

SUPPORTING INFORMATION

Organosilanes as synthetic precursors for oligosiloxanes and phenylsilica spheres

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Index

	Page No.
Fig S1. ^1H NMR spectrum of cyclic siloxane.....	3
Fig S2. $^{29}\text{Si}\{^1\text{H}\}$ NMR spectrum of cyclic siloxane.....	3
Fig S3. ESI-MS spectrum of cyclic siloxane.....	4
Fig S4. DLS profile of 0.01 wt% aqueous dispersion of cyclic siloxane.....	4
Fig S5. GC MS and $^{29}\text{Si}\{^1\text{H}\}$ NMR of linear siloxane, 1b	4
Fig S6. Various stages of water-organosilane emulsification.....	5
Fig S7. ^1H NMR monitoring of hydrolytic oxidation of MePhSiH_2 and <i>Mecyclo</i> - HexSiH_2	5
Fig S8. ESI-MS of disiloxane-1,3-diols, 2a and 2b	5
Fig S9. ^1H NMR spectrum of 2d	6
Fig. S10. ESI MS of mixture of 1,3- and 1,5-siloxanols, 2c	6
Fig. S11. ESI MS of mixture of 1,3- and 1,5-siloxanols, 2d	6
Fig S12. ^1H and $^{29}\text{Si}\{^1\text{H}\}$ NMR spectra of <i>t</i> - $\text{Bu}_2\text{Si}(\text{H})\text{OH}$, 2e	7
Fig S13. ^1H and $^{29}\text{Si}\{^1\text{H}\}$ NMR spectra of $\text{Ph}_2\text{Si}(\text{OH})_2$, 2f	7
Fig S14. $^{29}\text{Si}\{^1\text{H}\}$ NMR and GC MS of linear siloxane, 3	7
Fig S15. $^{29}\text{Si}\{^1\text{H}\}$ NMR and ESI MS of oligoether-substituted linear siloxane, 4a	8
Fig S16. $^{29}\text{Si}\{^1\text{H}\}$ NMR and ESI MS of triethoxysilyl-substituted linear siloxane, 4b	8
Fig S17. FT-IR spectrum of 5a	8
Fig S18. FT-IR spectrum of 5b	9
Fig S19. Solid state ^{29}Si NMR spectrum of 5a	9
Fig S20. UV-Vis diffuse reflectance spectrum of 5a	9
Fig S21. Powder X-Ray diffraction pattern of 5a and 5b	10

