

## COMPUTATIONAL THERMODYNAMICS IN STEELMAKING AND PROCESSING – HOW USEFUL IS EQUILIBRIUM INFORMATION?

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### **Abstract**

The last 40 years have seen the intense development and the maturity of computational thermodynamics and its applications to several materials, in special to steels. In about the same period the steel industry has recovered from a “stagnant” situation to an almost unprecedented vigor in the first decade of the 21st century. This has been due, in part, to the ability of the steel industry to reinvent itself, improving and developing manufacturing processes and developing novel steels at an astonishing pace. It is proposed that, among the decisive factors for this change is the progress in the application of thermodynamics, made possible both by the development of computational thermodynamics and by the creation of consistent and reliable thermodynamic databases.

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