Supporting information

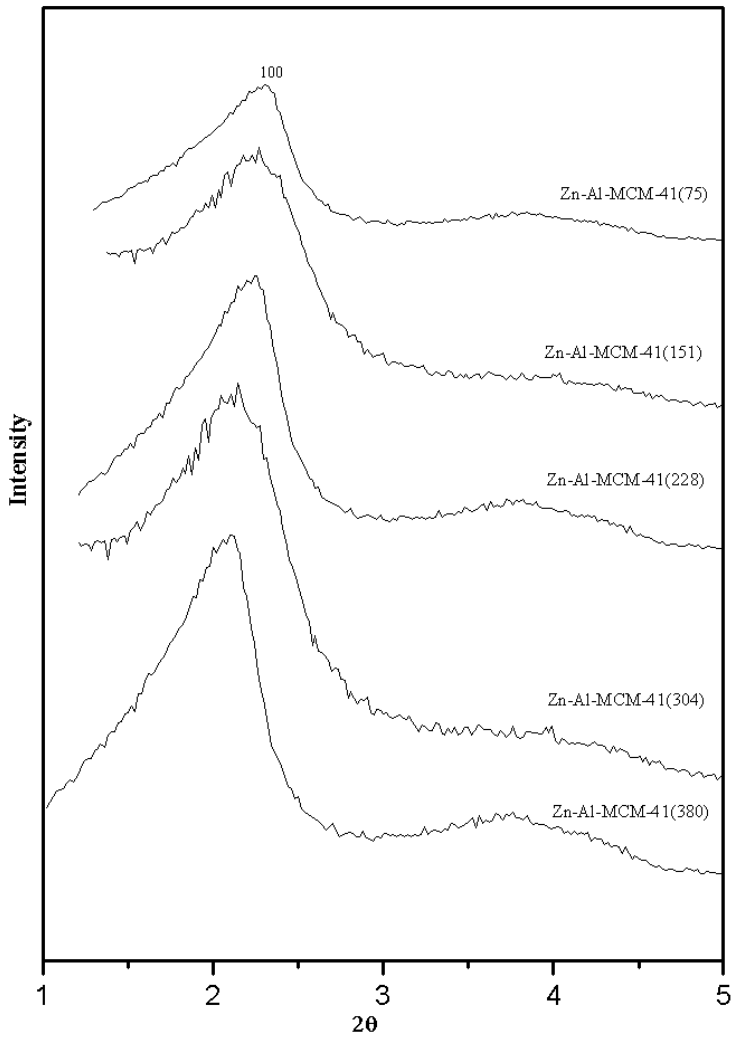

Figure 1S: X-ray diffraction patterns of calcined Zn-Al-MCM-41 samples

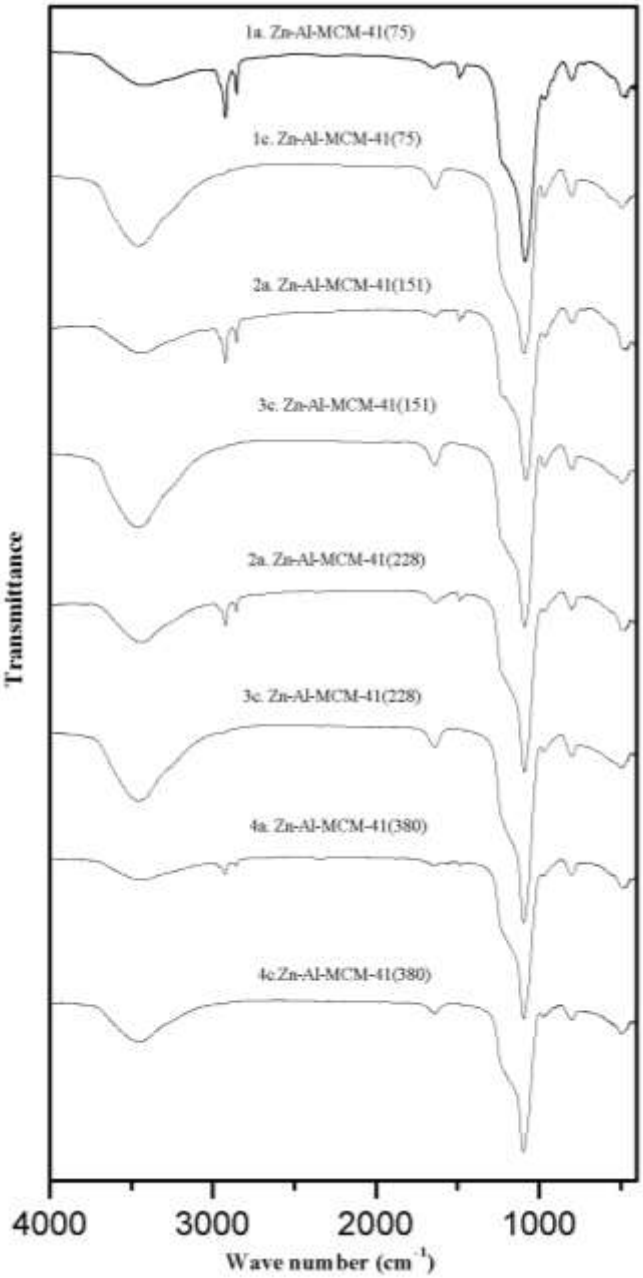

Figure 2S: FTIR spectra of Zn-Al-MCM-41 samples (a - as-synthesized and c - calcined)