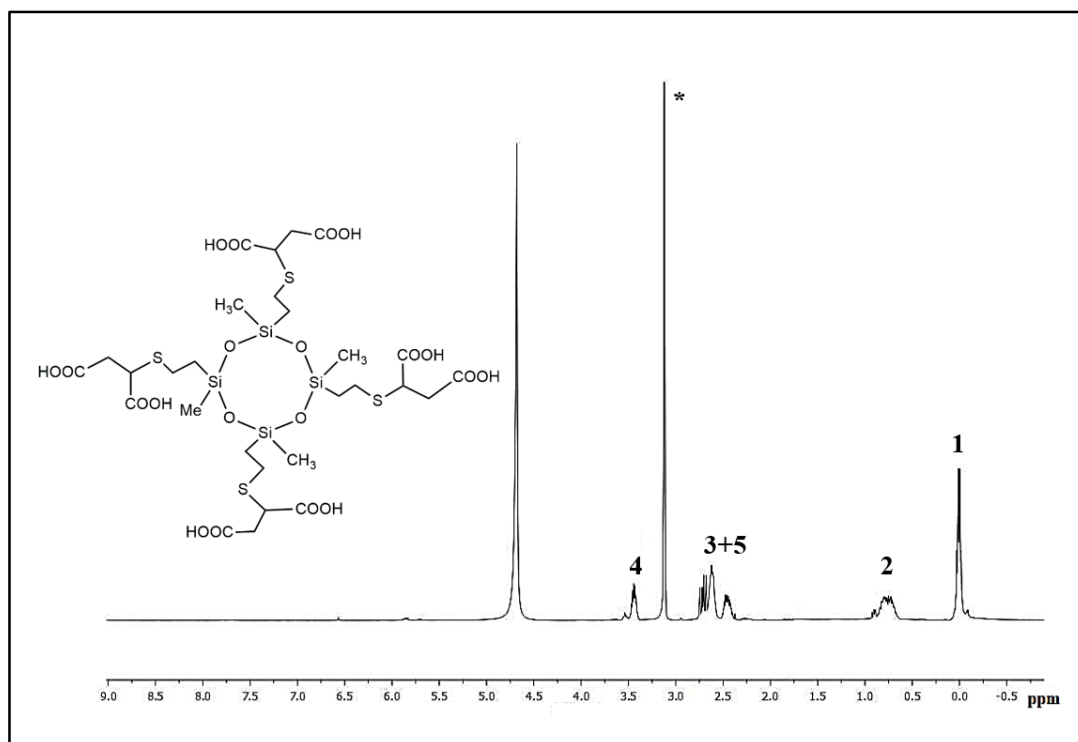


Figure S1. ^1H NMR spectrum of cyclic siloxane

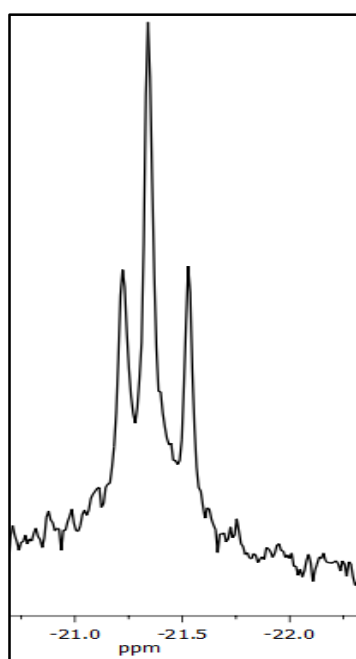


Figure S2. $^{29}\text{Si}\{^1\text{H}\}$ NMR spectrum of cyclic siloxane

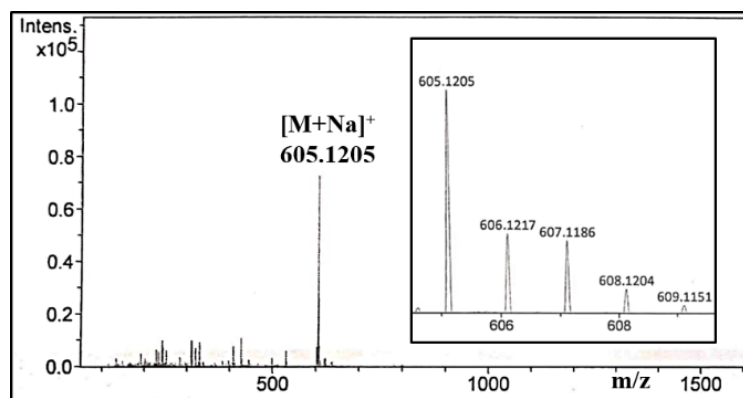


Figure S3. ESI-MS spectrum of cyclic siloxane

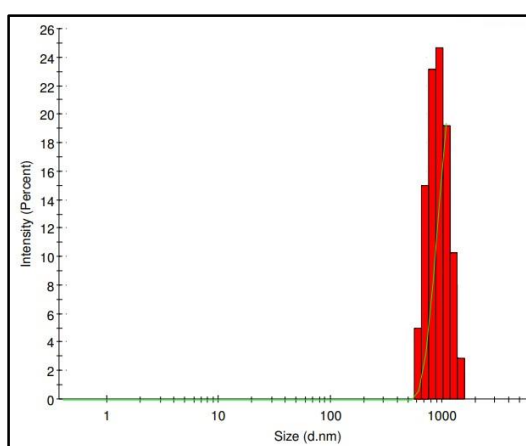


Figure S4. DLS profile of 0.01 wt% aqueous dispersion

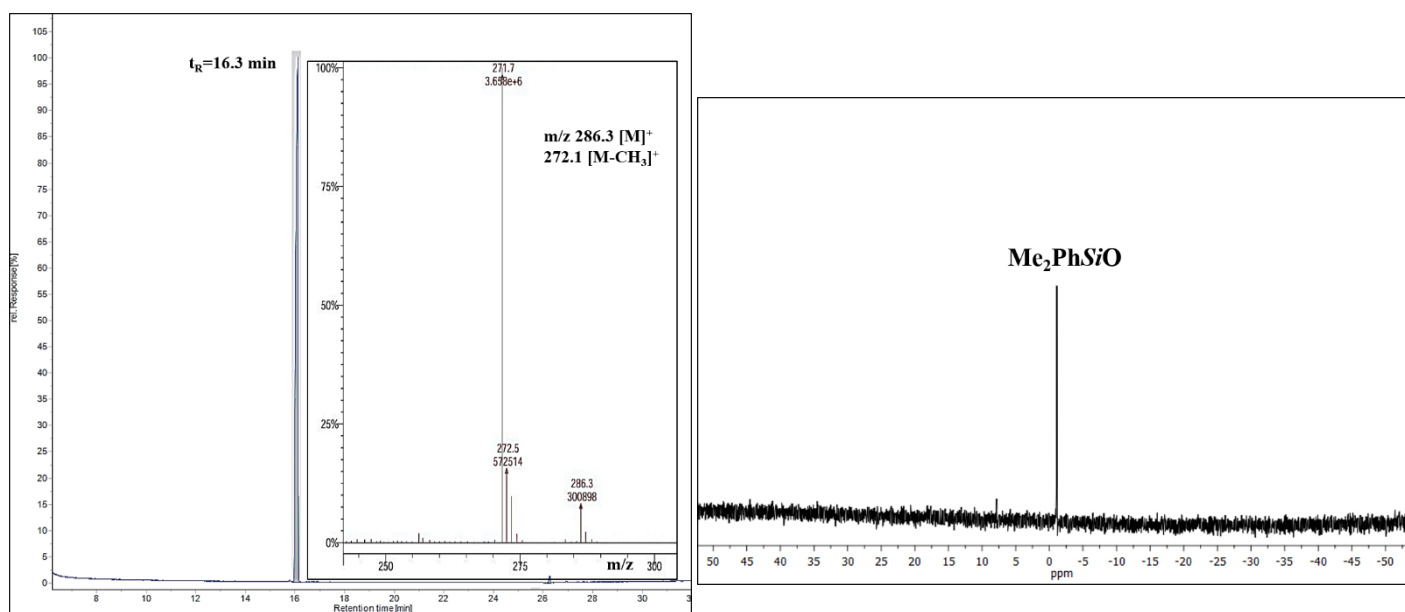


