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 2.4 Equilibrium Between Phases in Binary Solutions. Phase Diagrams of Binary Alloys; 2.4.1 Gibbs' Phase Rule; 2.4.2 Gibbs' Free Energy Curves for Solid and Liquid Binary Solutions; 2.4.3 The Tangent to Tangent Method to Predict Phases in Binary Solutions; 2.4.4 Calculation of Chemical Potentials from Gibbs' Free Energy Diagrams; 2.4.5 Phase Diagrams of Binary Alloys; 2.4.6 Relationship between Molar Gibbs' Free Energy Curves and Phase Diagrams. Construction of Phase Diagrams; 2.4.7 Influence of Parameters on Phase Diagrams
 2.5 Driving Force of Solidification in Binary Alloys

Sommario/riassunto

Solidification and Crystallization Processing in Metals and Alloys Hasse Fredriksson KTH, Royal Institute of Technology, Stockholm, Sweden Ulla Akerlind University of Stockholm, Sweden Solidification or crystallization occurs when atoms are transformed from the disordered liquid state to the more ordered solid state, and is fundamental to metals processing. Conceived as a companion volume to the earlier works, Materials Processing during Casting (2006) and Physics of Functional Materials (2008), this book analyzes solidification and crystallizat
