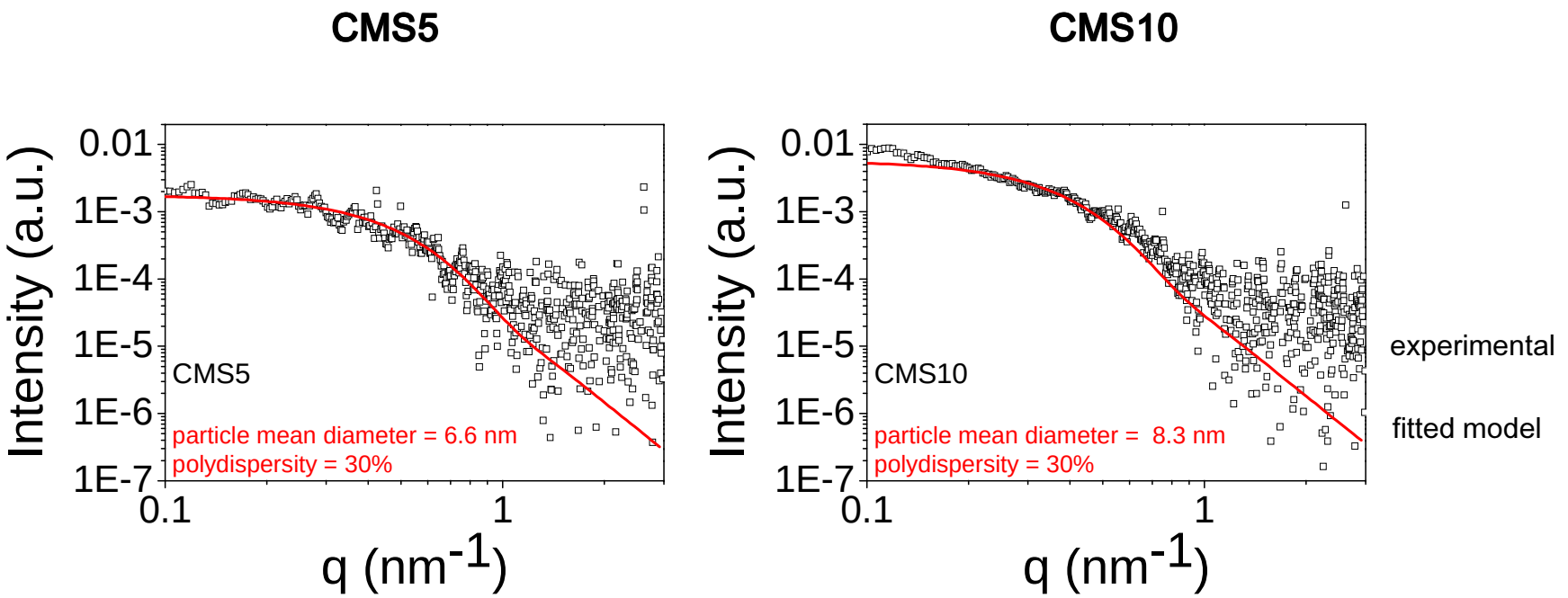
Electronic Supplementary Material (ESI) for Journal of Materials Chemistry A.

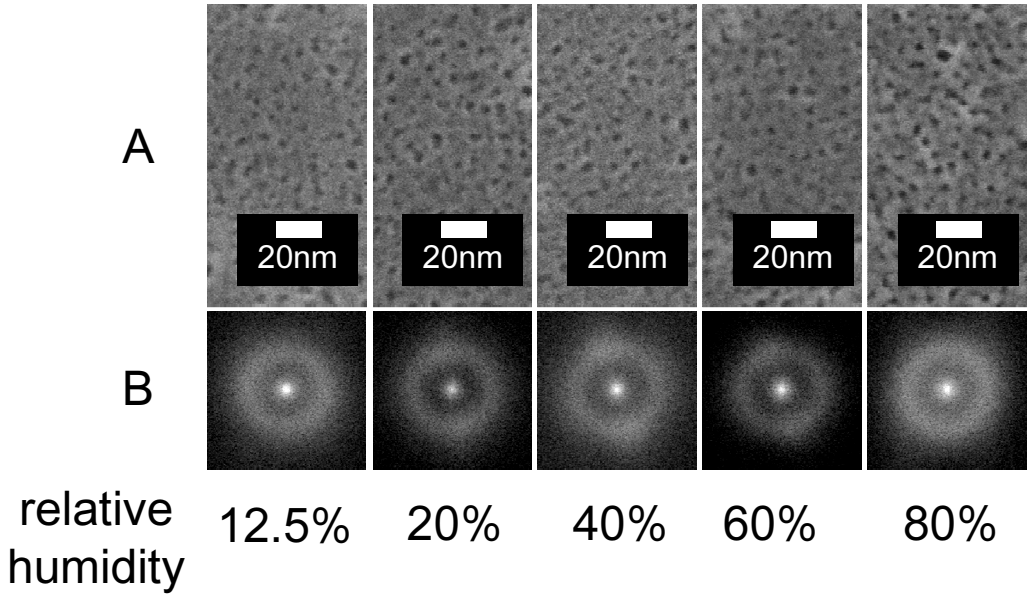
Supporting information

S1: SAXS analysis of CMS5 and CMS10 dissolved in ethanol



S1. SAXS scattering curves (black squares) and mathematical fits (red line) of dissolved CMS5 (left graph) and CMS10 (right graph) polymers in ethanol (1 g/L). The intensity is plotted against the scattering vector *q*. A spherical shape, a homogeneous electron density and a Schulz–Zimm size distribution are assumed. The polymer with the larger hyperbranched polyglycerol core CMS10 shows a larger particle mean diameter (8.3 nm) than CMS5 (6.6 nm).

S2: Influence of relative humidity during dip-coating on pore size and ordering



S2. SEM images (A) and corresponding FFT (B) of CMS5-templated mesoporous TiO_2 films deposited at different relative humidities. All films were calcined at 400 °C. Dip-coating was performed at 25 °C and at relative humidity ranging from 12.5% to 80% (from left to right). The differences in r.h. do not result in significant changes in pore size or ordering.