Electronic Supplementary Material (ESI) for RSC Advances.

A supramolecular assembly of methyl-substituted cucurbit[5]uril and its potential applications in selective absorption

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Experimental Section

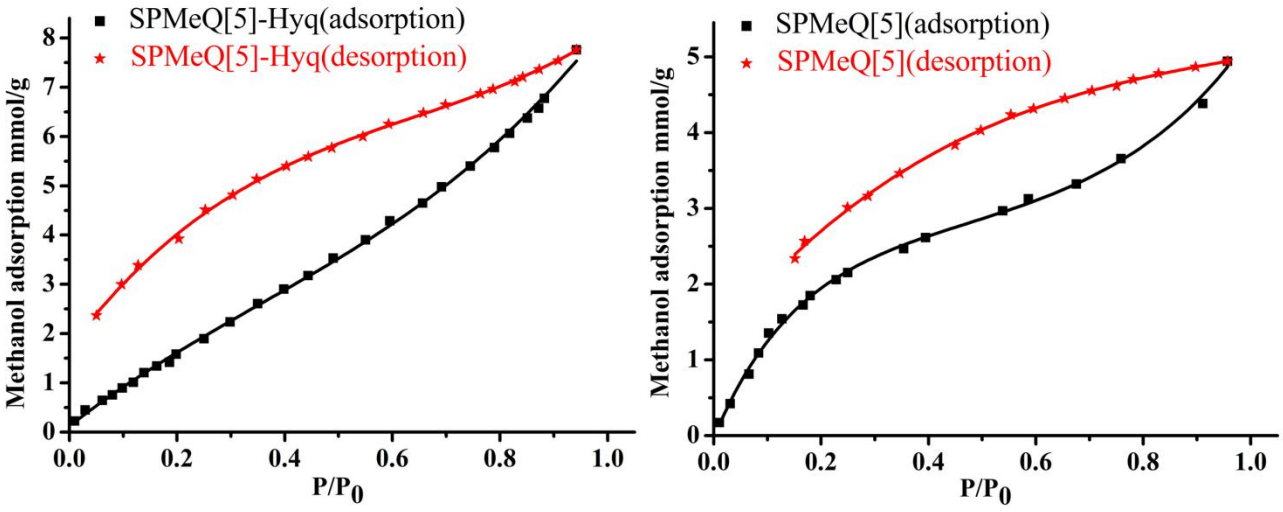

Figure S1 The sorption isotherms of Methanol at 298 K. ■ symbol = adsorption and, ★ symbol = desorption of the SPMeQ[5]-Hyq -based porous material and SPMeQ[5] powder respectively.

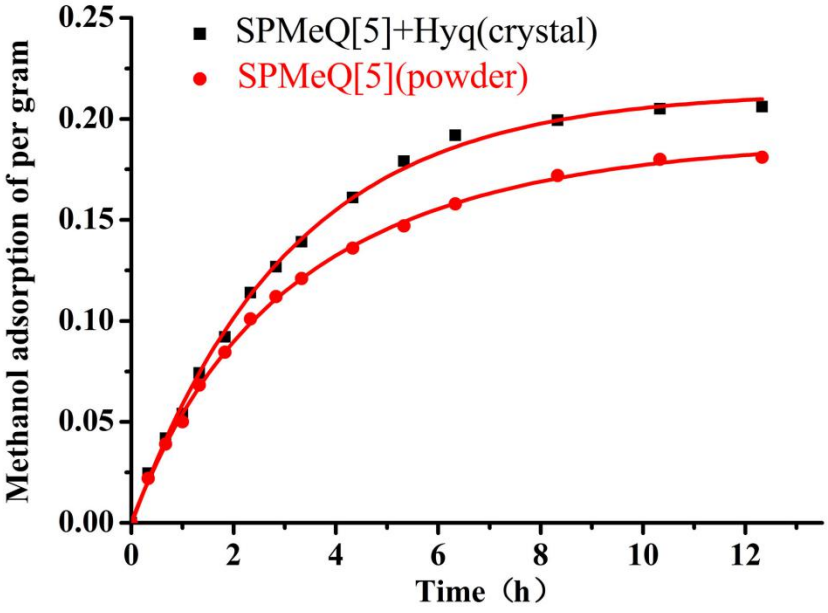

Figure S2 Violated materials sorption profiles of (■) the SPMeQ[5]-Hyq-based porous material, and (●) SPMeQ[5] powder for methanol.

