Pre class activity: Collection and Analysis of Rate Data

Lecture notes for chemical reaction engineering

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- Read Chapter 5, and 6 from Fogler (2016).
- Revise numerical solution of ordinary differential equations
  - We will be using `solve_ivp` interpolation function from the `scipy.interpolate` library. Go through documentation for scipy.integrate.solve_ivp
  - Also look at Python ODE solvers
- For design equations in terms of conversion, many a times it is possible to obtain an analytical solution by integration. It is possible to obtain a solution to these integrals using symbolic mathematics.
  - SymPy is a Python library for symbolic mathematics. Go through SymPY documentation, particularly the section on Integrals to learn more.
  - Online Integral Calculator with Wolfram|Alpha

Fogler, H. Scott. 2016. *Elements of Chemical Reaction Engineering*. Fifth edition. Boston: Prentice Hall.