Formulas：

$$D_{p,kel} = \frac{4\sigma v_m}{k_b T ln S_r} \tag{2}$$

$$\eta_{act} = \frac{\int_0^{R_{act}} 2\pi r w(r) N(r) dr}{Q_a N_0} \tag{3}$$

Pictures：

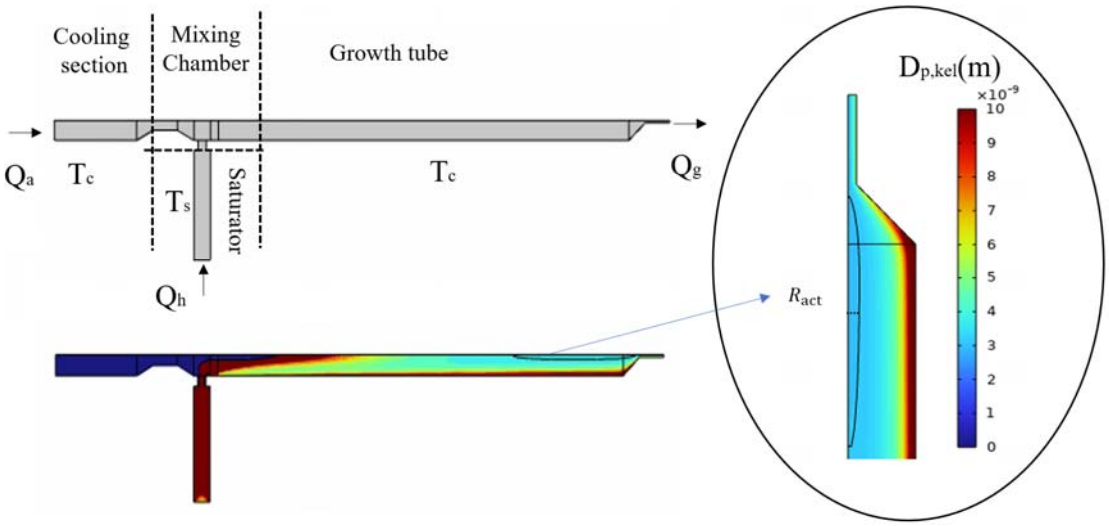

Figure 2. Computational domain for modeling the sMCPC performance and a typical distribution of the equilibrium Kelvin-diameter

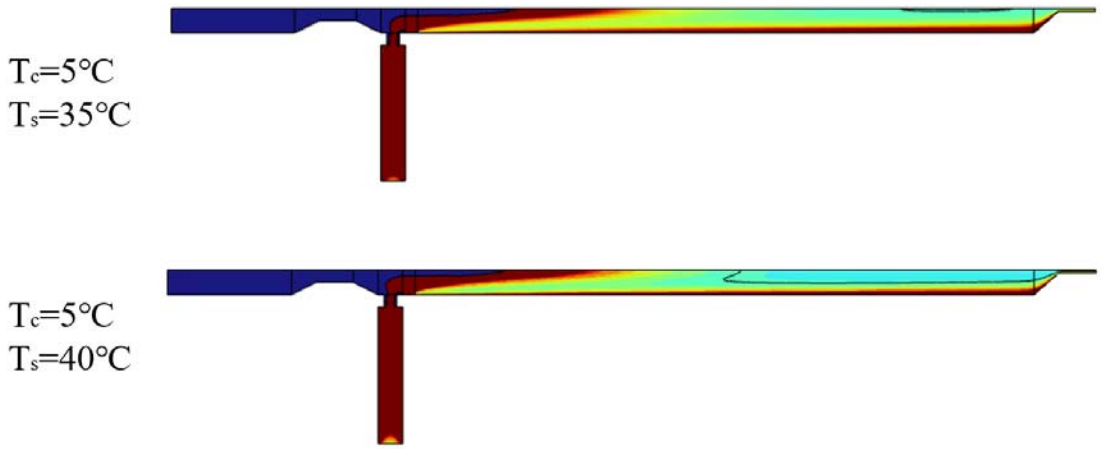

Figure 8. Comparison of activation regions for particles with the same diameter in the sMCPC under different temperature settings

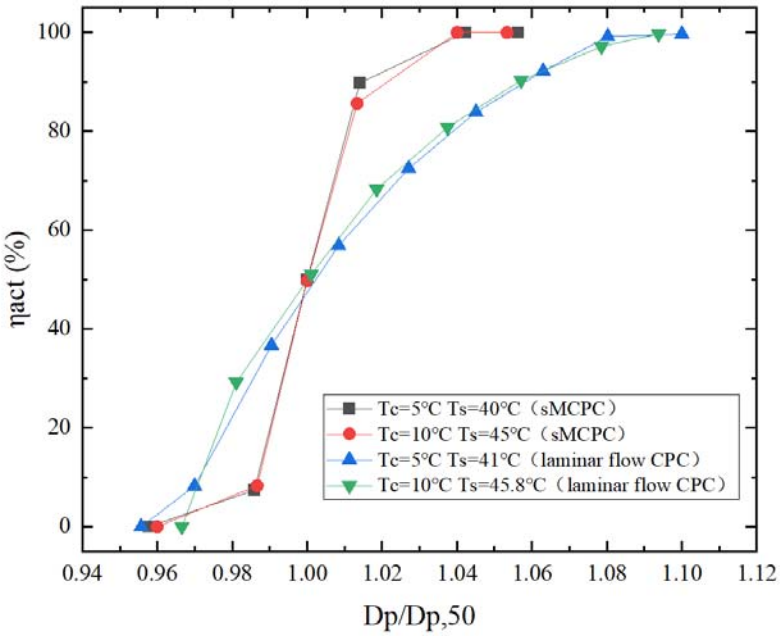

Figure 13. Comparison of the activation efficiency curves for sMCPC and laminar flow CPC