Electronic Supplementary Information for:

Cosolvent-free synthesis and characterisation of poly(phenyl-*co*-*n*-alkylsilsesquioxane) and poly(phenyl-*co*-vinylsilsesquioxane) glasses with low melting temperatures

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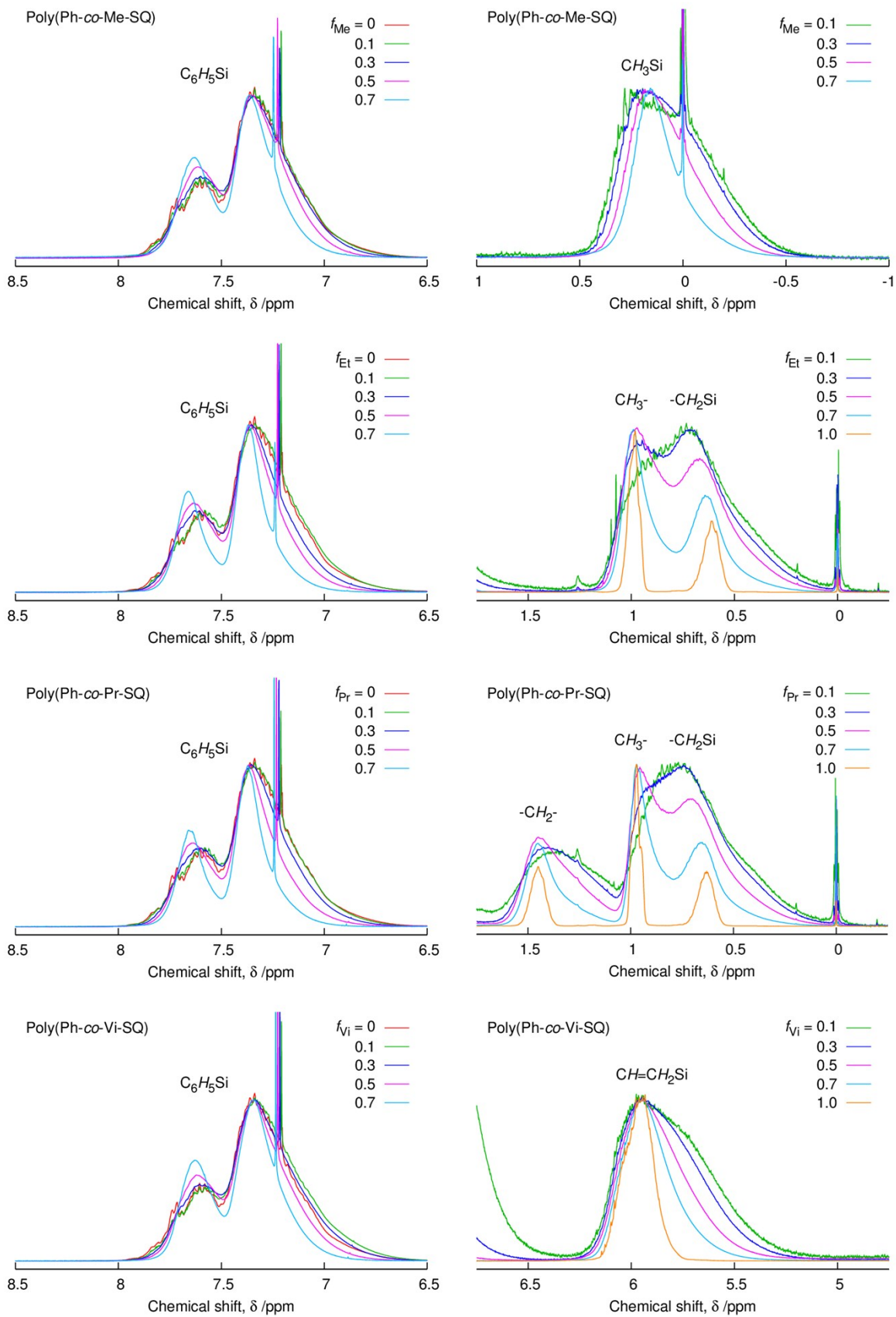
Fig. S1 Magnified liquid-state ^{1}H single-pulse NMR spectra of poly(Ph-*co*-R-SQ) with R = Me, Et, Pr, and Vi (300 MHz, CDCl$_3$) normalized to the maximum value.
