

$$C_{2,i+1} = C_{2,i} + \frac{C_{1,i} - C_{2,i}}{(1 - \alpha_1) \alpha_2 \tau} \Delta t$$

$$\nu C_1 = \nu C_2 + (1 - \alpha_1) \alpha_2 V \frac{dC_2}{dt} \implies$$

$$\implies C_1 = C_2 + (1 - \alpha_1) \alpha_2 \tau \frac{dC_2}{dt} \implies$$

$$\implies \frac{dC_2}{dt} = \frac{C_1 - C_2}{(1 - \alpha_1) \alpha_2 \tau} \implies$$

$$\implies \frac{\Delta C_2}{\Delta t} = \frac{C_{2,i+1} - C_{2,i}}{\Delta t} = \frac{C_{1,i} - C_{2,i}}{(1 - \alpha_1) \alpha_2 \tau} \implies$$

$$\implies C_{2,i+1} = C_{2,i} + \frac{C_{1,i} - C_{2,i}}{(1 - \alpha_1) \alpha_2 \tau} \Delta t$$