

Supporting Information for:

**Synthesis and Characterization of Functionalized Mesoporous  
Silica by Aerosol-Assisted Self-Assembly**

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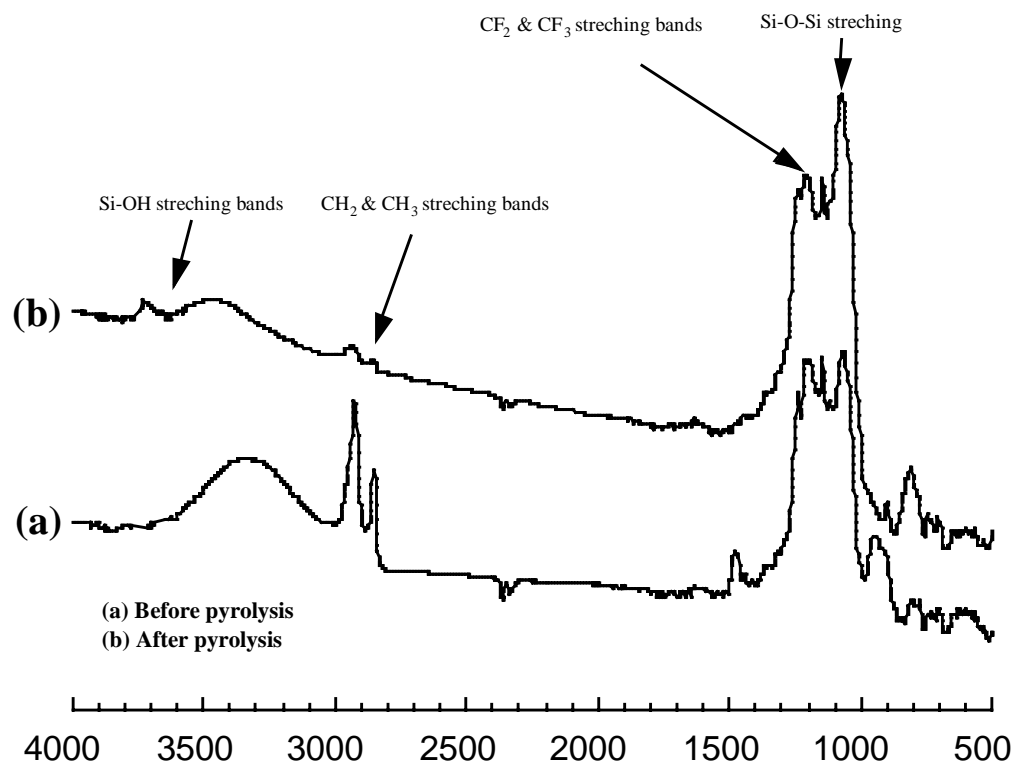


Figure S1. FT-IR spectra of the TFTS-modified silica particles before and after heat treatment at 350 °C for 5 hr in a nitrogen atmosphere.

