

Electronic Supplementary Information (ESI)

Tailoring 2D and 3D Molecular Sieves Structure for Polyolefins Composites: Do All Roads Lead to Remarkable Performances?

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Figure SI_01. N₂ adsorption/desorption isotherms of MCM-41 and MCM-48 and their respectively catalysts.

Figure SI_02. XRD of MCM-41 (a), NH₂-MCM-41 (b), Oct-Fluorene-NH-MCM-41 (c) and 3@MCM-41 (d).

Figure SI_03. ¹³C CP/MAS NMR of NH₂-MCM-41 (a), Oct-Fluorene-NH-MCM-41 (b) and 3@MCM-41 (c). #residual DIPEA.

Figure SI_04. Melting (A) and crystallization (B) temperatures of PE made by 2@magadiite in the absence (a) and presence (b) of 1-octene and 2@MCM-48 in the absence (c) and presence (d) of 1-octene. C) ¹³C NMR at 100 °C of PE made by 2@magadiite in the absence (a) and absence (b) of 1-octene.

Figure SI_05. ¹³C NMR for polymers made by homogeneous 5 (a), 5@Magadiite (b) and 5@n-alkyl-AlPO-kan (c).

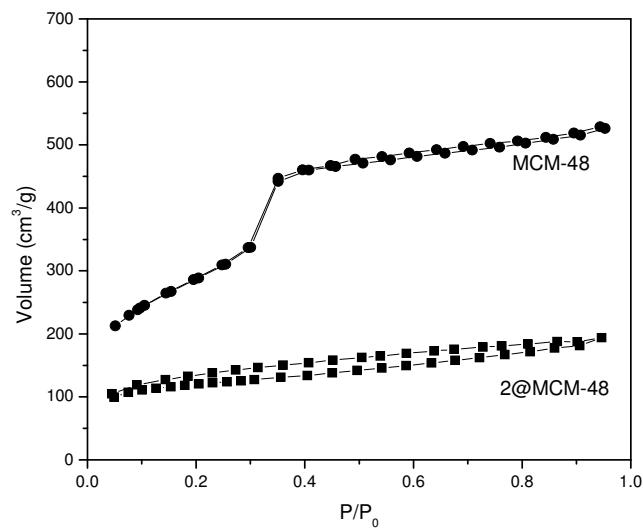
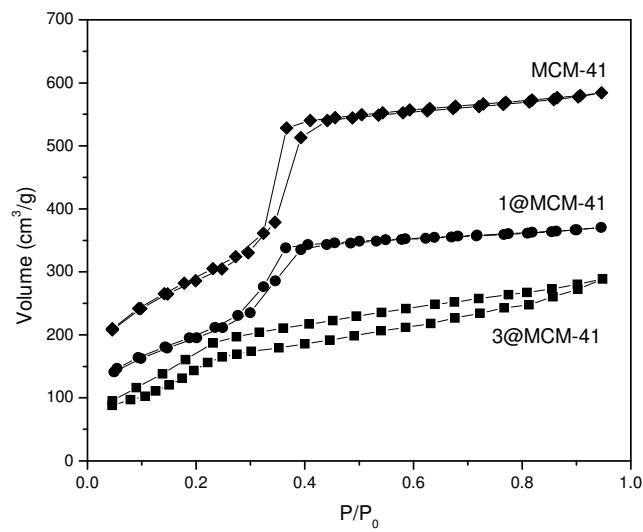


Figure SI_01. N_2 adsorption/desorption isotherms of MCM-41 and MCM-48 and their respectively catalysts.

