Electronic Supplementary Material (ESI) for Dalton Transactions.

Calcium and nitrogen species loaded into SBA-15 - a promising catalyst tested in Knoevenagel condensation

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Table S1. Binding energies of O 1s, Si 2p, Ca 2p and N 1s region.

Catalyst	Binding energy, eV			
	O 1s	Si 2p	Ca 2p	N 1s
SBA-15-AP	532.1	102.6	-	399.4
	530.1	-	-	-
SBA-15-Im	532.6	103.2	-	400.8
	530.3	-	-	399.0
CaSBA-15	533.2	103.8	351.3	-
	531.8	102.2	347.6	-
CaSBA-15-AP	532.1	102.7	350.4	399.2
	530.1	101.9	346.8	-
CaSBA-15-Im	532.6	103.4	350.9	401.1
	531.4	102.6	347.3	399.3
Ca/SBA-15-550	532.7	103.2	350.9	-
	531.1	101.6	347.3	-
Ca/SBA-15-550-AP	532.1	102.6	350.4	399.3
	529.9	100.9	346.8	-
Ca/SBA-15-550-Im	532.5	103.1	350.7	401.0
	530.2	101.8	347.2	399.1
Ca/SBA-15-700	532.8	103.4	351.2	-
	531.7	102.1	347.6	-
Ca/SBA-15-700-AP	532.1	102.6	350.4	399.3
	529.9	100.8	346.8	-
Ca/SBA-15-700-Im	532.5	103.1	350.7	400.7
	530.1	101.3	347.1	398.9

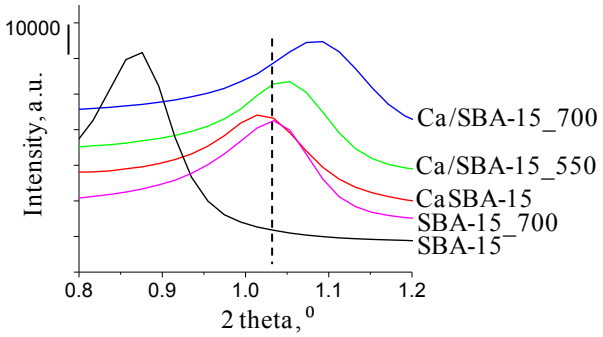

Figure S1. XRD patterns of silica and metallosilicates.

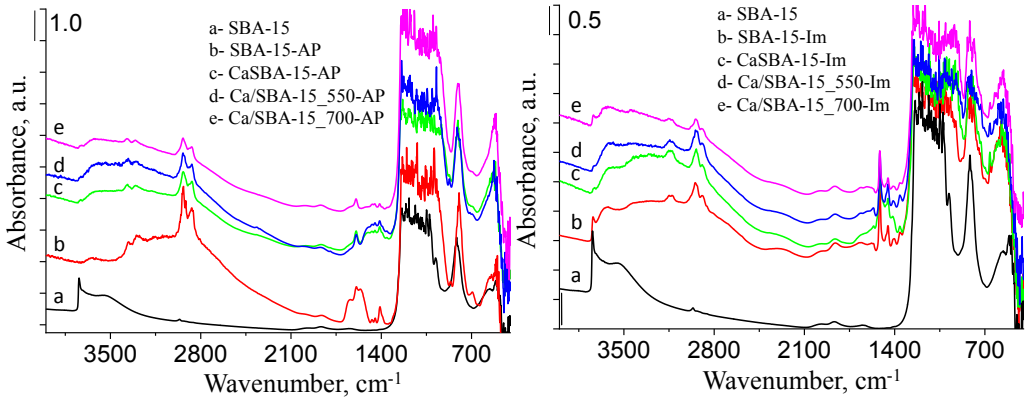

Figure S2. The FTIR spectra of synthesized samples in the range of 4000 – 400 cm^{-1}.

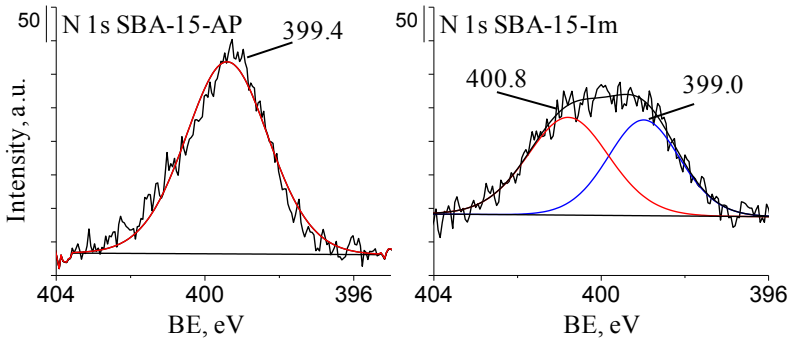

Figure S3. XP spectra of N 1s for SBA-15-AP and SBA-15-Im.

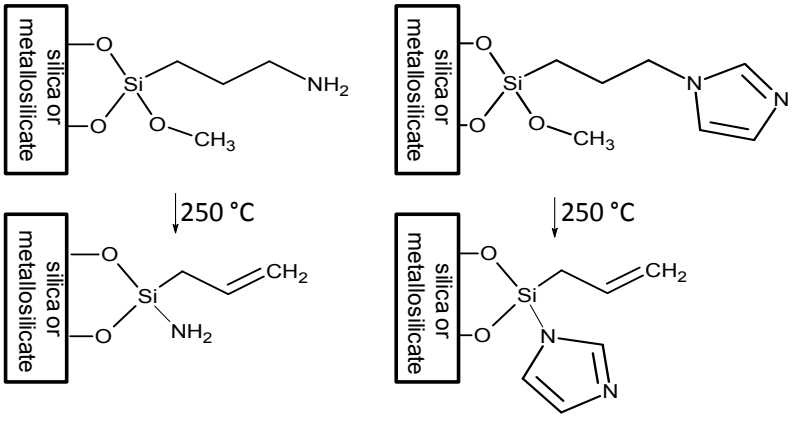

Figure S4. The two possibilities of amine and imidazole anchored in mesoporous silicas and metallosilicates.

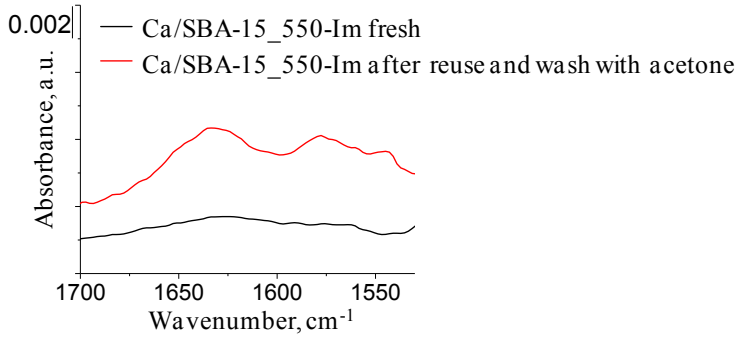

Figure S5. ATR-FTIR spectra of Ca/SBA-15_550-Im before and after its reuse and wash with acetone.