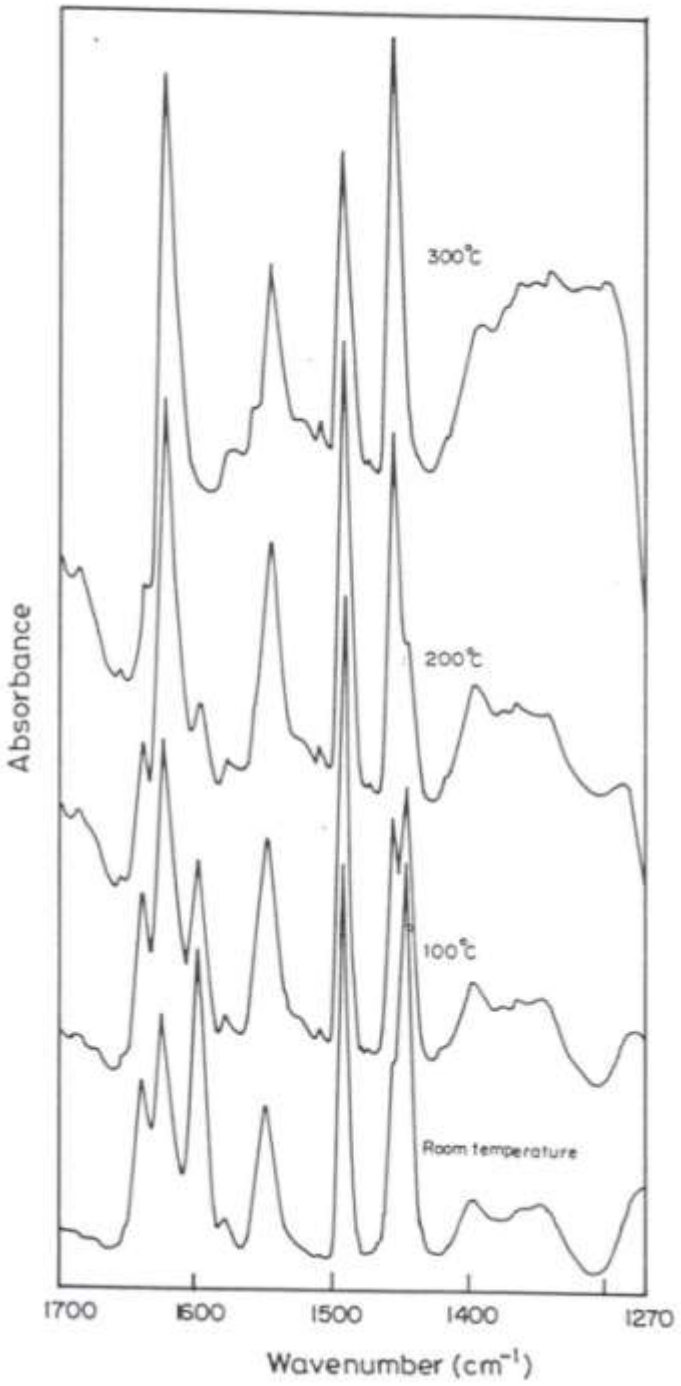

Figure 3S: FTIR spectra of pyridine adsorbed on Zn-Al-MCM-41(151)

