Magnetic porous carbons derived from cobalt (II)-based metal-organic frameworks for the solid-phase extraction of sulfonamides

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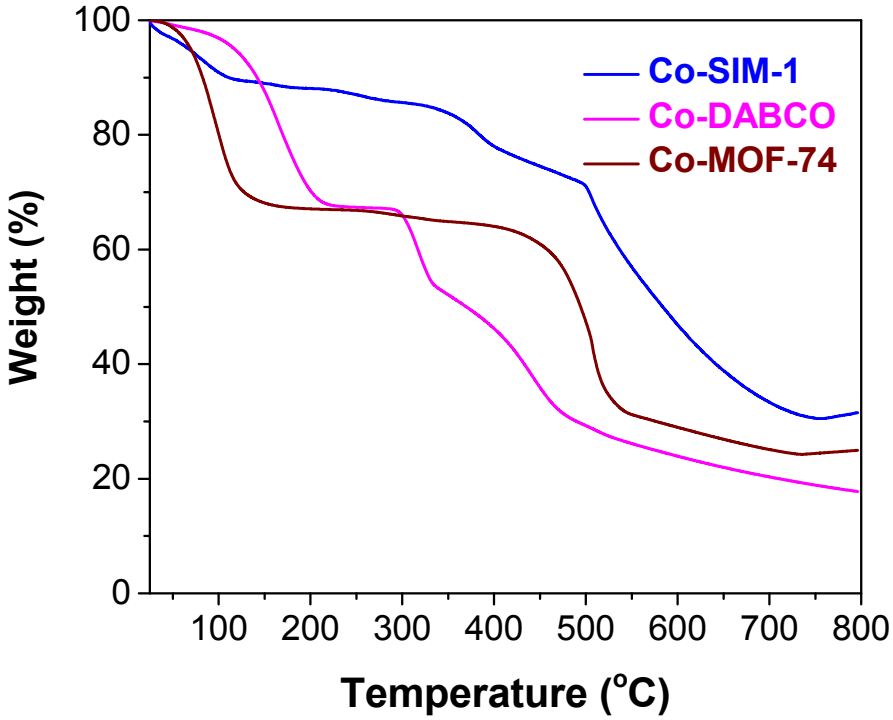

Fig. S1. TGA curves of Co-SIM-1, Co-MOF-74 and Co-DABCO.

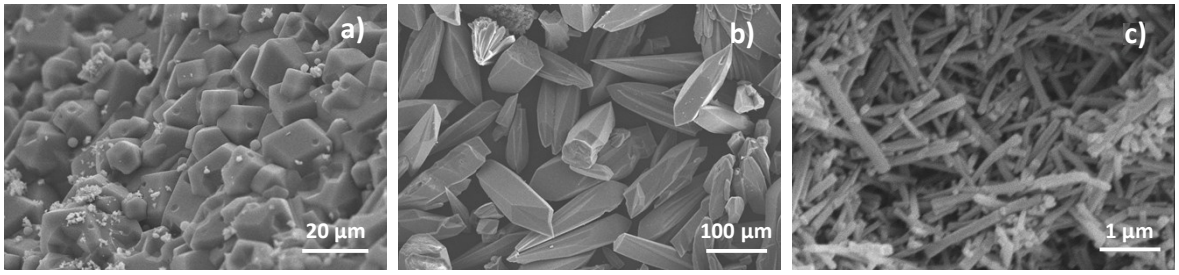

Fig. S2. SEM images of (a) Co-SIM-1, (b) Co-MOF-74 and (c) Co-DABCO metal-organic frameworks.

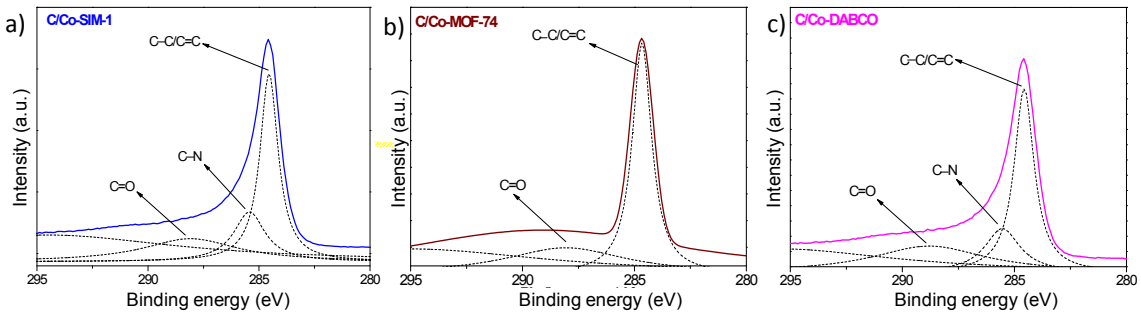

Fig. S3. High resolution C 1s XPS spectra of (a) C/Co-SIM-1, (b) C/Co-MOF-74 and (c) C/Co-DABCO samples.

