

Supplementary Information for the manuscript

Organoclays with Carbosilane Dendrimers
Containing Ammonium or Phosphonium Groups

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Table S1. Results of XRD analysis

	Dm₁N₄Mt_z		Dm₁P₄Mt		Dm₂N₈Mt		Dm₂P₈Mt		Dm₃N₁₆Mt		Dm₃P₁₆Mt	
Z	2 θ (°)	<i>d</i> [Å]	2 θ (°)	<i>d</i> [Å]	2 θ (°)	<i>d</i> [Å]	2 θ (°)	<i>d</i> [Å]	2 θ (°)	<i>d</i> [Å]	2 θ (°)	<i>d</i> [Å]
0.1	5.96	14.81	5.85	15.09	4.65	18.98	5.83	15.14	4.85	19.27	4.60	19.19
0.2	5.83	15.14	5.89	14.99	4.53	19.48	5.67	15.57	4.49	19.66	5.86,4.63	15.06,19.06
0.4	4.86	18.16	5.38	16.41	4.54	19.44	4.47	19.74	4.42	19.97	5.62- 4.26	15.71- 20.72
0.6	4.68	18.86	4.57	19.51	4.47	19.74	4.43	19.92	4.23	20.86		

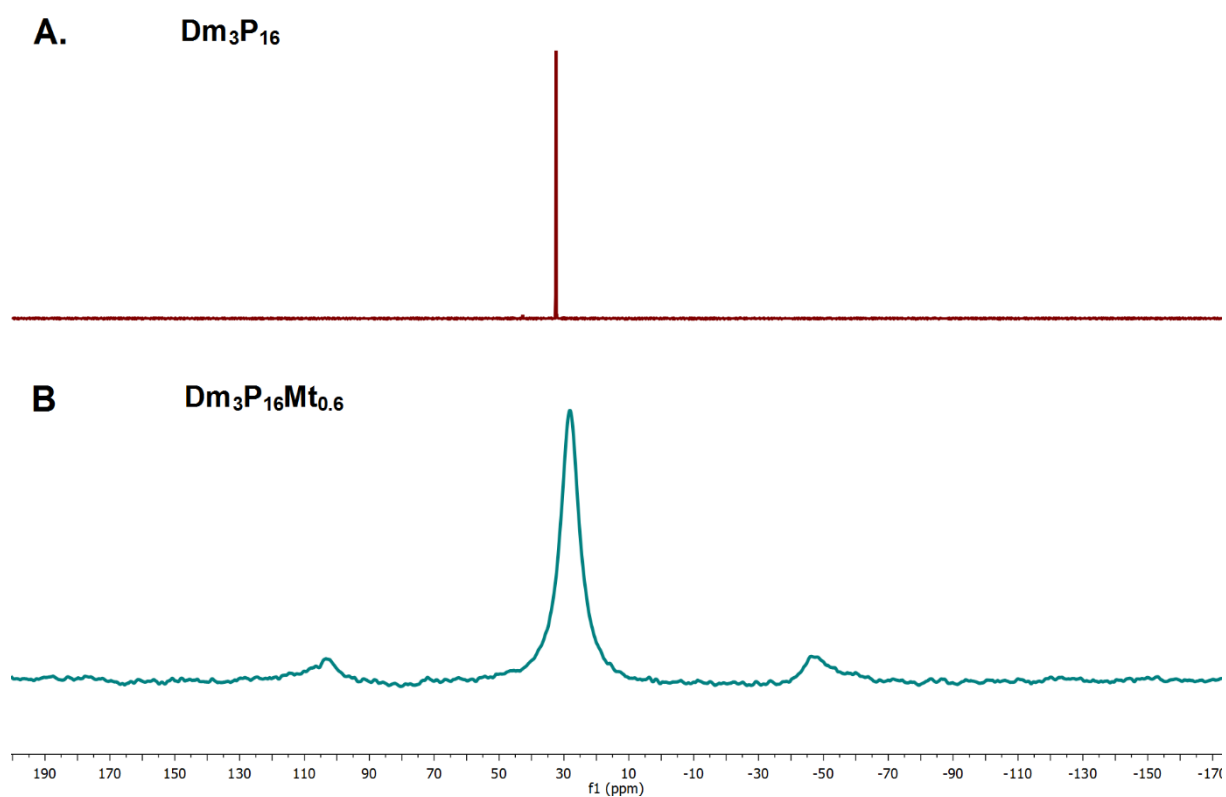
