*Supporting information for*

# One-step synthesis of a highly homogeneous SBA-NHC hybrid material: en route to single-site NHC-metal heterogeneous catalysts with high loadings

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**Characterization of 1-(2,6-Diisopropylphenyl)-3-[3-(triethoxysilyl)propyl]-imidazolium Iodide (1)**

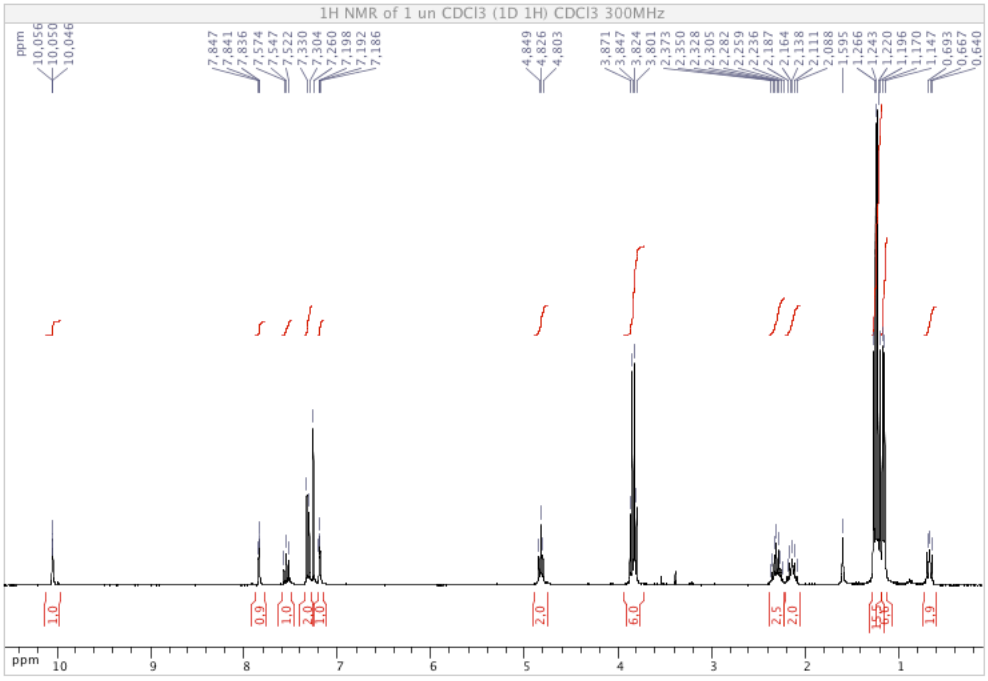


**Figure S1a.** $^{1}$H NMR spectrum of **1** in $CDCl_3$.

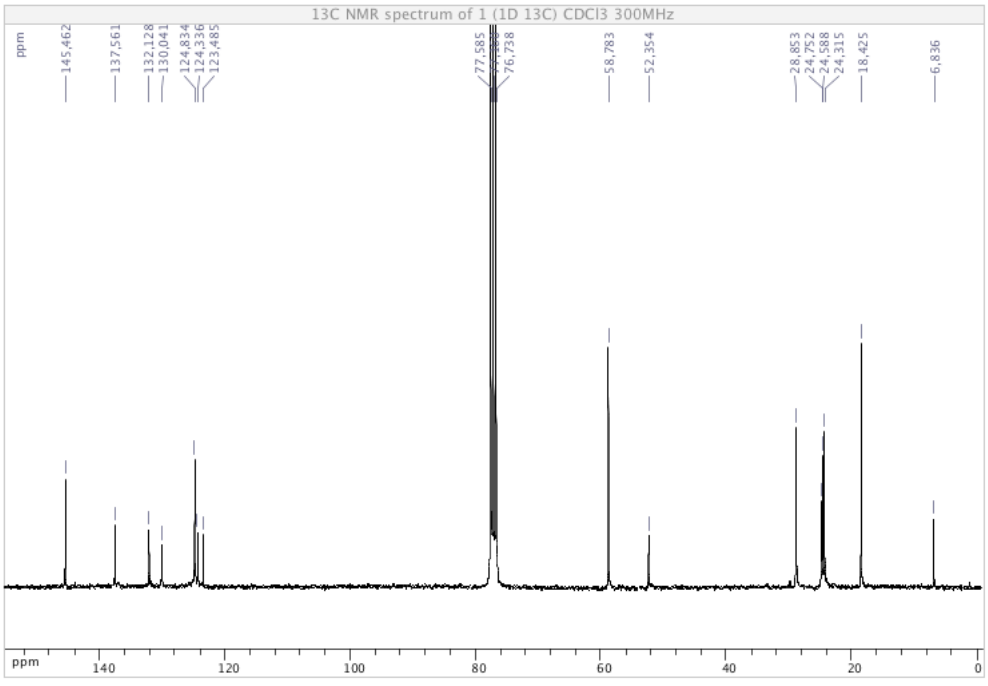