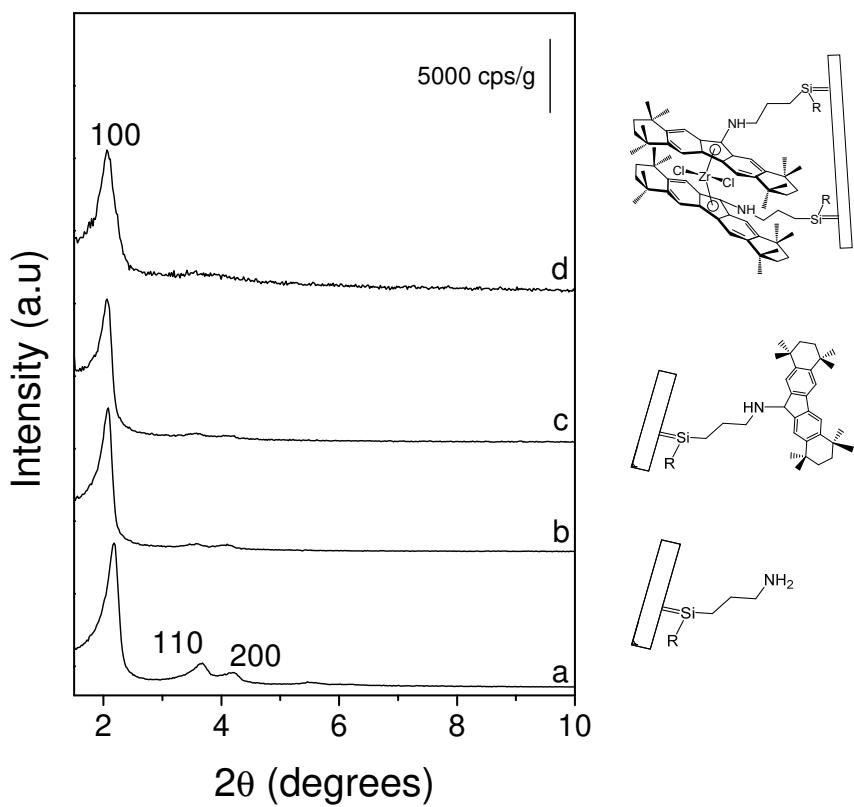


Figure SI_02. XRD of MCM-41 (a), NH_2 -MCM-41 (b), Oct-Fluorene-NH-MCM-41 (c) and 3@MCM-41 (d).

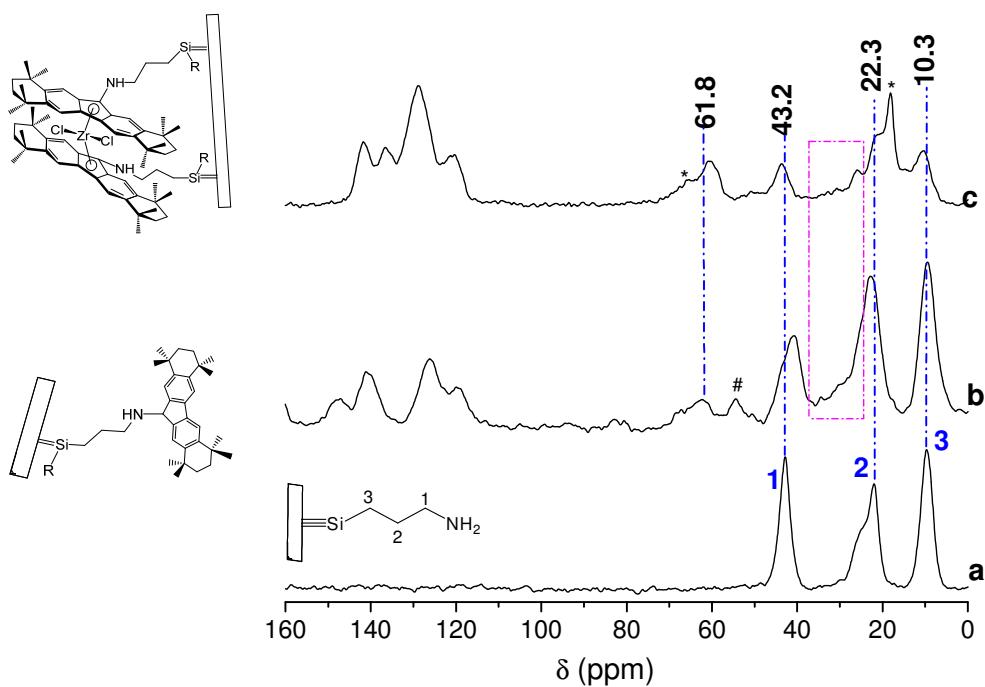


Figure SI_03. ^{13}C CP/MAS NMR of NH₂-MCM-41 (a), Oct-Fluorene-NH-MCM-41 (b) and 3@MCM-41 (c). #residual DIPEA. * CH₂ and CH₃ from the Oct-moiety.