Figure S5. GC MS and $^{29}\text{Si}\{^1\text{H}\}$ NMR of linear siloxane, **1b**

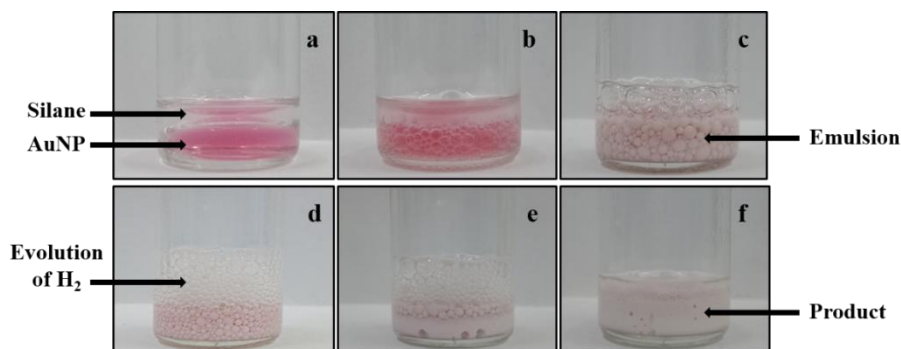


Figure S6. Visuals showing (a) **AuNP** in water with methylphenylsilane as an immiscible phase. (b–e) Various stages of emulsification followed by (f) Destabilization of the Pickering catalyst.

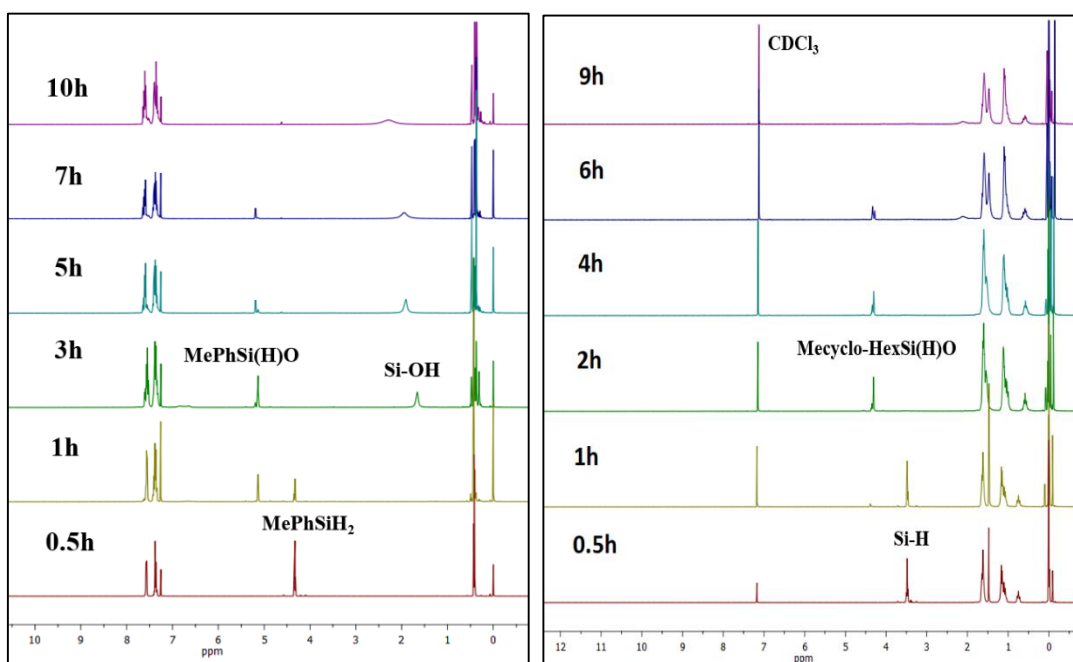


Figure S7. ^1H NMR monitoring of hydrolytic oxidation of MePhSiH_2 (left) and *Mecyclo*- HexSiH_2 (right)

