

Electronic Supporting Information

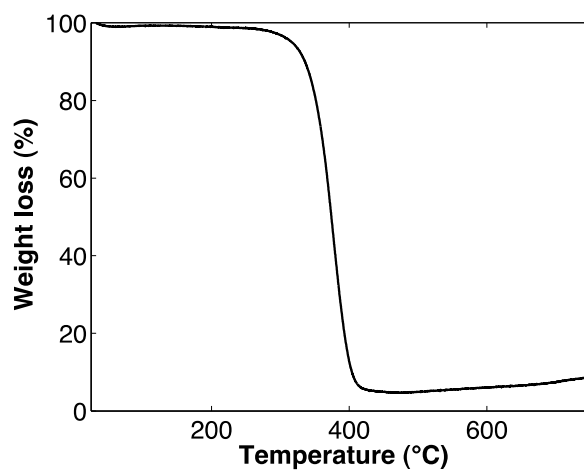


Figure S1. Thermogravimetric analysis of pure Poly-N-isopropylacrylamide carried out under air with a heating rate of $10^{\circ}\text{C}.\text{min}^{-1}$.

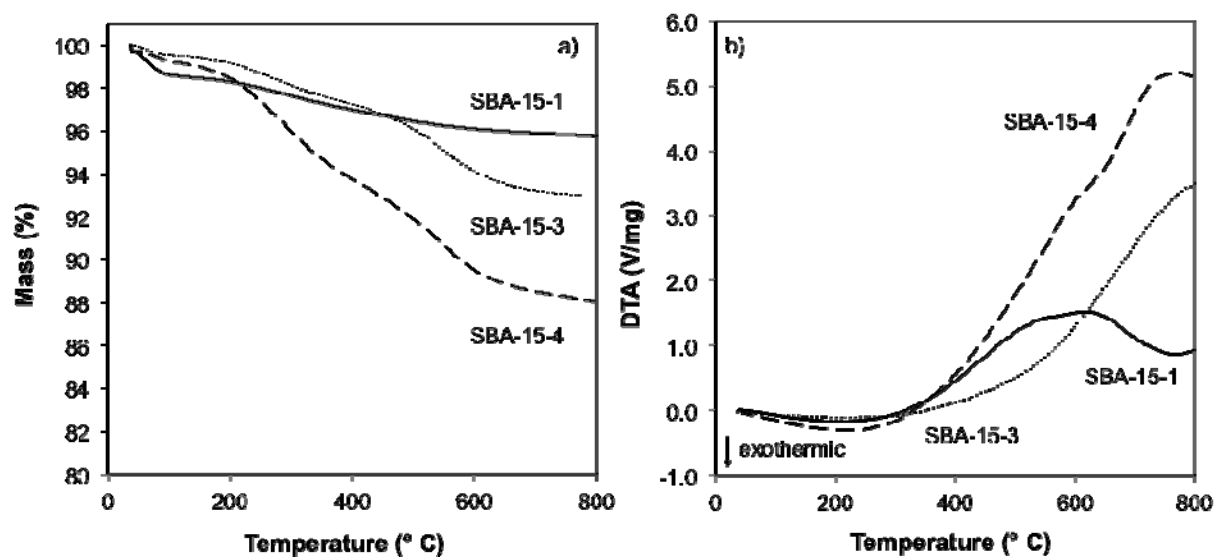


Figure S2. a) TGA and b) DTA curves of SBA-15-1 (solid lines), SBA-15-3 (dotted lines) and SBA-15-4 (dashed lines) carried under N₂ with a heating rate of 5 °C min⁻¹.

