Electronic Supplementary Material (ESI) for RSC Advances.

Efficient and reusable ordered mesoporous WO_x/SnO_2 catalyst for oxidative desulfurization of dibenzothiophene

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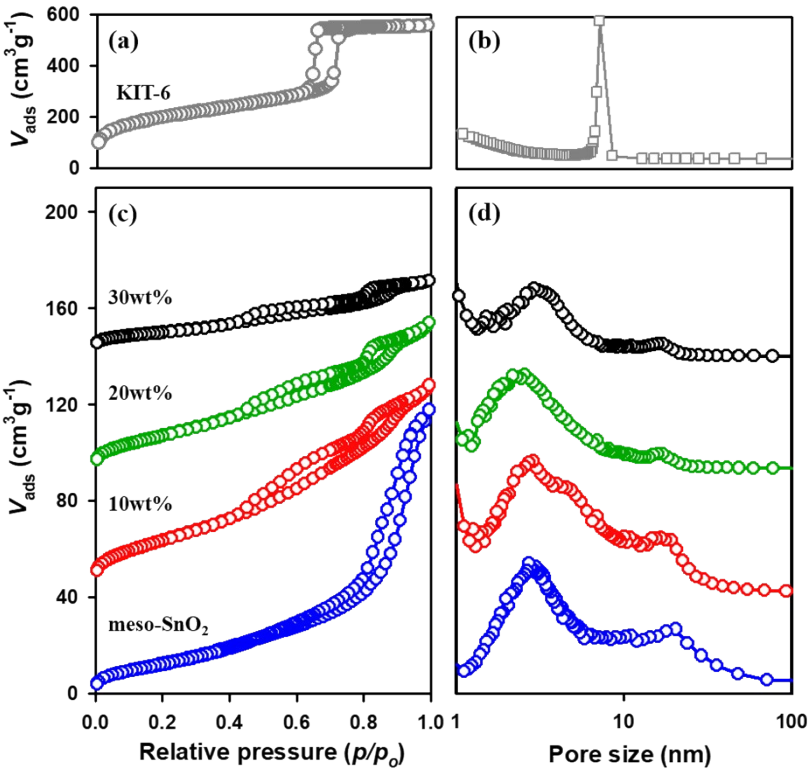

Fig. S1. N_2 sorption isotherms (a), (c) and corresponding BJH pore size distributions (b) ,(d) of all the catalysts.

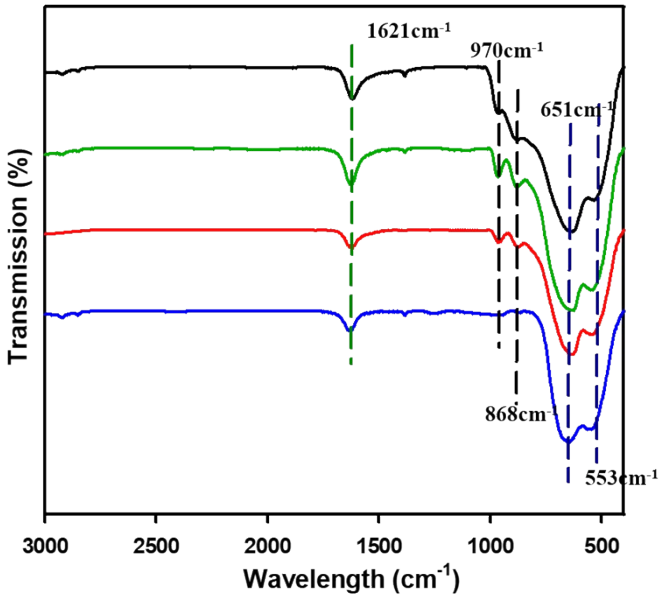

Fig. S2. FT-IR spectra of the prepared catalysts: (a) meso-SnO_2, (b) 10 wt% WO_x/meso-SnO_2, (c) 20 wt% WO_x/meso-SnO_2, and (d) 30 wt% WO_x/meso-SnO_2.

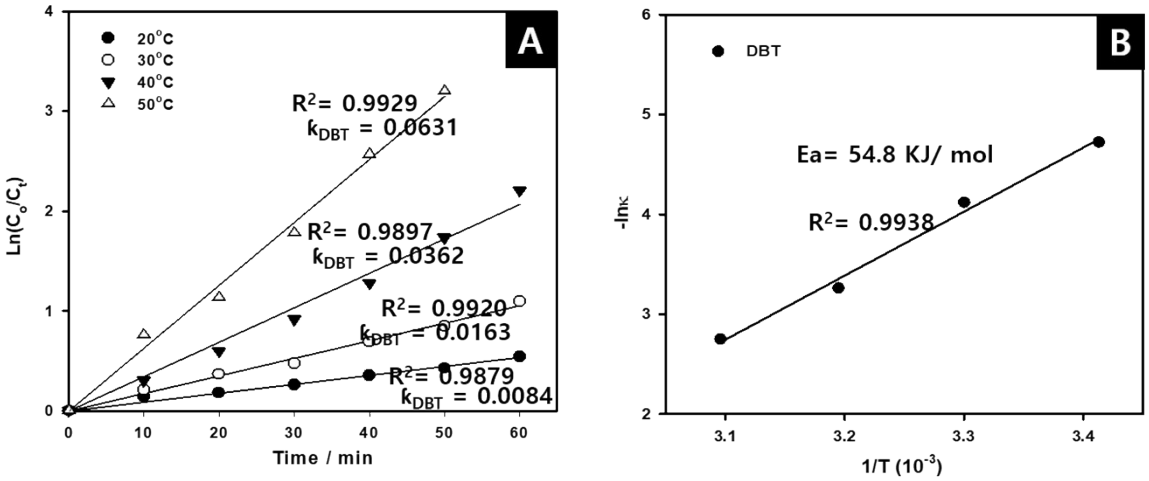

Fig. S3. (A) Pseudo-first-order kinetics for oxidation of DBT at different temperatures. (B) Arrhenius plot of DBT in ODS reaction on 20 wt% WO_x/meso-SnO_2 catalyst. Reaction conditions: model oil = 14 ml, acetonitrile = 14 ml, sulfur concentration = 2000 ppm, n[H_2O_2] : n[S] = 5 : 1, catalyst = 0.1 g, time = 60 min.