A peek ahead to when we discuss sedimentation: Just so it is less of a mystery, classifications of sedimentation are based on the concentration and type of particles:

- **Class I:** Discrete settling. Dilute suspensions (< 500 mg/L), non-cohesive particles.
- **Class II:** Flocculent settling. Dilute suspensions (<500 mg/L) of cohesive particles (particles can stick together and form aggregates).
- **Class III:** Zone or hindered settling. Concentrated suspensions (500 to 2000 mg/L) of cohesive particles.
- **Class IV:** Compression settling. High particle concentrations where water has to be squeezed out.

An alternative for solids separation is to use a reactor with flow moving upward from the bottom though a fluidized bed of particles referred to as a “floc blanket”.
Time (hours) 0.13
Jet Diameter 6.3 mm
PACl Dose 2.5 mg/L

System Concentrations

Concentrations (mg/L)

Time (hours)