

Supporting Information for

Syntheses of Dumbbell-shaped Trifluoropropyl-Substituted POSS Derivatives Linked by Simple Aliphatic Chains, and Their Optical Transparent Thermoplastic Films.

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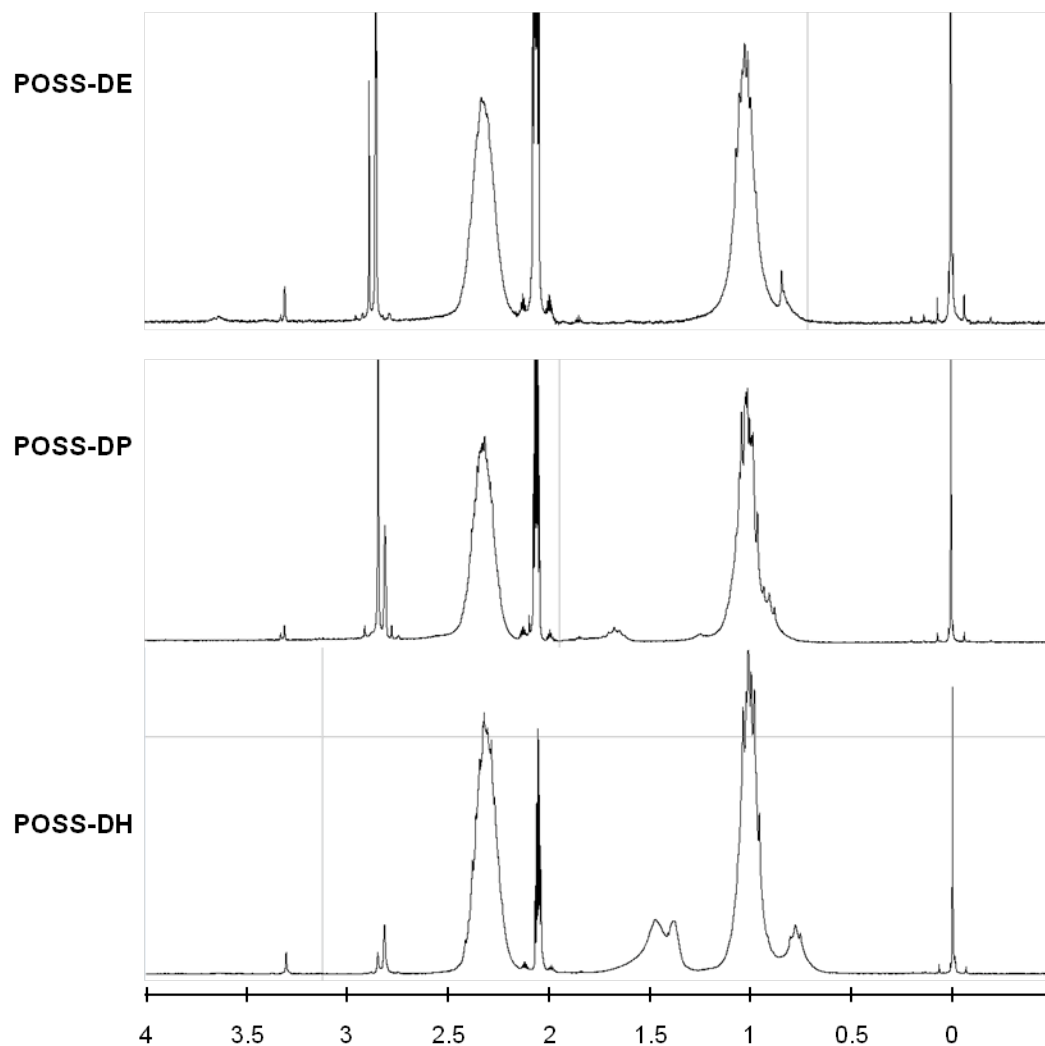


Figure S1. ^1H -NMR of POSS-DE, POSS-DP and POSS-DH after reprecipitation as first purification.

