Electronic Supplementary Material (ESI) for Catalysis Science & Technology

Electronic Supplementary information

The role of the support properties in the catalytic performance of an anchored copper(II) aza-bis(oxazoline) in mesoporous silicas and their carbon replicas

Ana Rosa Silva[1*], Vanessa Guimarães[1], Ana Paula Carvalho[2], João Pires[2]

[1] Departamento de Química, CICECO, Universidade de Aveiro, Campus Universitário de Santiago, 3810-193 Aveiro, Portugal

[2] CQB, Departamento de Química e Bioquímica, Faculdade de Ciências, Universidade de Lisboa, 1749-016 Lisboa, Portugal

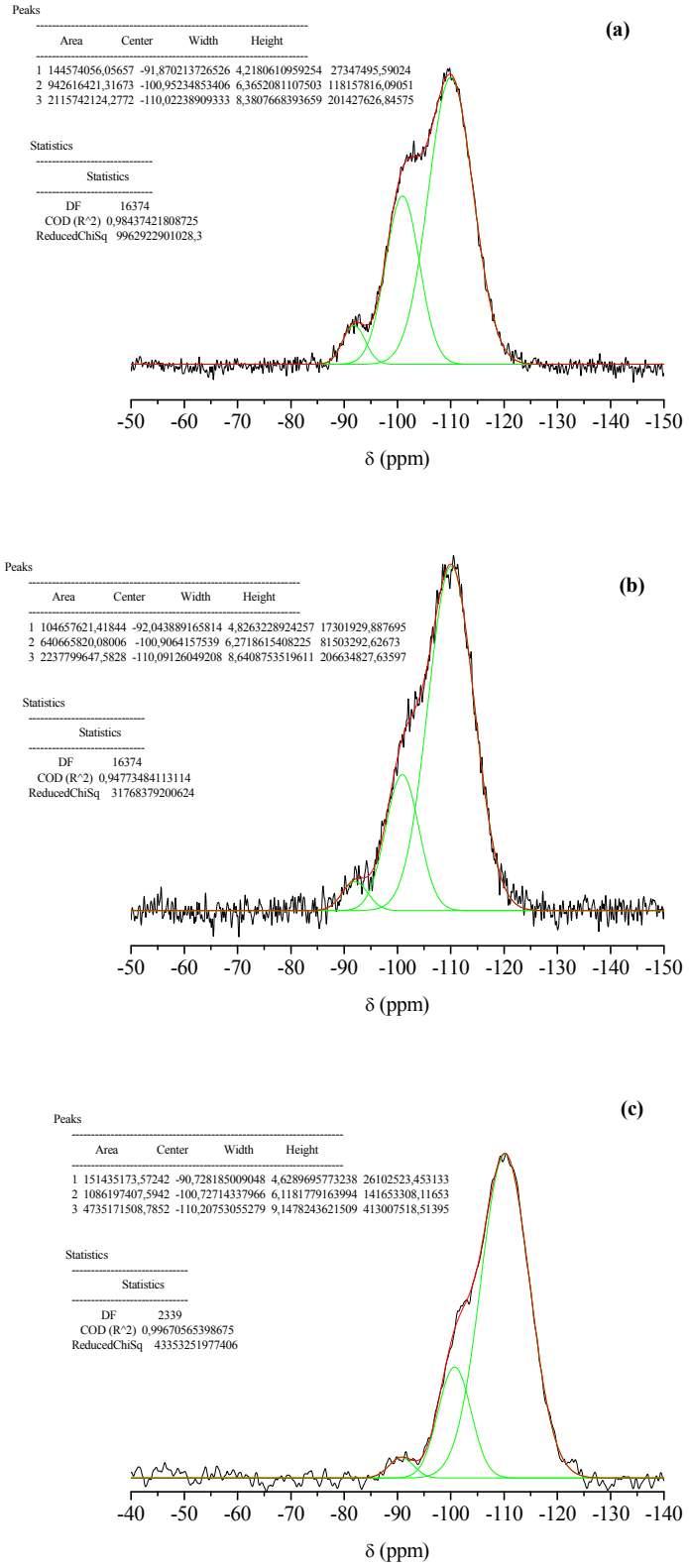

Fig. S1 Deconvolution of the ^{29}Si MAS NMR spectra of the (a) HMS, (b) SBA-15 and (c) SPSi.

Table S1 XPS elemental analysis of some of the 3Cu@MM materials.

	Atom%							µmol Cu/g	
Sample	**C 1s**	**N 1s**	**O 1s**	**F 1s**	**Si 2p**	**S 2p**	**Cu 2p3**	**XPS**	**ICP**
3Cu@SBA-15	5.72	0.71	59.57	1.26	31.79		0.83	413	157
3Cu@HMS	4.48	0.17	60.39	0.57	34.27		0.13	65	138
3Cu@SPC	91.43	0.26	5.63	1.35	0.52	0.47	0.17	137	90

Table S2 Curve fitting of the high resolution XPS spectra in the areas C1s, N 1s, O 1s, F 1s, Si 2p, S 2p and Cu $2p_{3/2}$.

Sample	**Binding energy (FWHM)/ eV**						
	C 1s	**N 1s**	**O 1s**	**F 1s**	**Si 2p**	**S 2p**	**Cu $2p_{3/2}$**
3Cu@SBA-15	285.0 (2.5) 287.7 (2.5) 292.3 (2.5)	400.1 (3.1)	532.7 (2.3)	688.4 (2.8)	103.4 (2.3)		932.8 (2.8)
3Cu@HMS	285.0 (2.5) 287.2 (2.5)	400.8 (6.2)	532.9 (2.4)	688.4 (3.4)	103.6 (2.4)		933.6 (2.6)
3Cu@SPC	284.4 (1.5) 285.6 (2.5) 288.9 (5.6)	399.6 (2.5)	531.8 (2.5) 533.7 (2.5) 536.8 (2.5)	688.0 (2.6)	102.0 (2.5)	168.3 (2.5)	934.2 (4.2)