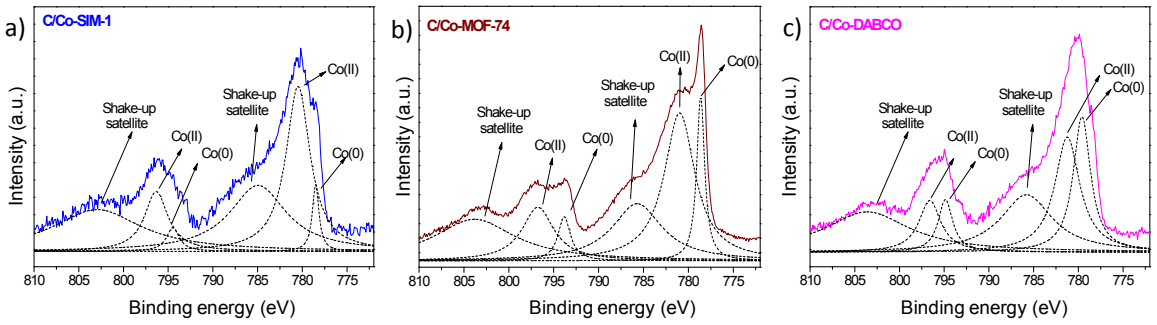

Fig. S4. High resolution Co 2p XPS spectra of (a) C/Co-SIM-1, (b) C/Co-MOF-74 and (c) C/Co-DABCO samples.

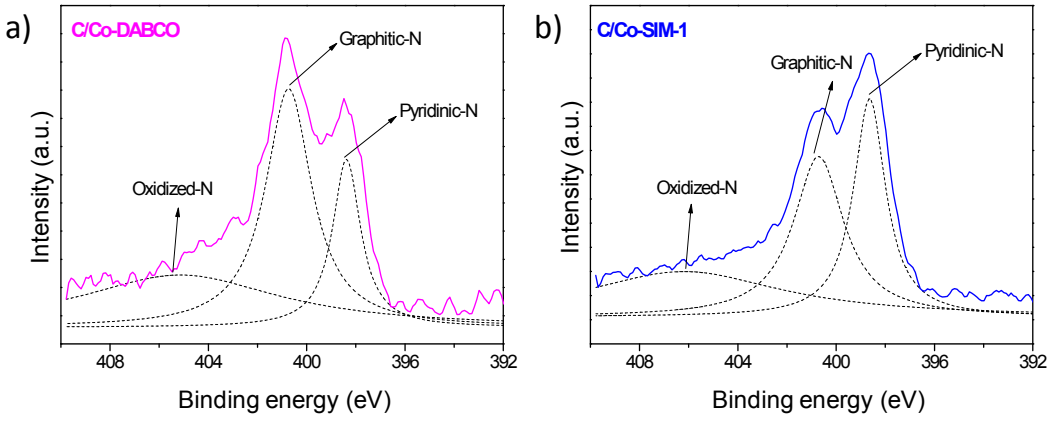

Fig. S5. High resolution N 1s XPS spectra of (a) C/Co-SIM-1 and (b) C/Co-DABCO samples.