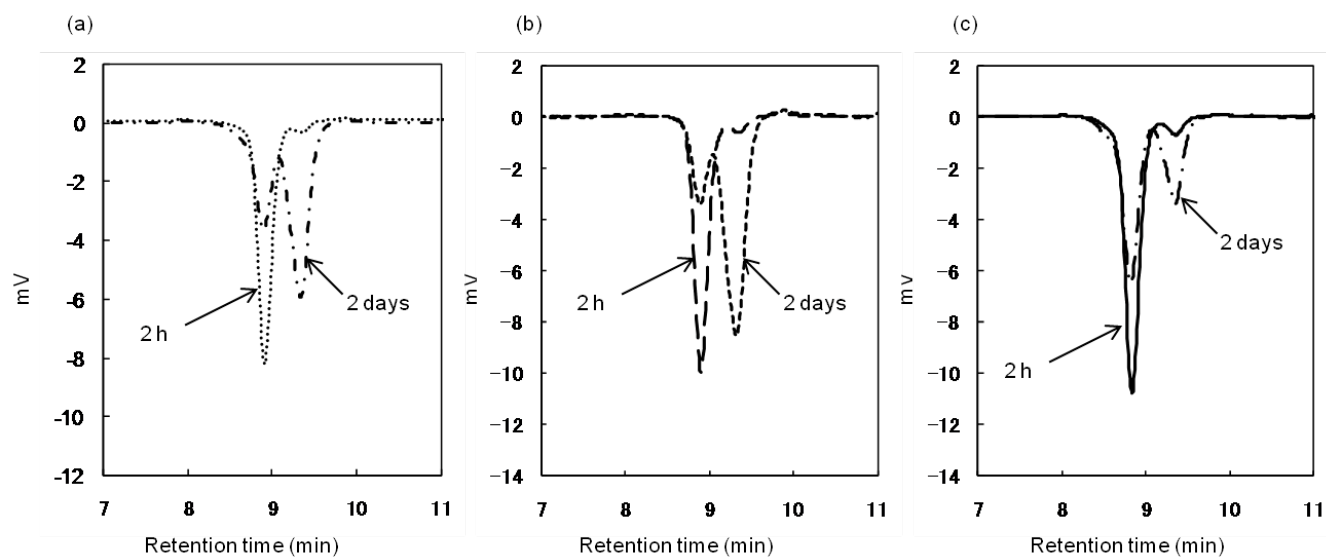


Figure S2. GPC traces of the THF solutions of (a) POSS-DE, (b) POSS-DP and (c) POSS-DH after 2 h and 2 days incubation at r.t.