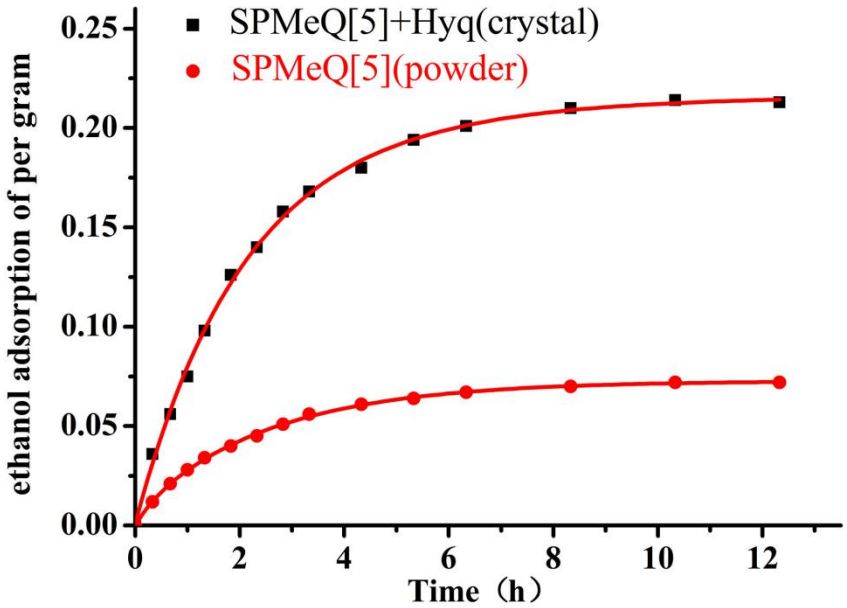

Figure S3 Violated materials sorption profiles of (■) the SPMeQ[5]-Hyq-based porous material, and (●) SPMeQ[5] powder for ethanol.

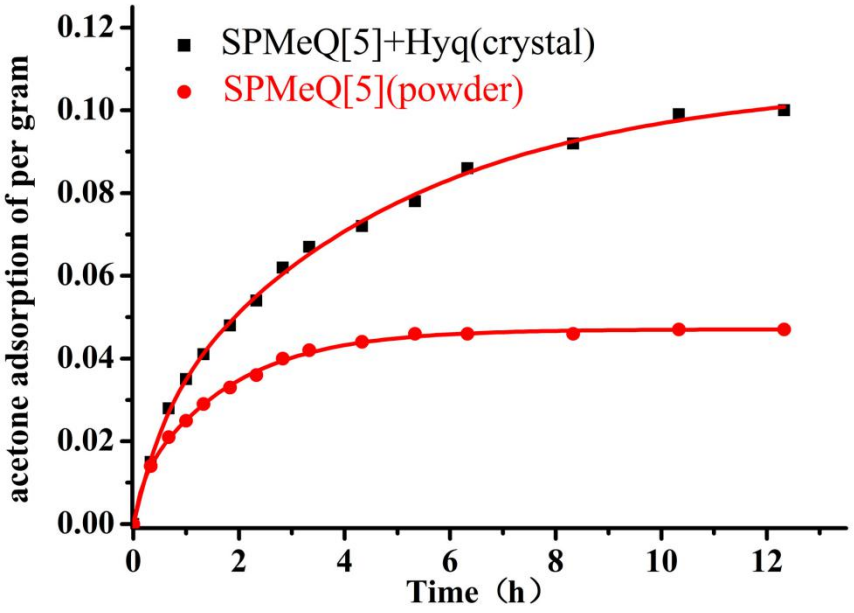

Figure S4 Violated materials sorption profiles of (■) the SPMeQ[5]-Hyq-based porous material, and (●) SPMeQ[5] powder for acetone.

