

3D-representation of phase and property diagrams in multi-component systems

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Abstract

This paper shows the potential of three-dimensional diagrams, using up-to-date computer graphics techniques. In contrast to the past perspective diagrams can now be generated from quantitative calculations of phase equilibria for systems with any number of components. These diagrams can even be made quantitatively readable. Furthermore new visualisation techniques from the field of virtual reality are used to make the complex data easier to understand.

Keywords: Phase diagrams; Virtual reality; Three dimensional; Gibbs energy minimisation