

$$S_i = \frac{K_i A}{K_i A + V + \sum_{i=1}^n S_i V_i^{sat}} \quad (\text{Eq. 3})$$

$$V_i^{sat} = \frac{VP_i}{\left(P_T - \sum_{i=1}^n P_i \right)} \quad (\text{Eq. 4})$$

$$K_i = K_o \left(\frac{M_o}{M_i} \right)^{1/3} \quad (\text{Eq. 5})$$