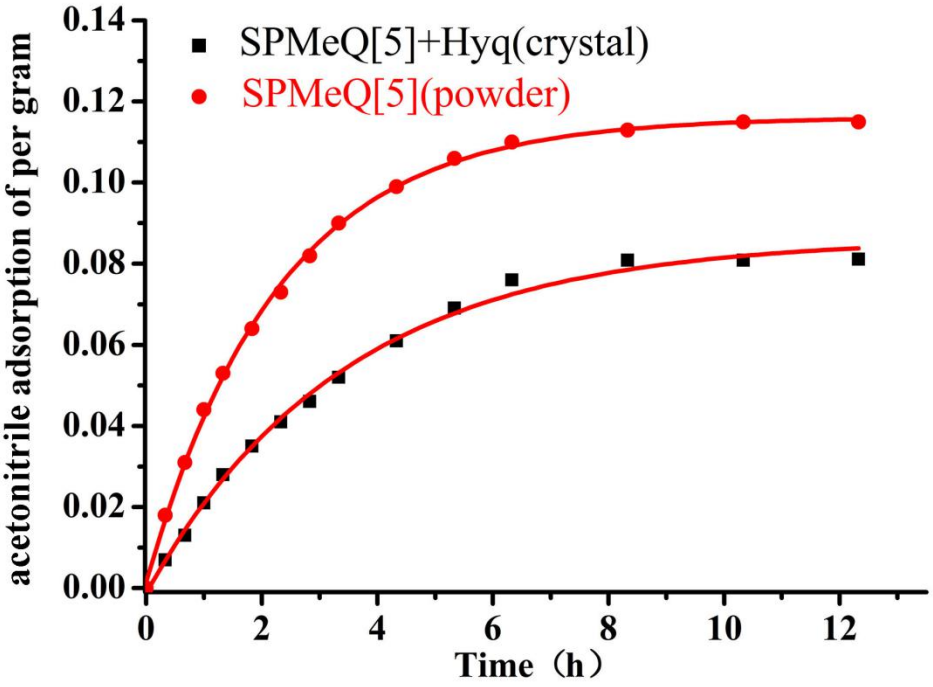

Figure S5 Violated materials sorption profiles of (■) the SPMeQ[5]-Hyq-based porous material, and (●) SPMeQ[5] powder for acetonitrile.

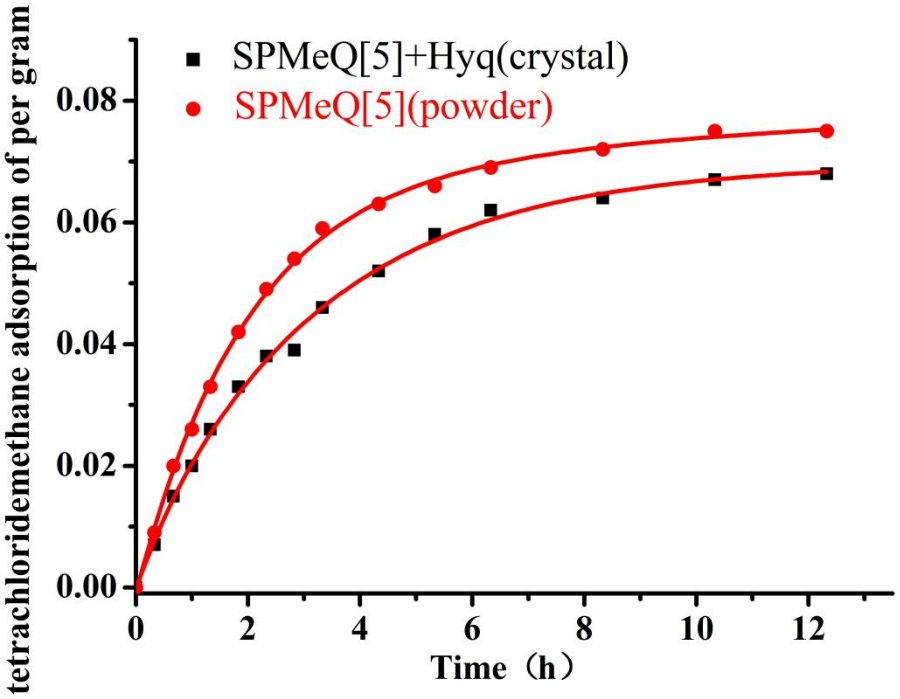

Figure S6 Violated materials sorption profiles of (■) the SPMeQ[5]-Hyq-based porous material, and (●) SPMeQ[5] powder for tetrachloridemethane.

