

Figure S1: SANS intensity $I(q)$ as a function of q for a solution of PMAA in water at a volume fraction of 0.065. The time evolution of $I(q)$ has been monitored following a temperature jump from 25°C to $T_{CP} + 10^\circ\text{C}$. The various delay between the temperature change and the acquisition of $I(q)$ are represented in different colors: \circ 60 min, \square 180 min, \triangle 300 min, ∇ 420 min, \triangleleft 540 min, \triangleright 660 min, \diamond 780 min, \blacklozenge 900 min

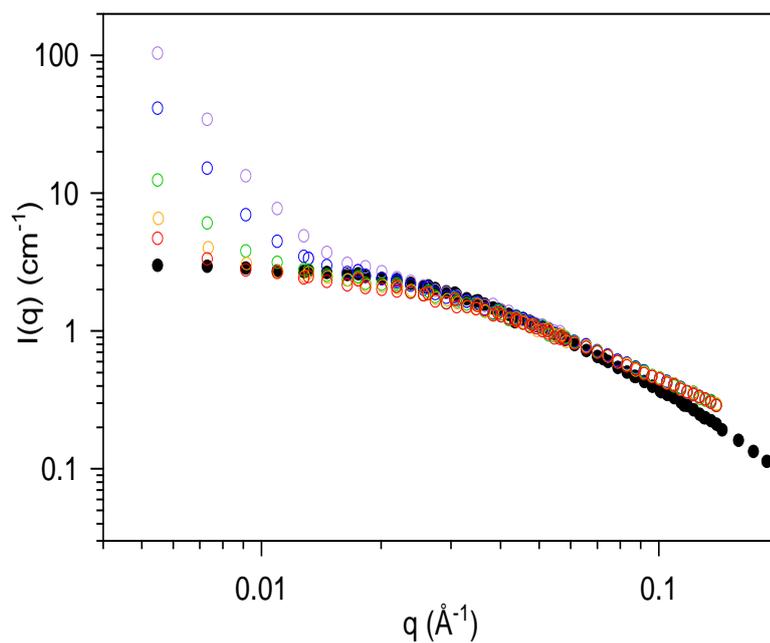


Figure S2: SANS intensity $I(q)$ as a function of q for a solution of PMAA in water at a volume fraction of 0.104. The time evolution of $I(q)$ has been monitored following a temperature jump from 25°C to $T_{CP} + 10^\circ\text{C}$. The various delay between the temperature change and the acquisition of $I(q)$ are represented in different colors: \circ 60 min, \circ 180 min, \circ 300 min, \circ 420 min, \circ 540 min. The SANS intensity obtained for the same solution at 25°C, before the temperature change, has been included for sake of comparison (\blacksquare)

