

Supporting Information

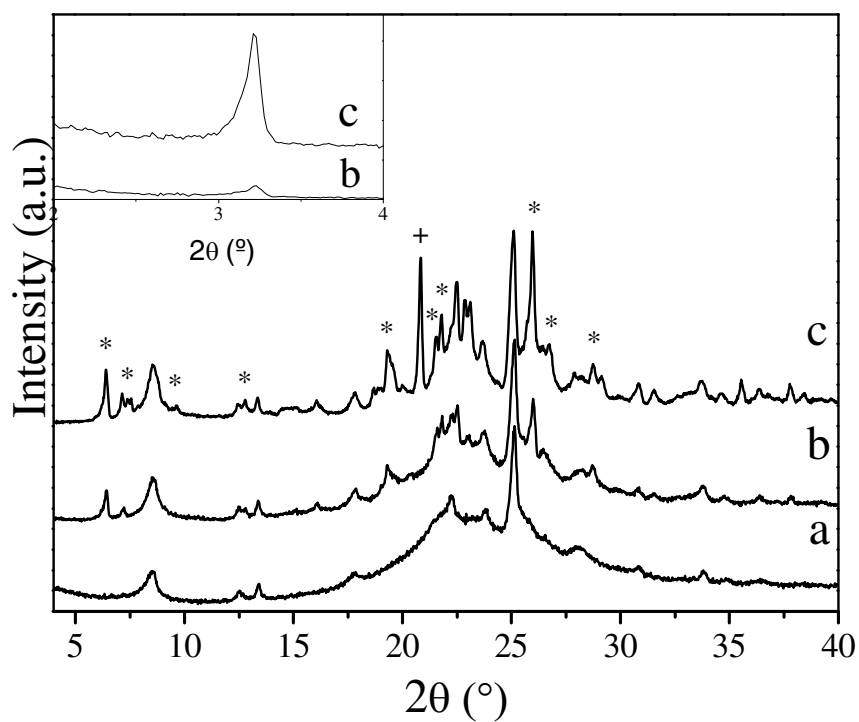
Appendix 1. Synthesis at 150°C.

A poorly crystallised ferrierite-type of material is obtained at 10 days of heating. Prolonging the heating time to 20 and 30 days results in the appearance of a competing phase (Figure S1, Table S1), which was identified as mordenite in a preliminary work (A.B.Pinar et al., *Collect. Czech. Chem. Comm.* **2007**, 72, 666). However, transmission electron microscopy studies confirmed the presence of a mixture of phases including one related to MCM-22, which explains the presence of the characteristic reflection at $2\theta \sim 3.2^\circ$ in the XRD pattern (shown in the inset of figure S1).

Table S1. Syntheses of zeolites performed at 150°C for gels of composition: 0.06 Quin.HCl : 0.48 bmpOH : 0.48 HF : 0.03 Al₂O₃ : 0.94 SiO₂ : 4.7 H₂O.

Sample	T(°)	t (days)	Product
Q150-1-10d	150	10	FER-type
Q150-1-20d	“	20	Mixture
Q150-1-30d	“	30	Mixture

Figure S1. Powder XRD patterns of samples synthesised at 150°C, samples a) Q150-1-10d; b) Q150-1-20d and c) Q150-1-10d. The onset of the figure shows the first diffraction of MCM-22 for b) and c); (* indicates MCM-22; + indicates a dense phase).



