Abstract Paper 5

To synthesize drugs is the objective to save humanity from diseases and epidemics. On the other hand, we must find a way to get rid of it without harming nature and life on earth. In this work we are interested in the issue of drug releases in hospital waters, where there are a lot of drugs used et encore les different microoganismes. Hospital wastewater (HWW ) contains pathogenic agents and hazardous compounds; so, it will cause many risks on environmental and human health of different communities. Conventional water treatment technologies are not very effective for reducing the concentration of these pollutants to a desirable level. The aim of this work was to evaluate the efficiency of two technologies in reducing the pollutant concentration of two wastewater samples. Therefore, inclusion complex with native β-cyclodextrin (β-CD) were studied and their elimination capacities from water were evaluated. An emerging photodegradation process using UV lamp 365nm was also evaluated. For both technologies, we observed a decrease in the total Ketoprofenid Drug (KD) content due either to the inclusion and precipitation of KD by CD or to the degradation of KD under UV irradiations.