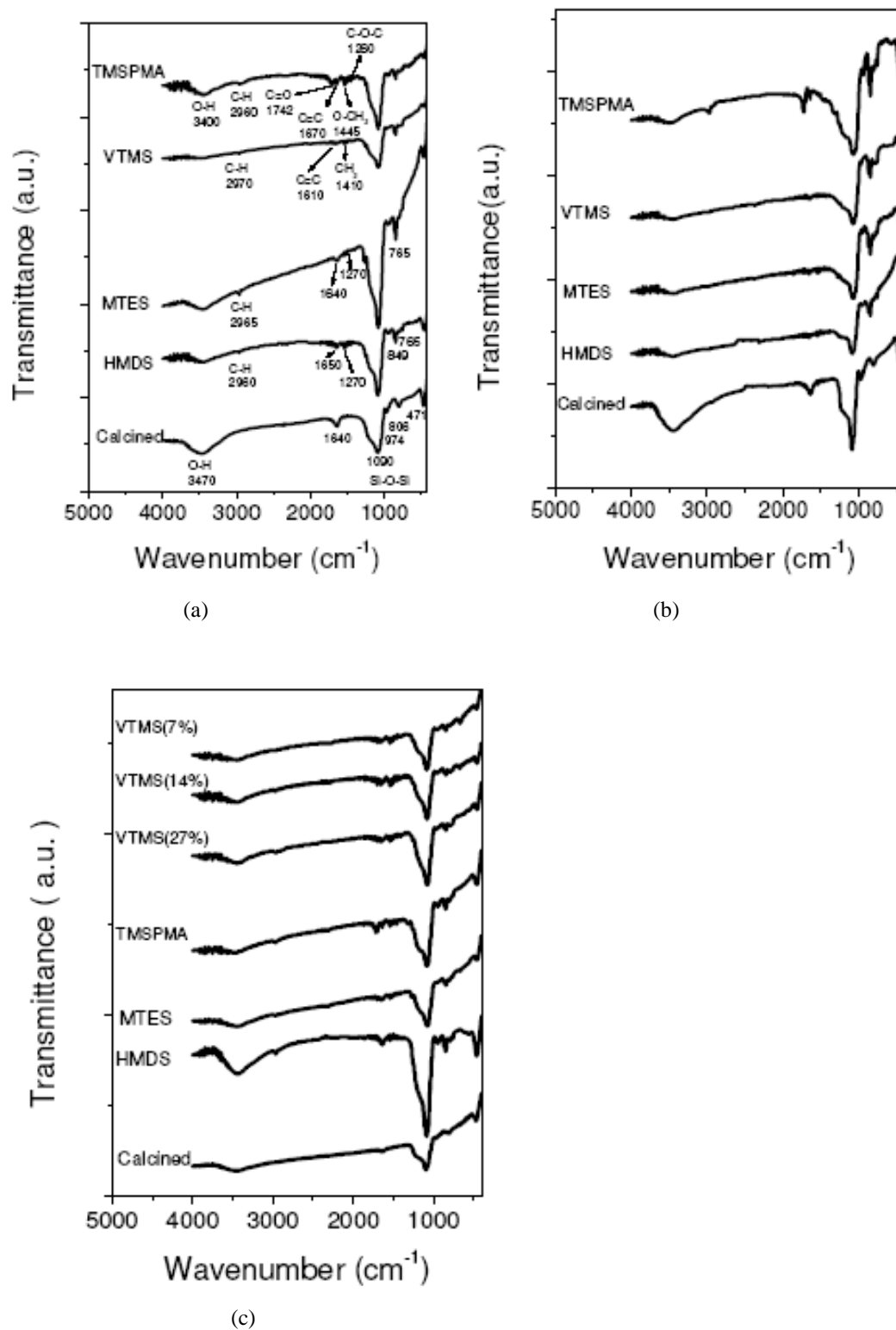


Figure S2. FT-IR spectra for organic functionalized silica particles, (a) Brij-56, (b) CTAB, (c) P123 as a template.