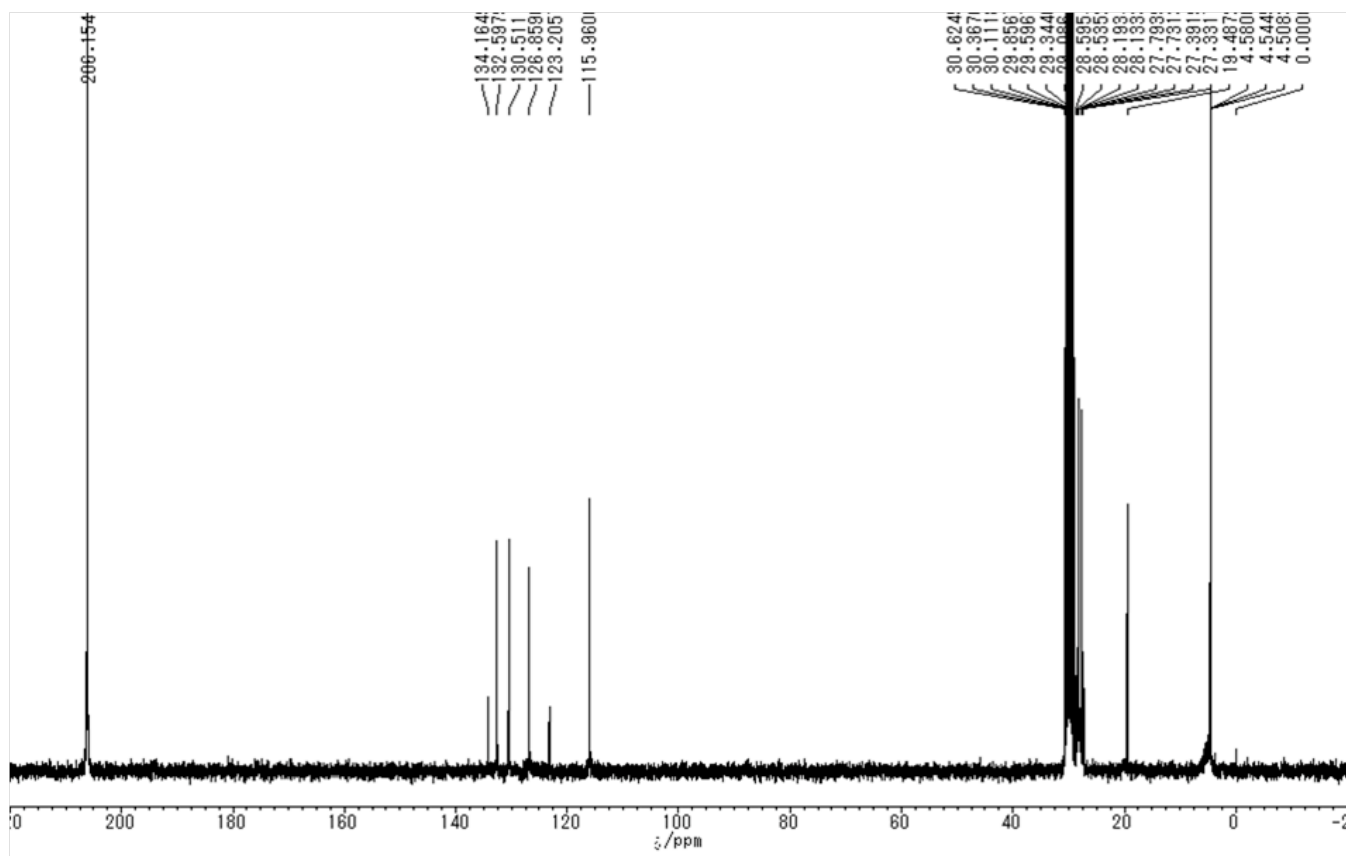


Figure S3. ^{13}C -NMR of POSS-F7A1.

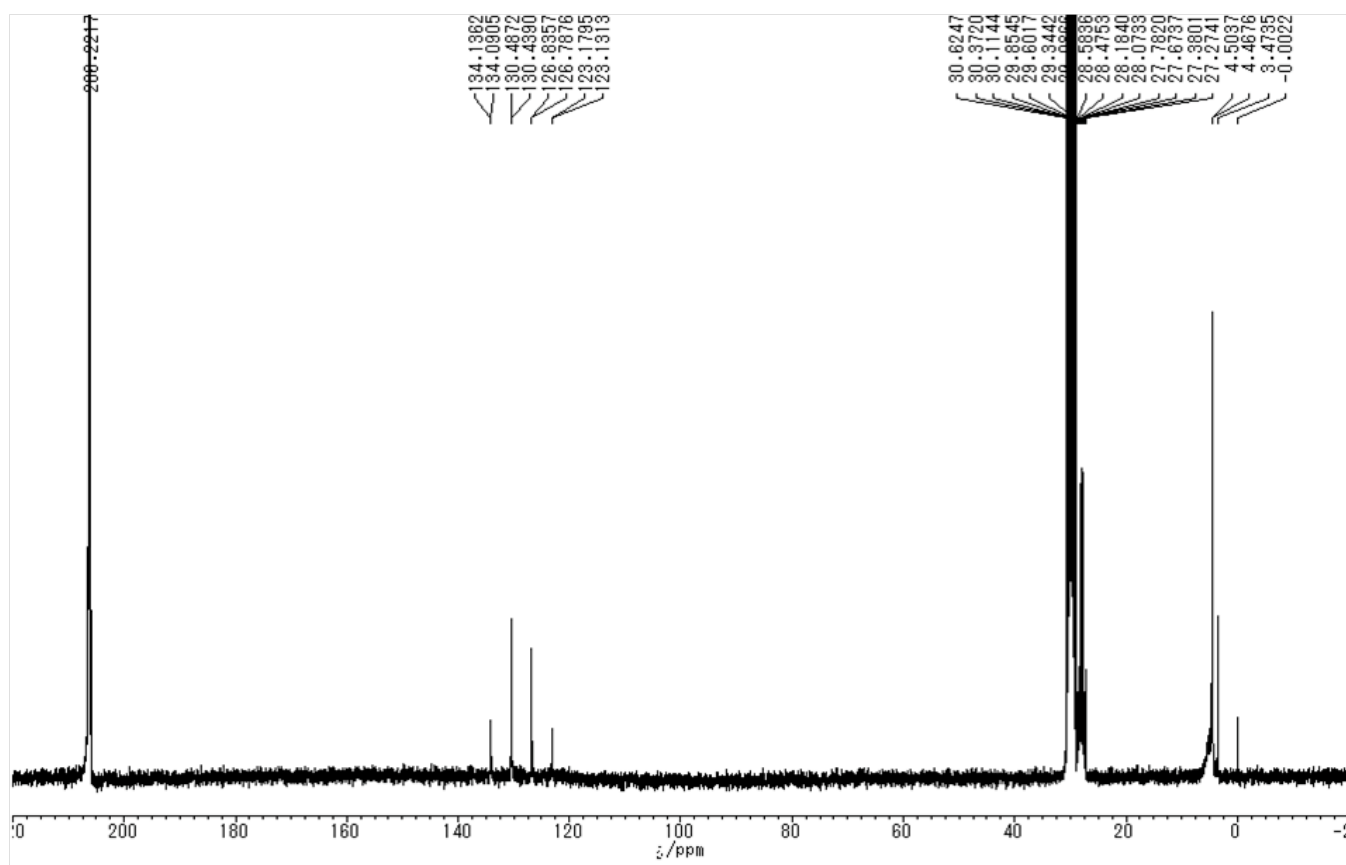


Figure S4. ^{13}C -NMR of POSS-DE.