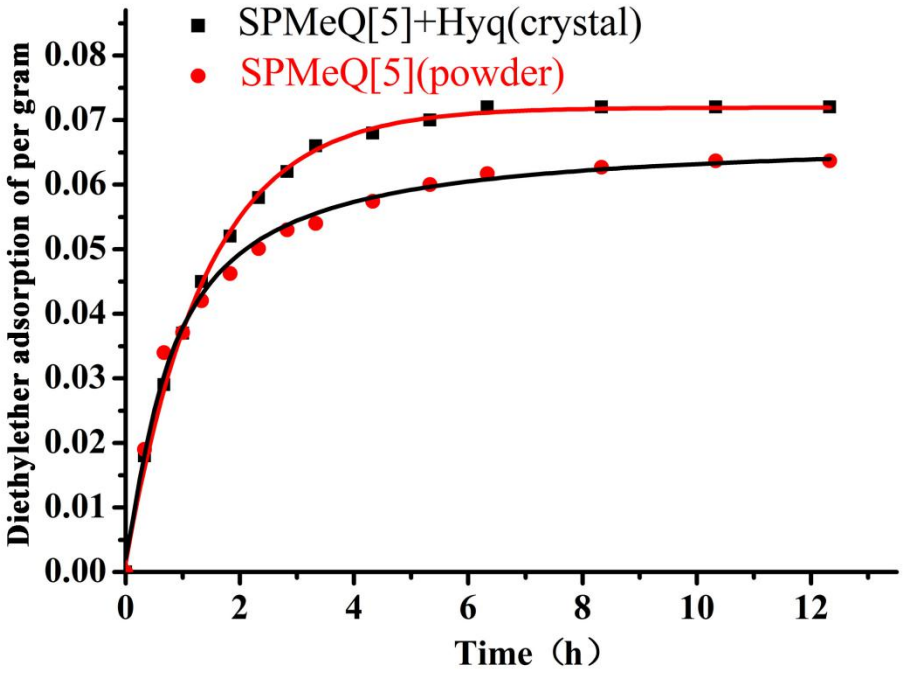

Figure S7 Violated materials sorption profiles of (■) the SPMeQ[5]-Hyq-based porous material, and (●) SPMeQ[5] powder for diethylether.