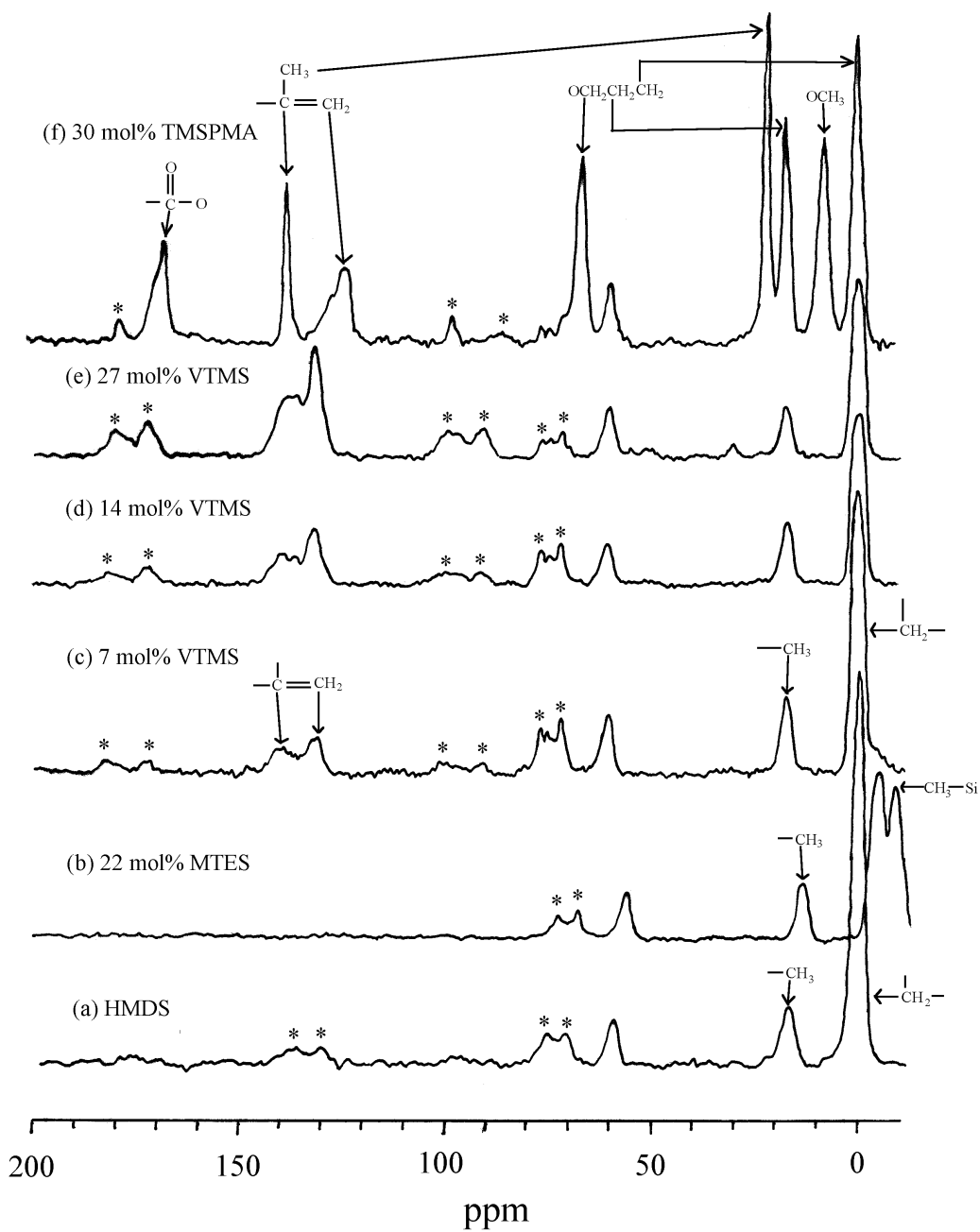


Figure S3. Solid-state  $^{13}\text{C}$  CP/MAS NMR spectra, (a) HMDS, (b) 22 mol% MTES, (c) 7 mol% VTMS, (d) 14 mol% VTMS, (e) 27 mol% VTMS, (f) 30 mol% TMSPMA, \* spinning side bands.