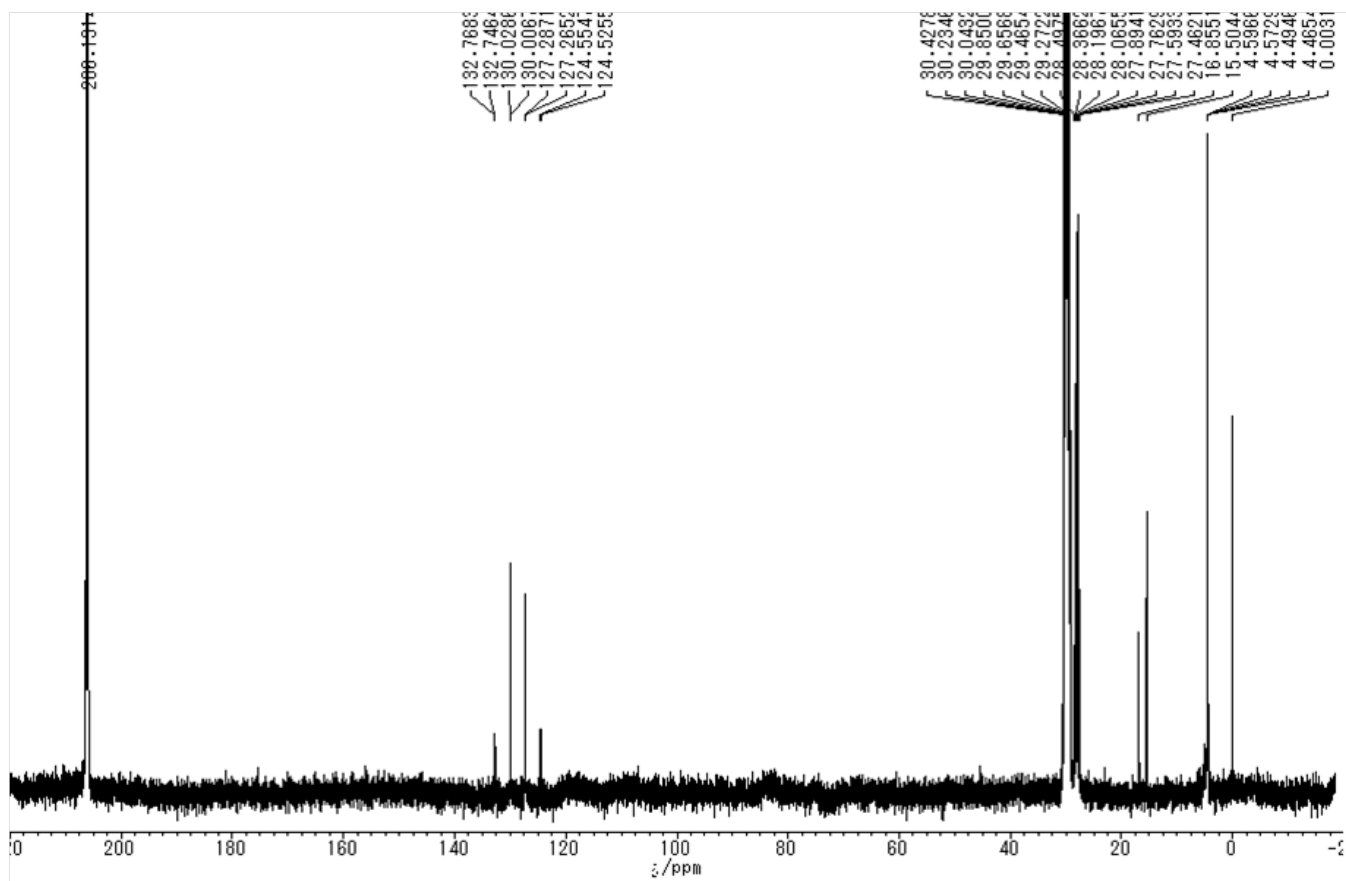


Figure S5. ¹³C-NMR of POSS-DP.

