

Title: **Biosorbents for metal recovery**

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Industrial waste and polluted waters are two phenomena that have the potential to cause environmental and health problems. Besides, metal acquisition nowadays it is becoming harder and more expensive; caused by the fact that metal sources in the planet earth are finite and their making is running out. The lack or high price of some metals, can be sorted out by recovering them from wastewater or electronic devices; which can also resolve, as well, future health issues and avoid contaminated waters.

In this research, metal recovery has been investigated from an economical position (pointing out a method either functional or affordable) as well as environmentally sustainable (since there are already treatments to recover them but they are rather expensive or harmful for the environment).

The basis of this scientific thesis is the use of biosorbents as a starting point material to recover metals. Three different methods will be used to active those biosorbents and test its adsorption behaviour; afterwards, two different treatments will be used to recover the metals adsorbed.

The overall of this research shows extensile the real possibility of recover these metals from wastewaters which means a huge step for the future to come.