**Figure S1b.** $^{13}$C {$^{1}$H} NMR spectrum of **1** in $CDCl_3$.

## Characterization of the Hybrid SBA-NHC (2)

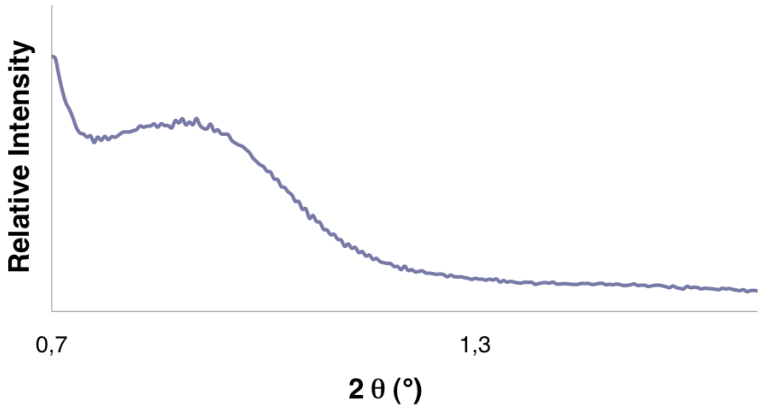


**Figure S2a.** Small-Angle Powder XRD Pattern of **2**.

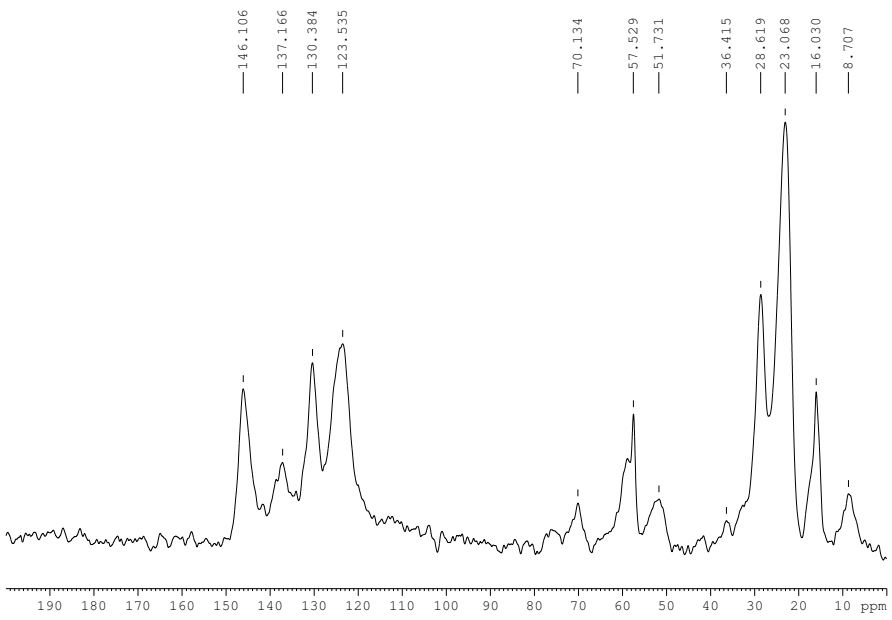


**Figure S2b.** $^{13}$C CP-MAS NMR spectrum of **2**.[a,b]

(a) 102400 scans were accumulated with a recycle delay of 3 s.
(b) Peaks at 70, 59, 58 and 16 ppm correspond to residual template agent present in micropores and to Si-OEt signals that arise from surfactant removal by extraction with EtOH (see Fig. S3a).

