

Chemistry 2201 Lab: EQUIL-LV

Determining if a binary mixture is behaving ideally.

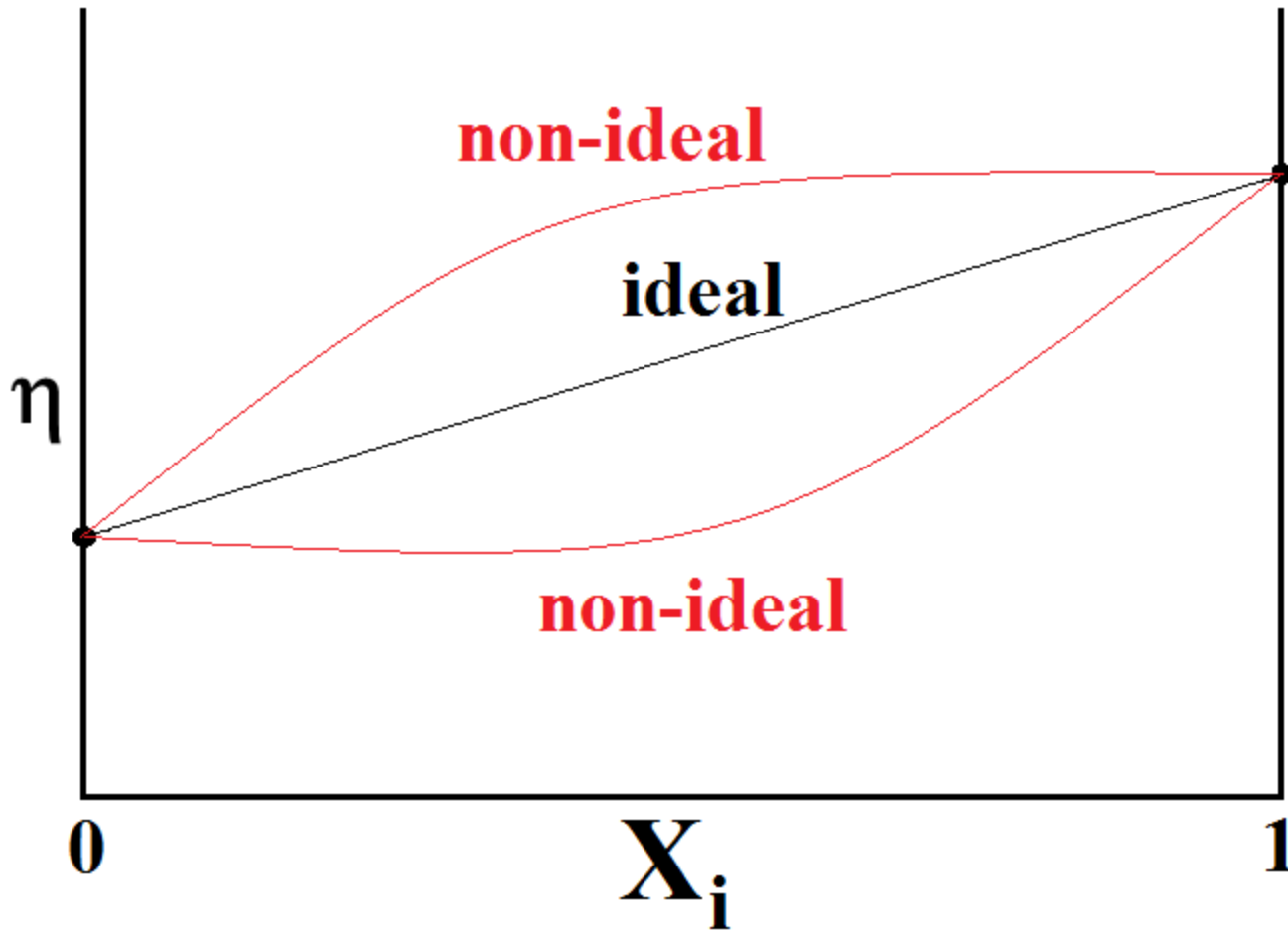
Goals:

- 1. Construct calibration curve of refractive index(η) vs. mole-fraction(X_i).**
- 2. Construct Liquid-Vapor Phase Diagram.**