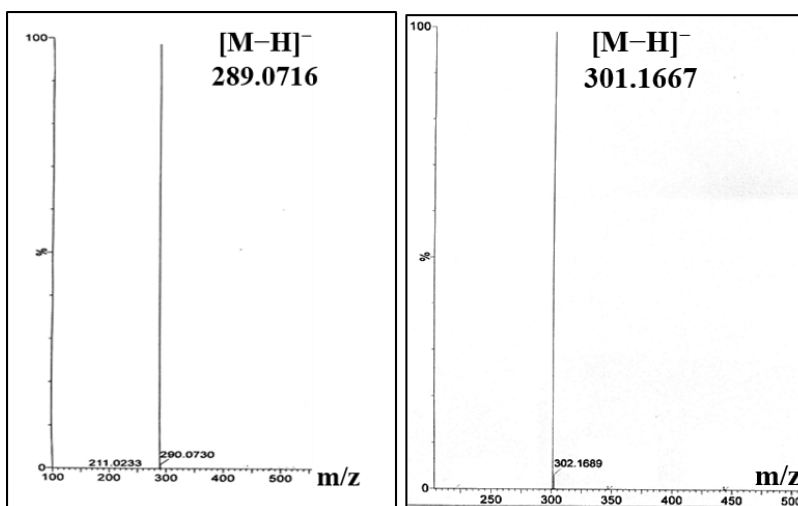


Figure S8. ESI-MS of disiloxane-1,3-diols **2a** (left) and **2b** (right)

