

# Portfolio 01: Mole balances

CHEN3010/ CHEN5040: chemical reaction engineering

2024-02-22

Answer following questions

1. Write a paragraph describing both the content goals and the intellectual goals of the course. (1 mark)
2. Roam around the campus. Identify and photograph 5 reactors. (2 marks)

For each reactor,

- Give one to two line description
  - Identify what reactions take place
  - What type of reactor is it? Single phase, multiphase, batch, semibatch, continuous, etc...
  - Determine the type of ideal reactor that may best describe the reactor.
  - Show photographs.
3. For the following processes, search the web and determine the main reactions and the reactors used. (2 marks)
    - Ethylene polymerization
    - Saponification of fats
    - Nitric acid production
    - Iron production
    - Ammonia synthesis

Save your report as a pdf file. Rename the file as STUDENTID\_Portfolio1.pdf and upload it using assessment submission link on blackboard.