

## Phase Diagram Learning Objectives

At the end of this chapter you should be able to...

- Interpret pure substance composition using phase diagrams.
- Describe different processes (boiling point, vapor pressure, freezing point, etc.) by interpreting phase diagrams.
- Describe phase diagrams and changes of phase using chemical potential.
- Use the Gibb's phase rule to determine the number of possible species in equilibrium.
- Build phase diagrams using the Clapeyron and Clausius-Clapeyron Equations.
- Describe assumptions made and determine if they are valid for converting from what your book calls the Clausius equation to the Clausius-Clapeyron equation.
- Use entropy, densities, enthalpies, vapor pressures, etc. to solve problems utilizing the Clausius equations.