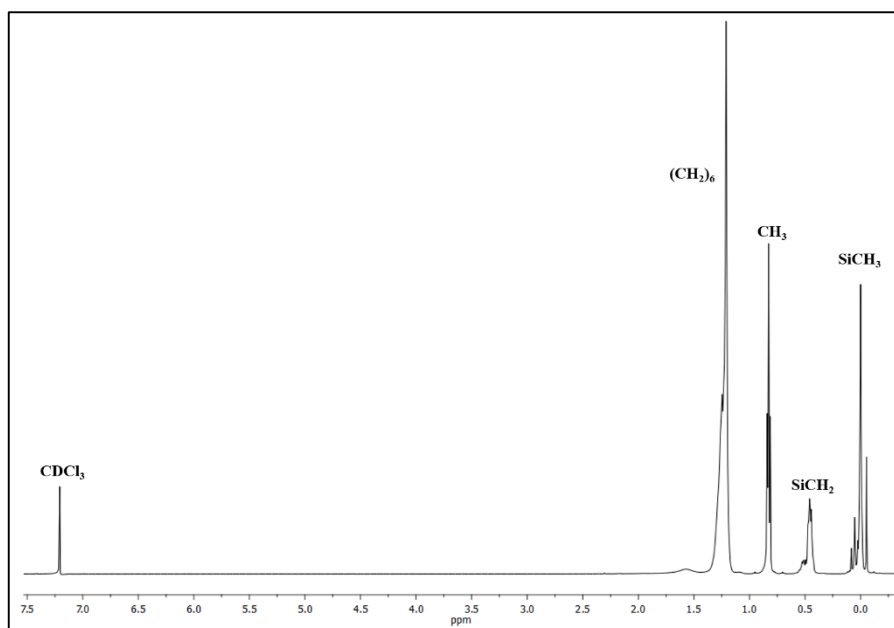


Figure S9. ^1H NMR spectrum of **2d**

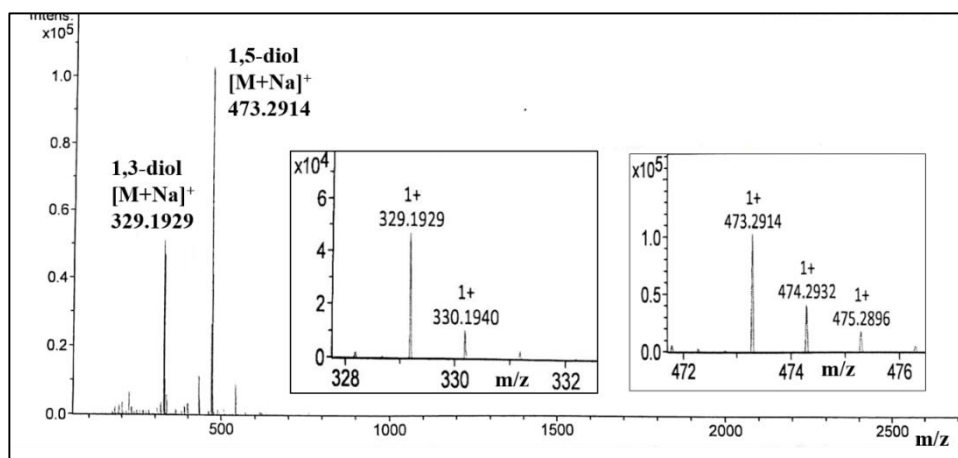


Figure S10. ESI MS of mixture of 1,3- and 1,5-siloxanols, **2c**

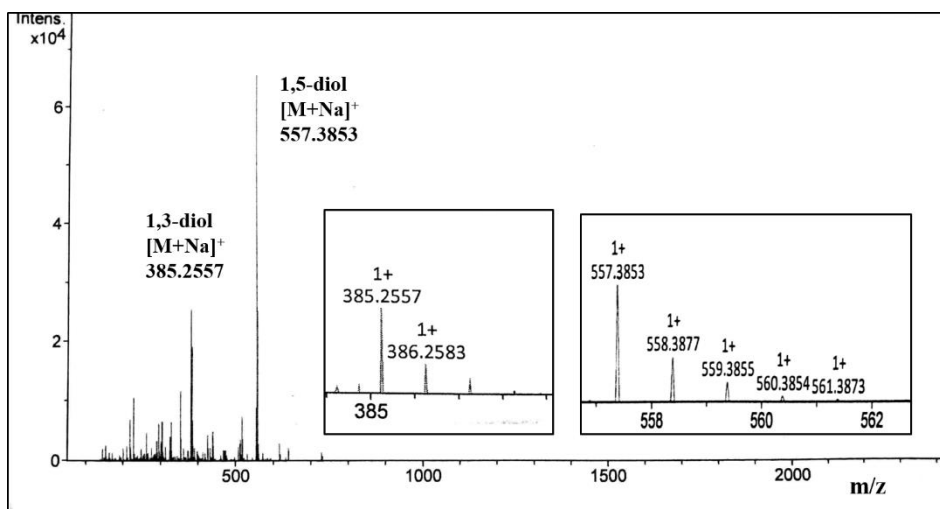


Figure S11. ESI MS of mixture of 1,3- and 1,5-siloxanols, **2d**

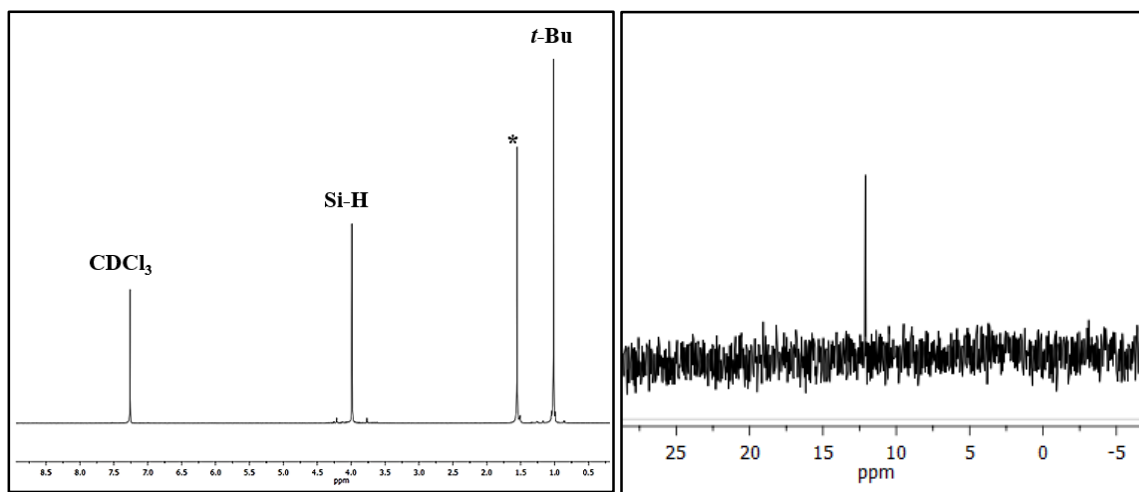


Figure S12. ^1H and $^{29}\text{Si}\{^1\text{H}\}$ NMR spectra of $t\text{-Bu}_2\text{Si}(\text{H})\text{OH}$, **2e**

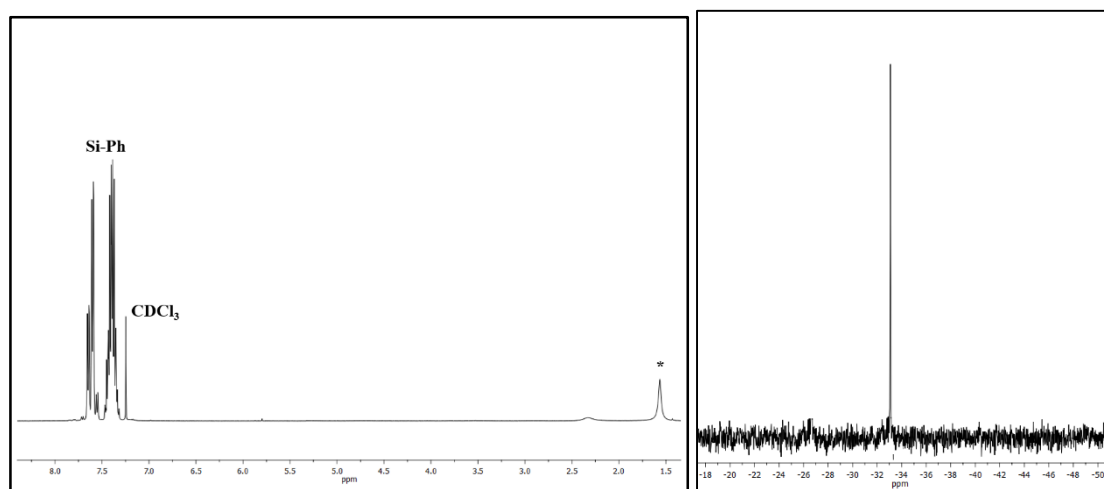


Figure S13. ^1H and $^{29}\text{Si}\{^1\text{H}\}$ NMR spectra of $\text{Ph}_2\text{Si}(\text{OH})_2$, **2f**

