Project: Waste Water Treatment Plant Dynamics- Using an Anaerobic Digester and Model based on Monod’s Constant.

**Purpose:** Dynamic Modeling is useful as Anaerobic digester suffers stability problem due to accumulation of volatile fatty acids and drop in pH, and once the system fails, it takes long time to restart it again, sometimes even days.

1. User has to enter the Capacity and the load of his current design Plant.
2. This system uses 12 Parameters to describe the system, such as yield rate, death rate (microorganisms)
3. The influent conditions can be entered by user
4. The effluent conditions are specified as per the environmental norms of desirable/tolerable limits.
5. A system of 6 differential equations arises, which is solved by ode.int