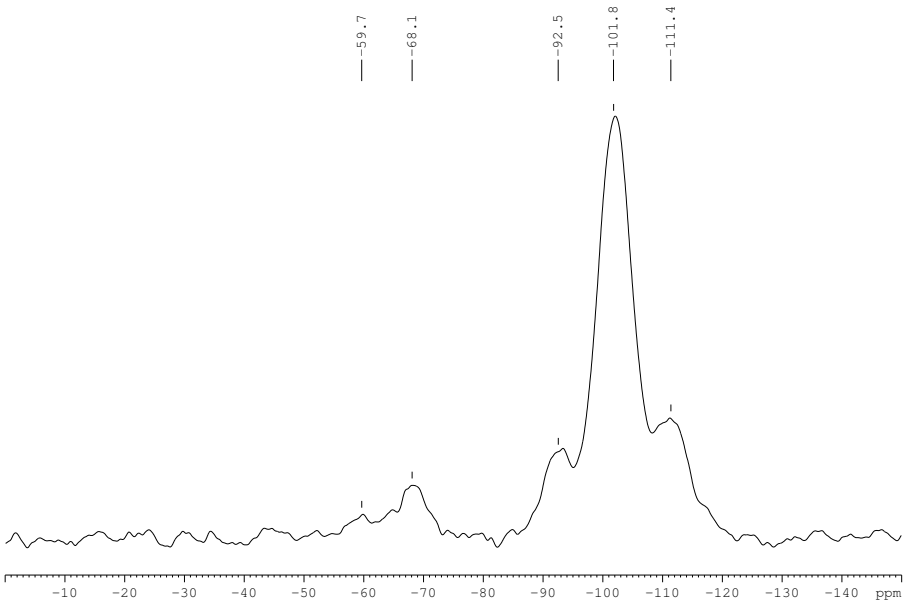


**Figure S2c.** $^{29}$Si CP-MAS NMR spectrum of **2**.[a]

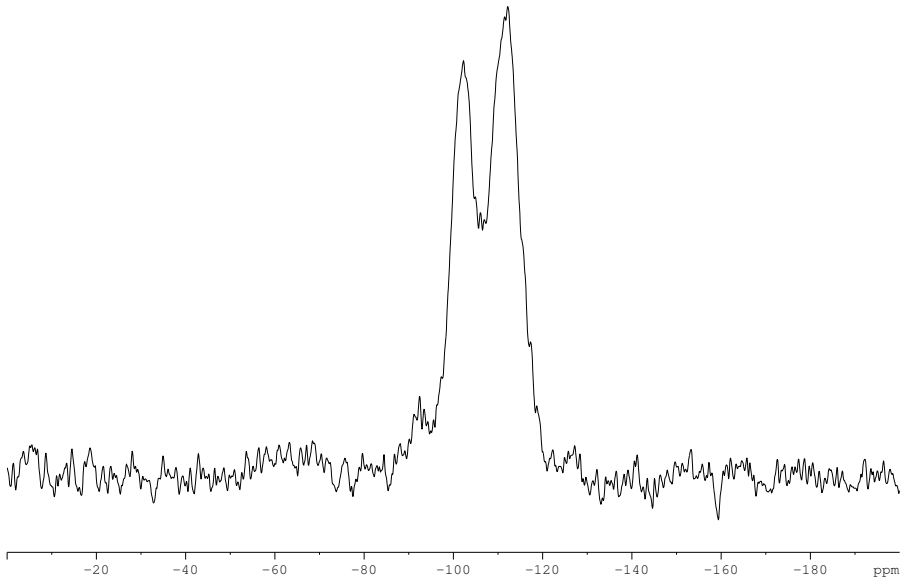


**Figure S2d.** $^{29}$Si MAS NMR spectrum of **2**.[b]

(a) 32768 scans were accumulated with a recycle delay of 5 s.
(b) 14000 scans were accumulated with a recycle delay of 30 s.

