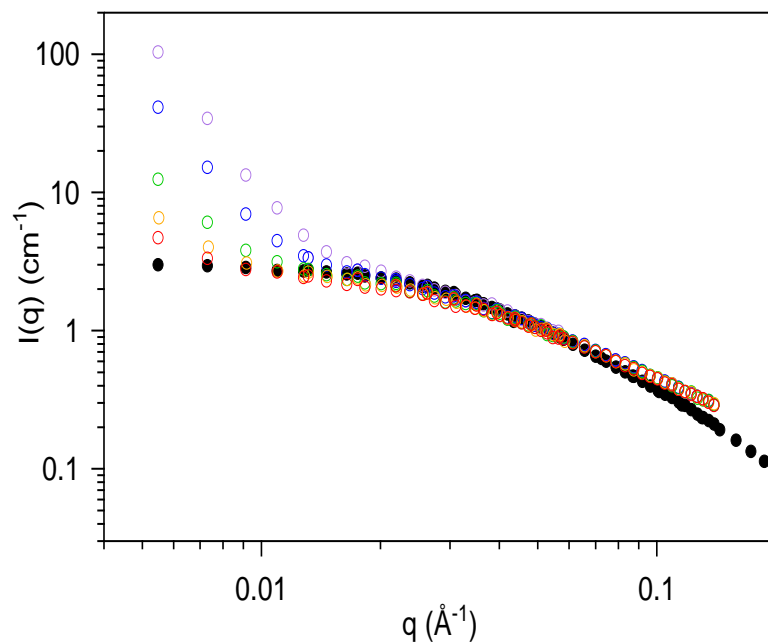
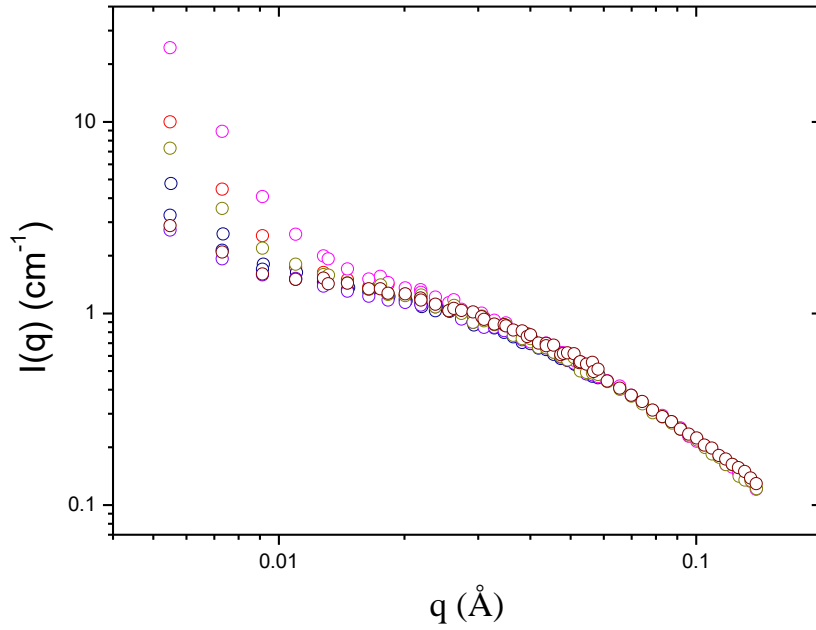


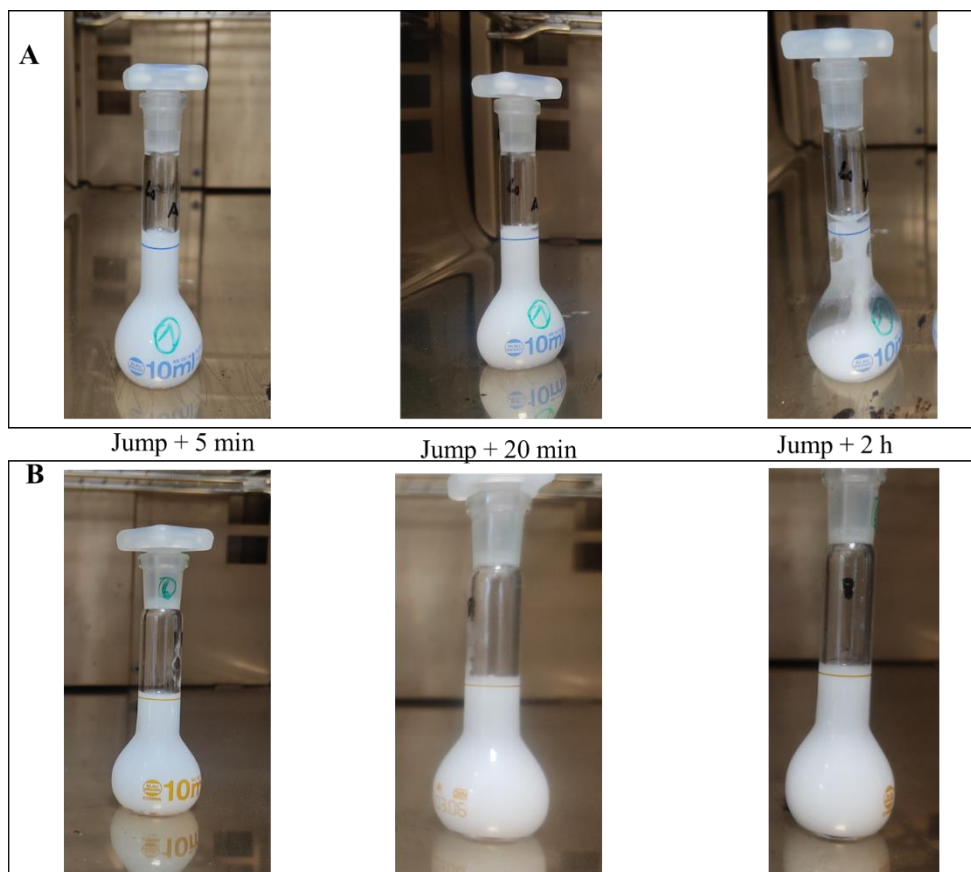
**Figure S1:** SANS intensity  $I(q)$  as a function of  $q$  for a solution of PMAA in water at a volume fraction of 0.065. The time evolution of  $I(q)$  has been monitored following a temperature jump from 25°C to  $T_{CP} + 10^\circ\text{C}$ . The various delay between the temperature change and the acquisition of  $I(q)$  are represented in different colors:  $\circ$  60 min,  $\square$  180 min,  $\triangle$  300 min,  $\nabla$  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)  $\phi_{PMAA} = 0.013$  and (B) and of  $\phi_{PMAA} = 0.090$ .