

Electronic Supplementary information

Platinum on 2-Aminoethanethiol Functionalized MIL-101 as a Catalyst for Alkenes Hydrosilylation

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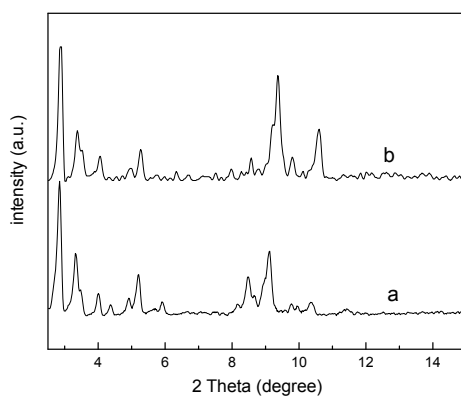
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S1. 1.5%Pt^{δ+}/AET-MIL-101 (a); Recovered 1.5%Pt^{δ+}/AET-MIL-101 catalyst (b)

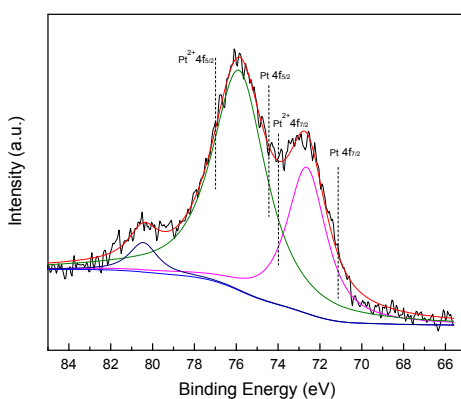
S2. XPS spectra of the recovered 1.5%Pt^{δ+}/AET-MIL-101

S3. ¹H NMR data of the synthesized compounds

S4. ¹H NMR spectra of the synthesized compounds



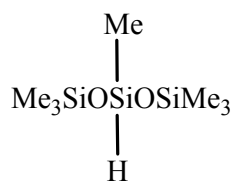
S1. 1.5%Pt^{δ+}/AET-MIL-101 (a); Recovered 1.5%Pt^{δ+}/AET-MIL-101 catalyst (b)



S2. XPS spectra of the recovered 1.5%Pt^{δ+}/AET-MIL-101

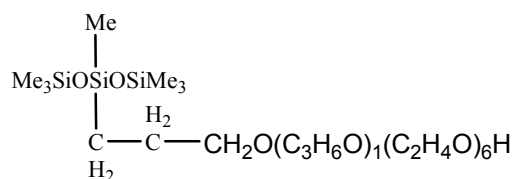
S3 ¹H NMR data of the synthesized compounds

(i) Heptamethyltrisiloxane



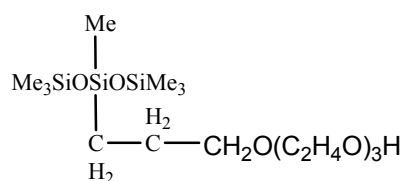
¹H NMR (400 MHz, CDCl₃, ppm) δ 4.36 (s, 1H), 0.13-0.07 (m, 21H).

(ii) Allyl alcohol polyether and heptamethyltrisiloxane reaction product (Table 3 entry 1)



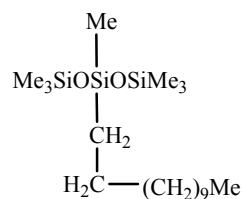
¹H NMR (400 MHz, CDCl₃, ppm) δ 3.76-3.38 (m, 37H), 3.07-2.95 (m, 1H), 2.71 (s, 1H), 1.59-1.52 (m, 2H), 0.4 (s, 1H), 0.18-0.04 (m, 26H).

(iii) Allyl alcohol polyether and heptamethyltrisiloxane reaction product (Table 3 entry 2)



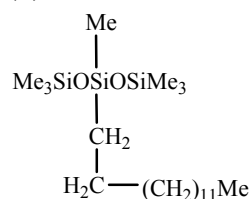
¹H NMR (400 MHz, CDCl₃, ppm) δ 3.71-3.38 (s, 18H), 2.60 (s, 1H), 1.6 (s, 2H), 0.43 (s, 1H), 0.11-0.07 (m, 21H).

(iv) 1-Dodecene and heptamethyltrisiloxane reaction product (Table 3 entry 3)



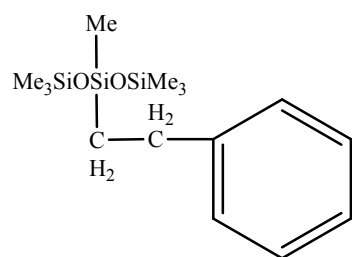
¹H NMR (400 MHz, CDCl₃, ppm) δ 1.63-1.20 (m, 5H), 0.87 (s, 1H), 0.11-0.08 (m, 7H).

(v) 1-Tetradecene heptamethyltrisiloxane reaction product (Table 3 entry 4)



¹H NMR (400 MHz, CDCl₃, ppm) δ 1.30-1.25 (m, 6H), 0.87 (s, 1H), 0.13-0.05 (m, 7H).

(vi) Styrene heptamethyltrisiloxane reaction product (Table 3 entry 4)



^1H NMR (400 MHz, CDCl_3 , ppm) δ 2.66-2.63 (m, 1H), 0.85 (s, 1H), 0.13-0.01(m, 18H).

S4 ^1H NMR spectra of the synthesized compounds

