Electronic Supplementary Material (ESI) for Physical Chemistry Chemical Physics.

Supporting Information

Nanosized Na-EMT and Li-EMT zeolites: selective sorption of water and methanol studied by combined IR and TG approach

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Table S1. Chemical composition of Na-EMT and Li-EMT samples determined by ICP.

Sample	Concentration (mg/l)				
	Si	Al	Si/Al	Na	Li
Na-EMT	78.53	68.45	1.15	61.15	00.00
Li-EMT	72.12	64.36	1.12	18.32	16.09

Table S2. Positions of Na cations in sample Na-EMT prior and after water adsorption.

	Site	δ (ppm)	Cq (MHz)	η	(%)
Na-EMT	I	7,8	2,2	0,6	9,7
	I'A	-4,5	2,8	0,6	39,8
	I'B	-19,6	5,1	0,0	42,0
	II	1,4	4,2	0,0	8,5
Na-EMTw	I	8,7	2,3	0,8	23,1
	I'A	0,3	2,9	0,5	40,3
	I'B	-18,9	5,0	0,0	23,2
	II	-5,9	3,7	0,0	13,4

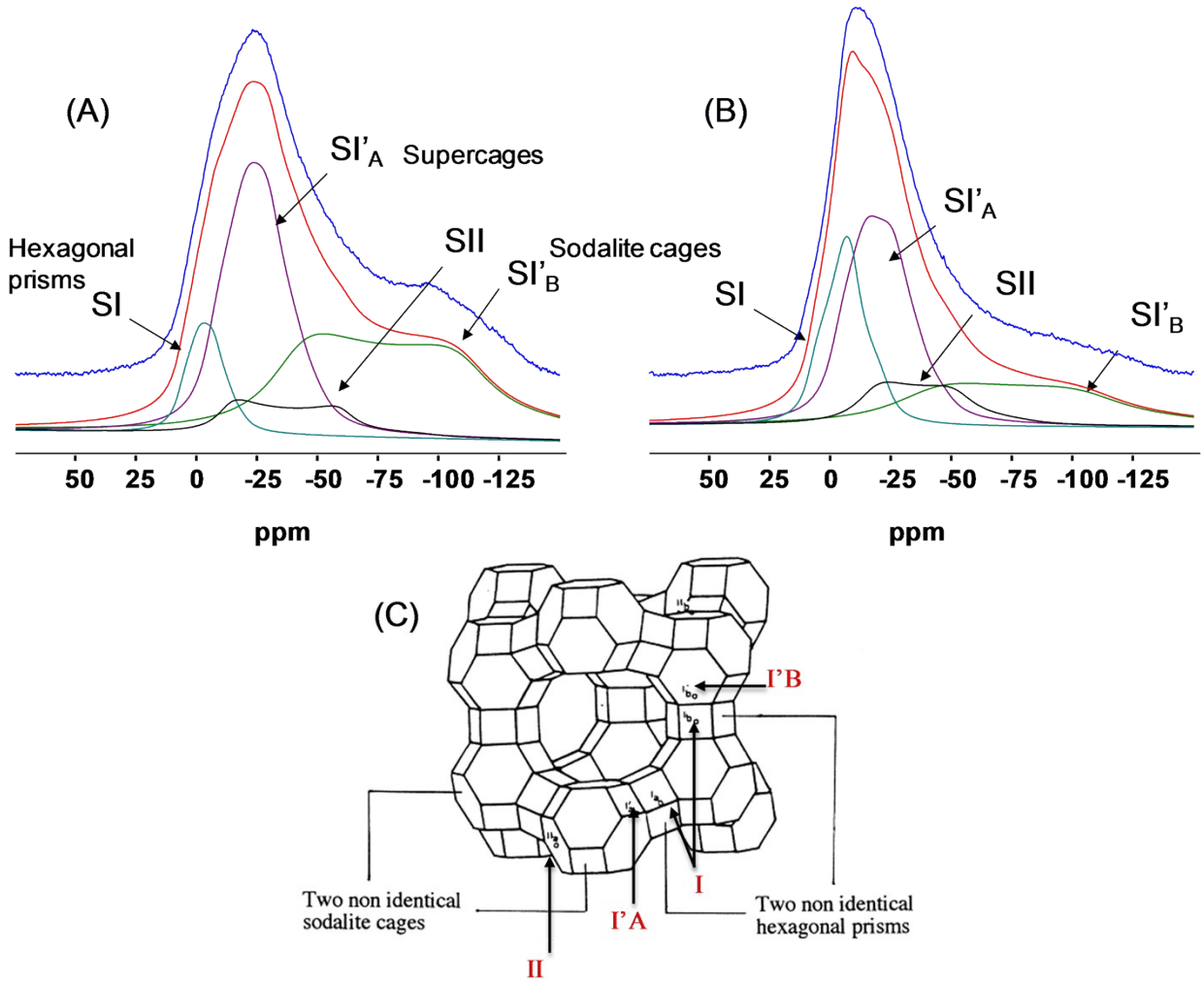

Figure S1. ^{23}Na NMR spectra of samples (A) Na-EMT and (B) Li-EMT.

