

Figure S1: X-ray diffraction patterns of calcined SBA-15 (I, SBA-50-100-C2) and microwave digested SBA-15 (II, SBA-50-100-MW).

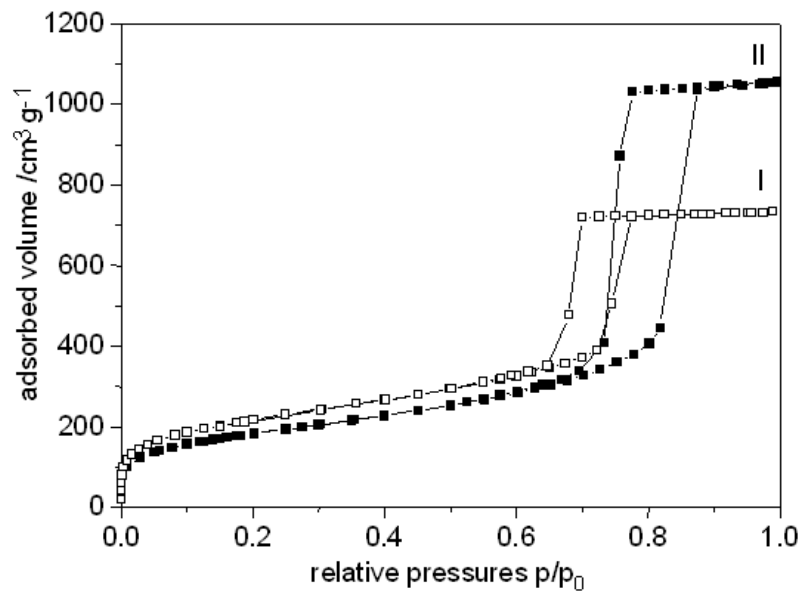


Figure S2: Nitrogen physisorption isotherms of calcined KIT-6 (I) and microwave digested KIT-6 (II).

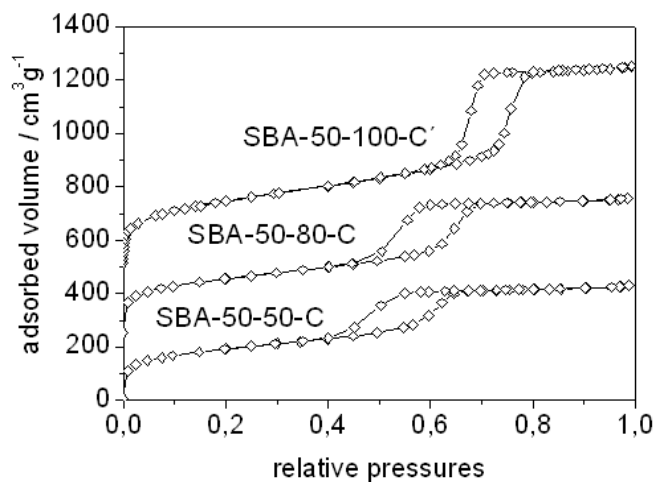


Figure S3: Nitrogen physisorption isotherms of calcined SBA-15 samples as a function of the temperature of hydrothermal treatment; for clarity sample SBA-50-80-C is given with an offset of $250 \text{ cm}^3 \text{ g}^{-1}$ and sample SBA-50-100-C is given with an offset of $500 \text{ cm}^3 \text{ g}^{-1}$.

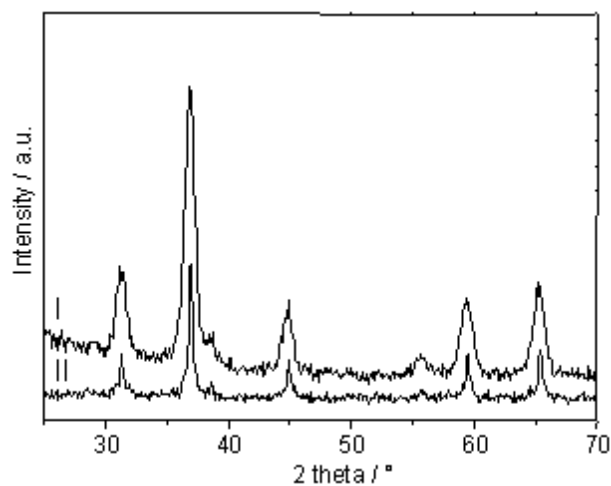


Figure S4: Wide angle XRD of $\text{Co}(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O}$ calcined at 200°C (I) and of a $\text{Co}(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O}$ / SBA-15 composite calcined at 450°C .

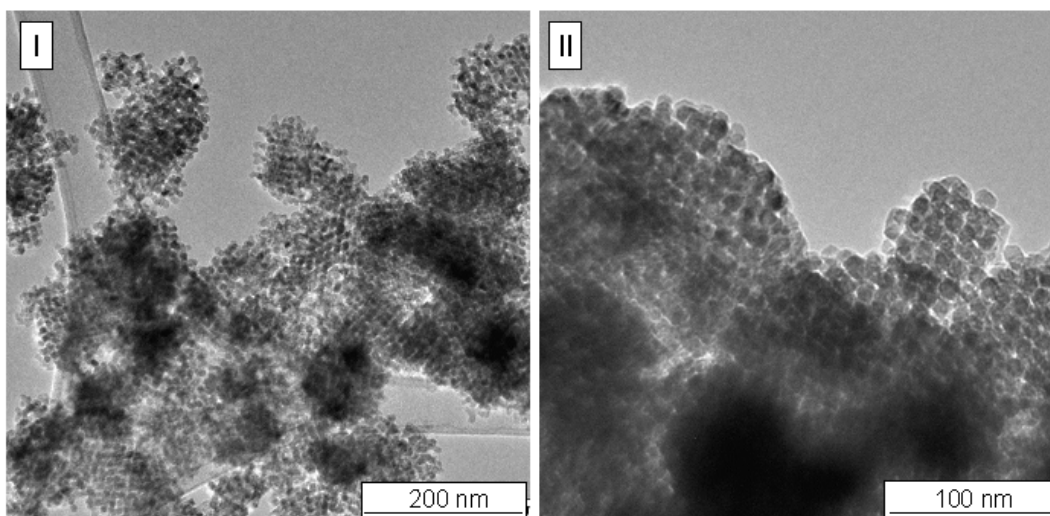


Figure S5: Effect of a size variation of microwave digested KIT-6 on the nanocast Co_3O_4 ; TEM images of nanocast Co_3O_4 : Co-Cubic-50-MW (I), Co-Cubic-135-MW (II).