Additions and Corrections

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M. T. Janicke, C. C. Landry, S. C. Christiansen, S. Birtalan, G. D. Stucky, and B. F. Chmelka: Low Silica MCM-41 Composites and Mesoporous Solids .

In Table 1 (*Chem. Mater.* **1999**, *11*, 1342, this issue), the uncertainty for the Si/Al molar ratio is ±0.3.

The incorrect version of Figure 2 and its caption were published. The correct figure and its caption are as follows:

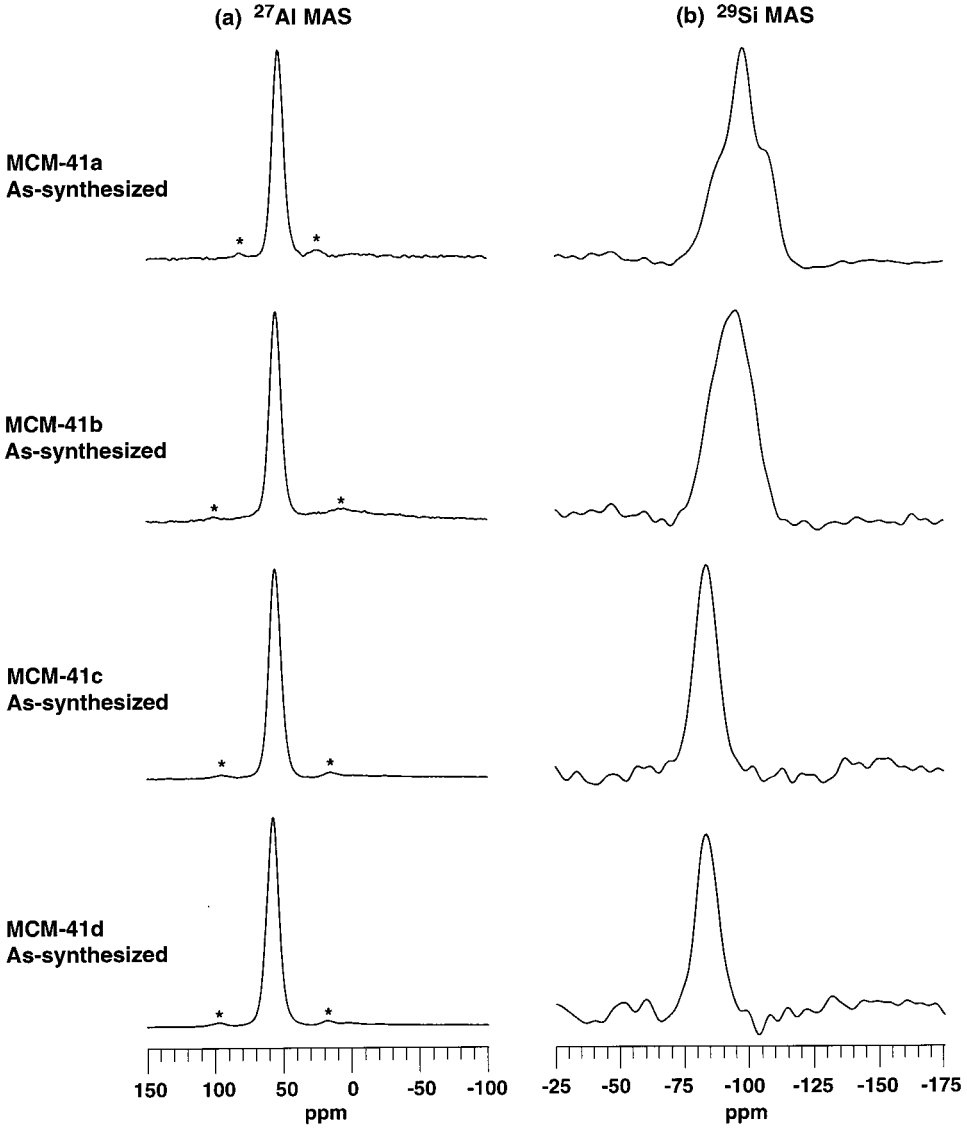

Figure 2. Single-pulse ^{27}Al and ^{29}Si MAS NMR spectra for as-synthesized, low silica MCM-41a−d samples containing different concentrations of aluminum (see Table 1). (a) Only tetrahedrally coordinated aluminum species (55 ppm) are observed in the ^{27}Al MAS spectra of these materials. The additional weak peaks in the spectra correspond to spinning sidebands (∗) which appear symmetrically about the isotropic peak at integer multiples of the rotor frequency. ^{27}Al MAS data were collected with short 1-μs pulses (corresponding to a $\pi/6$ tip angle), 500-ms repetition delays, and spinning speeds ranging from 3.5 to 5 kHz under conditions of proton decoupling. (b) ^{29}Si MAS spectra reflect a distribution of ^{29}Si sites. ^{29}Si MAS data were collected with a 8.50-μs $\pi/2$ pulse and a recycle delay of 180 s, under conditions of magic-angle spinning at 5 kHz and proton decoupling.

