ESI

TOPOTACTIC CONDENSATION OF LAYER SILICATES WITH FERRIERITE-TYPE LAYERS FORMING POROUS TECTOSILICATES

B. Marler,[*a] Y. Wang,[b] J. Song,[c] and H. Gies[a]

Results of the ^{13}C CP NMR spectroscopy

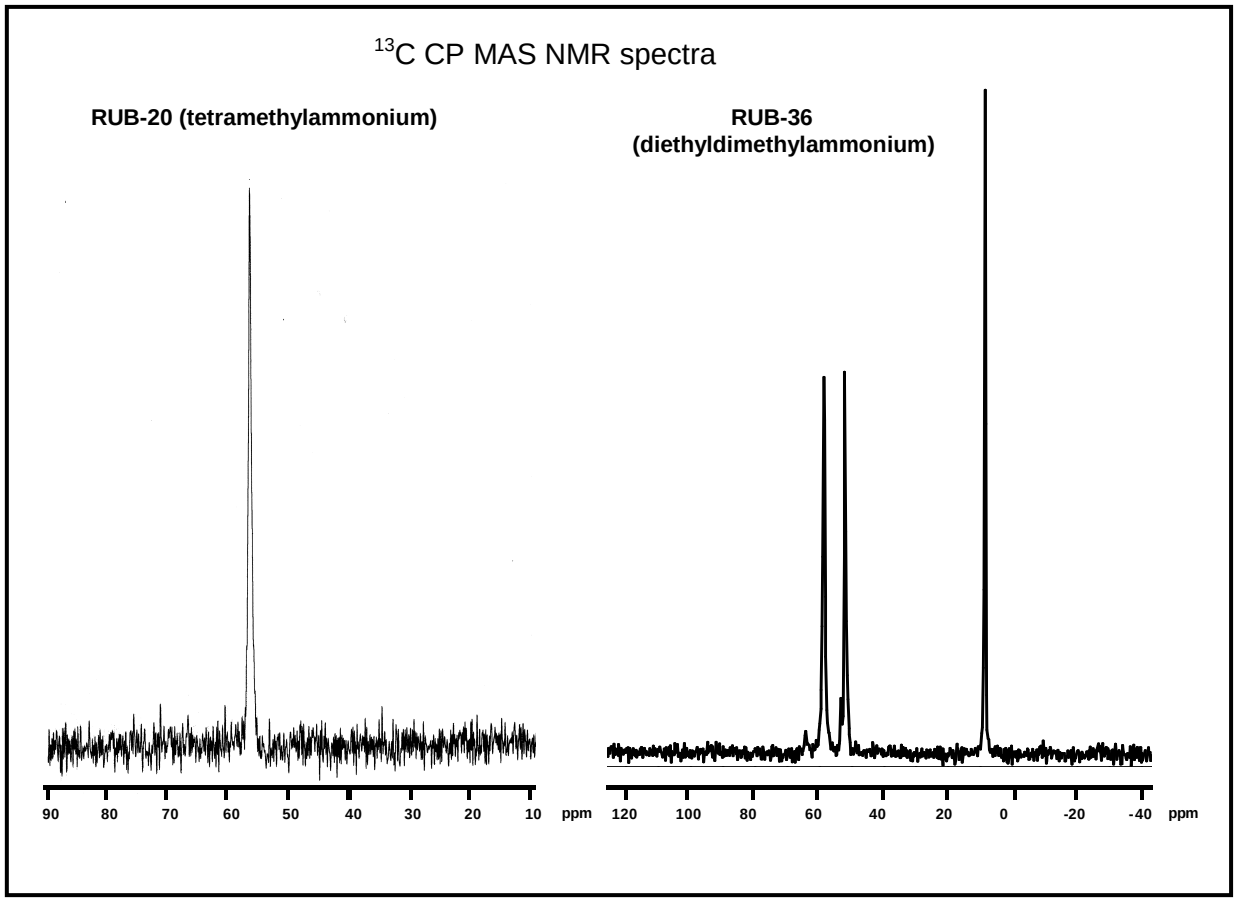

Fig. S1: The ^{13}C CP NMR spectra of RUB-20 (left), and RUB-36 (right) are displayed here as representatives of the monoclinic and orthorhombic materials, respectively. The chemical shift values of the signals of all HLSs are listed in Table 1.

Table S1: List of signals observed from ^{1}H-^{13}C CPMAS NMR spectra of the layered RUB materials. The chemical shift values are listed together with the expected values as estimated from the molecular structure and charge of the cations.

Material	Cation	Observed Signals with chemical shift	Expected signals based on the molecular structure of the cation
RUB-20	$\mathbf{[N(CH_3)_4]^+}$	57.0 ppm	1 signal at ca. 57 ppm (methyl groups attached to N)
RUB-20b	$\mathbf{[N(CH_3)_4]^+}$	57.4 ppm	1 signal at ca. 57 ppm (methyl groups attached to N)
RUB-40	$\mathbf{[P(CH_3)_4]^+}$	n.d.	1 signal at ca. 10 ppm (methyl groups attached to P)
RUB-36	$\mathbf{[N(CH_3)_2(CH_2CH_3)_2]^+}$	58.5 51.8 ppm 8.5	3 signals at ca. 60 ppm (methylene groups attached to N) 50 ppm (methyl groups attached to N) 10 ppm (methyl groups attached to -CH_2-)
RUB-38	$\mathbf{[N(CH_3)_1(CH_2CH_3)_3]^+}$	58 ppm 48 ppm 9 ppm	3 signals at ca. 60 ppm (methylene groups attached to N) 50 ppm (methyl group attached to N) 10 ppm (methyl groups attached to -CH_2-)
RUB-48	$\mathbf{[N(CH_3)_3\{CH(CH_3)_2\}_1]^+}$	69.9 ppm 51.3 ppm 17.2 ppm	3 signals at ca. 70 ppm (CH- group attached to N) 50 ppm (methyl groups attached to N) 15 ppm (methyl groups attached to -CH-)