



The 2019 year review on chromium(III) adsorption from aqueous solutions

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ABSTRACT

Regardless of its toxicity, chromium is an element that lives with humans due to its various uses, and while the toxic character of Cr(VI) is of wide knowledge, this element in its (III) oxidation state is also harmful, and this harmfulness increased by the risk of its potential oxidation to the (VI) oxidation state. Thus, there is a constant effort to find technologies that eliminated this Cr(III) from the different effluents in which it is present. In liquid solutions, it seems that adsorption is one of the most popular methods, and also the finding of adsorbents which eliminated Cr(III) most easily, most selectively and with better yields. The recovery of this element from the loaded adsorbent and the recycle of the adsorbent, are also two points that always, but this is not the real situation, must be taking into account. This manuscript reviewed the most recent advances (papers published in the 2019 year) about the use of adsorption, and adsorbents aimed at the recovery of Cr(III) from liquid solutions.

Keywords: Chromium(III); Adsorption; Desorption; Recovery; Aqueous solutions
