

Supplementary Materials: The impact of 3-(trihydroxysilyl)-1-propanesulfonic acid treatment on the state of vanadium incorporated on SBA-15 matrix

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Table S1. Parameters of ESR spectra recorded at 77 K for the different catalysts.

Catalyst	Evacuation	$g_{\parallel}A_{\parallel}$	[Gs]	$g_{\perp}A_{\perp}$	[Gs]	$g_{iso}A_{iso}$	[Gs]
Vs/SBA-15	fresh	1.928	202.4	1.972	77.7	1.957	119.3
	at RT 6 h	-	-	-	-	-	-
	at 373 K 2 h	-	-	-	-	-	-
	at 473 K 2 h	-	-	-	-	-	-
TPS/Vs/SBA-15	fresh	1.932	202.8	1.984	77.3	1.967	119.1
	at RT 6 h	-	-	-	-	-	-
	at 373 K 2 h	-	-	-	-	-	-
	at 473 K 2 h	-	-	-	-	-	-
Vm/SBA-15	Fresh	1.925	204.7	1.967	77.4	1.954	119.8
		1.909	207.1*				
	at RT 6 h	-	-	-	-	-	-
	at 373 K 2 h	-	-	-	-	-	-
	at 473 K 2 h	-	-	-	-	-	-
TPS/Vm/SBA-15	Fresh	1.934	202.3	1.978	77.0	1.963	118.9
		1.920	202.3*				
	at RT 6 h	-	-	-	-	-	-
	at 373 K 2 h	-	-	-	-	-	-
	at 473 K 2 h	-	-	-	-	-	-

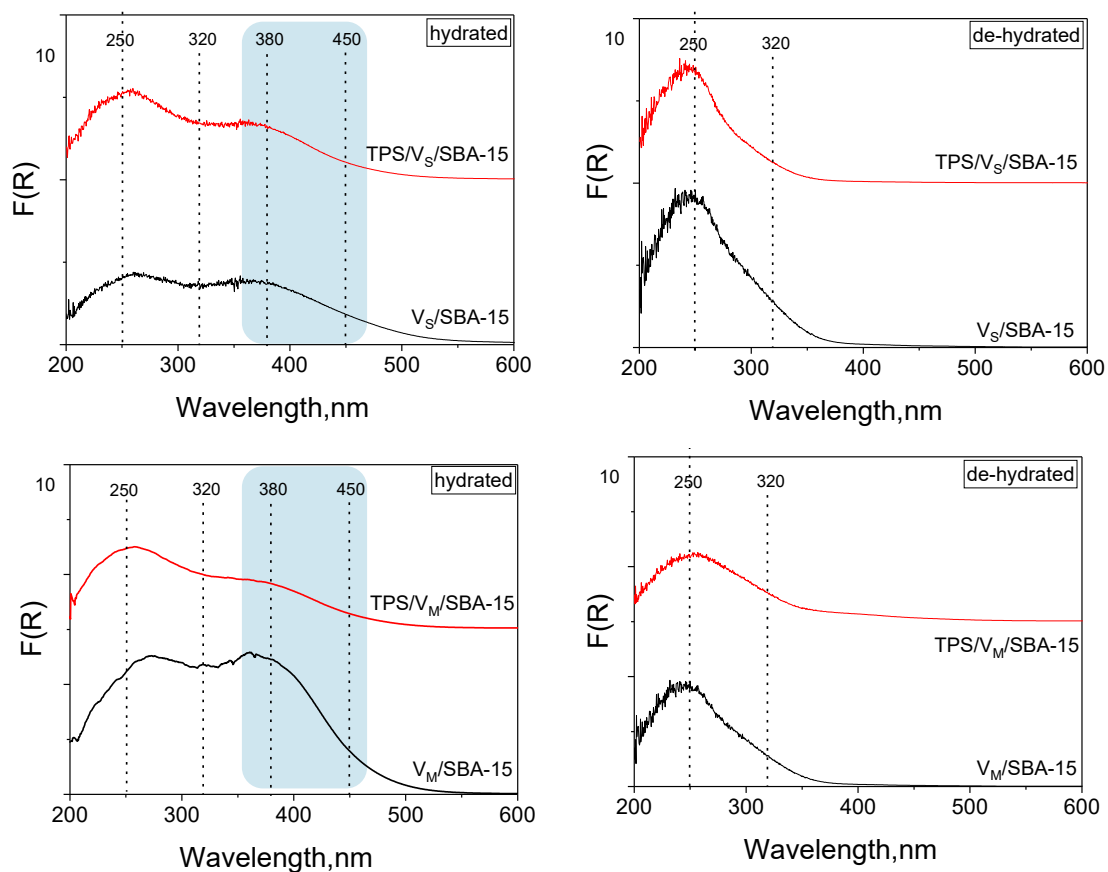


Figure S1. UV-Vis spectra of hydrated and dehydrated samples.

