Supporting information

Fluorocarbon templated mesoporous material IBN–4[22] was synthesized and its N_2 adsorption isotherm is displayed below,

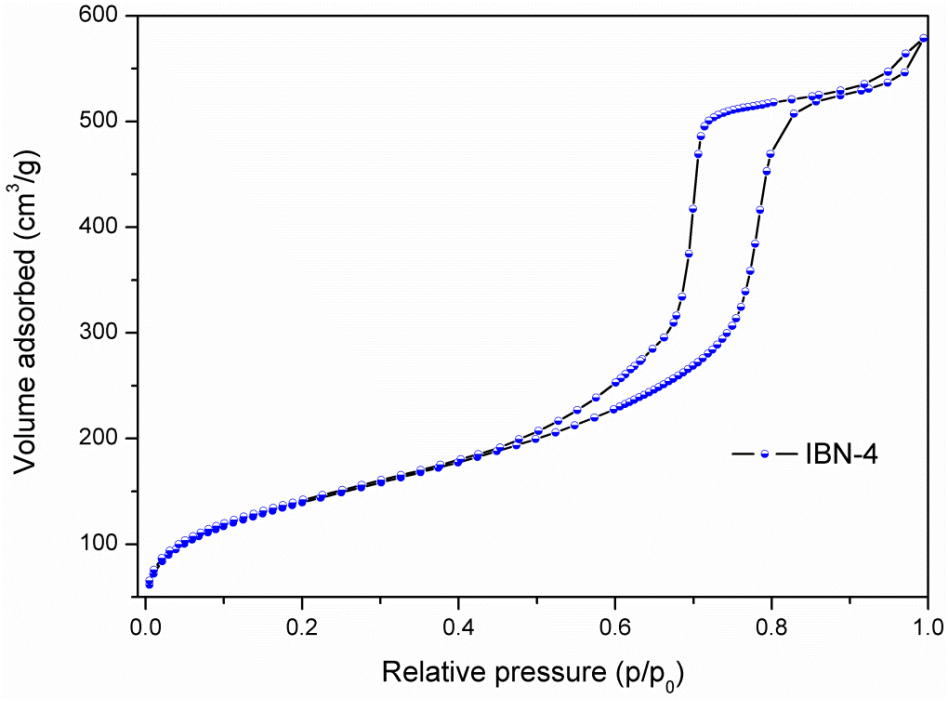

Figure S1: N_2 adsorption desorption isotherm of IBN–4.

FT–IR spectra were measured for the IBN–4 and ICMS materials. The methylene stretching frequencies were observed near the region of 2930 cm^{-1} was found to increase with increasing amount of thiol groups.

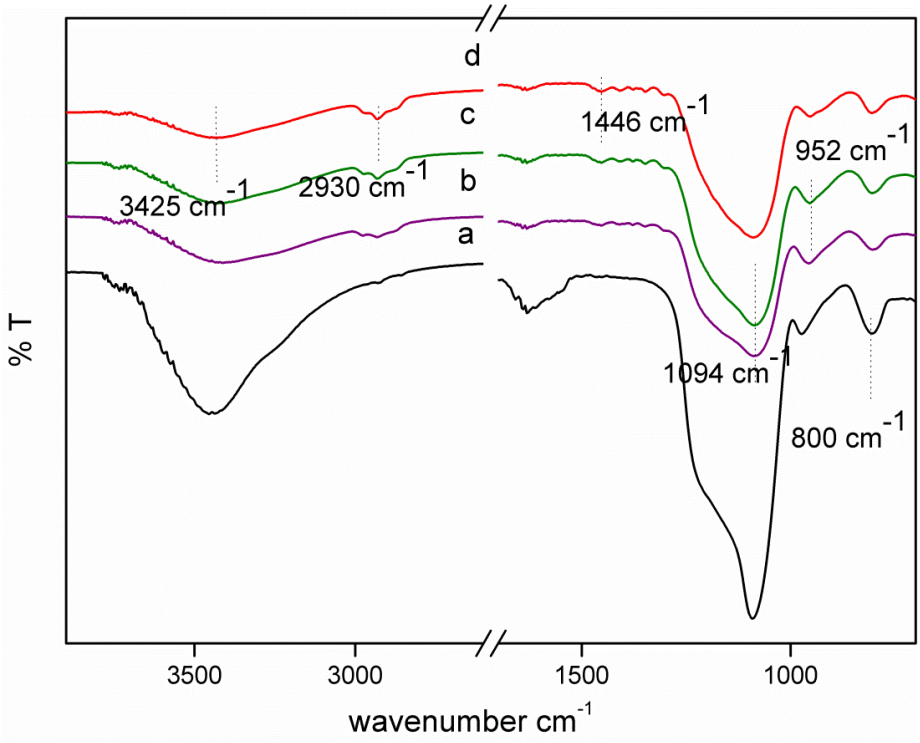

Figure S2: FTIR spectra of IBN–4 and ICMS materials, (a) IBN, (b) ICMS–10, (c) ICMS–20 and (d) ICMS–30.

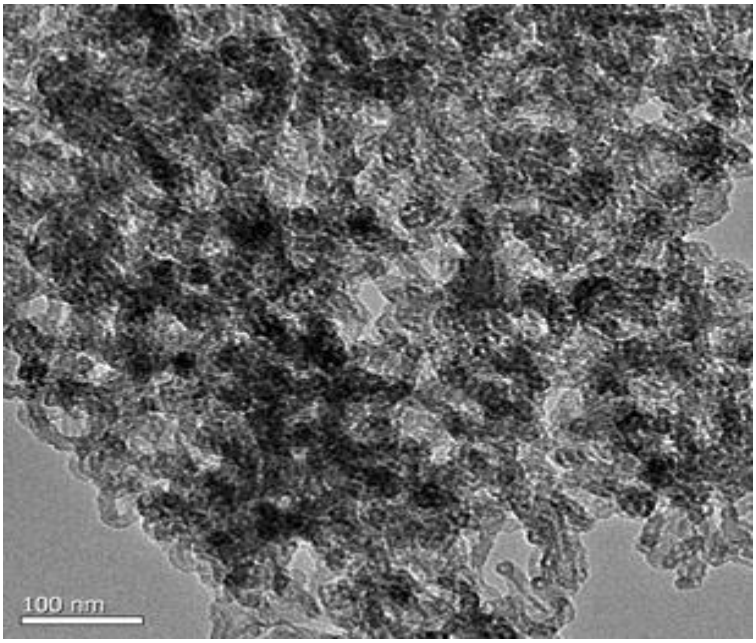

Figure S3: TEM image of ICMS–40 materials showing highly clustered with blocked pore channels.

Table S1: Elemental analysis

	C %	H %	S %
ICMS–10	14.01	2.75	4.09
ICMS–20	16.11	3.06	6.27
ICMS–30	20.28	3.78	9.22

The weight percentages of Carbon, Hydrogen and Sulphur elements in the ICMS materials are given in the table.