Assignment

- Consider a mixture of 75% **A**, 22% **B** and 3% **C** by mole fractions. Determine the work requirement per unit mole of **C**, when all the three gases are separated and only when **C** is separated. The mixture is at 300 K and at a pressure of 1.013 bar (1 atm).

- For the above problem, calculate the above parameters for the case of **B**. Comment on the results.

Answers

Work	300 K
$W_{i,m}/n_m$	1631.3
$W_{i,c}/n_m$	336.0
$W_{i,B}/n_m$	1314.2

Work	300 K
$W_{i,m}/n_c$	54379
$W_{i,m}/n_B$	2471.7
$W_{i,c}/n_c$	11202
$W_{i,B}/n_B$	5973.6