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

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

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

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

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

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

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

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

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