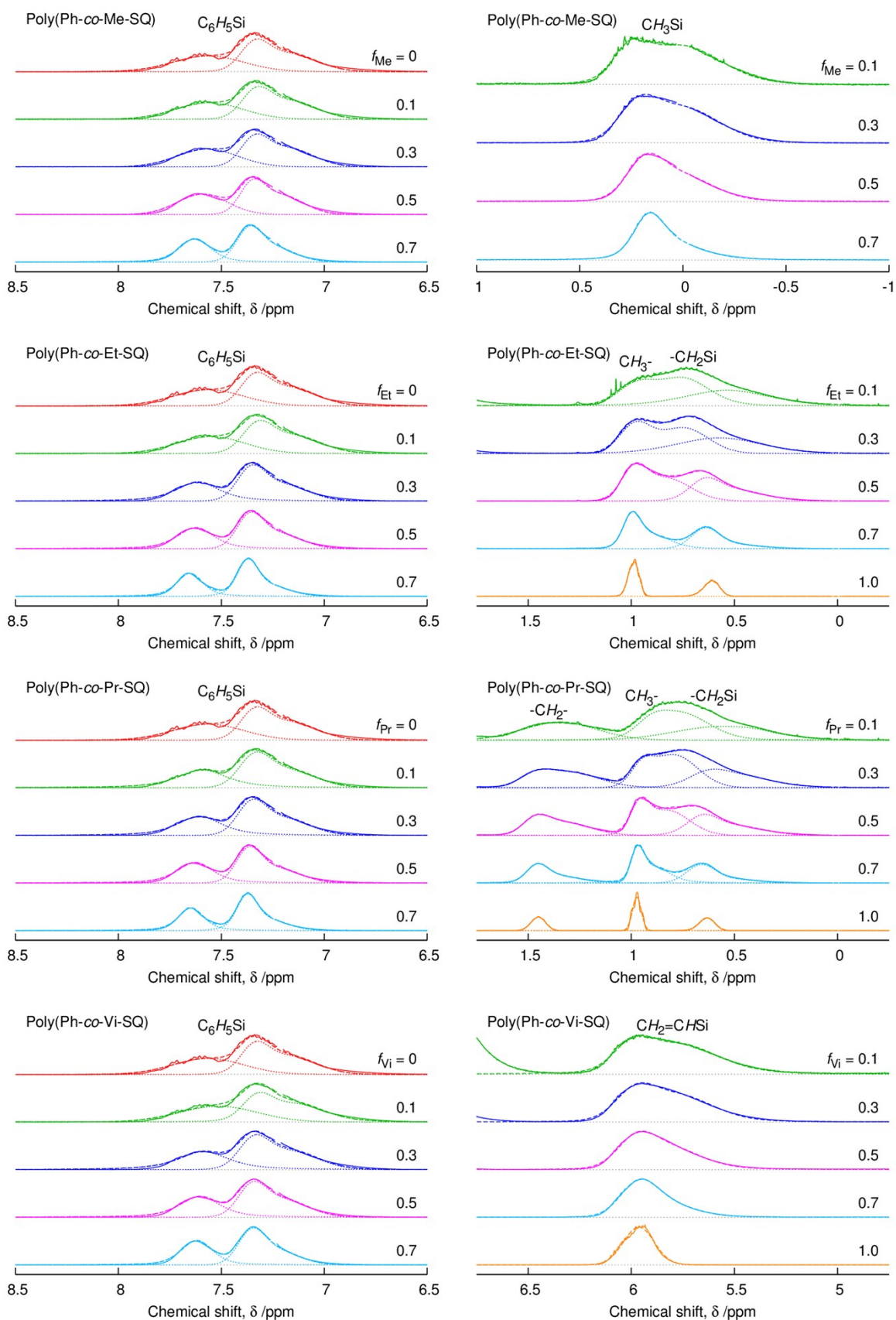
Fig. S2 Results of least-squares fitting of ^{1}H NMR spectra shown in Figs. 3 and S1. Solid and dashed lines denote observed and simulated spectra, respectively, and dotted lines indicate spectra of decomposed peaks. Each peak was expressed by one or two pseudo-Voigt functions, and its intensity (area) was assumed to be proportional to the number of ^{1}H nuclei attributed to the peak.