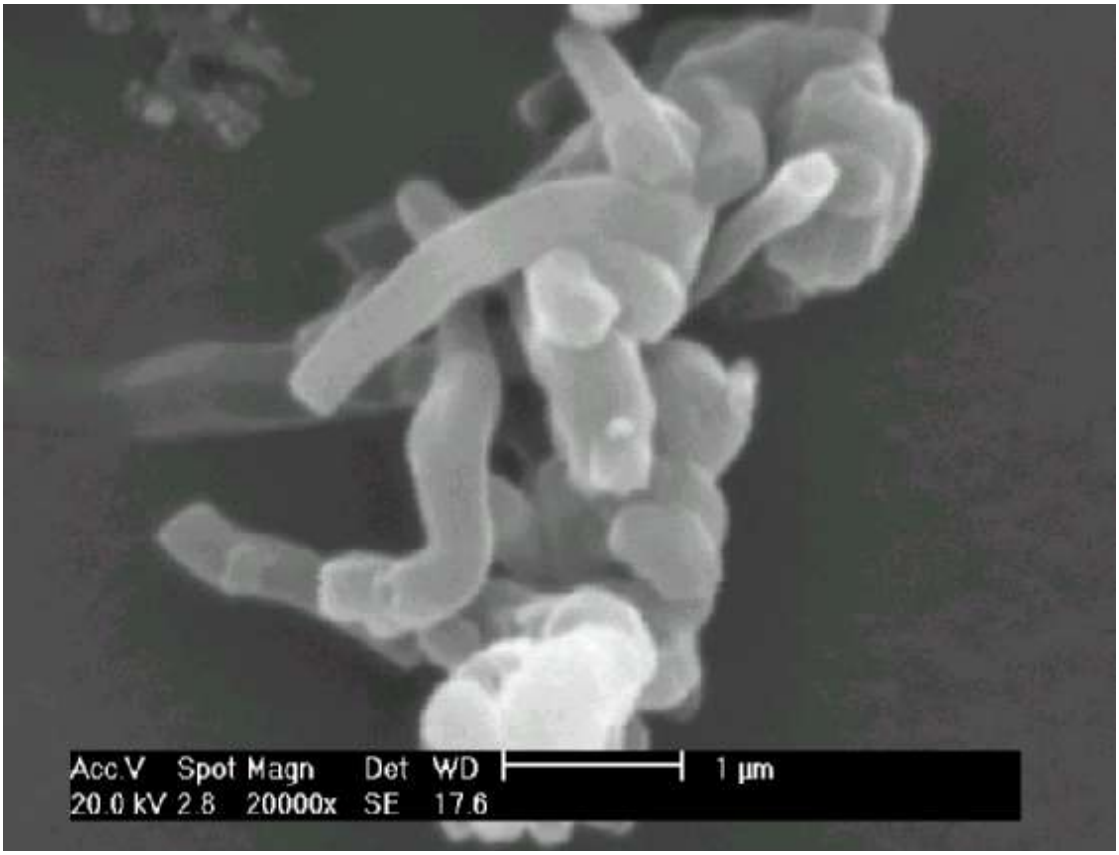

Figure 4S: SEM image for Zn-Al-MCM-41(75)