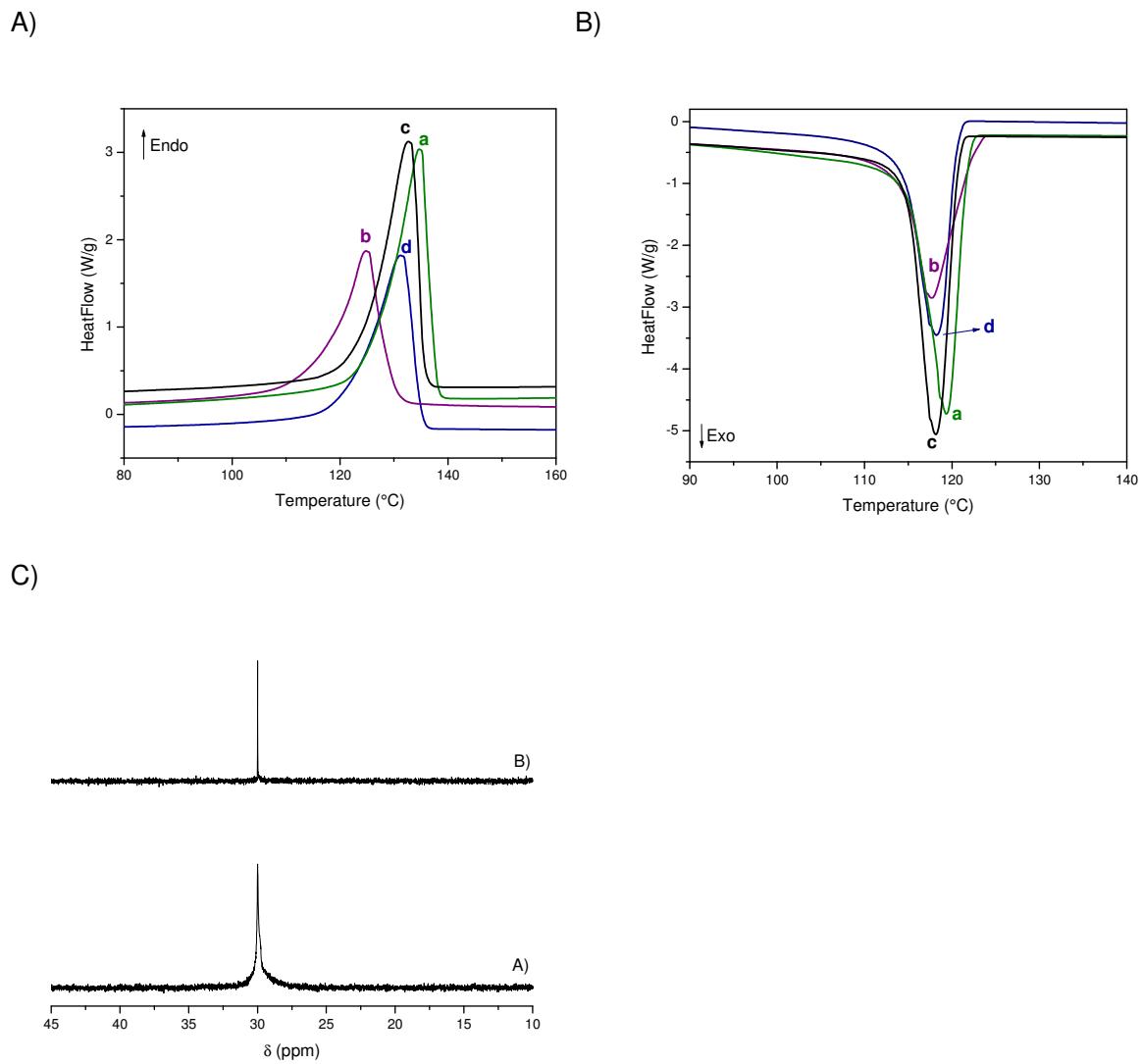


Figure SI_04. Melting (A) and crystallization (B) temperatures of PE made by 2@magadiite in the absence (a) and presence (b) of 1-octene and 2@MCM-48 in the absence (c) and presence (d) of 1-octene. C) ^{13}C NMR at 100 °C of PE made by 2@magadiite in the absence (a) and absence (b) of 1-octene.

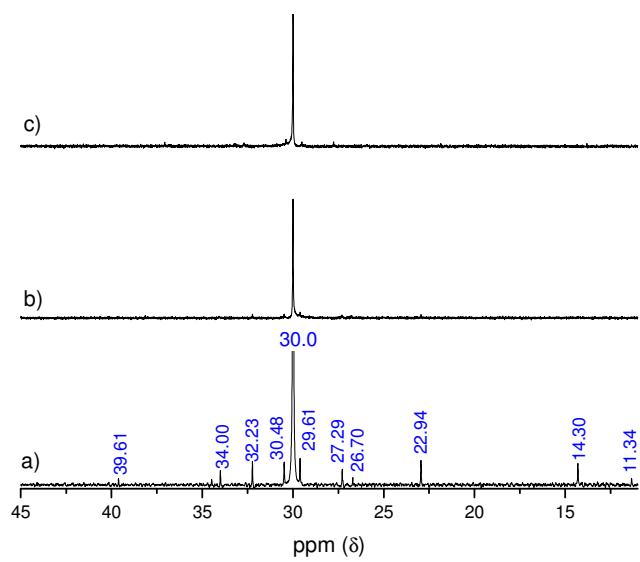


Figure SI_05. ^{13}C NMR for polymers made by homogeneous 5 (a), 5@Magadiite (b) and 5@n-alkyl-AlPO-kan (c).