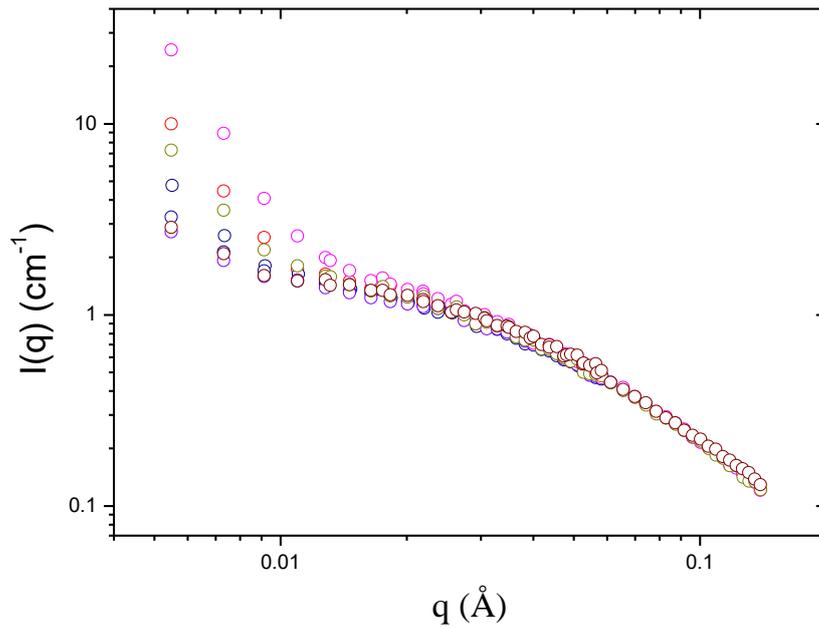


Figure S3: SANS intensity $I(q)$ as a function of q for a solution of PMAA in water at a volume fraction of 0.017. The time evolution of $I(q)$ has been monitored following a temperature jump from 25°C to $T_{CP} + 10^\circ\text{C}$. The various delay between the temperature change and the acquisition of $I(q)$ are represented in different colors: \circ 60 min, \circ 120 min, \circ 180 min, \circ 240 min, \circ 300 min, \circ 360 min, \circ 420 min..

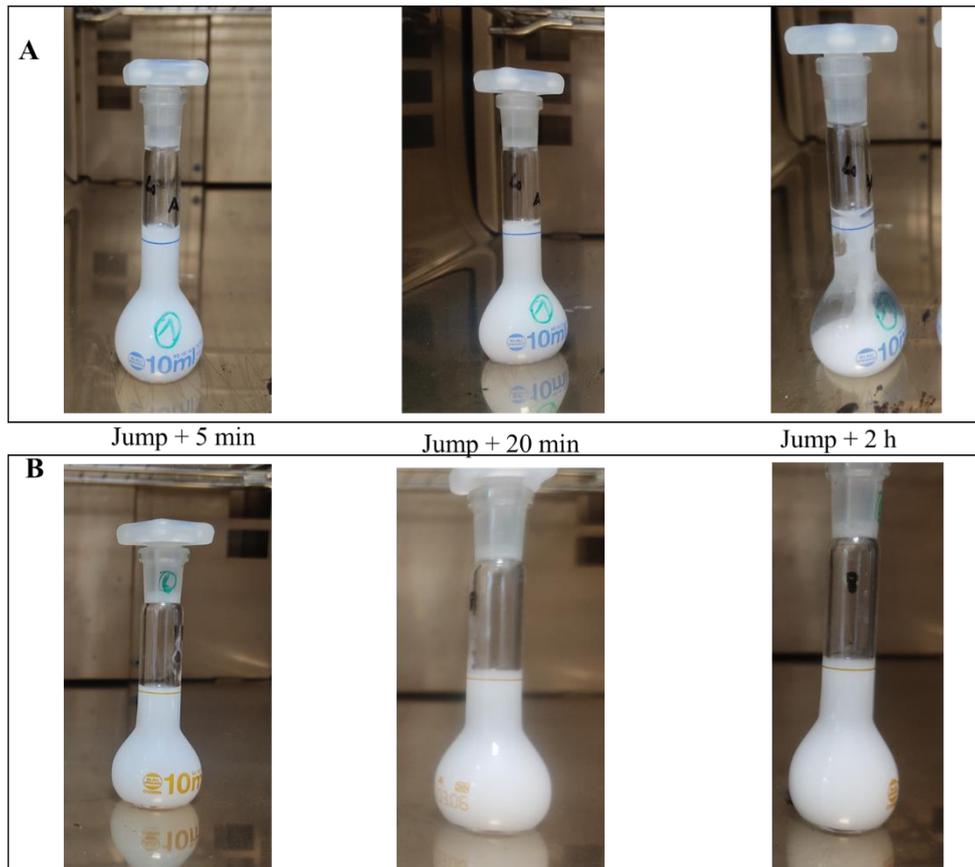


Figure S4: Photographs of two PMAA solutions in an oven above the cloud after 3 different delays following a temperature jump (5 minutes, 20 minutes and two hours): (A) $\phi_{\text{PMAA}} = 0.013$ and (B) and of $\phi_{\text{PMAA}} = 0.090$.