## CP-MAS NMR Characterization of the Pristine SBA-15 (3)

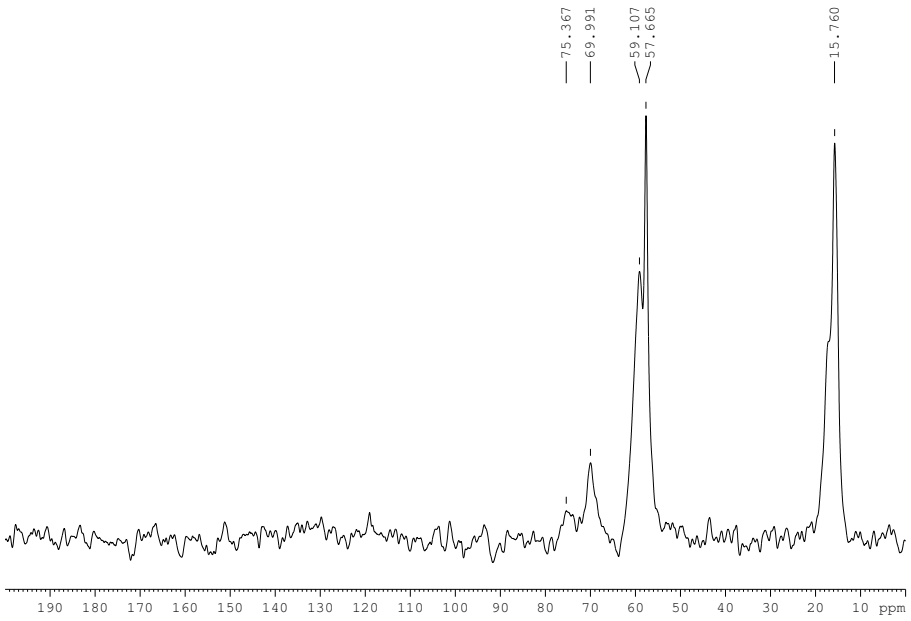


**Figure S3a.** $^{13}$C CP-MAS NMR spectrum of **3**.[a]

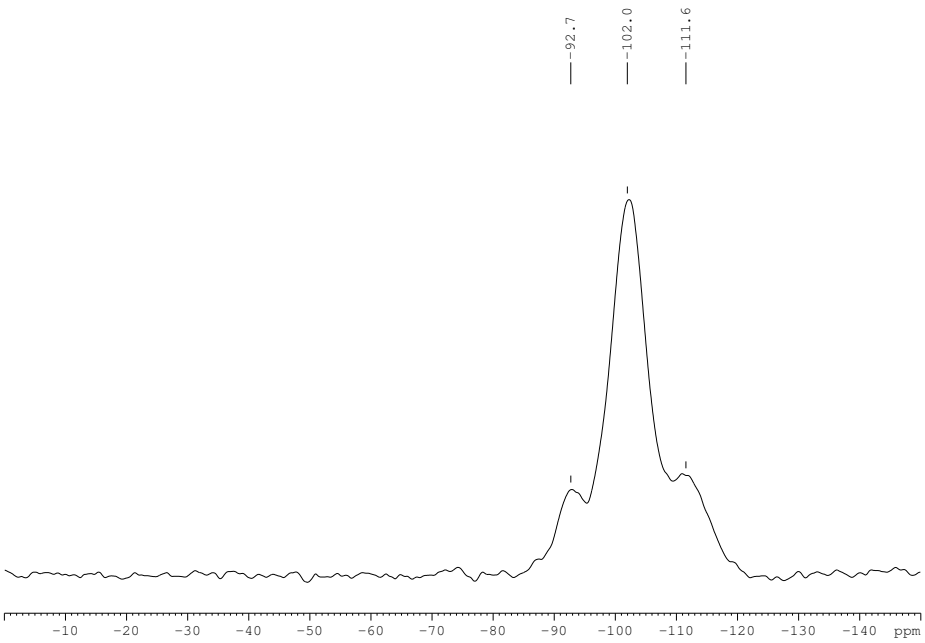


**Figure S3b.** $^{29}$Si CP-MAS NMR spectrum of **3**.[b]

(a) 32100 scans were accumulated with a recycle delay of 3 s.
(b) 32768 scans were accumulated with a recycle delay of 5 s.

