ChemApp as a Tool to Study Pyrometallurgical Processes: K.U.Leuven Examples and Perspectives

F. Verhaeghe, S. Arnout, D. Durinck, K. Verscheure, B. Klaasen, P. Wollants, B. Blanpain

Department of Metallurgy and Materials Engineering K.U.Leuven, Belgium

Abstract

The 'Thermodynamics in Materials Engineering' group of the K.U.Leuven is active in pyrometallurgical research, determination and optimisation of phase diagrams and modelling of microstructure evolution. The group has used FactSage and ChemApp in a wide range of applications: modelling of stainless steel production processes, lead blast furnace simulation, zinc fuming process development, slag solidification, dissolution of oxidic particles in slags and exergy analysis of metallurgical production processes. In the presentation some highlights as well as some perspectives of this work will be given.