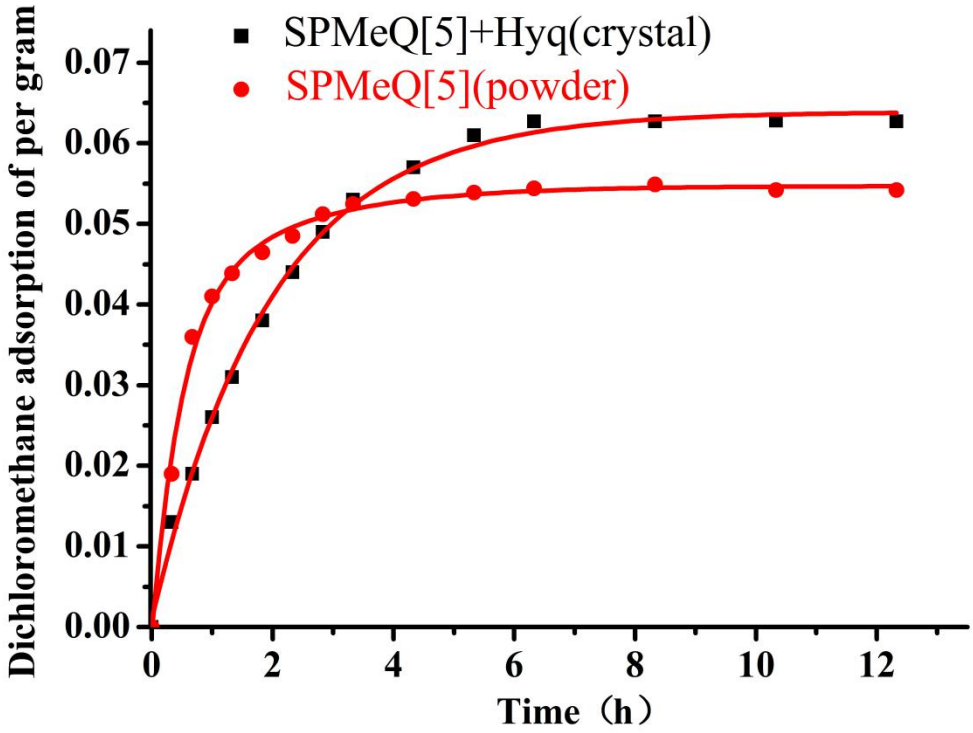

Figure S8 Violated materials sorption profiles of (■) the SPMeQ[5]-Hyq-based porous material, and (●) SPMeQ[5] powder for dichloromethane.

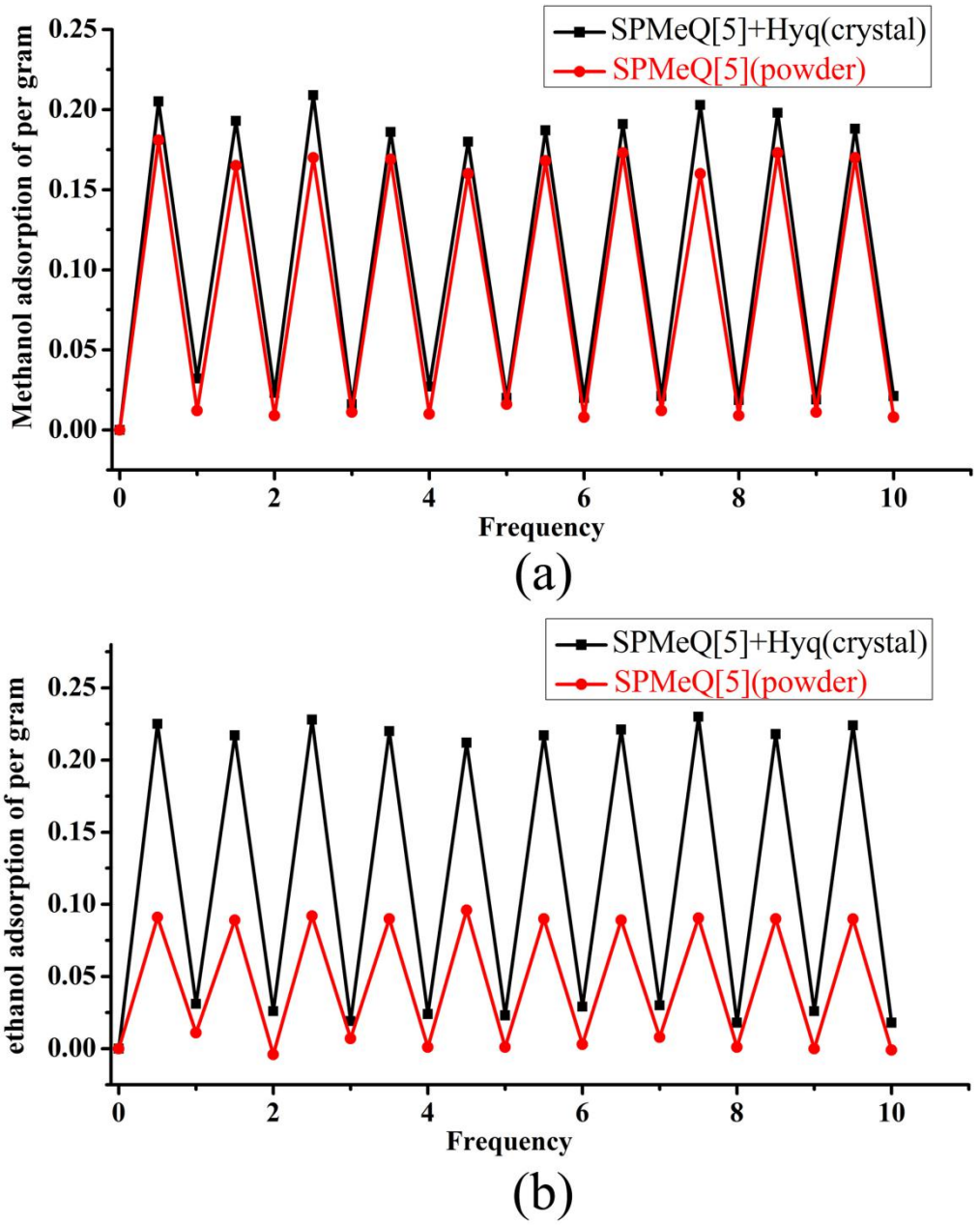

Figure S9 Lifetime experiments for methanol (a) and ethanol (b) adsorption of the SPMeQ[5]-Hyq-based porous material.

