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Title: A Novel Bioreactor System for Simultaneous Mutli-Metal Recovery from Industrial Pyrite Ash: Effect of Agitation and Sulphur Dosage

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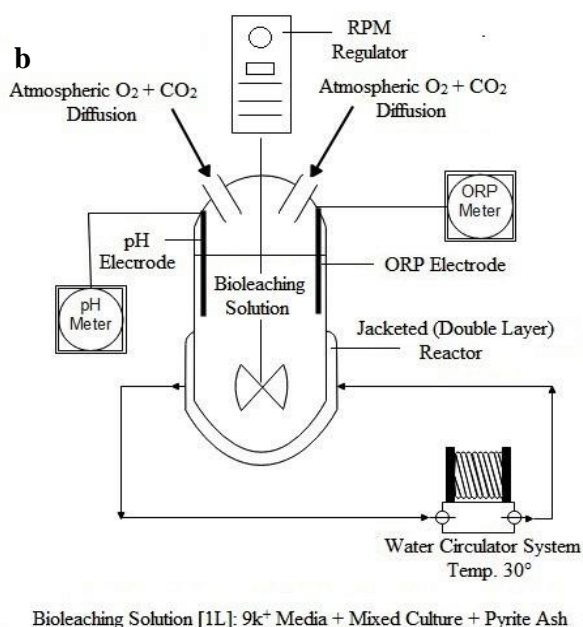
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GRAPHICAL ABSTRACT



Bioreactor operating under natural diffusion of atmospheric O₂ & CO₂

Metal Recovery from PAE:

Cu – 94.1%, Co – 98.54%, 75.95%, 60.80% at 1g/L S, 150 rpm, 9g/L Fe²⁺, 30°C, 8 days

(a) Set-up of the batch bioreactor system (4 individual reactors) connected with continuous water heating and circulation through the doubled layered jackets for temperature maintenance. (b) Schematic representation of the operation of the bioreactor.

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