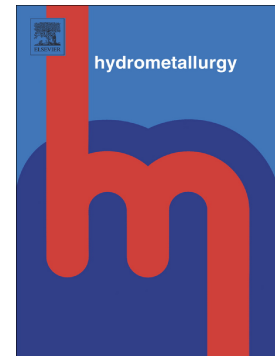


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**TREATMENT OF ACIDIC MINE DRAINAGE IN AN ADSORPTION PROCESS
USING CALCIUM SILICATE MODIFIED WITH Fe(III)**

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ABSTRACT

Two compounds based on calcium silicate hydrate and modified with Fe(III), using FeCl₃ and Fe(OH)₃ as iron sources, were synthesized, characterized and evaluated as adsorbents for removing ionic species from an arsenic-containing acidic aqueous mine solution. The adsorbents were prepared by contacting an aqueous solution of sodium silicate with calcium hydroxide and Fe(III) compounds. The structure of these adsorbents were determined by X-ray diffraction, FTIR, DSC, BET porosimetry analysis, mean particle

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