

Assignment for Batch Reactor:

Write

Objective, Theory, Apparatus, Chemicals used, Procedure

Observation Table:

Volume of each sample: 5 ml.

$C_{A0} = 0.048 \text{ M}$, $C_{B0} = 0.091 \text{ M}$

Temp(K)	t(min)	volume of succinic(ml)
303.15	3	2
	6	1.8
	9	1.5
	12	1.1
285.15	3	5.2
	6	4.4
	9	3.6
	12	3.1
313.15	3	1.3
	6	1
	9	0.7
	12	0.6

Determine X_A at each time at each temperature, Rate constant K at each temperature and time. Represent the result in tabular form.

Determine activation energy and frequency factor for the reaction considering average rate constant for each temperature. Draw the Arrhenius plot and show the calculation of activation energy.