

Supplementary information

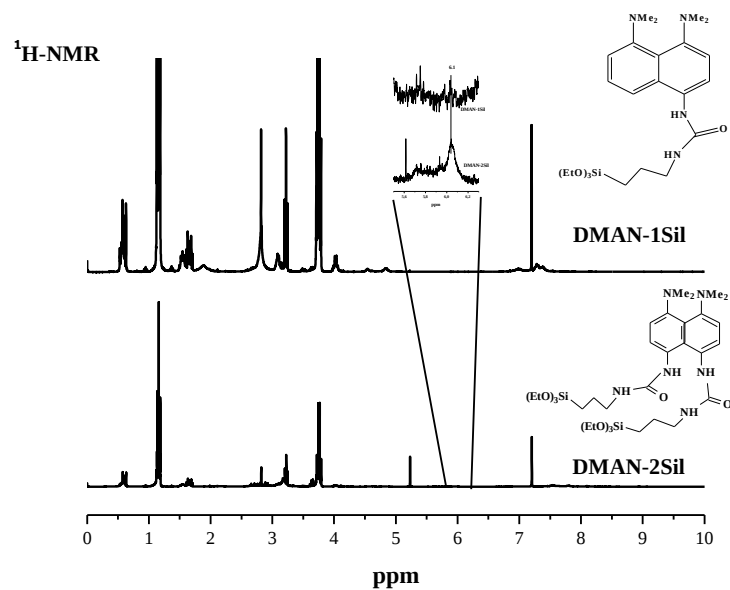


Fig.1 – ¹H NMR spectra of DMAN-1Sil and DMAN-2Sil

Table 1 - Organic content of the fresh mesoporous bifunctional hybrids and after the 3th catalytic run estimated by Elemental Analysis.

Catalysts	N%	C%	H%	S%	Organic content (EA)/%
DMAN-SO ₃ H/SiO ₂ -5-5 fresh	1.4	9.2	2.4	1.5	14.5
DMAN-SO ₃ H/SiO ₂ -5-5 used	1.4	8.2	2.0	1.3	12.9
grDMAN-SO ₃ H/SiO ₂ -5 fresh	2.1	12.8	2.4	1.6	18.9
grDMAN-SO ₃ H/SiO ₂ -5 used	1.9	12.1	2.1	1.5	17.6
DMAN-SO ₃ H/PMO-5-5 fresh	2.1	13.6	2.7	1.0	19.4
DMAN-SO ₃ H/PMO-5-5 used	2.0	13.0	2.5	0.9	18.4
grDMAN-SO ₃ H/PMO-5 fresh	2.7	15.4	2.7	1.6	22.4
grDMAN-SO ₃ H/PMO-5 used	2.4	15.0	2.4	1.6	21.4