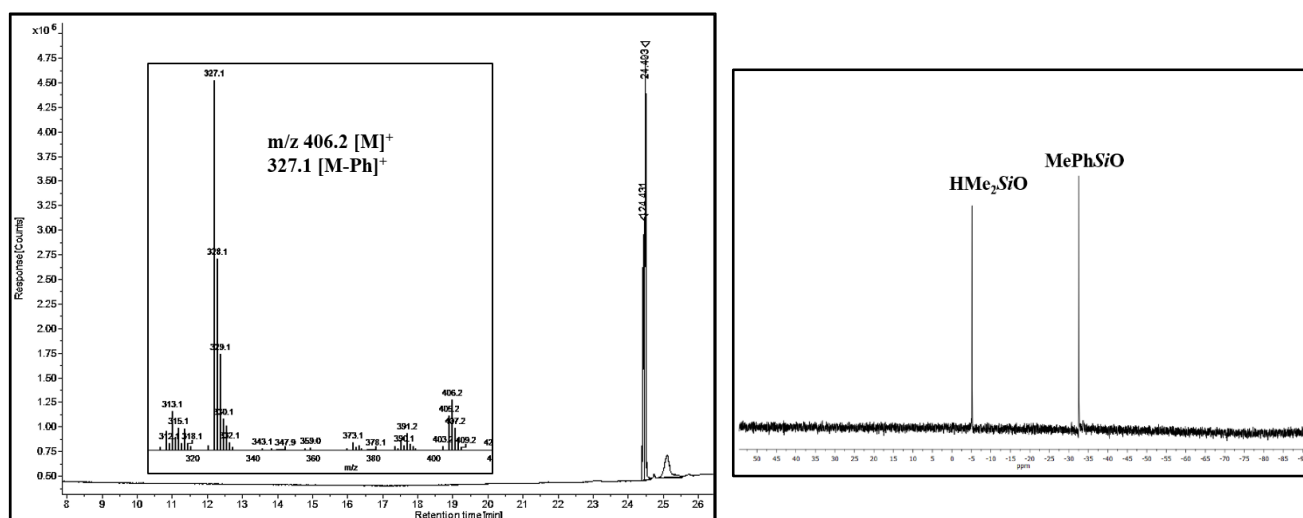


Figure S14. $^{29}\text{Si}\{^1\text{H}\}$ NMR and GC MS of linear siloxane, **3**

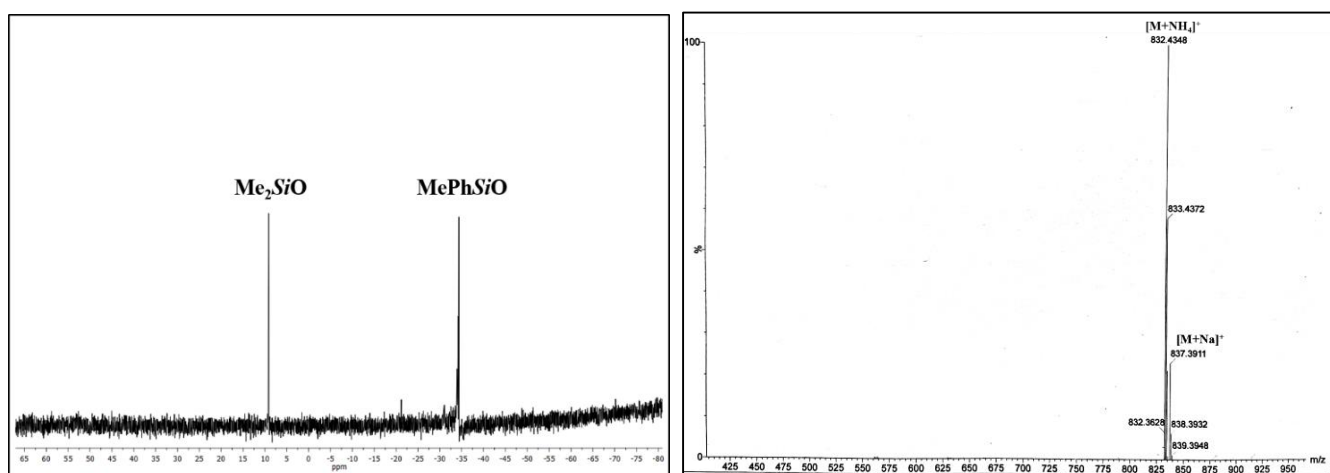


Figure S15. $^{29}\text{Si}\{^1\text{H}\}$ NMR and ESI MS of oligoether-substituted linear siloxane, **4a**