FigureS2. Scanning electron micrograph of sample Q150-1-30d

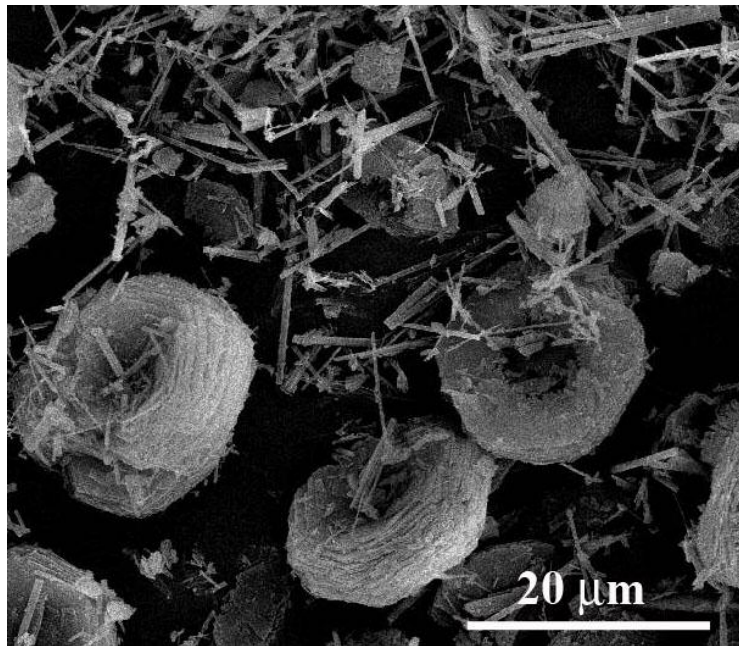


Figure S3.

TEM studies of the needles in sample Q150-1-30d: a) SAED pattern; b) low MAG image, and c) HRTEM image.