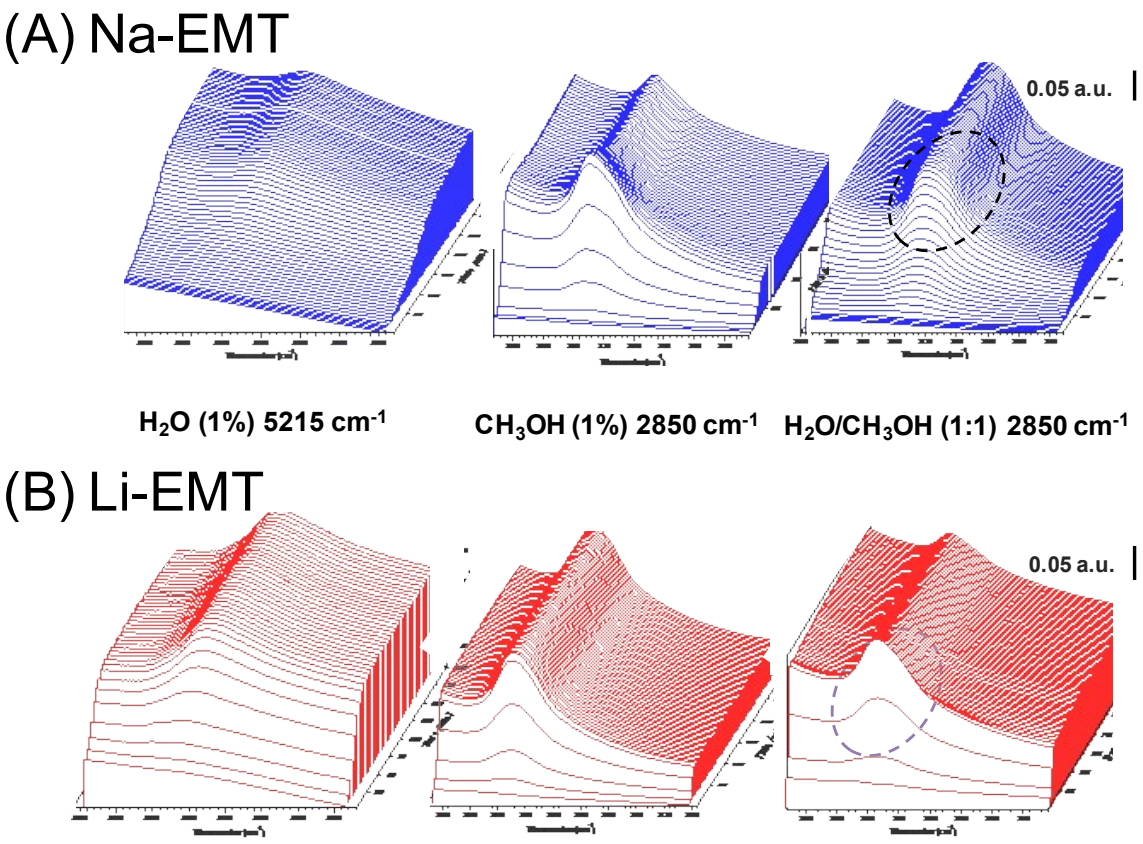

Figure S2. Evolution of vOH and vCH IR bands for 1 % molar fraction of water, methanol and a mixture water/methanol = 1/1for samples (A) Na-EMT and (B) Li-EMT.

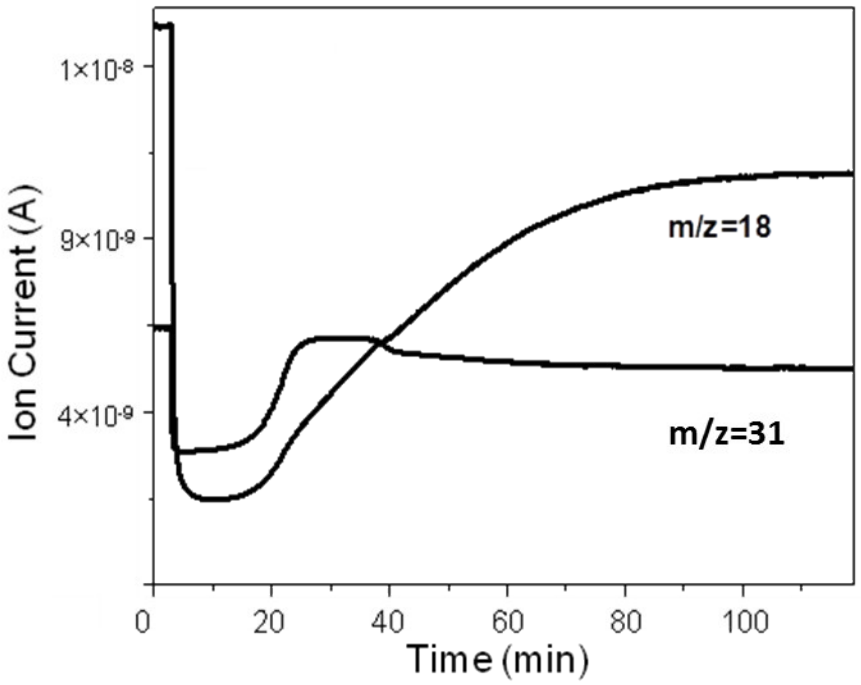

Figure S3. Evolution of mass spectra signals for a mixture of methanol (m/z = 31) and water (m/z = 18) in Ar as a function of time on the Li-EMT zeolite sample.