Resumo

Adsorção de poluentes orgânicos em carvões activados e

materiais mesoporosos ordenados

Over the last decades the literature has shown the possibility of producing activated carbons (AC) from a wide variety of raw materials and to use them as one of the most environment-friendly solutions for waste disposal. Additionally it has been shown that the adsorption of pollutants from different media by AC is one of the most efficient techniques for remediating or solving this type of problem [1]. In this context, the presence of pesticides in water can cause serious problems in the environment and to human health; their removal from wastewaters is a crucial concern. The work presented here focuses these two problematic areas (solid waste reduction and wastewater treatment). The main idea was to develop low cost and efficiently adsorbent materials for hazardous compounds removal from aquatic media, to level admitted in drinking water [2]. In this perspective, we present a study involving the production of AC, by chemical activation with KOH, from wastes PET (PET-2-700), the optimisation of the post modification treatment with urea (PET-2-700Ux) and their applicability for the adsorption of 4-chloro-2-methylphenoxyacetic acid (MCPA).