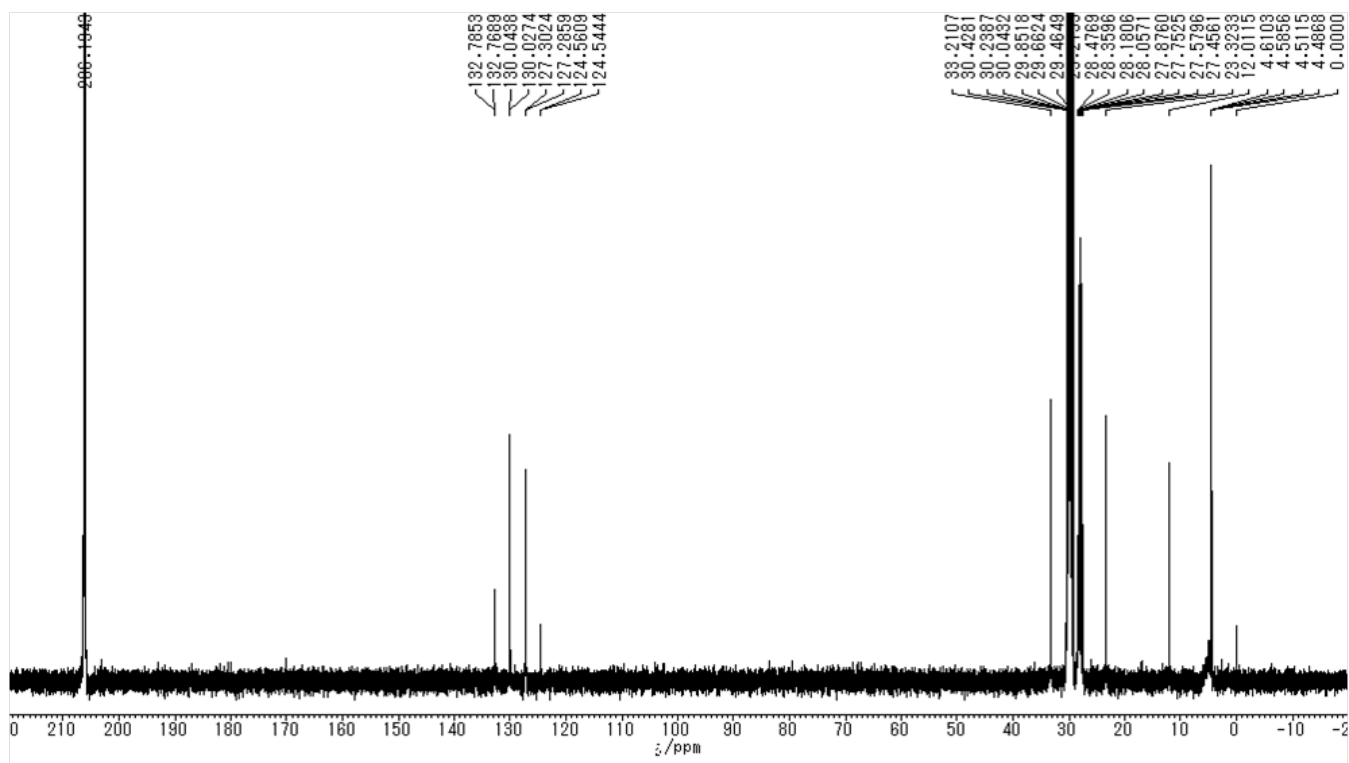


Figure S6. ¹³C-NMR of POSS-DH.

