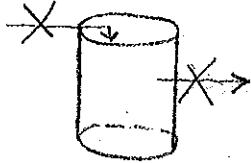


GENERAL CLASSIFICATION OF REACTORS

ENV 5666 & CGN 4930 (ST) – Water Quality Management

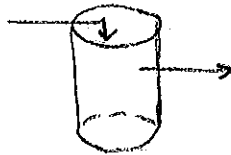
1) Material Transfer Mode

- a) Batch (or closed over the Δt of interest)

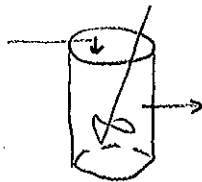


Materials are added at $t = 0$

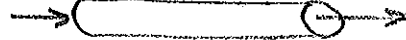
- b) Flow (or open over the Δt of interest)



2) By Level of Mixing



CSTR
Completely Stirred (∞ dispersion)



PFR
Plug Flow reactor (0 dispersion)

3) By Number of Involved Phases

- a) Homogenous (e.g., only liquids)
b) Heterogeneous (e.g., gas and liquid)

3) Catalyst Presence

- a) Non-catalytic
b) Catalytic

5) Others (e.g., combinations of the above thereof)