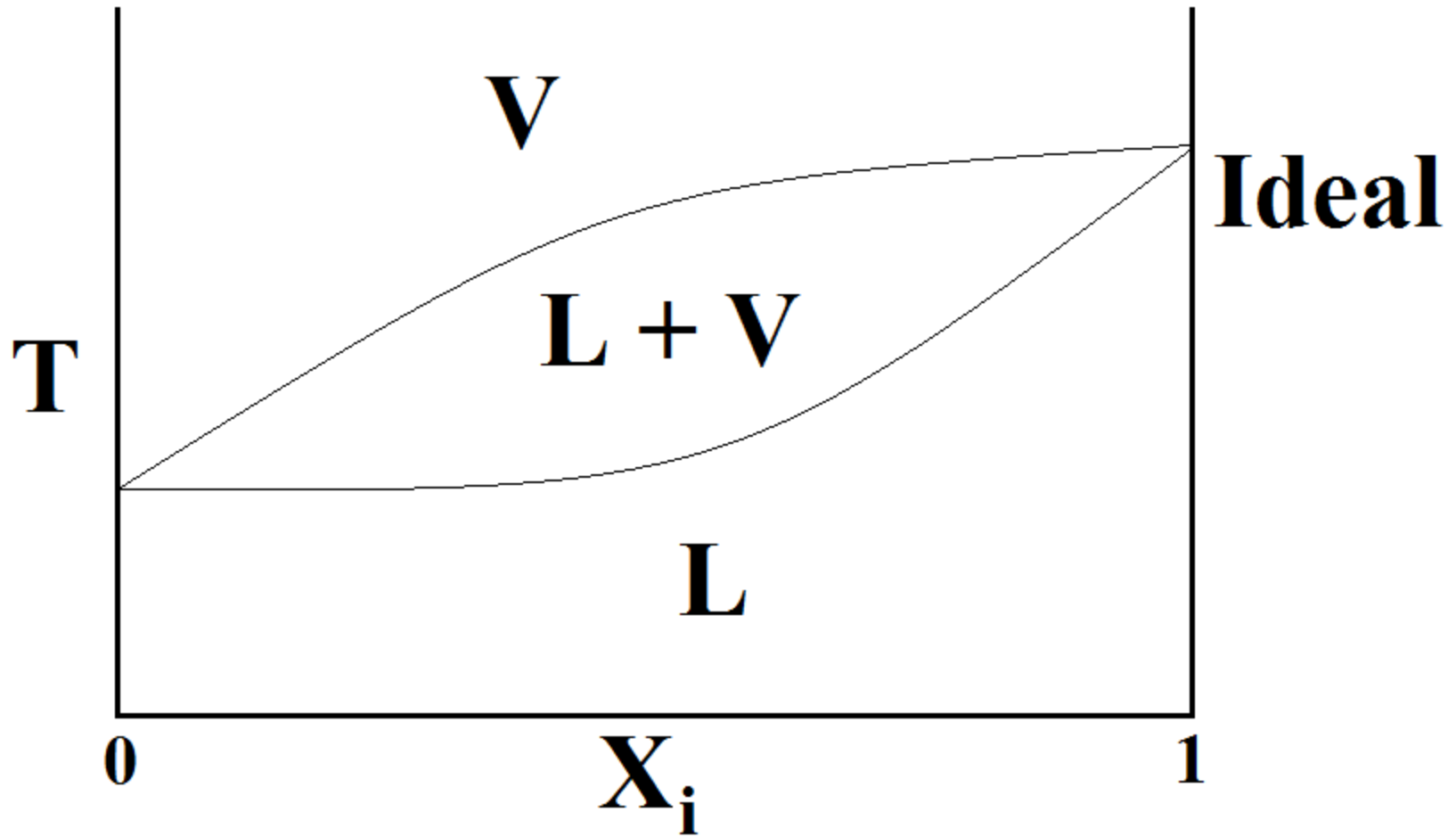
Mixture behaving ideally if interaction between pure components same as components of mixture.

Refractive index(η) a measure of light deflection when going from one medium to another.

For an ideal mixture, a plot of η vs. mole-fraction (X_i) is linear.



Liquid-Vapor Phase Diagram for an Ideal Binary Mixture:



Liquid-Vapor Phase Diagram for a Non-Ideal Binary Mixture:

Ideal

Non-Ideal