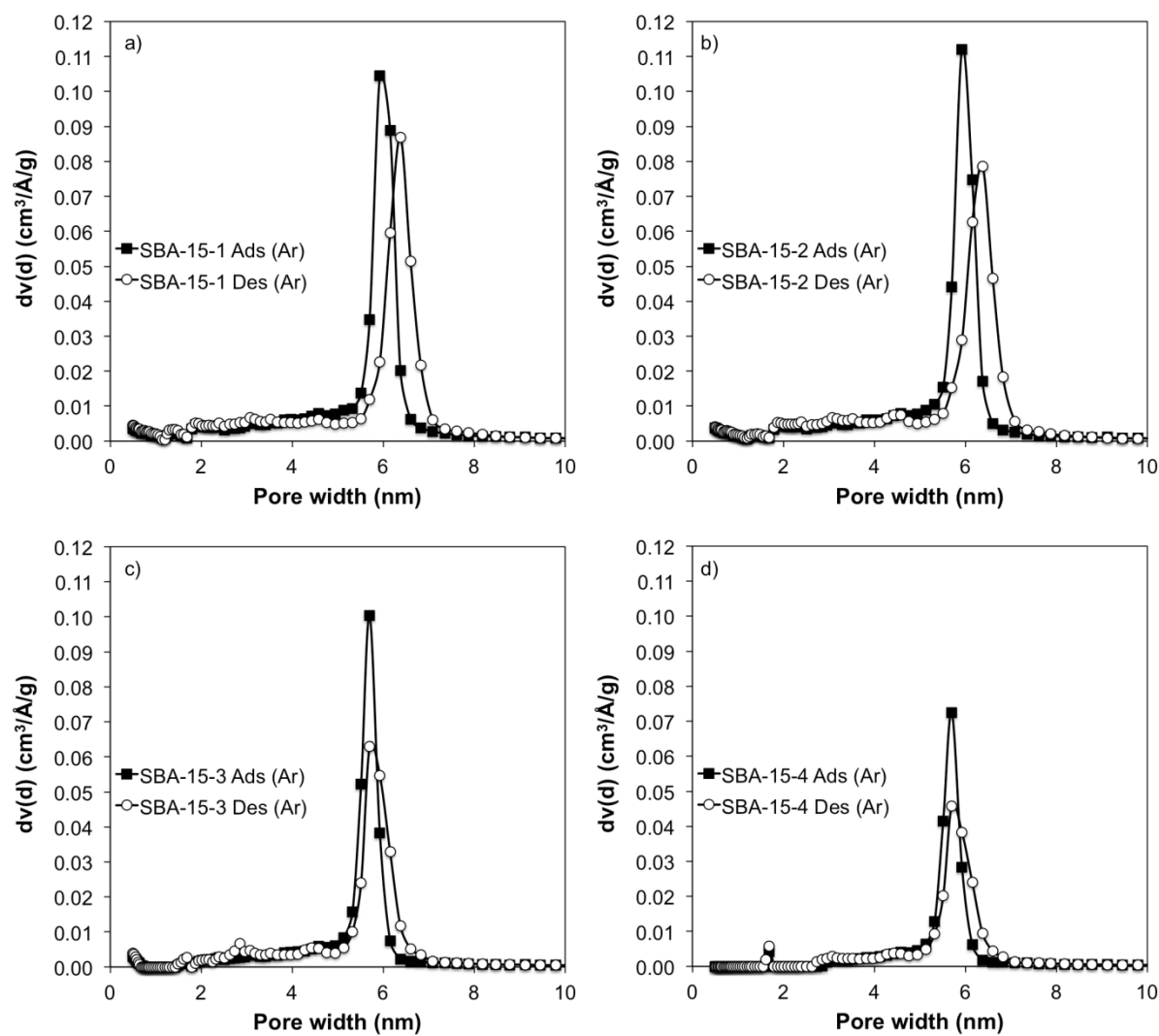


Figure S3. NLDFT pore size distributions extracted from Ar isotherms (adsorption and desorption branches): a) SBA-15-1, b) SBA-15-2, c) SBA-15-3 and d) SBA-15-4.