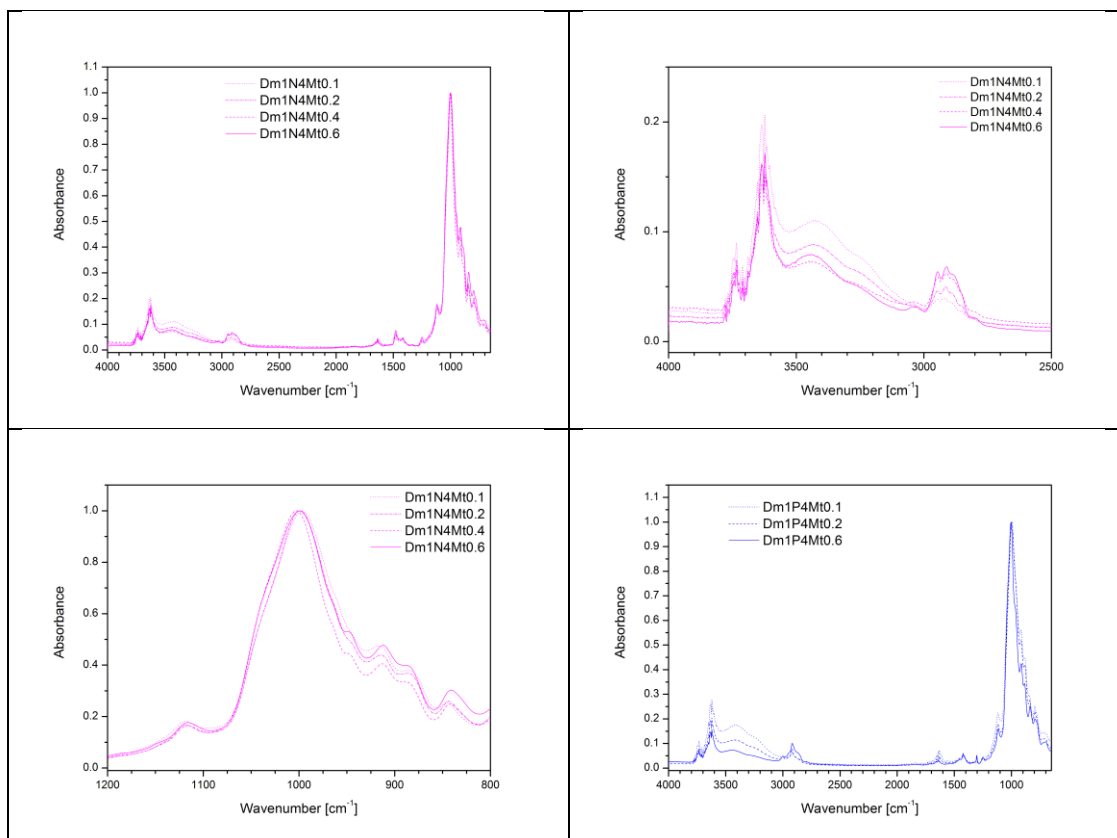
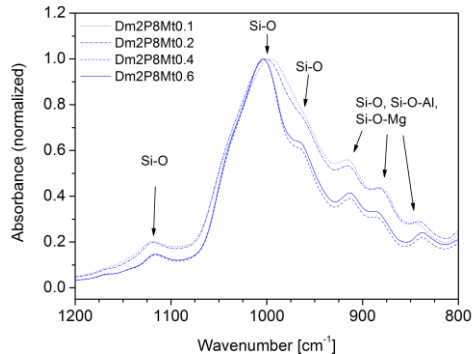
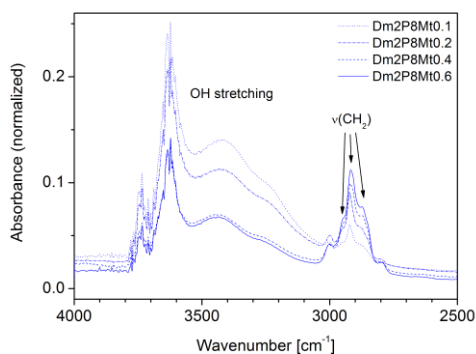
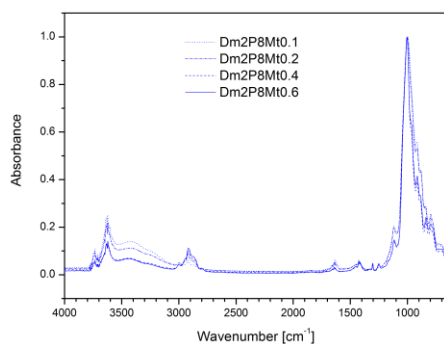
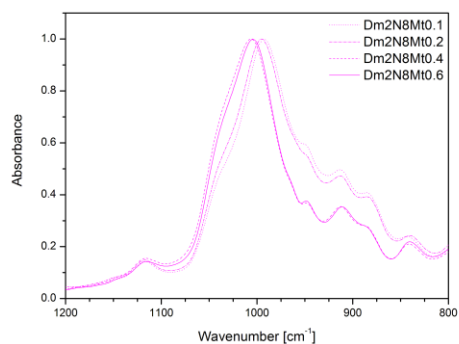
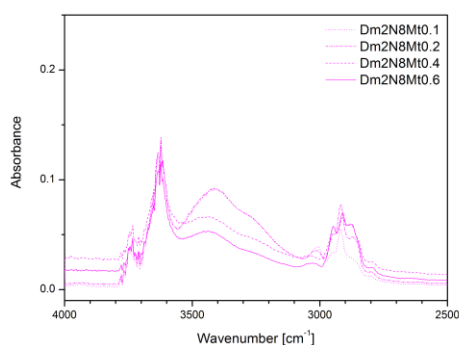
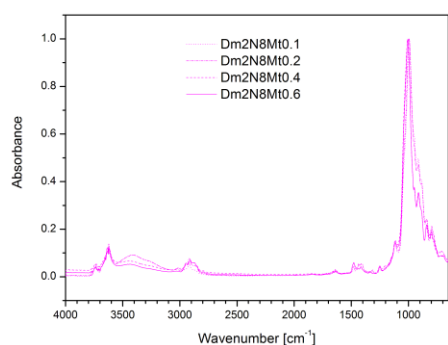
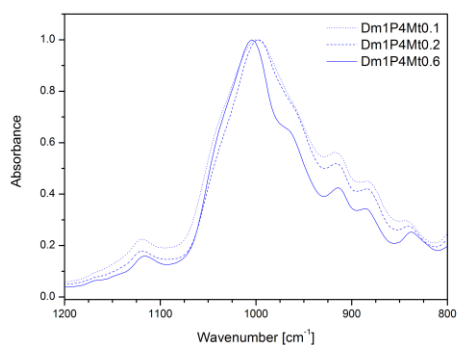
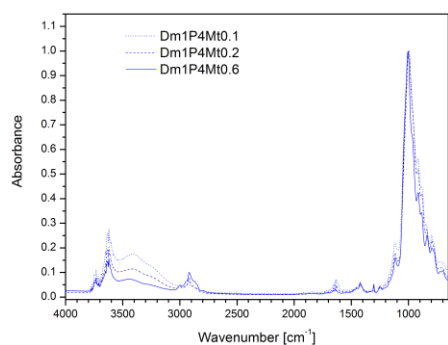


