

Title: **Use of a continuous-flow sorption technique to assess biochar suitability for the removal of copper from contaminated waters**

Student: Garcia Martinez, Marc

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Supervisor/s: Dra. Anna Rigol Parera

Department of Chemical Engineering and Analytical Chemistry

Heavy metals presence allows concern as a direct consequence of his expansion over the environment. Heavy metals, are widely used in the rural area or in a great deal of industrial activities, as a consequence of that heavy metals can be found in a great deal of biological matrix as water. Contaminated waters need to be intervened in order to reduce the impact of those pollutants, often by using sorbents which have a great affinity to metals.

One of the most promising sorbents is biochar, which is a solid obtained from vegetal waste, which has a prose structure and a high capacity to retain organic and inorganic pollutants.

In this project, continuous-flow techniques are studied in order to evaluate the removing of copper in contaminated waters. Concurrently, it is also studied under batch conditions in order to compare both techniques.

On the other hand, it has been done a statistical treatment of all the data obtained in order to stablish a clear path of how data must be treat for further research.

Finally, a research has been prompted in order to stimate or evaluate which posibles mechanism of interaction between the biochar and copper were taking place.

Keywords: Heavy metals, sorption, water, biochar, copper continuous-flow.