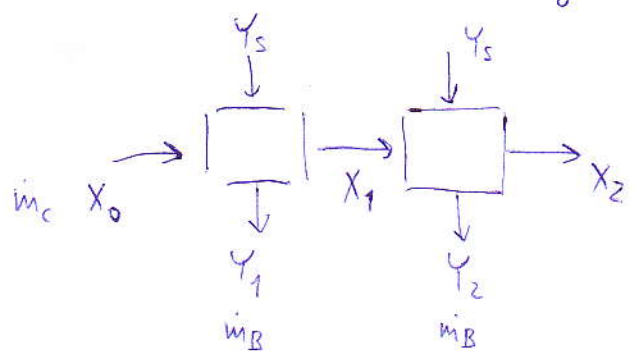


13-2

13 hm% Aceton (A)  
87 hm% voda (C)  
10 kg

99% o-xylen (B)  
1% acetonu (A)  
5 kg



Vodná fáze X  
Xylenová fáze Y

$$X_0 = \frac{m_A}{m_C} = \frac{0,13}{0,87} = 0,149$$

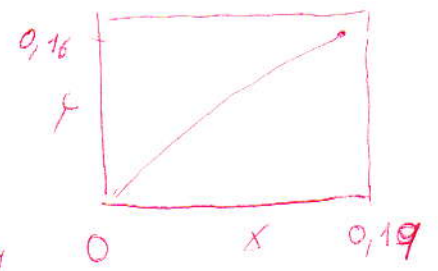
$$Y_s = \frac{m_A}{m_B} = \frac{1}{99} = 0,010$$

$$m_C = 0,87 \cdot 10 = 8,7 \text{ kg}$$

$$m_B = 0,99 \cdot 5 = 4,95 \text{ kg}$$

bod 0 = "[X<sub>0</sub>, Y<sub>s</sub>]"

směrnice =  $-\frac{m_C}{m_B} \frac{\Delta Y}{\Delta X} = 17/58$



společnosti 2x

$$E = 0,75 \quad X = 0$$

$$Y = \frac{m_C}{m_B} X_0 + Y_{s1} = 0,272$$

130:87 = 14  
450  
72

hmotnosti → relativní hmotnosti (z.s/obz.)

w → X

$$w_i = \frac{m_i}{\sum m_j} \quad X_i = \frac{m_i}{m_C}$$

X → w

$$w = \frac{m_A}{m_A + m_B} = \frac{m_B \cdot X}{m_B \cdot X + m_B}$$

$$w_A = \frac{m_A}{m_A + m_B} \quad X_A = \frac{m_A}{m_B} = \frac{m_A}{m_A} \frac{w_A}{1 - w_A}$$

$$w = \frac{X}{X + 1}$$

$$m_B = \frac{m_A - m_A w_A}{w_A} = m_A \frac{1 - w_A}{w_A}$$

$$X = \frac{w}{1 - w}$$

$$X - wX = w$$

$$w + wX = X$$

$$w = \frac{X}{1 + X}$$

X<sub>1</sub> = 0,175  
Y<sub>1</sub> = 0,083

$$Y = 0,199$$

16-2

acetone raffinat 1st = 0,097      extract 1st = 0,077  
 acetone ~~extra~~ 2st = 0,073      2st = 0,056

acetone ve  
 spol ekstraheta  $\frac{0,077 + 0,056}{0,077 + 1 - 0,056 + 1} = 0,062$

