

7 Further recommendations

- As seen from the results of this work, further research must be done in order to know how *Rhodococcus ruber* could behaved after interaction with other hematite ores, such as quartz, corundum, apatite, kaolinite, and calcite.
- Also, as *Rhodococcus ruber* strain is applied recently in Mineral beneficiation, and especially in Iron ore flotation, it is necessary to performed complementary studies such as surface tension and contact angle measurements.
- Surface tension measurements will help to know how much *Rhodococcus ruber* solution reduces the surface tension of water under specific pH and concentration conditions.
- Contact angle measurements will let know the value of its hydrophobicity, therefore it can be stated with certainty if it is a really highly hydrophobic bioreagent.
- Moreover, it is necessary to keep working with the Partridge-Smith flotation cell for bioflotation. This cell represents a new step in the area, because of its major size and easier handling that could let appreciate better the froth flotation process.
- The application of flotanol as frother and conditioned with *Rhodococcus ruber* biomass brought a new discussion focus by aiding bioreagents with conventional reagents, or vice versa. Moreover, further research studies must be carried out to discover the effect of conventional reagents over other mineral-microorganisms systems.