The incorrect versions of Figures 3 and 5 were published. The correct figures are as shown:

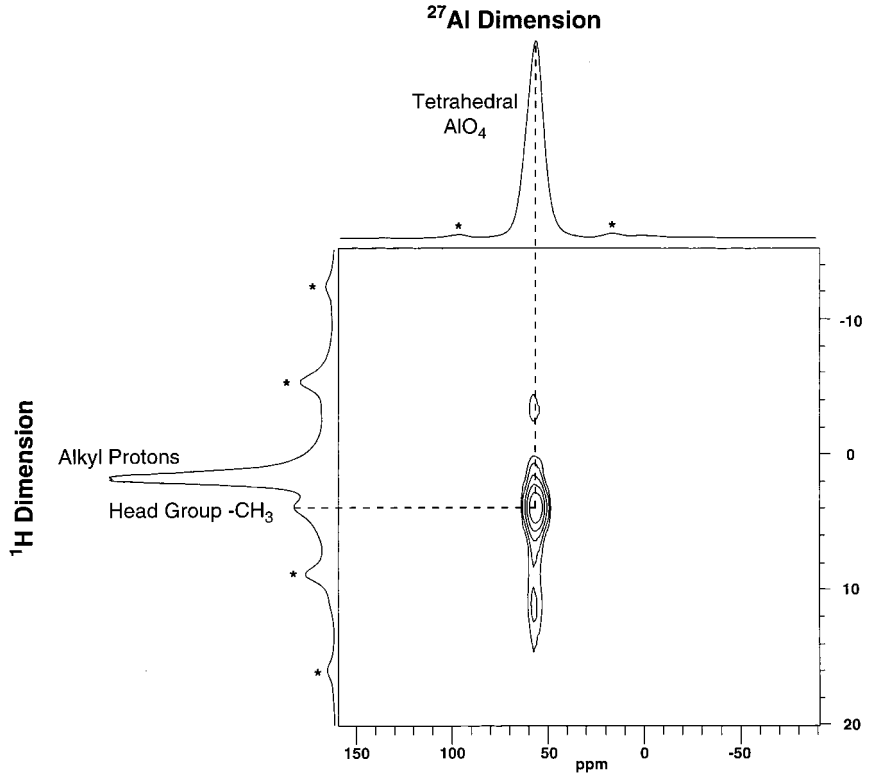

Figure 3. Two-dimensional $^{27}Al\{^{1}H\}$ HETCOR NMR spectrum for as-synthesized, low silica MCM-41d (Si/Al = 1.3). Separate ^{27}Al MAS and ^{1}H MAS spectra accompany the HETCOR contour plot along the corresponding axes (∗ denotes spinning sidebands). The 2D spectrum was acquired at room-temperature under conditions of magic-angle spinning at 3.5 kHz. A 8.0-μs 90° pulse, followed by a 0.75-ms contact time, was used for cross-polarization. The 90° ^{27}Al pulse length was assumed to be one-third of the 90° pulse length found for ^{27}Al in solution.[28,29] The HETCOR intensity correlations spectrum show that the tetrahedrally coordinated aluminum species interact strongly with the protons of the surfactant head group.

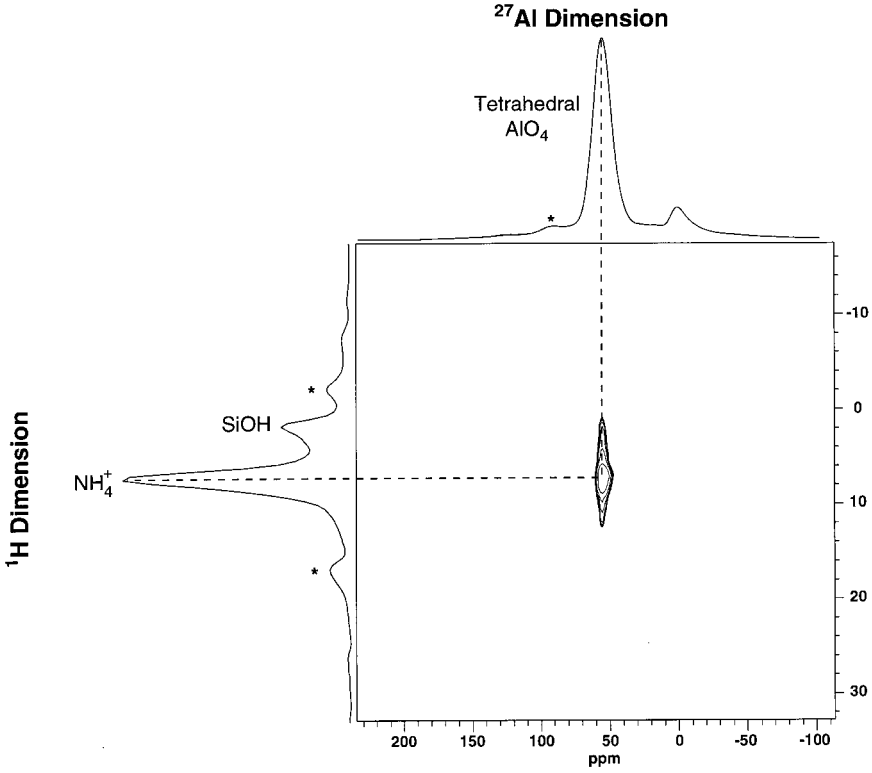

Figure 5. Two-dimensional $^{27}Al\{^{1}H\}$ HETCOR spectrum for the calcined, NH_4^+-exchanged, and dehydrated aluminosilicate MCM-41d sample. Separate ^{27}Al MAS and ^{1}H MAS spectra accompany the HETCOR contour plot along the corresponding axes. Correlated intensity in the 2D spectrum between signals from the NH_4^+ protons and tetrahedrally coordinated ^{27}Al species confirm retention of aluminum atoms in the framework following calcination. The spectra were acquired using the same experimental conditions reported in Figure 3.

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