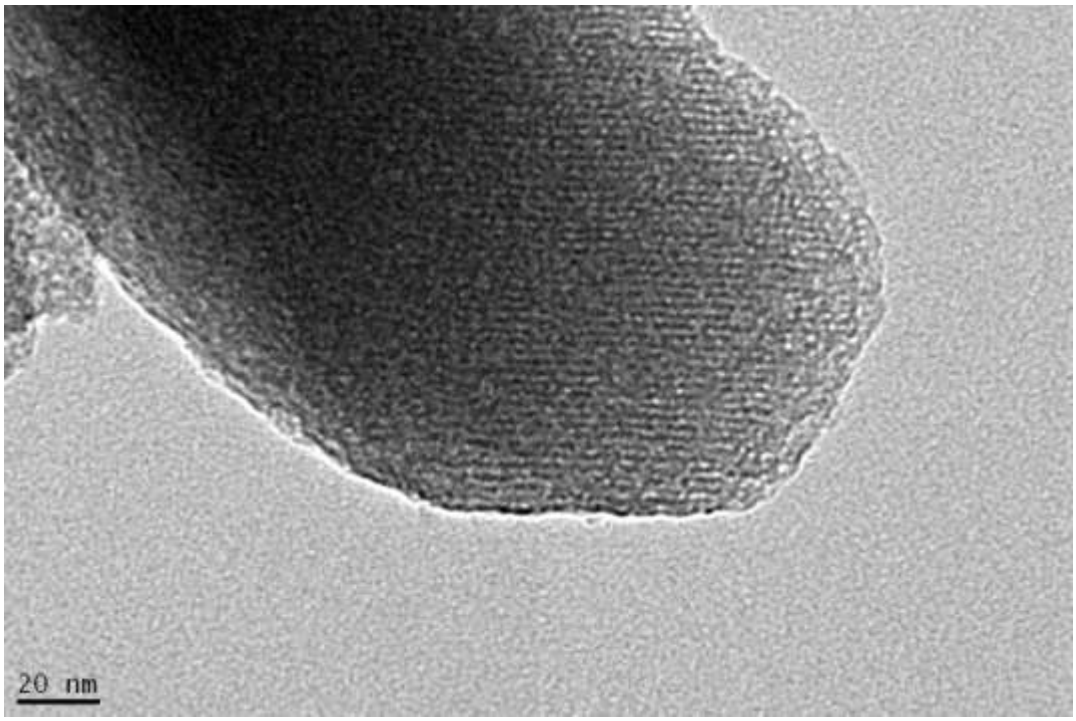

Figure 5S: TEM image for Zn-Al-MCM-41(75)

Table 1S: Brønsted acidity and Lewis acidity of the Zn-Al-MCM-41 catalysts characterized by FTIR-pyridine adsorption and desorption measurements at different temperatures as well as total acidity measured by TPD-pyridine.

Catalysts	Total acidity[a] (μmol pyridine. g^{-1})	Bronsted acidity (μmol pyridine. g^{-1}) [b]				Lewis acidity(μmol pyridine. g^{-1}) [b]			
		25 ºC	100 ºC	200 ºC	300 ºC	25 ºC	100 ºC	200 ºC	300 ºC
Zn-Al-MCM-41(75)	0.103	27.5	20.3	18.2	13.5	40.3	35.6	30.5	25.3
Zn-Al-MCM-41(151)	0.095	23.4	19.2	16.3	12.4	38.3	30.3	27.3	23.5
Zn-Al-MCM-41(228)	0.076	19.5	17.3	14.2	10.3	25.4	24.5	24.3	20.2
Zn-Al-MCM-41(304)	0.055	17.4	15.4	12.4	6.7	20.6	20.4	20.3	18.3
Zn-Al-MCM-41(380)	0.035	14.3	13.2	9.5	5.3	17.7	15.3	14.5	15.6
Al-MCM-41	0.099	23.8	18.3	12.3	11.3	11.9	10.3	8.3	6.3

Results obtained from [a] TPD-pyridine and [b] FTIR-pyridine