$$\frac{dc_{\mathrm{m}}}{dt} = \nabla \cdot (D(T)\nabla c_{\mathrm{m}}) + \Gamma - \sum \frac{dc_t}{dt}$$

$$-D(T)\nabla c_{\mathrm{m}} \cdot \boldsymbol{n} = K_r c_{\mathrm{m}}^2$$

$$\rho C_p \frac{dT}{dt} = \nabla \cdot (\lambda \nabla T) + Q$$

$$\frac{dc_{\mathrm{t}}}{dt} = k c_{\mathrm{m}}(n - c_{\mathrm{t}}) - p\, c_{\mathrm{t}}$$

$$\frac{c_{\mathrm{m}}^{-}}{S^{-}} = \frac{c_{\mathrm{m}}{}^{+}}{S^{+}}$$

$$-\lambda\nabla T \cdot \boldsymbol{n} = h(T - T_{\mathrm{ext}})$$

$$c_{\mathrm{m}} = S(T)\sqrt{P}$$

$$u = \sum_{i=0}^{N} u_i \phi_i(x, y, z)$$

$$c_{\max} = \frac{\varphi_{\mathrm{imp}}\, R_p}{D} + \sqrt{\frac{\varphi_{\mathrm{imp}}}{K_r}}$$