molecules

Photo-Reduction of CO_2 by VIS Light on Polythiophene-ZSM-5 Zeolite Hybrid Photo-Catalyst

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Electronic Supplementary information

(ESI)

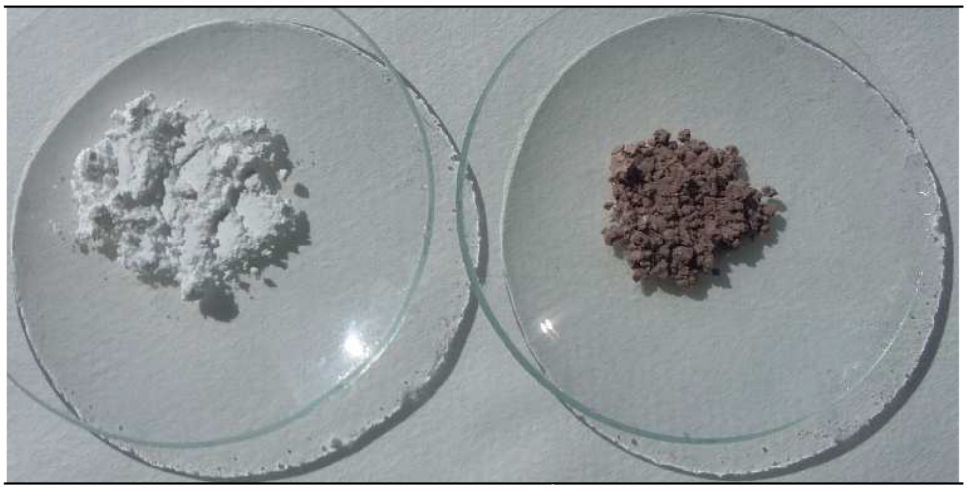

Figure 1. Left: Pure Na-ZMS-5 before reaction. Right: Photo-catalyst prepared without participation of ultrasound. Small amount of FeCl3 (~ 0.05 mol L^{-1}) was present in reaction mixture.

Figure S2. Left: Pure Na-ZMS-5 before reaction. Right: Photo-catalyst prepared with participation of ultrasound. $FeCl_3$ (0.25 mol L^{-1}) was present in reaction mixture.

Figure S3. Left: Pure Na-ZMS-5 before reaction. Right: Photo-catalyst prepared with participation of ultrasound doped with FeCl3 (0.55 mol L^{-1}).

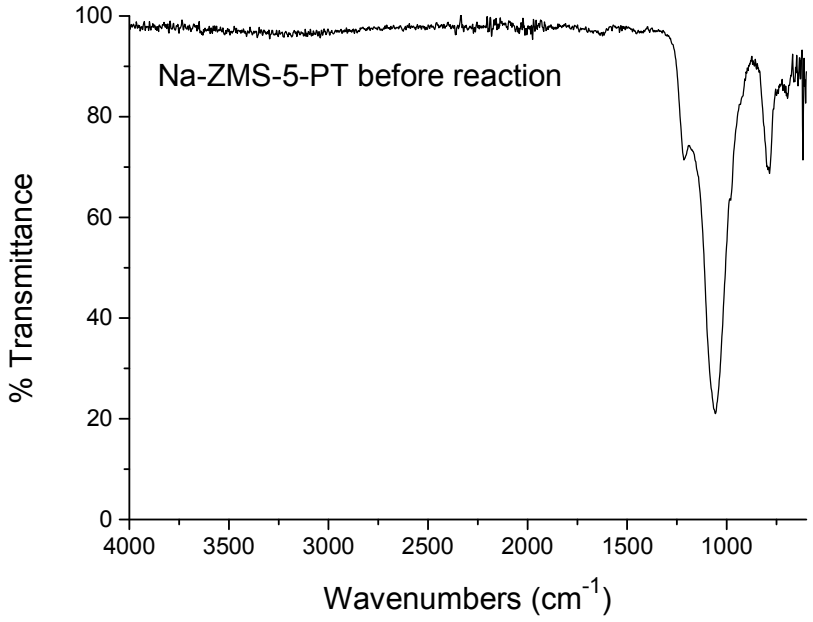

Figure S4. FT-IR spectrum of photo-catalyst before reaction.

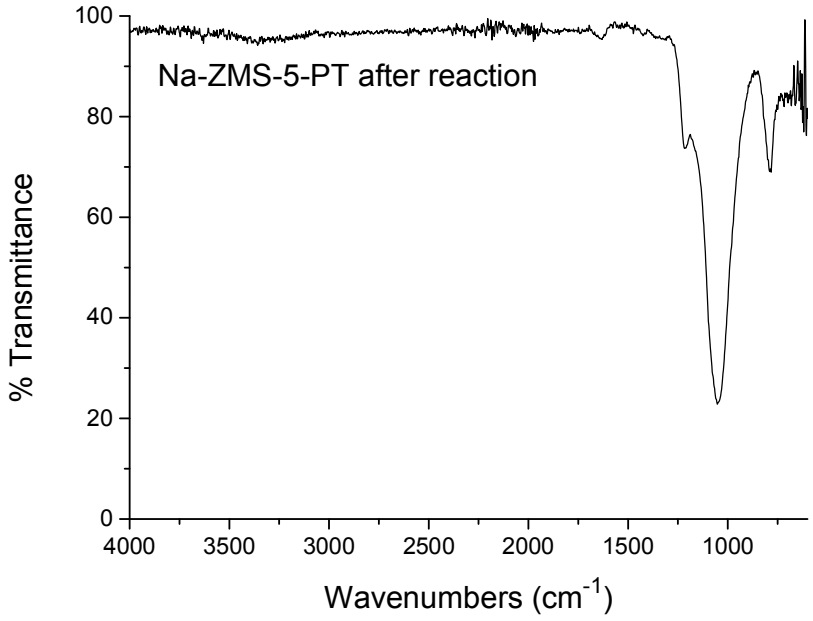

Figure S5. FT-IR spectrum of photo-catalyst after reaction.