CHAPTER OVERVIEW

8: Phase Transitions and Equilibria of Pure Substances

A system of two or more phases of a single substance, in the absence of internal constraints, is in an equilibrium state when each phase has the same temperature, the same pressure, and the same chemical potential. This chapter describes the derivation and consequences of this simple principle, the general appearance of phase diagrams of single-substance systems, and quantitative aspects of the equilibrium phase transitions of these systems.
