



Development of Flotation of Chalcopyrite

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Message from the Guest Editor

Dear Colleagues,

Chalcopyrite is an important sulfide mineral in the process of flotation because it is the primary source of copper in many ore deposits. Flotation is the most widely used method for concentrating chalcopyrite. Flotation of chalcopyrite includes complex phenomena that utilize different chemicals (collectors, frothers and modifiers) and conditions to separate the mineral from gangue minerals such as silicates and pyrite.

The flotation of chalcopyrite from porphyry and non-porphyry ores is influenced by a variety of factors that can impact the efficiency of the separation process. Some of the key factors affecting chalcopyrite flotation from porphyry ores include mineralogy (grain size, associations, liberation, gangue, phyllosilicates, etc.), particle size, physicochemical conditions (pH, reagents, and Eh), water quality, equipment and process design, etc. Understanding and optimizing these factors are essential for achieving efficient chalcopyrite flotation and maximizing the recovery of valuable copper minerals while minimizing the loss of valuable minerals and the generation of waste. Papers from academia and industry are welcome.





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Message from the Editor-in-Chief

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