System: Ethanol - Water

Description of the exercise:

Question 1: Do a distillation with total reflux and estimate average plate efficiency as a function of vapor speed.

Question 2: Measure the pressure drop over the column for different vapor speeds and find capacity borders (lower and higher).

Question 3: Do a 'binary-batch' distillation with given reflux and reboiler duty. Decide distillate composition as a function of n/n_0.

        n = total number of moles back in reboiler + column.
        n_0 = total number of moles at the beginning of the experiment.

    Compare experimental results with calculations

Version 1: Questions 1, 2
        Short report (2-3 pages)
        1 day for experiments

Version 2: Whole exercise (Questions 1, 2, 3).
        Short report (3-5 pages)
        2 days for experiments

Version 3: Whole exercise (Questions 1, 2, 3).
        Long report (~ 20pages)
        2 days for experiments