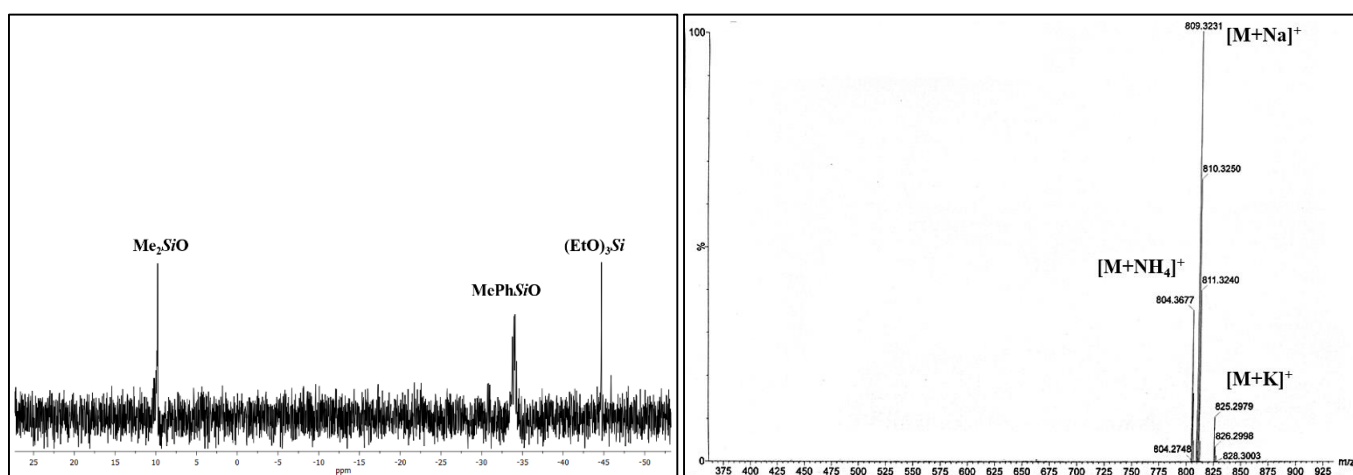


Figure S16. $^{29}\text{Si}\{^1\text{H}\}$ NMR and ESI MS of triethoxysilyl-substituted linear siloxane, **4b**

