$$C_{out,i+1} = C_{out,i} + rac{C_{4,i} - C_{out,i}}{\left(1 - lpha_1
ight)\left(1 - lpha_2
ight) au} \; \Delta t$$

$$(1 - \alpha_1)(1 - \alpha_2) T$$

$$C_4 \nu = C_{out} \nu + (1 - \alpha_1)(1 - \alpha_2) V \frac{dC_{out}}{dt} \Longrightarrow$$

$$C_4 \nu = C_{out} \nu + (1 - \alpha_1)(1 - \alpha_2) V \frac{dC_{out}}{dt} \Longrightarrow$$

$$\Longrightarrow C_4 = C_{out} + (1 - \alpha_1)(1 - \alpha_2) \tau \frac{dC_{out}}{dt} \Longrightarrow$$

$$\implies C_4 = C_{out} + (1 - \alpha_1)(1 - \alpha_2) \tau \frac{dC_{out}}{dt} \implies$$

$$\implies \frac{dC_{out}}{dt} = \frac{C_4 - C_{out}}{(1 - \alpha_1)(1 - \alpha_2) \tau} \implies$$

$$\Rightarrow C_4 = C_{out} + (1 - \alpha_1)(1 - \alpha_2)\tau \xrightarrow{\text{d}t} \Rightarrow$$

$$\Rightarrow \frac{dC_{out}}{dt} = \frac{C_4 - C_{out}}{(1 - \alpha_1)(1 - \alpha_2)\tau} \Rightarrow$$

$$\Delta C_{out} = C_{out} + C_{out} \Rightarrow$$

$$C_{d,i} = C_{out} \Rightarrow$$

$$\Rightarrow \frac{dC_{out}}{dt} = \frac{C_4 - C_{out}}{(1 - \alpha_1)(1 - \alpha_2)\tau} \Rightarrow$$

$$\Rightarrow \frac{\Delta C_{out}}{dt} = \frac{C_{out,i+1} - C_{out,i}}{(1 - \alpha_1)(1 - \alpha_2)\tau} = \frac{C_{4,i} - C_{0ut,i}}{(1 - \alpha_1)(1 - \alpha_2)\tau} = \frac{C_{4,i} - C_{out,i}}{(1 - \alpha_1)(1 - \alpha_2)\tau} = \frac{C_{4,i} - C_{out,i}}{(1 - \alpha_1)(1 - \alpha_2)\tau} = \frac{C_{4,i} - C_{out,i}}{(1 - \alpha_1)(1 - \alpha_2)\tau} = \frac{C_{4,i} - C_{0ut,i}}{(1 - \alpha_1)(1 - \alpha_2)\tau} = \frac{C_{4,i}}{(1 - \alpha_1)(1 - \alpha_2)\tau} = \frac{C_{4,$$

$$\Rightarrow \frac{dC_{out}}{dt} = \frac{C_4 - C_{out}}{(1 - \alpha_1)(1 - \alpha_2)\tau} \Rightarrow$$

$$\Rightarrow \frac{\Delta C_{out}}{\Delta t} = \frac{C_{out,i+1} - C_{out,i}}{\Delta t} = \frac{C_{4,i} - C_{out,i}}{(1 - \alpha_2)\tau} = \frac{C_{4,i} - C_{out,i}}{(1 - \alpha_2)\tau}$$

$$\Rightarrow \frac{1}{dt} = \frac{1}{(1 - \alpha_1)(1 - \alpha_2)\tau} \Rightarrow \Delta C_{out} \quad C_{out,i+1} - C_{out,i} \quad C_{4,i} - C_{out,i}$$

$$\implies \frac{\Delta C_{out}}{\Delta t} = \frac{C_{out,i+1} - C_{out,i}}{\Delta t} = \frac{C_{4,i} - C_{out,i}}{(1 - \alpha_1)(1 - \alpha_2)\tau} \implies$$

$$\Rightarrow \frac{\Delta C_{out}}{\Delta C_{out}} = \frac{C_{out,i+1} - C_{out,i}}{C_{out,i}} = \frac{C_{4,i} - C_{out,i}}{C_{0ut,i}} = \frac{C_{4,i} - C_{out,i}}{C_{4,i}} = \frac{C_{4,i}}{C_{4,i}} = \frac{C_{4,i}}{C_{4,i}}$$

 $\implies C_{out,i+1} = C_{out,i} + \frac{C_{4,i} - C_{out,i}}{(1 - \alpha_1)(1 - \alpha_2)\tau} \Delta t$