesis deals with removal of pharmaceuticals and personal care products by constructed wetlands (CWs) and compares its efficiency with removal efficiency of mechanical-biological conventional wastewater treatment plants (WWTP). In the first part the structure of WWTP is described, followed by the structure of CW. Special attention is also paid to the types of CWs, basic principles of function, physical-chemical parameters and vegetation. Below in literature review based on recent works is introduced characterization of selected pharmaceuticals with possible risks. The final section is focused on comparison of case studies from different countries in the world, oriented to the removal of organic polutants, especially PPCPs, from wastewater using various mechanisms including the use of constructed wetlands.

Key words: PPCPs, constructed wetland, wastewater treatment plant, wastewater