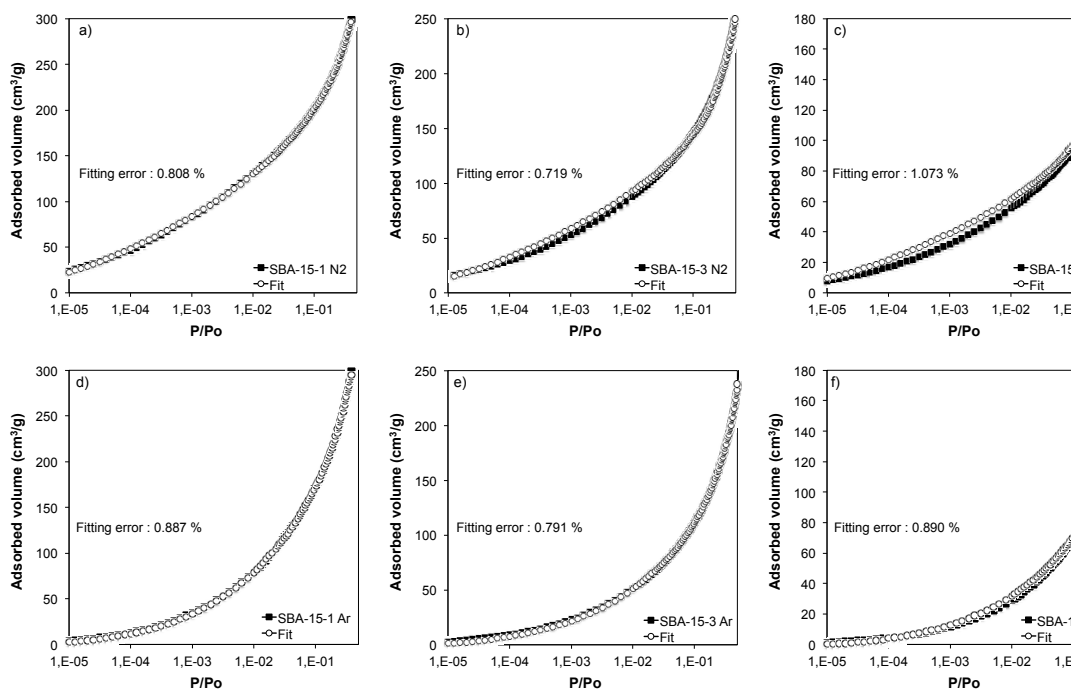


Figure S4. NLDFT fitting comparison ($10^{-5} \leq P/P_o \leq 0.5$) for the native SBA-15 and the modified materials (SBA-15-1, SBA-15-3 and SBA-15-4) extracted from the N_2 adsorption isotherms measured under standard conditions (a- c) and the Ar adsorption isotherms (d-f).

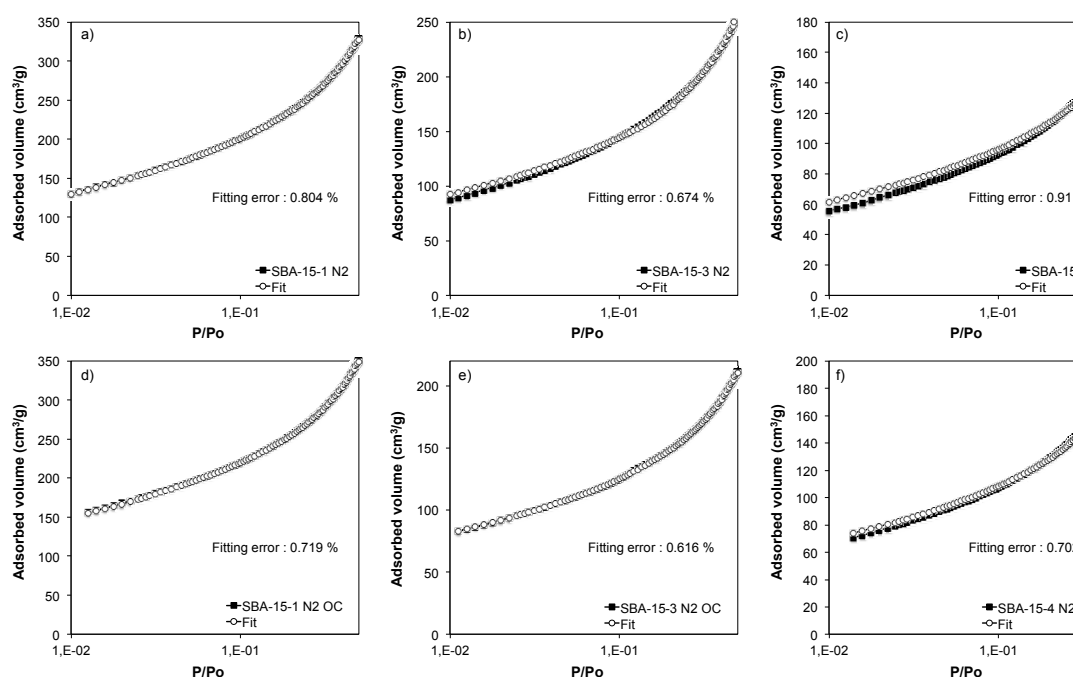


Figure S5. NLDFT fitting comparison ($0.01 \leq P/P_o \leq 0.5$) for the native SBA-15 and the modified materials (SBA-15-1, SBA-15-3 and SBA-15-4) extracted from the N_2 adsorption isotherms measured with standard conditions (a-c) and the N_2 adsorption isotherms measured with optimized conditions (OC) (d-f).