Assignment

- Consider a mixture of N_2 and O_2 at 2 atm. Calculate the Murphree efficiency for a plate with liquid at 89 K and the vapor below this plate is at 94 K. Also, it is given that the mole fraction of N_2 leaving this plate in vapor phase is 0.67.

- Use the temperature composition diagram given in the earlier lectures.

Answers

Data
p = 2 atm
y_{j-1} = 0.4 at 94 K
x_j = 0.42 at 89 K
$y_{0,j-1}$ = 0.72 at 89 K
y_j = 0.67 at 90 K

$$\eta_M = 0.843$$