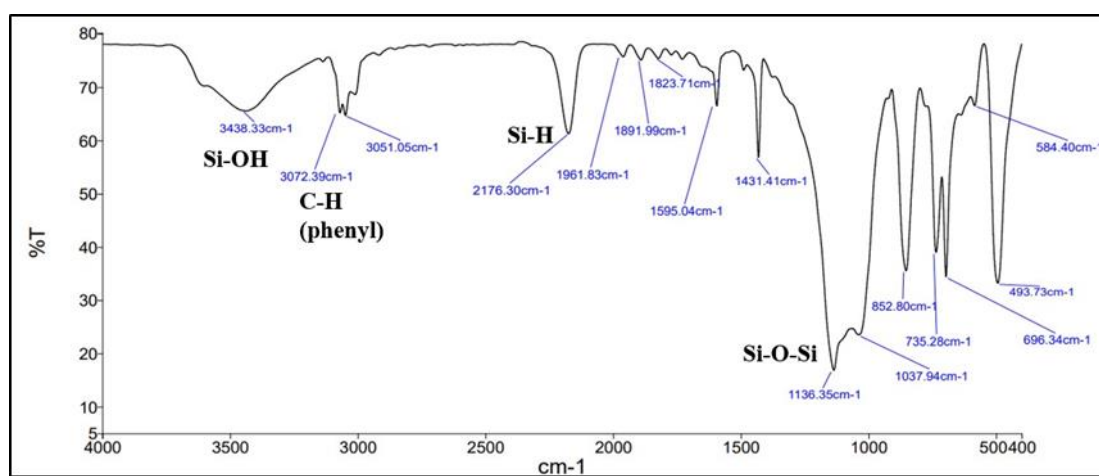


Figure S17. FT-IR spectrum of **5a**

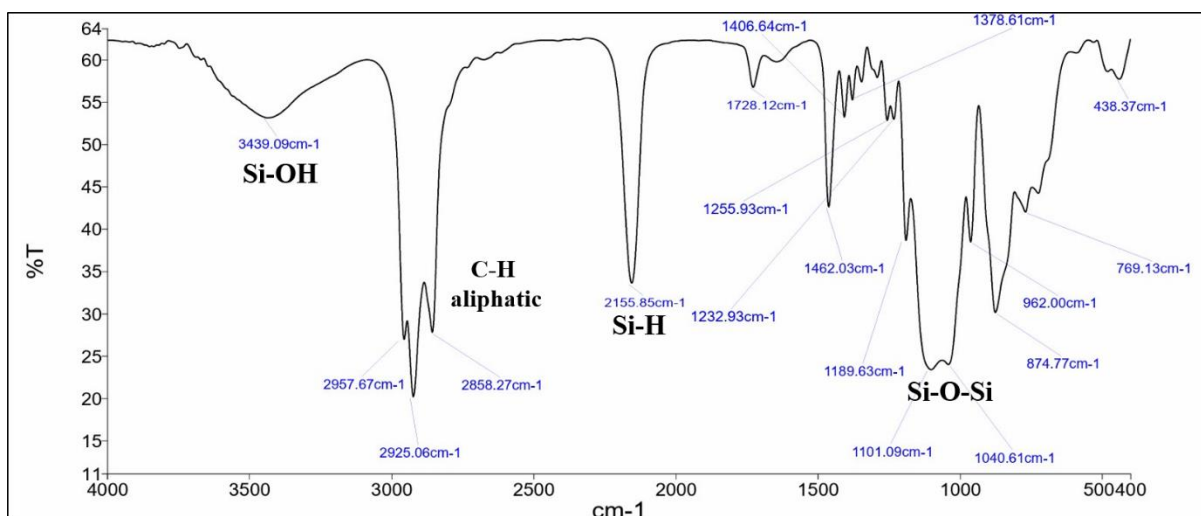


Figure S18. FT-IR spectrum of 5b

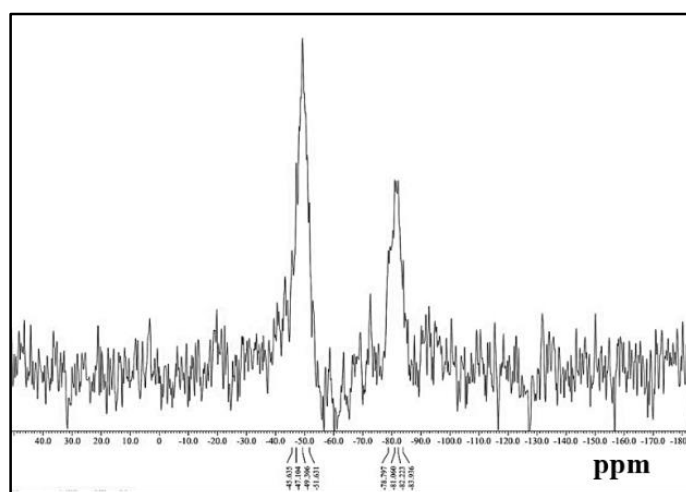


Figure S19. Solid state ²⁹Si NMR spectrum of 5a

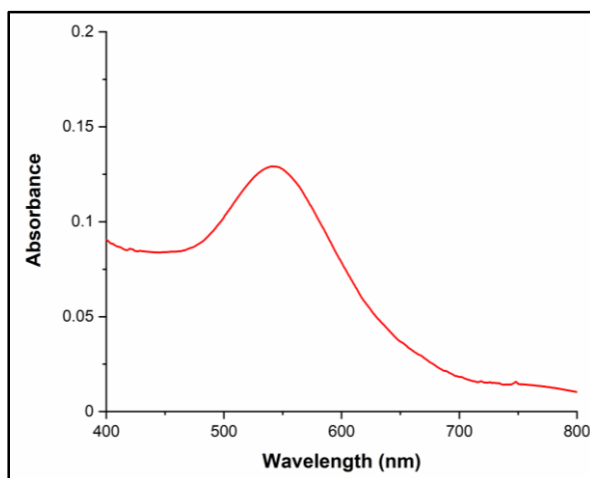


Figure S20. UV-Vis diffuse reflectance spectrum of 5a

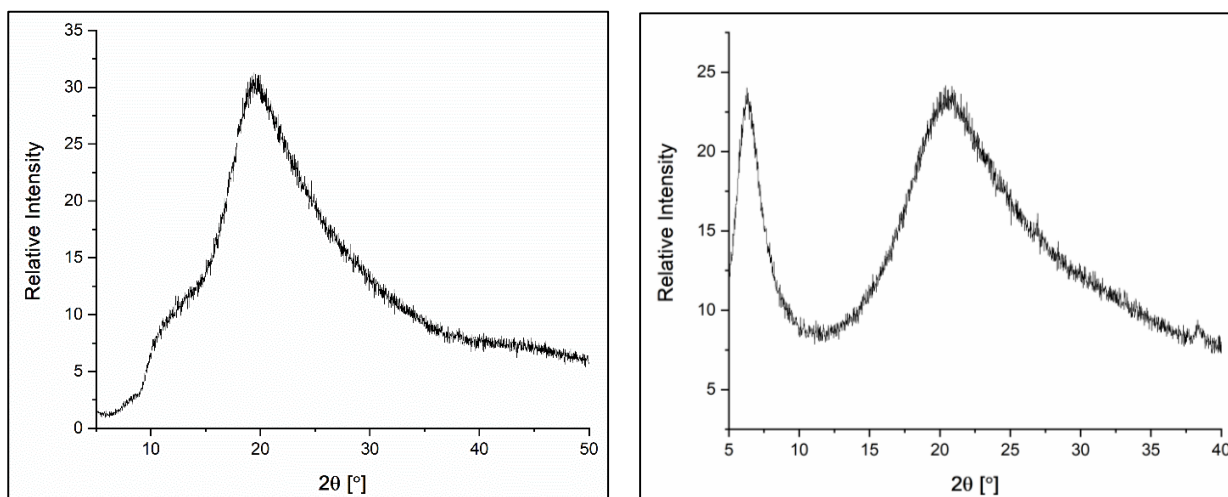


Figure S21. Powder X-ray diffraction pattern of **5a** (left) and **5b** (right)