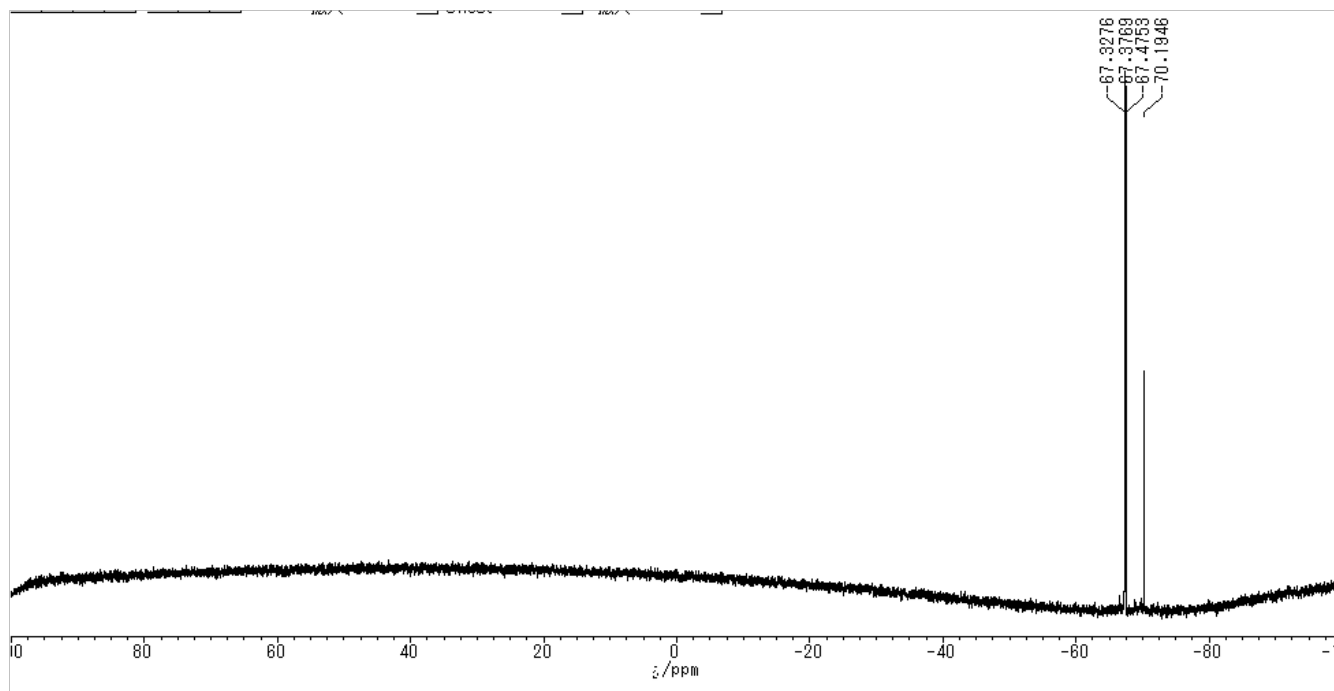


Figure S7. ^{29}Si -NMR of POSS-F7A1.

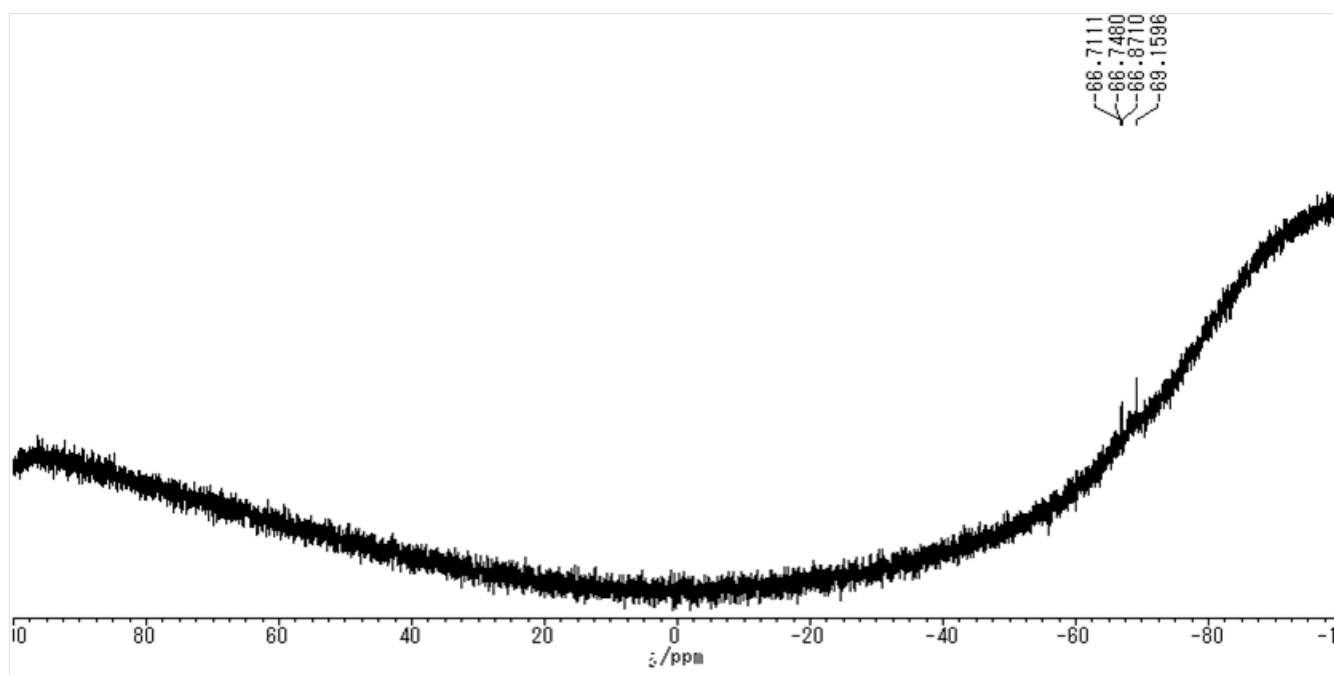


Figure S8. ^{29}Si -NMR of POSS-DE.

