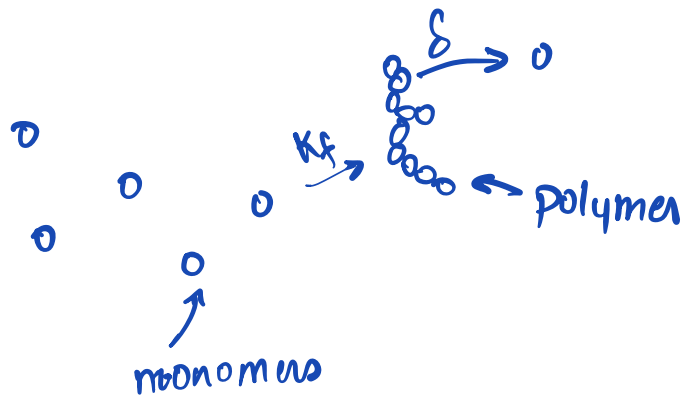


Polymerization



$C(t)$ = conc. of monomers at time t

$F(t)$ = conc. of polymers

A = total amount of material.

monomeric subunits

Conservation statement

$$C + F = A$$

$$\frac{dC}{dt} = -K_f C F + \delta F$$

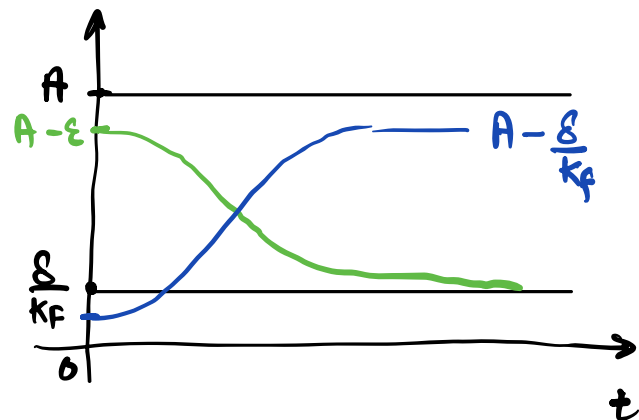
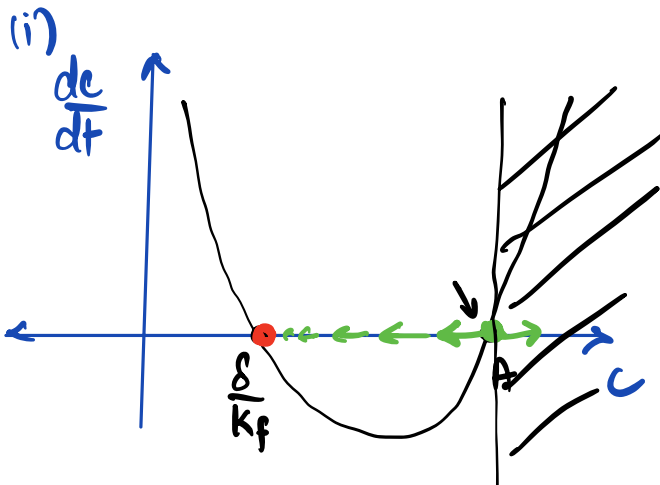
$$\frac{dF}{dt} = K_f C F - \delta F$$

$$F = A - C$$

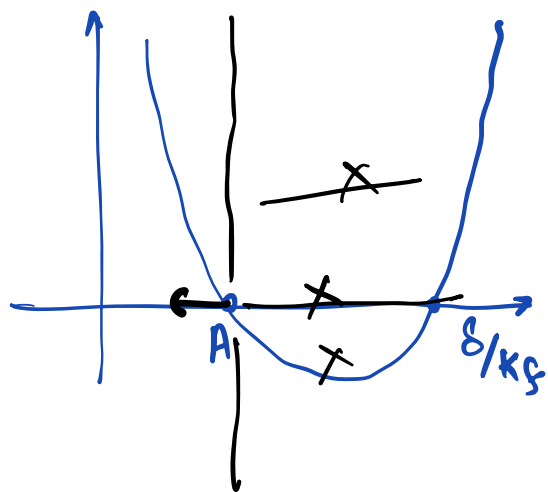
$$\frac{dC}{dt} = (\delta - K_f C)(A - C)$$

$$\frac{dC}{dt} = 0$$

$$C = \frac{\delta}{K_f}, A$$



(ii)



$$A < \left(\frac{\delta}{k_f} \right)$$