

KC32603 Process Simulation and Integration

In-Class Exercise 1 (CLO4 – PLO5; WP1, WP4; WK3, WK4, WK5 WK6)

Situation 1:

Feed conditions:

Comp: Water

Temp: 30 °C

Pres: 1 atm

EOS: Peng-Robinson

Flowrate: 100 kmol/h

Based on the given feed conditions above, design and simulate a system that has the final conditions as mentioned below:

Temp: 70 °C

Pres: 5 atm

Situation 2:

Feed conditions:

Comp: Water

Temp: 200 °C

Pres: 3 atm

EOS: Peng-Robinson

Flowrate: 100 kmol/h

Based on the given feed conditions above, design and simulate a system that has the final conditions as mentioned below:

Temp: 120 °C

Pres: 1 atm