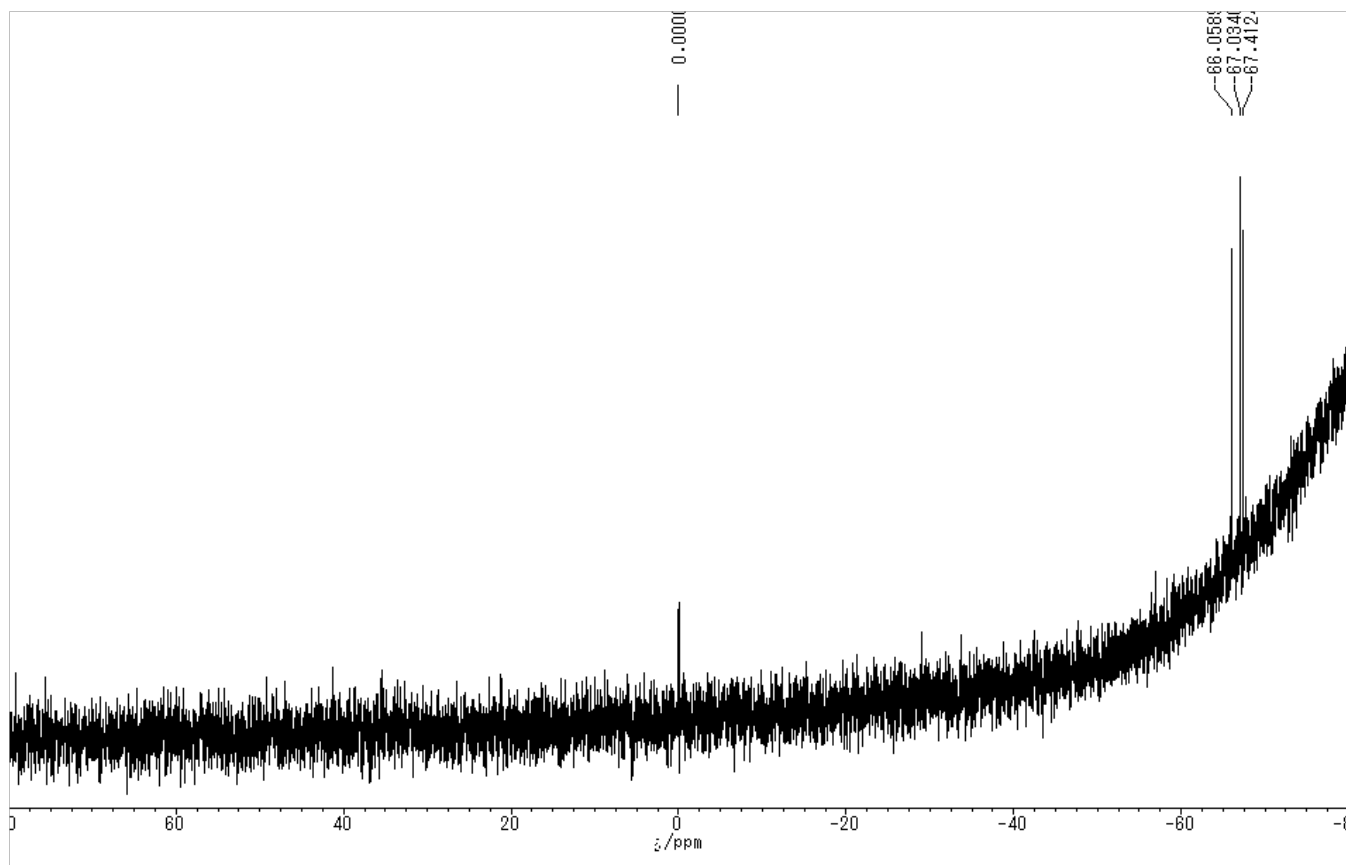


Figure S9. ^{29}Si -NMR of POSS-DP.

