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Recommendations

In order to complement the present research. Angle contact measurements before and after interaction with the crude biosurfactant would be necessary. In addition, with the objective of improve the biosurfactant recovery, other culture medias should be tested.

In this work, the broth was discarded and the extraction protocol was applied to the cellular pellet. However, it should develop other protocol for the extraction of biosurfactants contained in the broth.

In the drying process, regarding the extraction protocol, it was carried out in a furnace keeping a constant temperature of 50°C for 24 hours. However in order to avoid any kind of chemical reaction with the oxygen, it should be used a lyophilization equipment.

Even though, the hematite recovery was good, around 95 %. The crude biosurfactant should be refined, in order to test its efficiency and compare both economically.

It should be tried other regression models to describe the hematite flotation in function of the biosurfactant concentration and the pH. For example nor linear model may explain better the phenomena.

A scale up, testing the crude biosurfactant in a flotation cell is mandatory in order to understand its behavior at great scale applications.

Testing other microorganism, like certain yeasts, in order to select biosurfactant super-producers species should be made. In addition, testing the selectivity of the biosurfactant in a mixed system of two or more minerals shall be an important contribution to the research line.