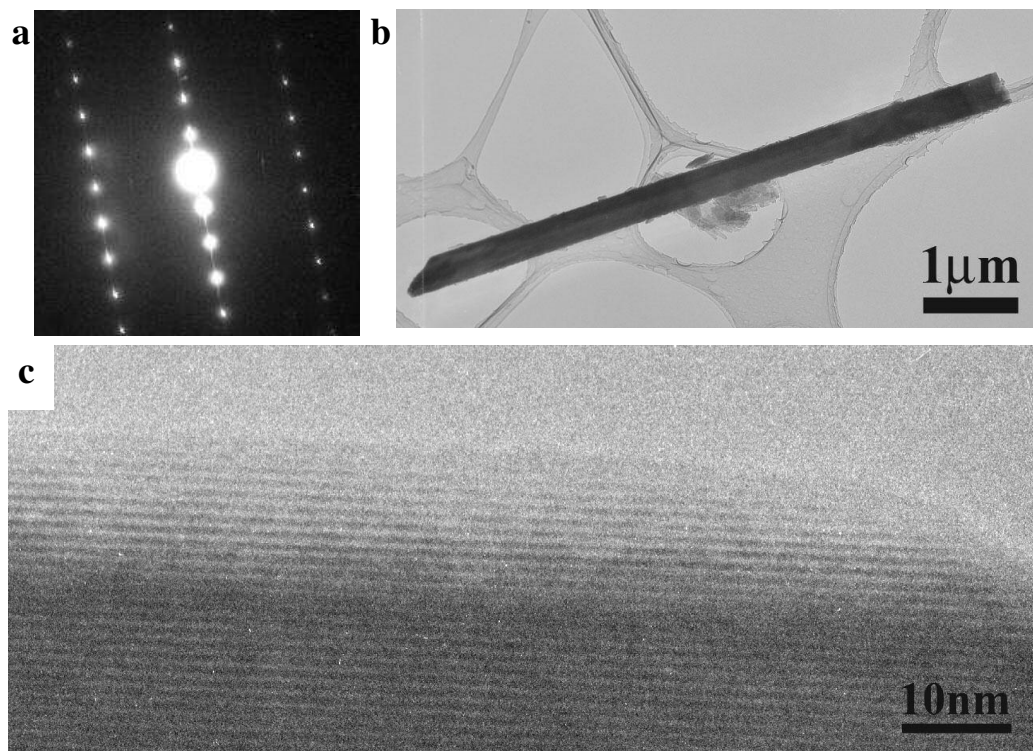
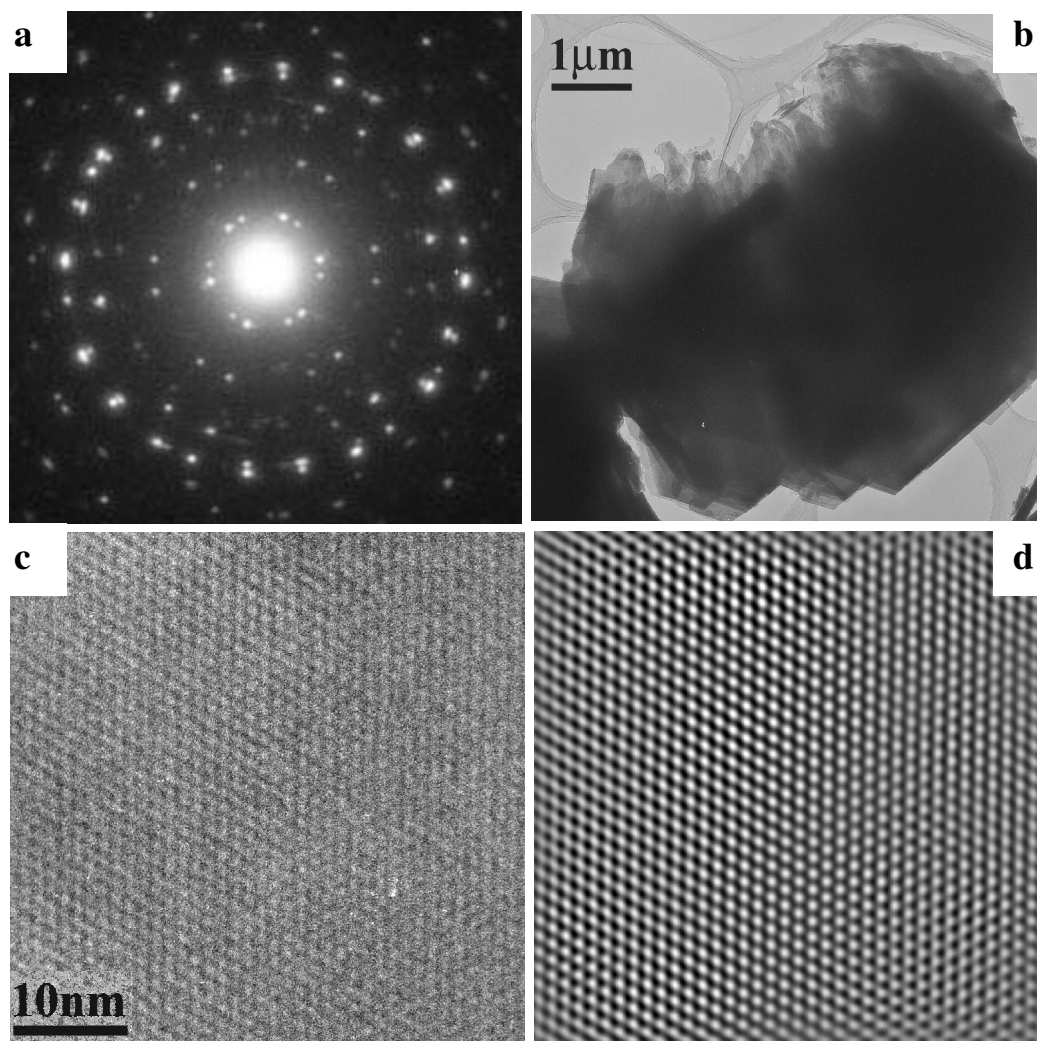


Figure S4. TEM studies of the hexagonal agglomerates in sample Q150-1-30d: a) SAED pattern; b) low MAG image, c) HRTEM image, and d) FFT Filtered HR image.



Appendix 2.

Figure S5. ^{27}Al MAS NMR spectra of a) Q135-1-10d and b) Q135-1-30d (* rotation bands).

