
Boundary**Condition**

$z = 0$

Known concentration

(1)

$$\text{POC}_i(0) = \text{POC}_{0i}$$

$z = z_{\text{bio}}$

Continuity

(2)

$$\text{POC}_i(z_{\text{bio}}^-) = \text{POC}_i(z_{\text{bio}}^+)$$

(3)

$$-D_{\text{bio}} \cdot \left. \frac{\partial \text{POC}_i}{\partial z} \right|_{z_{\text{bio}}^-} = 0$$