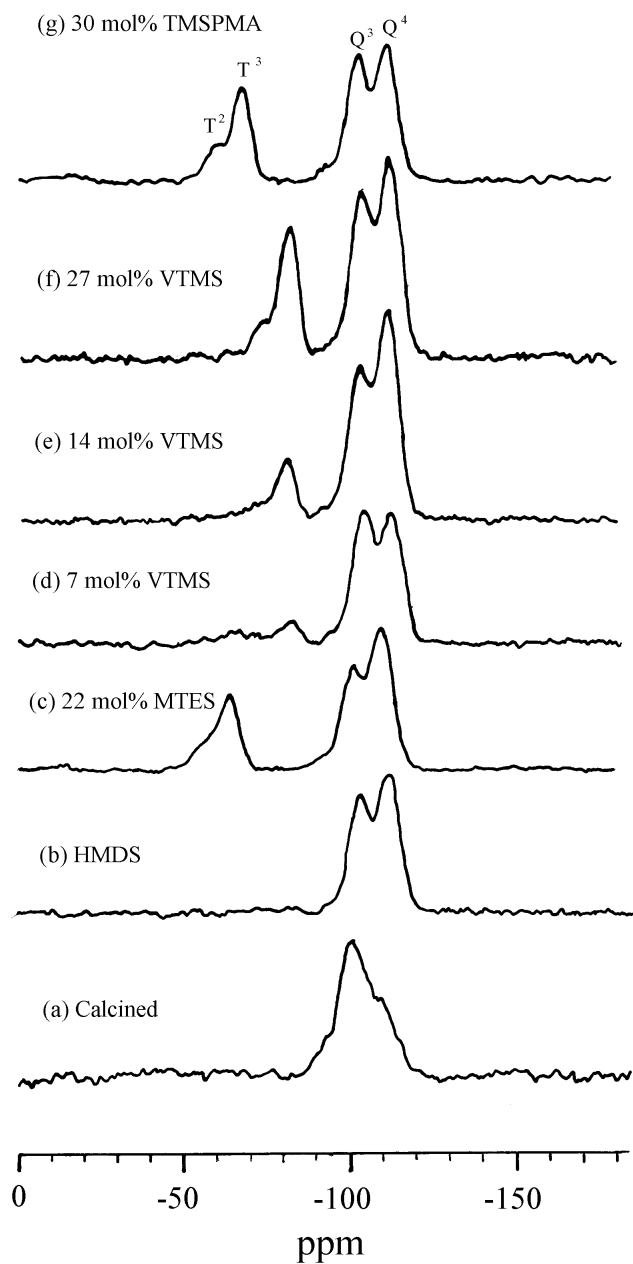


Figure S4. Solid-state  $^{29}\text{Si}$  MAS NMR spectra, (a) calcined at  $450^\circ\text{C}$  for 4 h, (b) HMDS, (c) 22 mol% MTES, (d) 7 mol% VTMS, (e) 14 mol% VTMS, (f) 27 mol% VTMS, (g) 30 mol% TMSPMA. (The cross-polarization (CP) contact time used in this study was 8 ms)

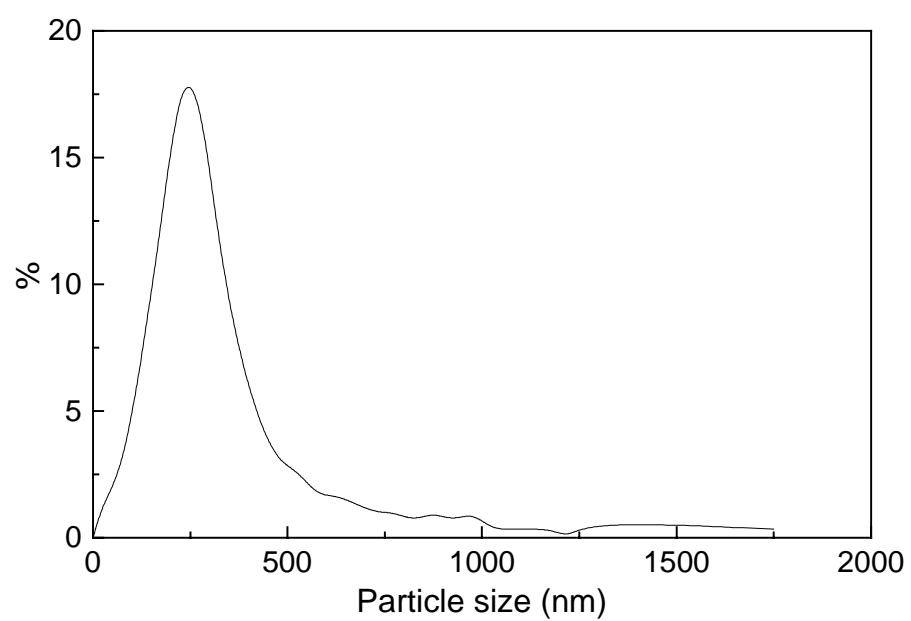


Figure S5 Particle size distribution of samples using P123 as a template