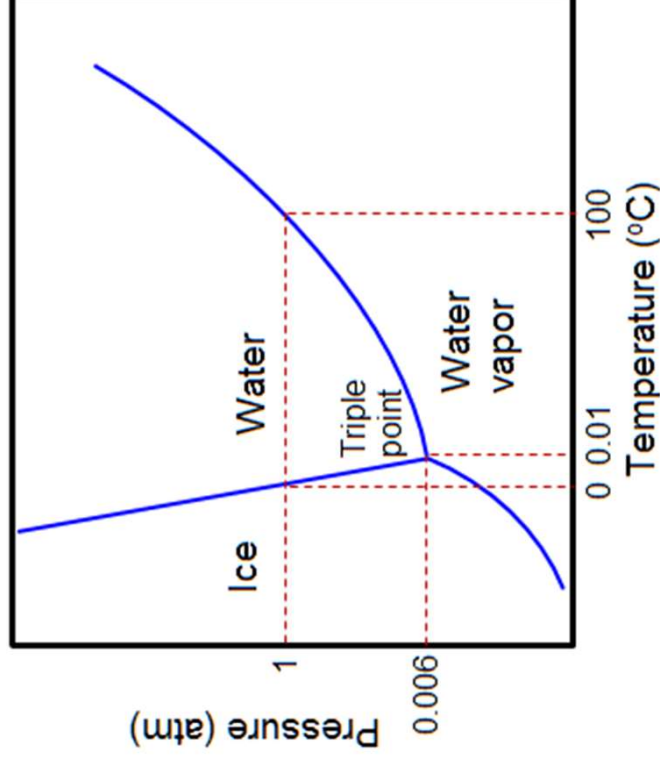


# Phase Diagrams

## One component system

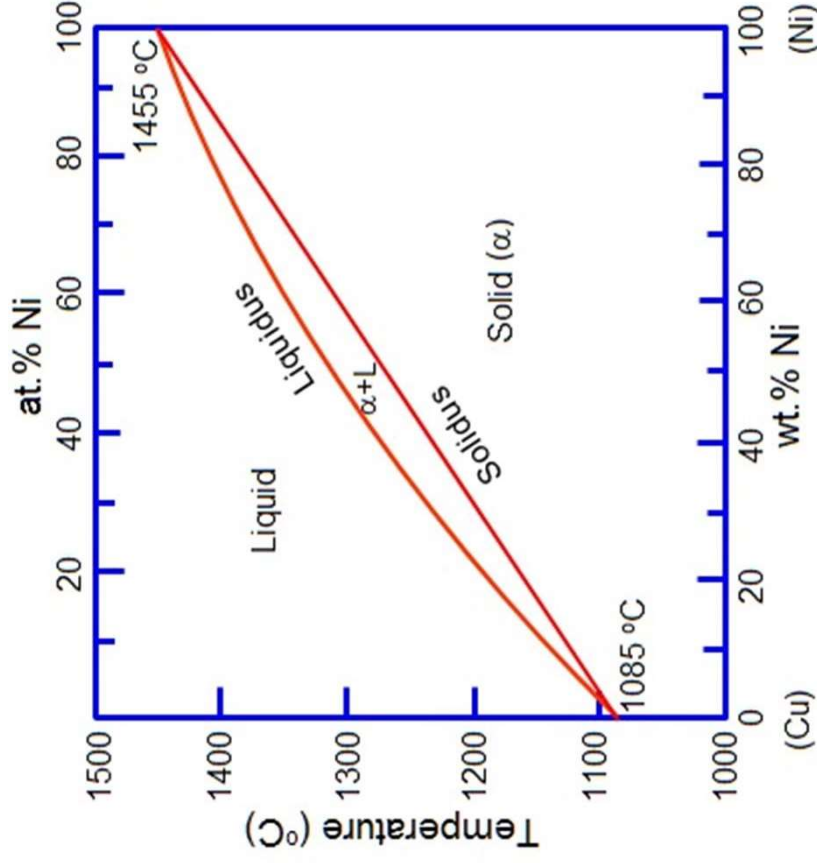
The simplest phase diagram is the water which is a one component system. It is also known as pressure-temperature or P-T diagram. Two phases exist along each of the three phase boundaries. At low pressure (0.006 atm) and temperature (0.01 °C) all the three phases coexist at a point called triple point.



Water phase diagram

# Binary Phase diagrams

- A binary phase is a two component system. Binary phase diagrams are most commonly used in alloy designing.
- The simplest binary system is the Cu-Ni which exhibits complete solubility in liquid and solid state.



Cu-Ni equilibrium phase diagram