

Fig. A XRD pattern of (a) SiMCM-48 (two step), (b) SiMCM-48

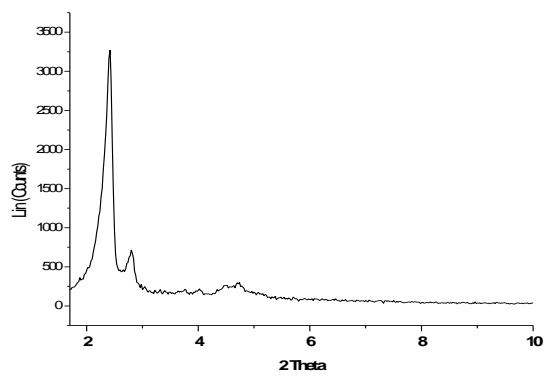


Fig. B XRD pattern of as synthesized CeMCM-48(Si/Ce 40)

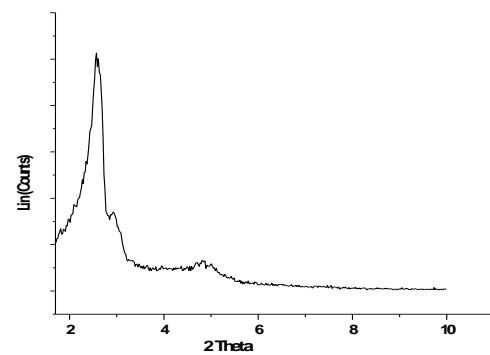


Fig. C XRD pattern of as synthesized VMCM-48(Si/V 40)

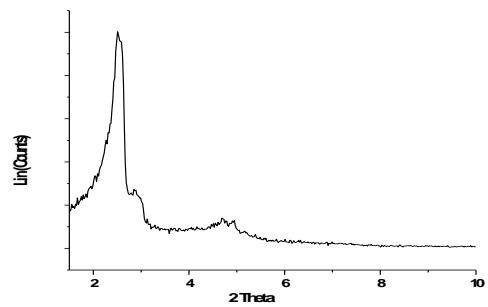


Fig. D XRD pattern of as synthesized ZrMCM-48(Si/Zr 40)

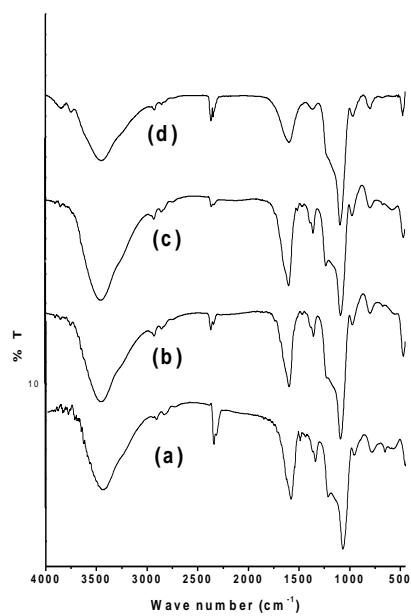


Fig. E FT-IR spectra of (a) SiMCM-48, (b) CeMCM-48(Si/Ce 40), (c) VMCM-48(Si/V 40), (d) ZrMCM-48(Si/Zr 40)

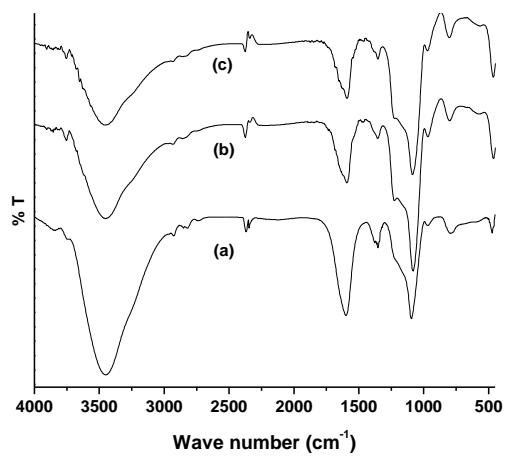


Fig. F FT-IR spectra of (a) 1% V_{imp} SiMCM-48, (b) 3% V_{imp} SiMCM-48, (c) 5% V_{imp} SiMCM-48