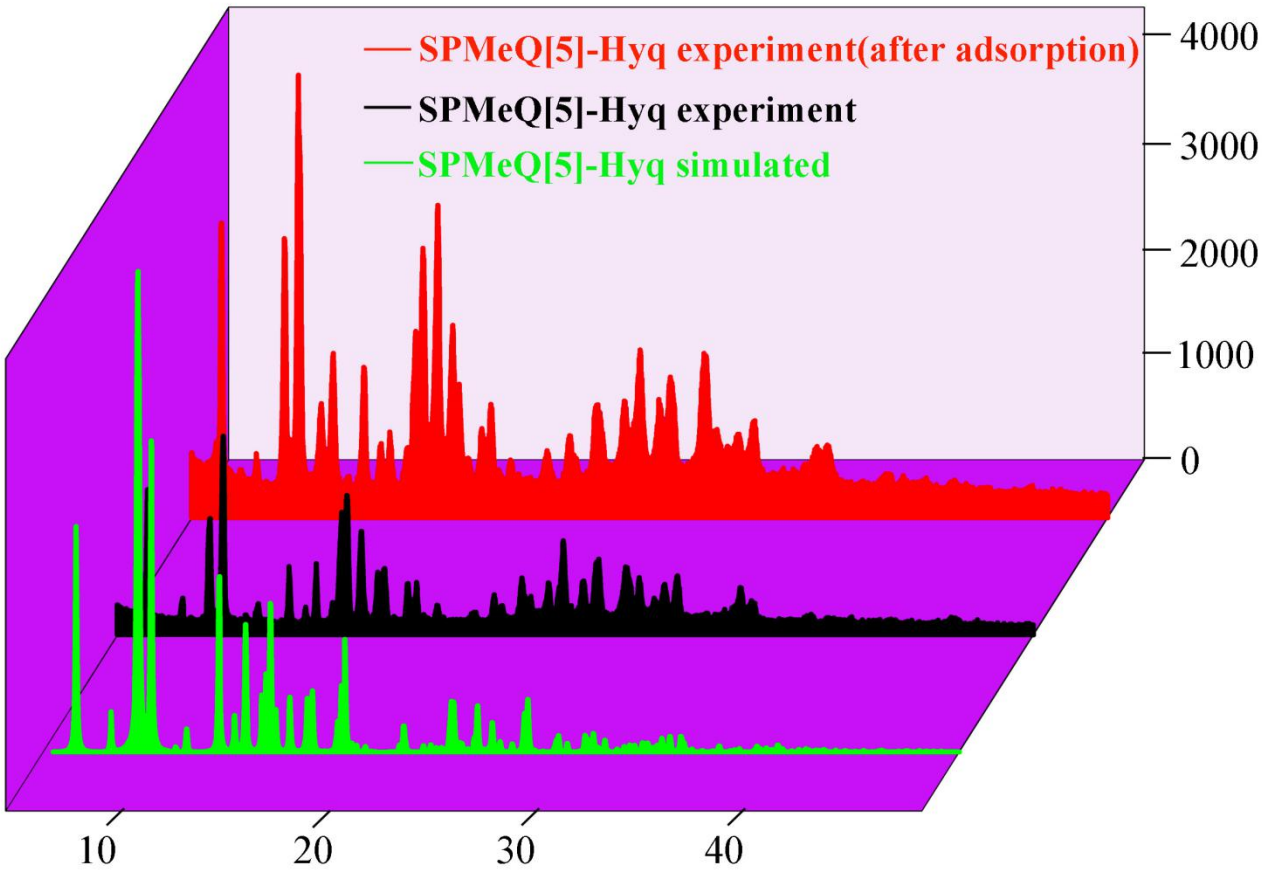

Figure S10 Powder X-ray diffraction (PXRD) of the SPMeQ[5]-Hyq-based porous material and the corresponding comparison with simulation.

