

Supplementary Material—On the cobalt content upgrade in nickeliferous laterites using iron (III) sulfate: A study based on thermodynamics simulations

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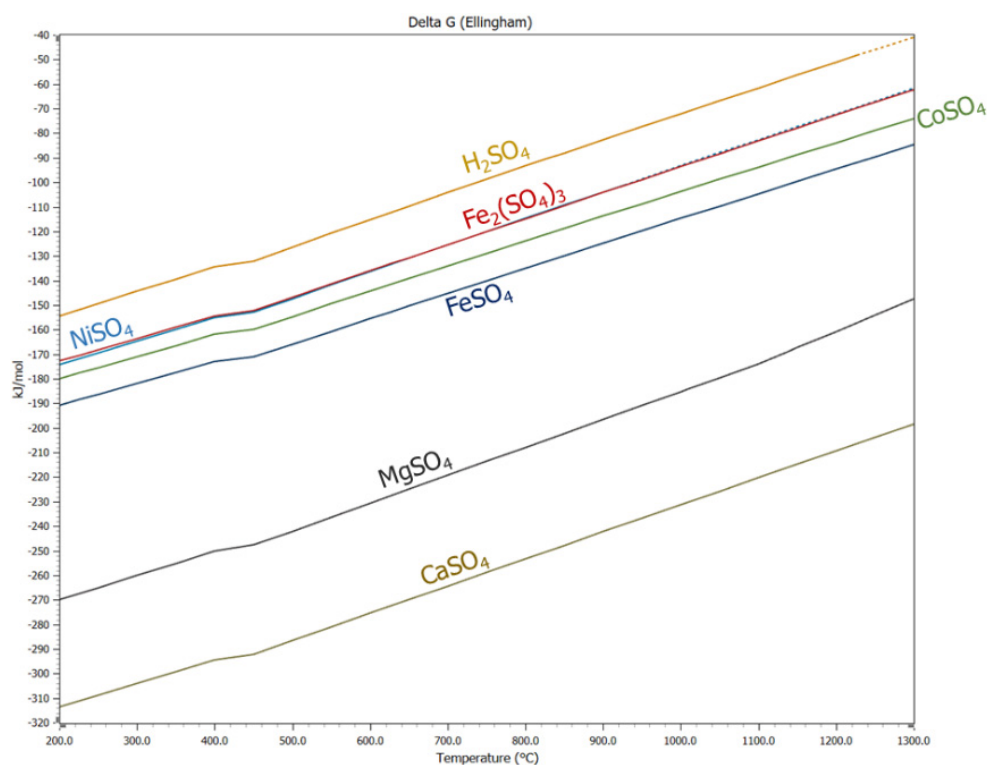
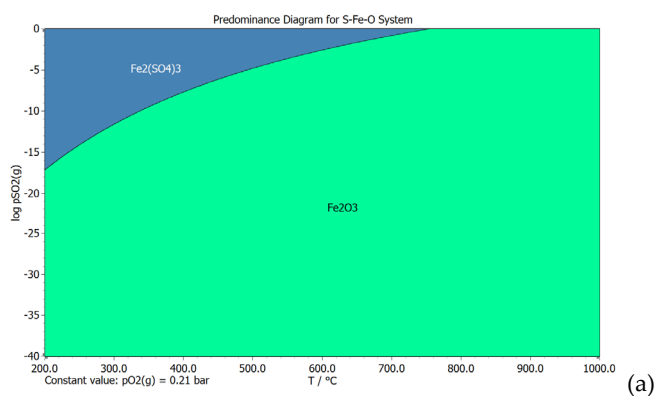
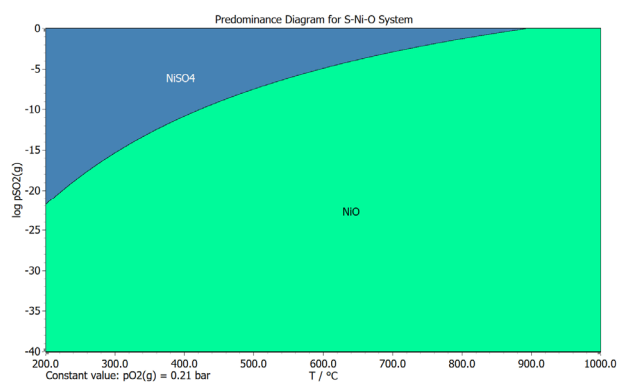