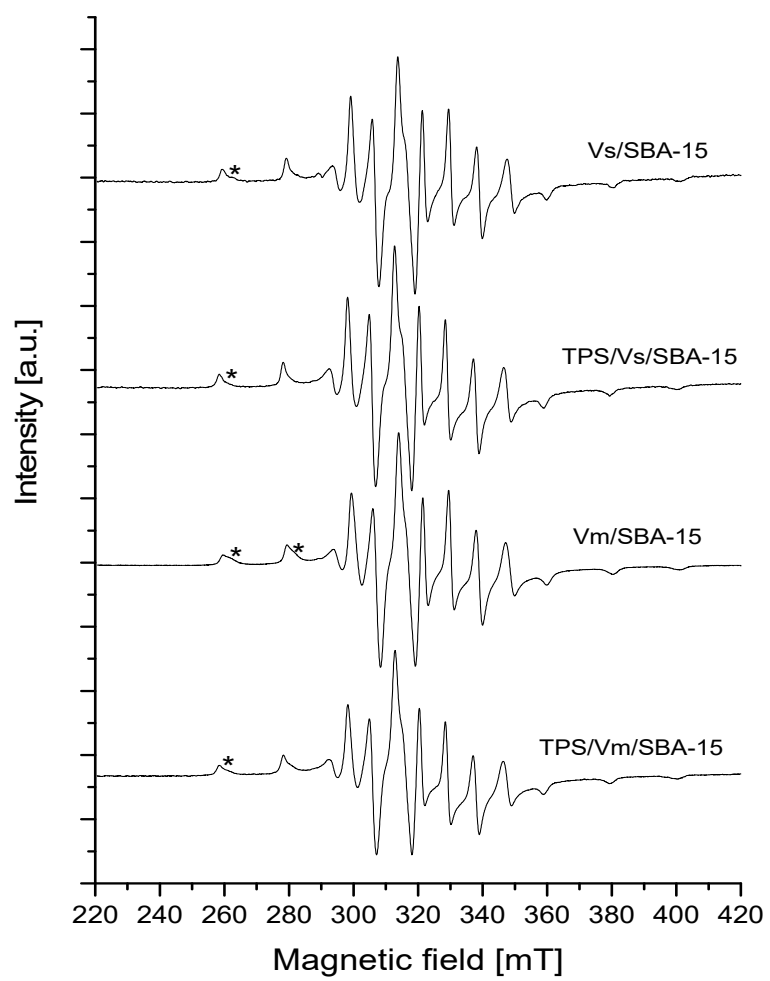


Figure S2. ESR spectra of vanadium containing catalysts (fresh samples) recorded at 77 K.

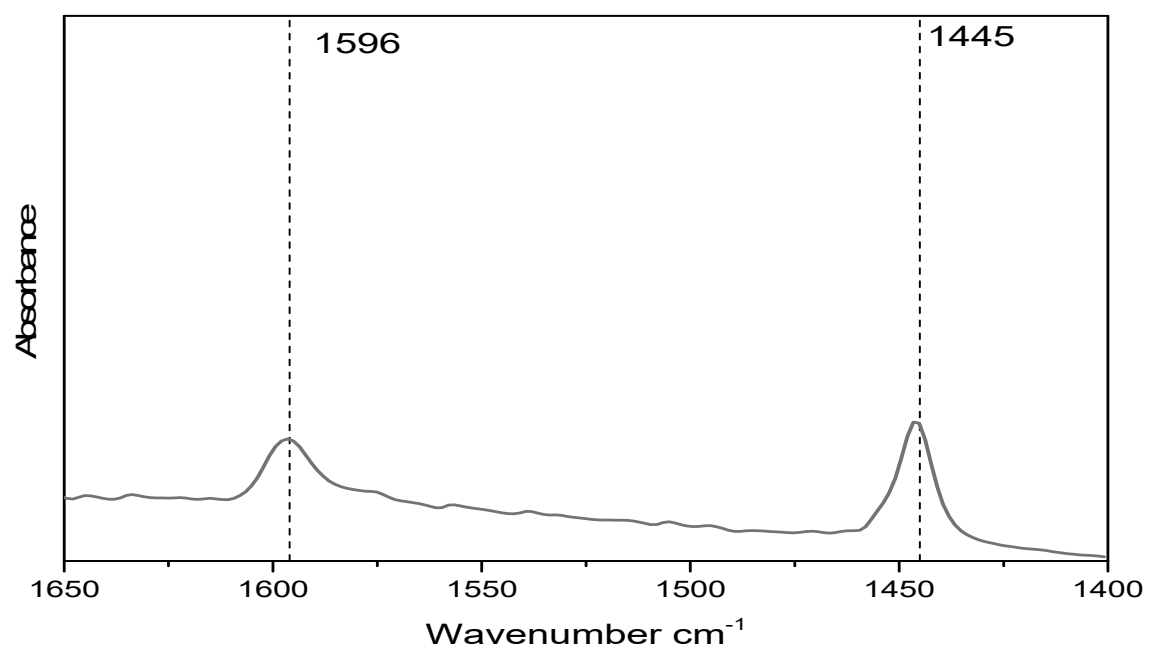


Figure S3. FTIR spectra recorded at room temperature after adsorption of pyridine at 423 K followed by desorption at 423 K for 10 min. on TPS/SBA-15.