## CP-MAS NMR Characterization of the Grafted SBA-NHC (4)

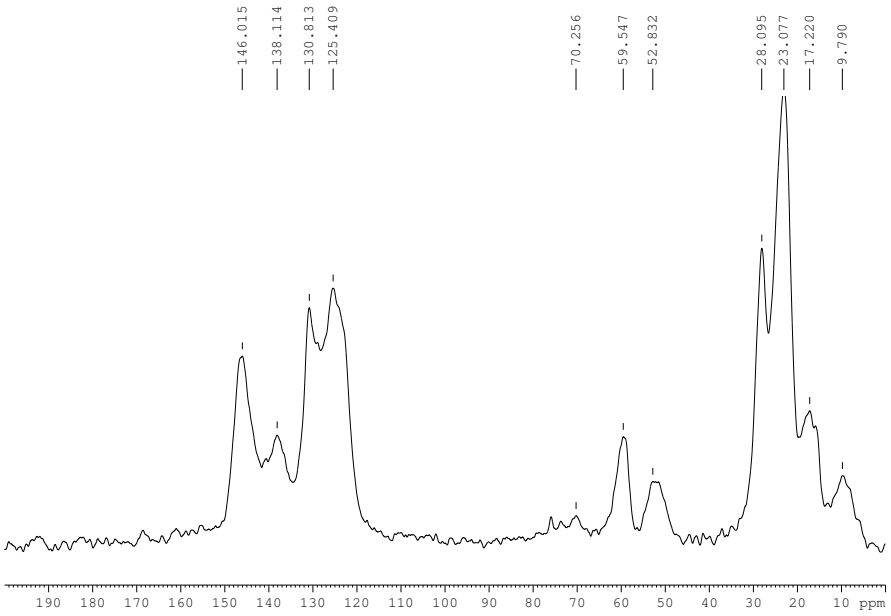


**Figure S4a.** $^{13}C$ CP-MAS NMR spectrum of **4**.[a,b]

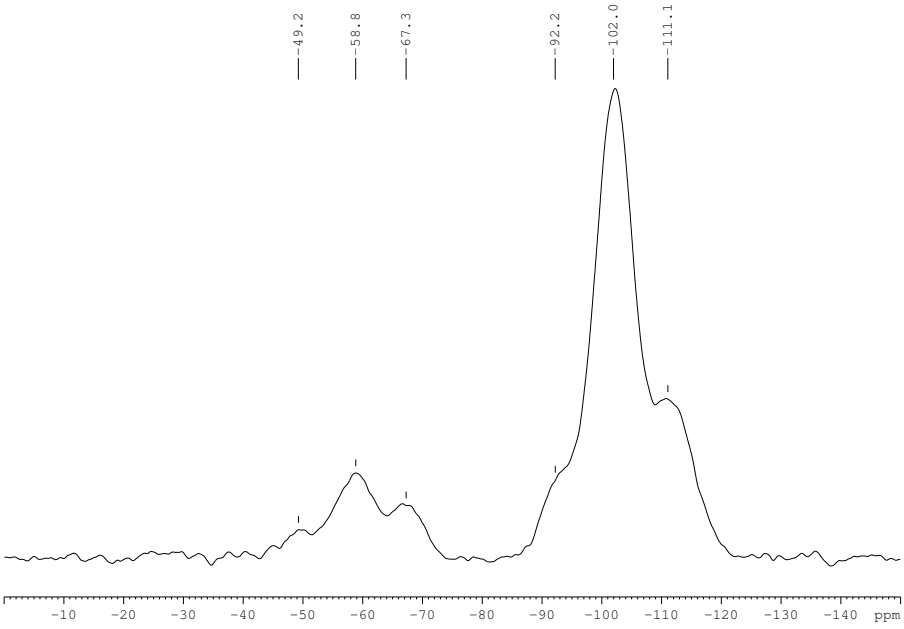


**Figure S4b.** $^{29}Si$ CP-MAS NMR spectrum of **4**.[c]

(a) 28675 scans were accumulated with a recycle delay of 3 s.
(b) Peaks at 70, 59 and 17 ppm correspond to residual template agent present in micropores and to Si-OEt signals that arise from surfactant removal by extraction with EtOH (see Fig. S3a).
(c) 32768 scans were accumulated with a recycle delay of 5 s.

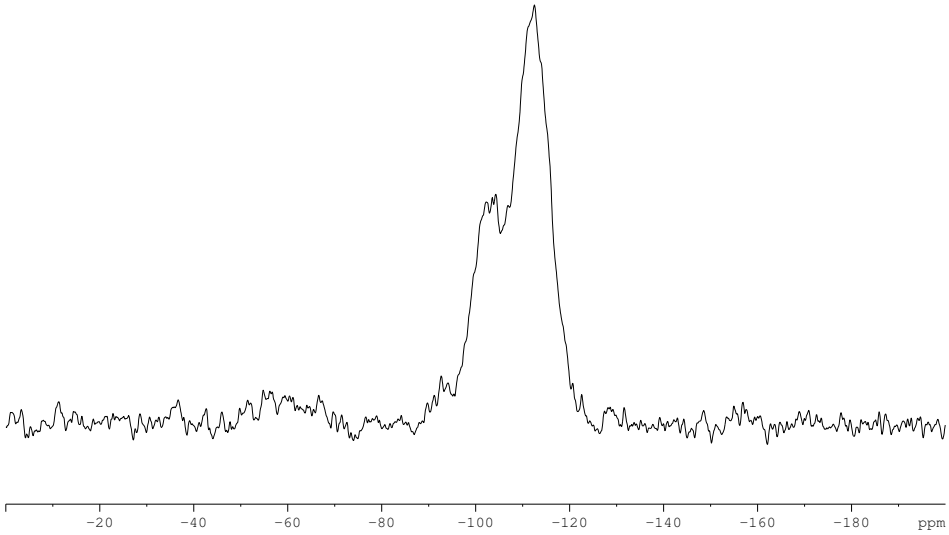


**Figure S4c.** $^{29}$Si MAS NMR spectrum of **4**.[a]

(a) 5000 scans were accumulated with a recycle delay of 30 s.