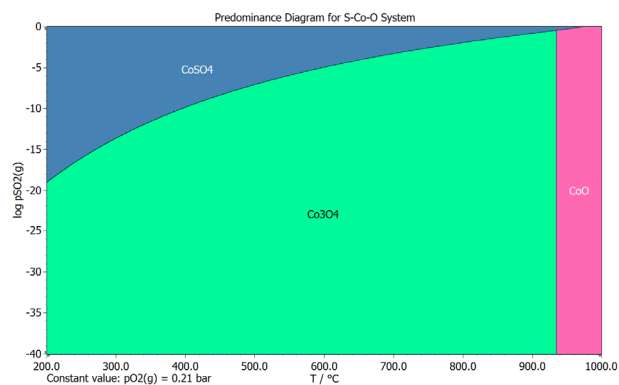
Figure S1. Ellingham diagram for sulfates formation based on a fixed quantity of O_2 .



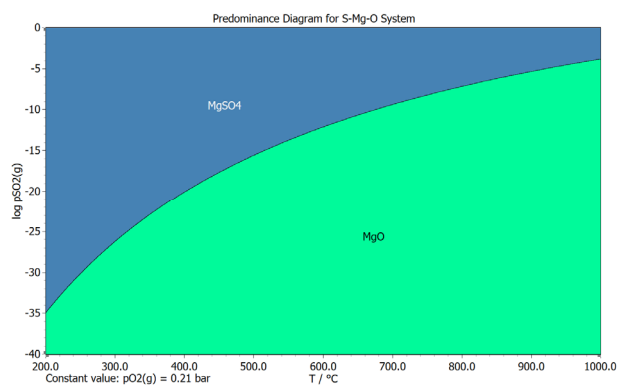
(a)



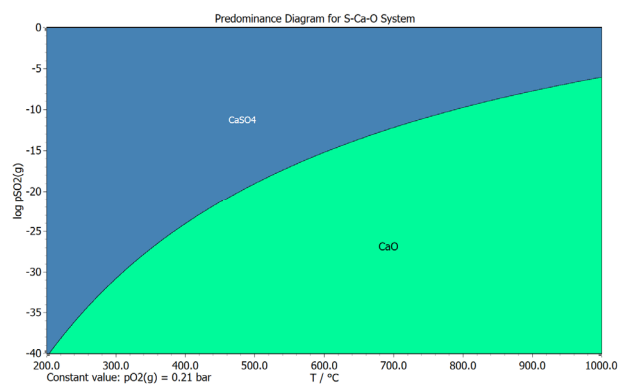
(b)



(c)



(d)



(e)

Figure S2. Predominance diagrams as function of temperature for a fixed quantity of oxygen (0.21 bar): (a) S-Fe-O system; (b) S-Ni-O system; (c) S-Co-O system; (d) S-Mg-O system; (e) S-Ca-O system.

