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pH EFFECT ON THE BIOSORPTION OF Cu^{2+} FROM AQUEOUS SOLUTION BY *SACCHAROMYCES CEREVISIAE*

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Abstract

In this work, the pH effect on cooper biosorption capacity of *Saccharomyces cerevisiae* was studied. Two series of experiences , first in static regime, and the second in mixing conditions – simulating a batch reactor, at pH values of 5, 6 and 7 were done.

The biomass originated from bake’s brewing industry and used for cooper biosorption from a $(\text{Cu SO}_4 \cdot 5 \text{ H}_2\text{O})$ solution. All experiences were carried out to temperature of 27°C . Biosorbtion was carried out with non-immobilized and living cell.

The samples were collected, filtered and analysed with a Flame Atomic Absorption Spectrophotometer (FAAS).

The results showed that the *S. cerevisiae* cells can be used as adsorbants for cooper ions from solutions, and that the process is dependent on pH value as well as on the mixing comditions in the heterogeneous system.

Keywords: cooper, biosorption, pH effect, *Saccharomyces cerevisiae*

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