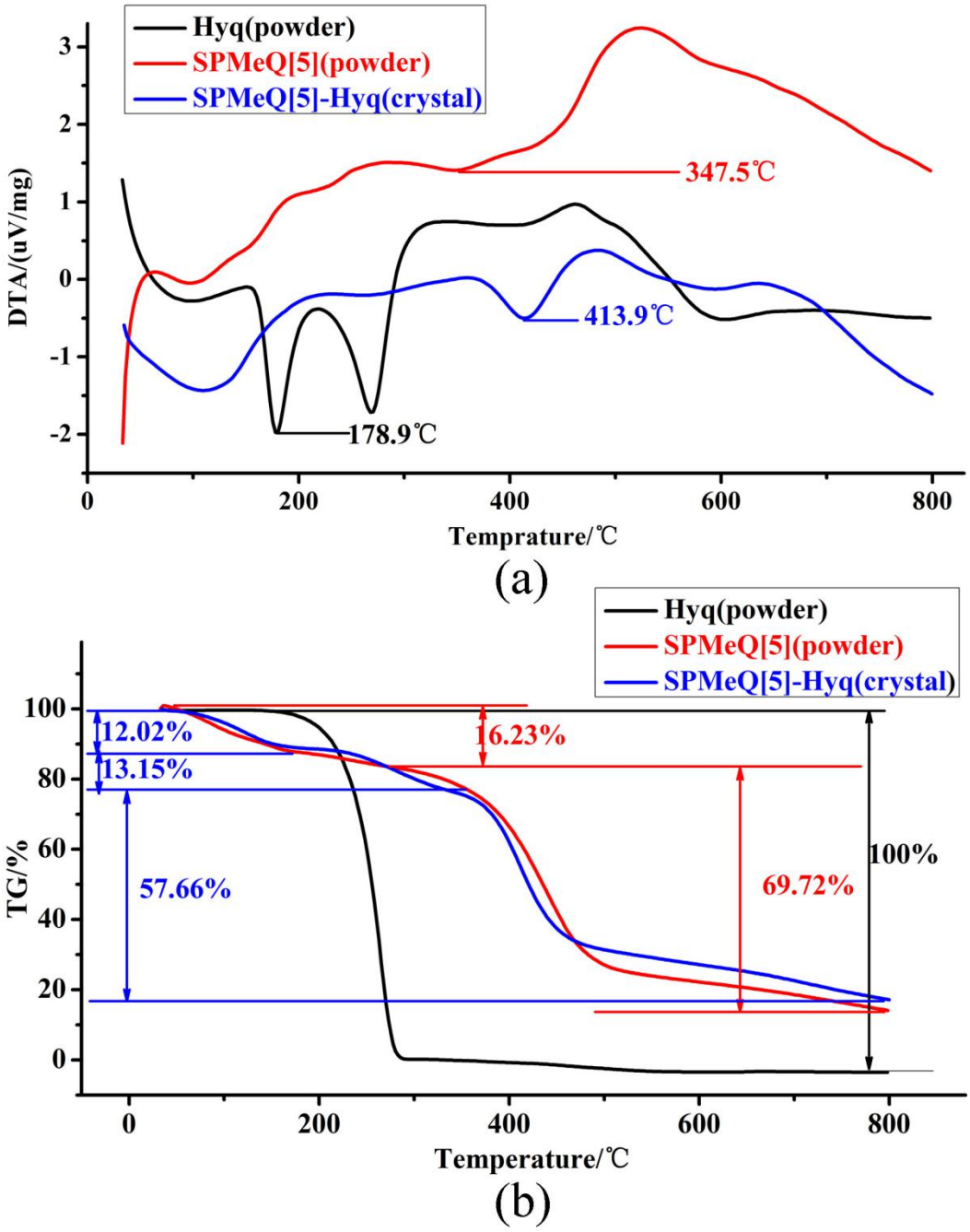

Figure S11 DSC (a) and TG (b) curves of the SPMeQ[5]-Hyq-based porous material and the corresponding comparison with SPMeQ[5] powder, hydroquinone powder in N_2.