Figure S1: ³¹P NMR spectrum of **Dm₃P₁₆** and solid state ³¹P NMR spectra of **Dm₃P₁₆Mt_{0.6}**

Table S2: Products of pyrolysis of **Dm₁N₄Mt_{0.6}** and **Dm₁P₄Mt₀**.

Dm₁N₄Mt_{0.6}				
major product	range [°C]	max. [°C]	IR [cm ⁻¹]	MS
NMe ₃	205-300	245	2962, 2824, 2775, 1458, 1259, 1184, 1041, 1058	58 (M ⁺), 42, 30, 15
CH ₄	240-670	340	3016, 1305	
C ₂ H ₄	435-580	480	949	
Dm₁P₄Mt_{0.6}				
major product	range [°C]	max. [°C]	IR [cm ⁻¹]	MS
PMe ₃	340-530	400	2962, 2902, 1259, 938, 842, 703	76 (M ⁺), 61, 45
CH ₄	320-800	480	3016, 1305	
C ₂ H ₄	320-660	490	949	
C ₂ H ₂	420-510	490	731	
C ₃ H ₆		460-470	991, 913	





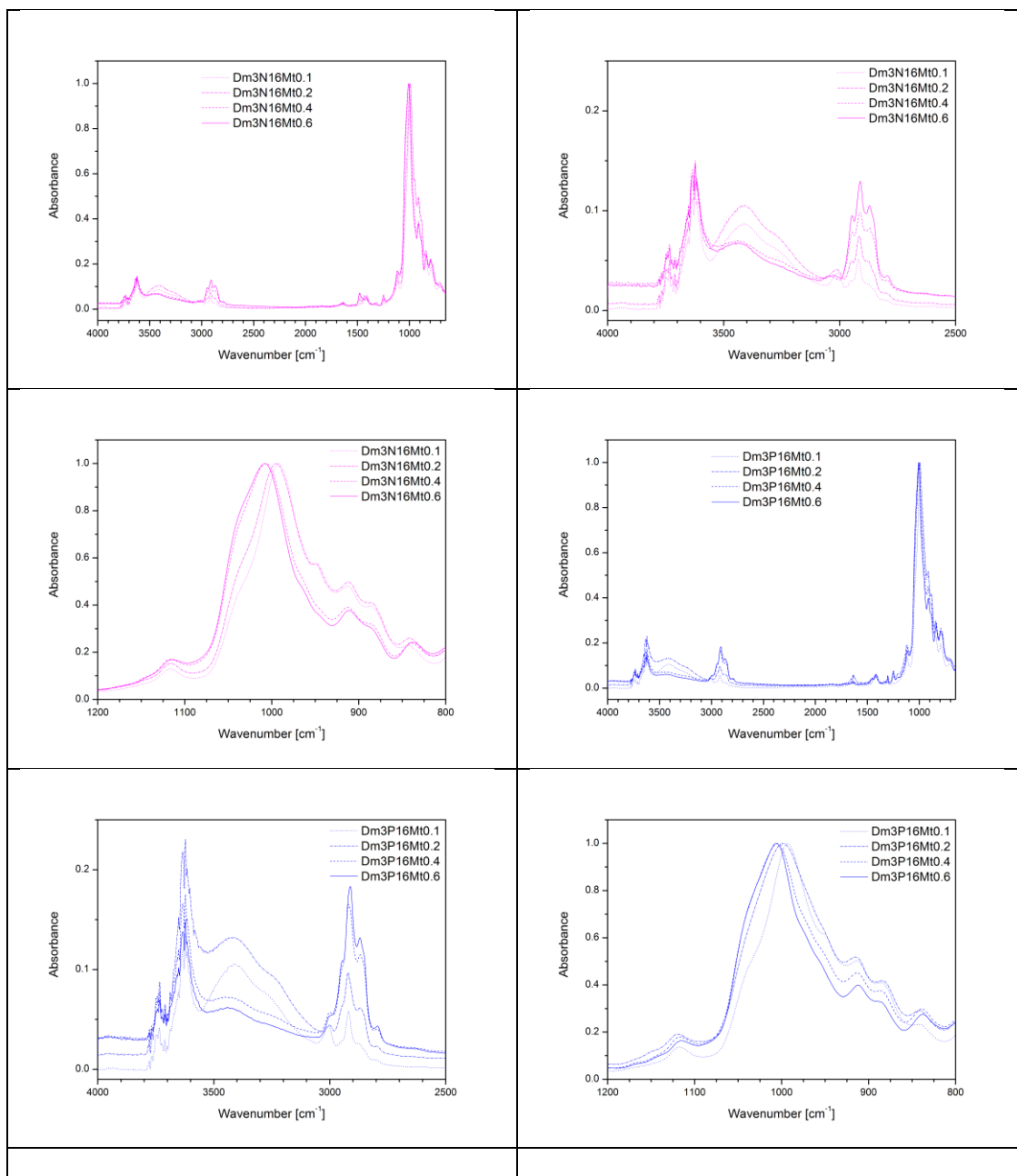


Figure S2: FTIR of ATR spectra of the motnomorillonite intercalated by phosphonium and ammonium carbosilane dendrimers.