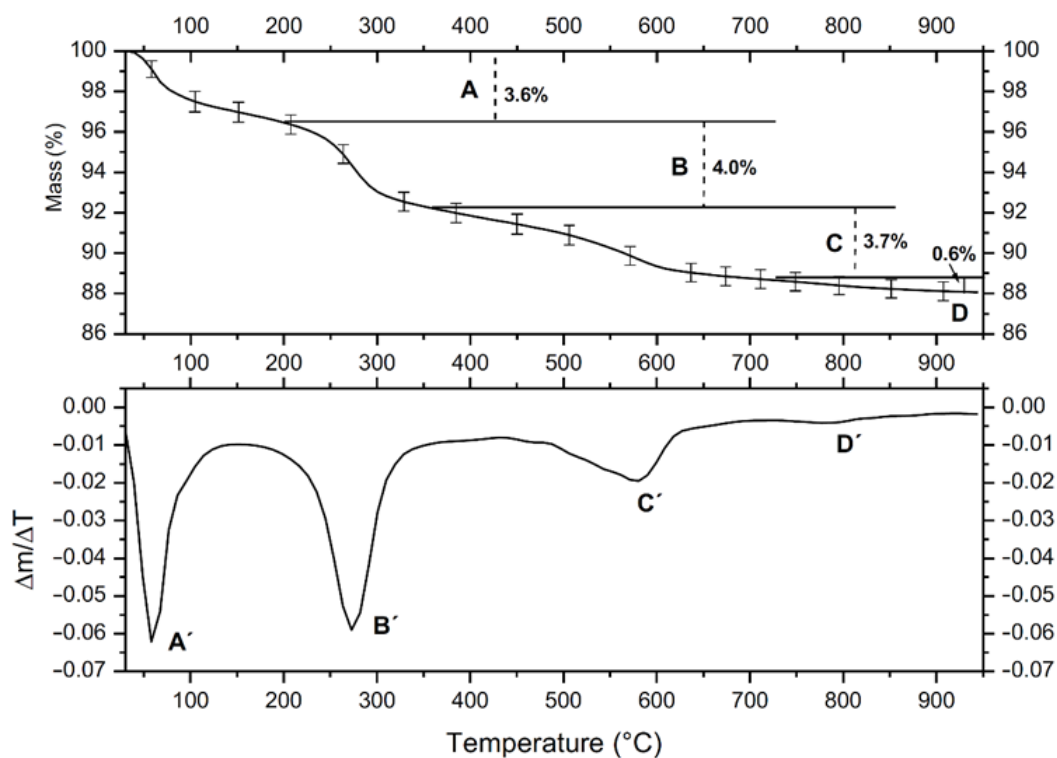


Figure S3. TGA and DTG characterization of the sample as received.

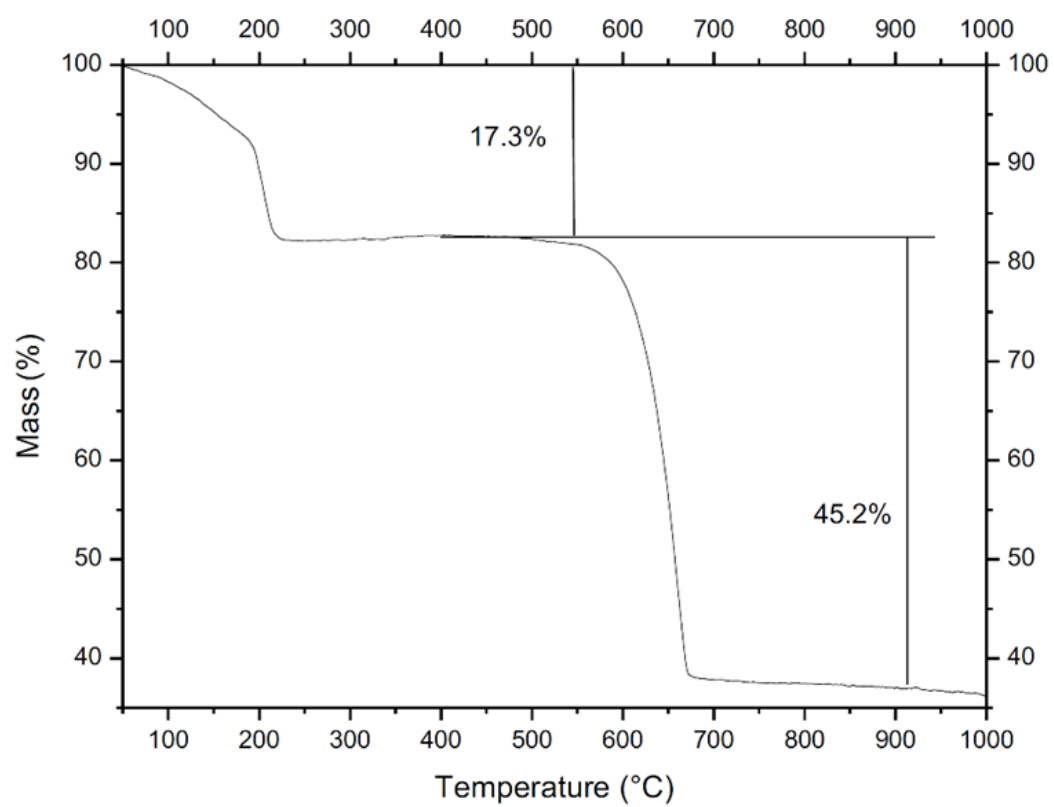


Figure S4. TGA characterization of the iron sulfate used as sulfation roasting reagent.