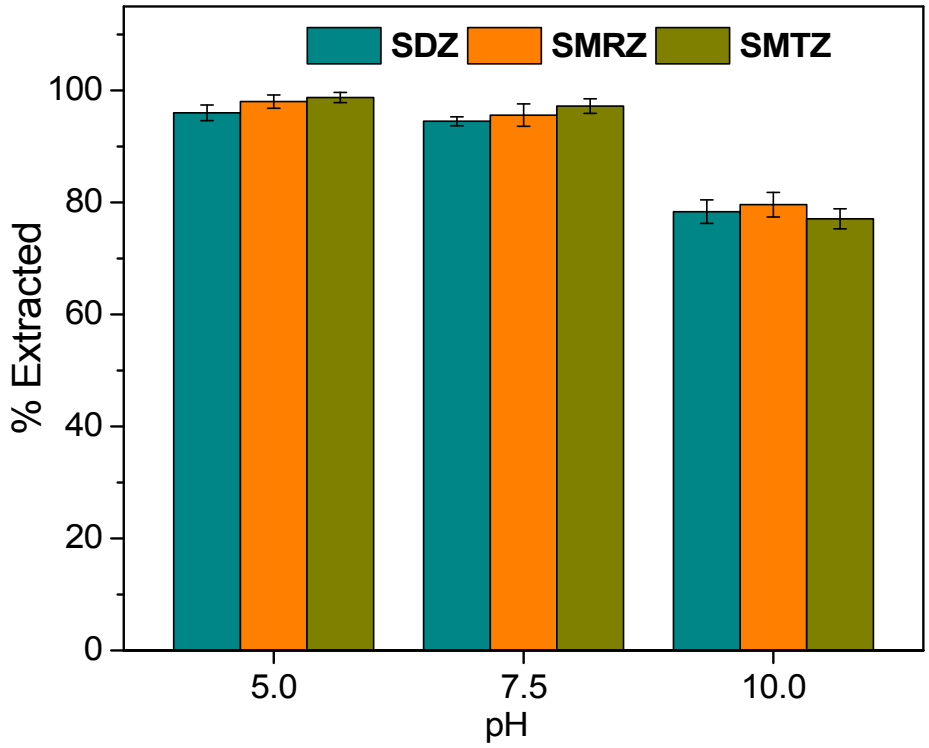

Fig. S6. Effect of pH on the adsorption of sulfonamides (5 ppm, each) on C/Co-SIM-1.

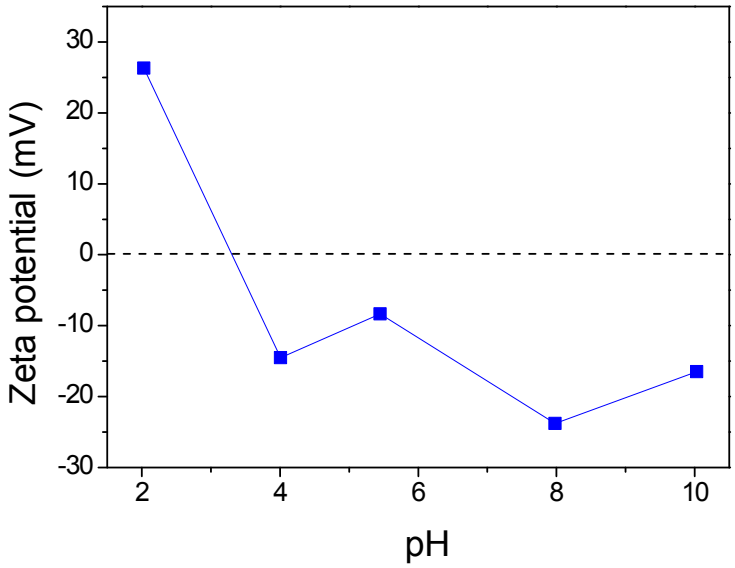

Fig. S7. Zeta potential values of C/Co-SIM-1 at different pH values.

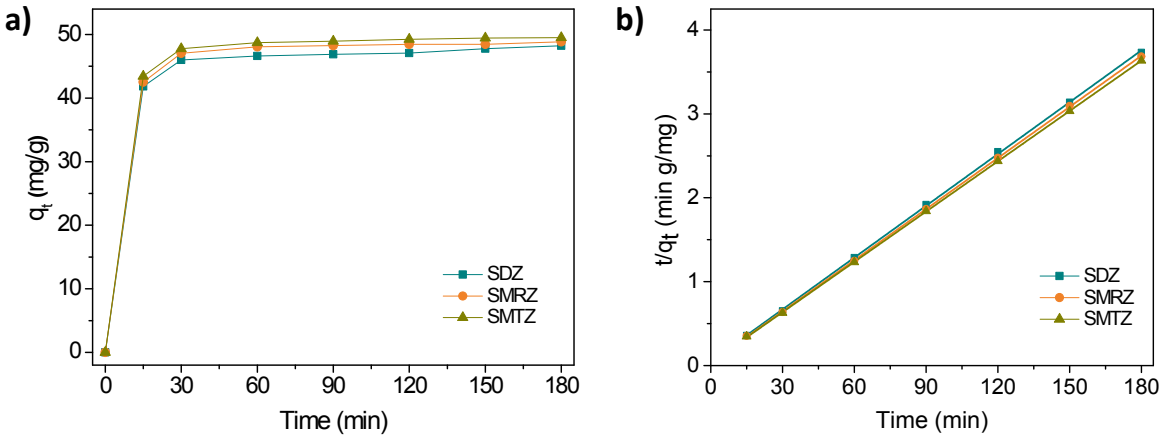

Fig. S8. (a) SNs adsorbed (mg/g) versus contact time (min) using C/Co-SIM-1 as adsorbent ($C_{Sulfonamide}$ 5 ppm, each). (b) Linear fit of pseudo-second order kinetics model for the adsorption of sulfonamides on C/Co-SIM-1.