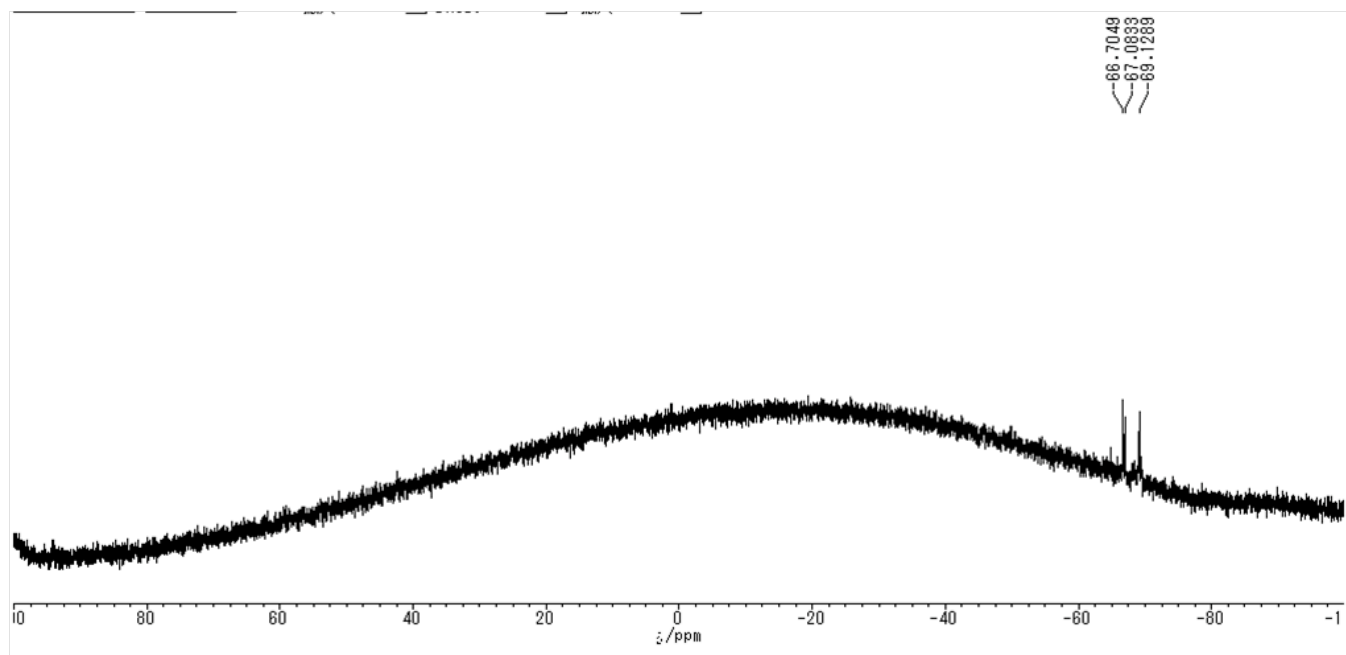


Figure S10. ^{29}Si -NMR of POSS-DH.

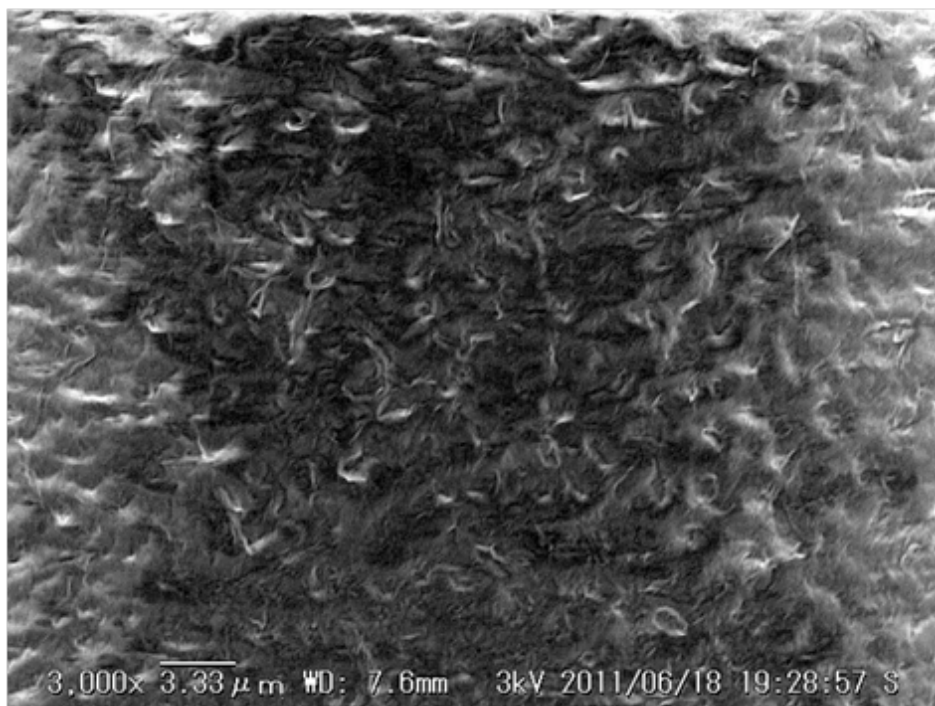


Figure S11. A SEM image of the surface of the opaque whitish film prepared from POSS-DE.

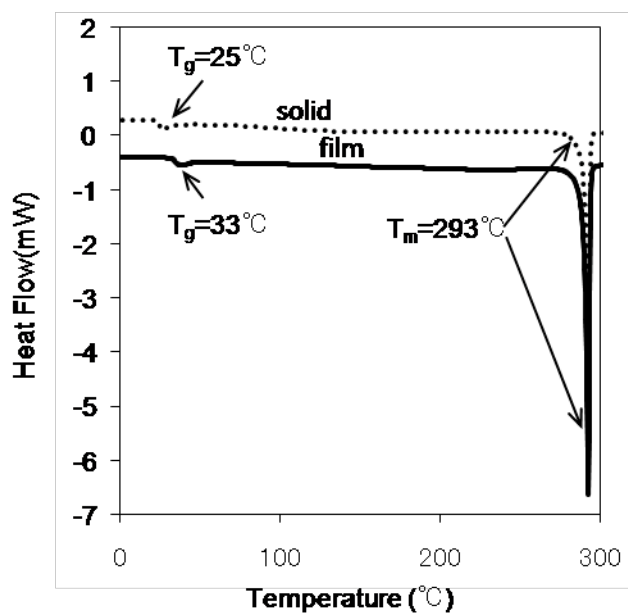


Figure S12. DSC traces of POSS-DE as shown in Figure 5 (solid) and the film obtained from POSS-DE (film). The film was prepared by baking the coating solution in aluminum pan for measuring DSC.