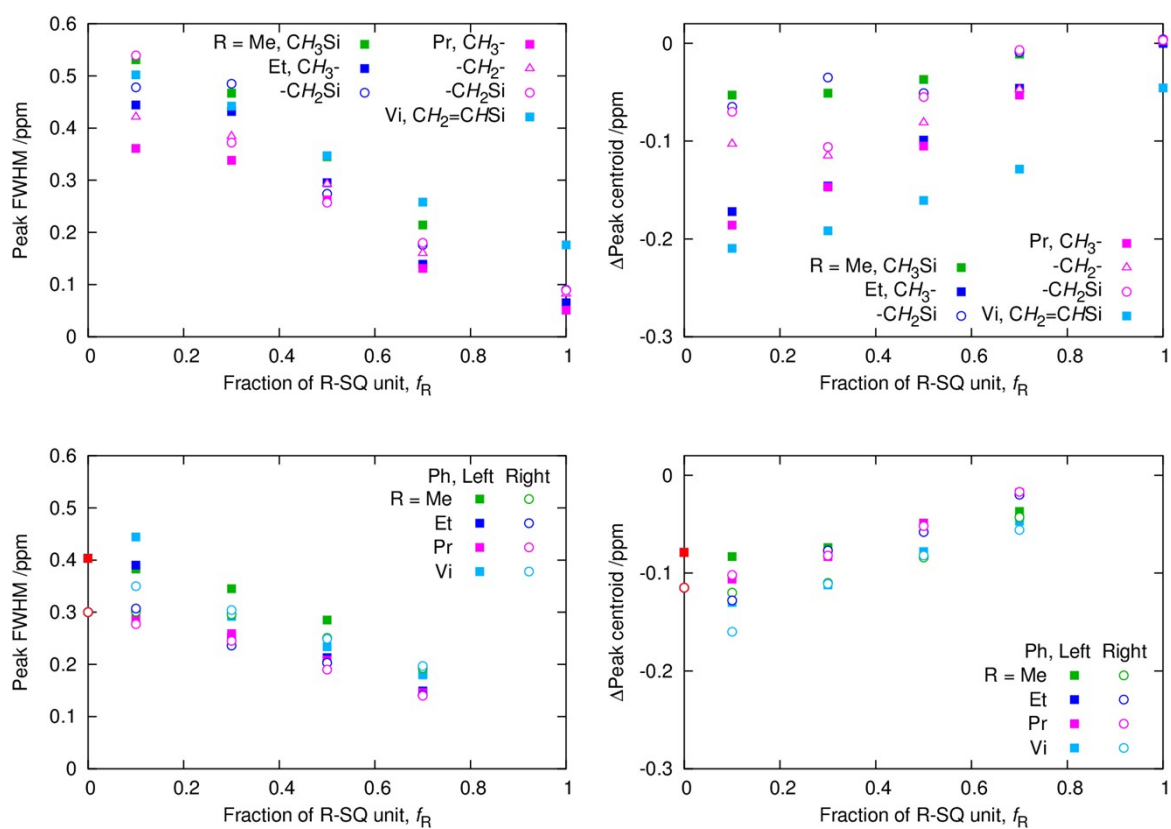
Fig. S3 Full-width at half-maximum (FWHM) and centroid of peaks for alkyl and vinyl groups (top) and phenyl groups (bottom), evaluated by the peak fitting and decomposition of ^{1}H NMR spectra shown in Fig. S2. Centroid is plotted as the shift from the peak position of corresponding trimethoxide (monomer).
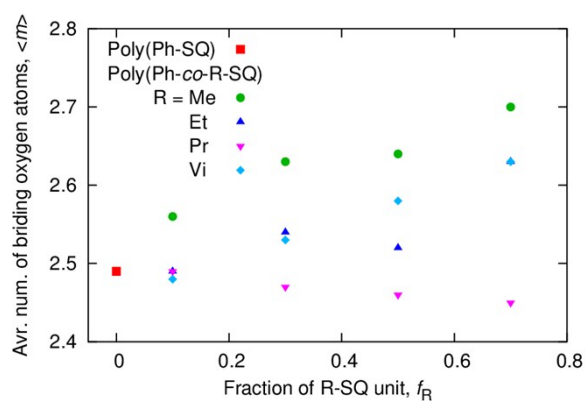

Fig. S4 Variation of average number of bridging oxygen atoms, $<m>$, with the fraction of R-SQ units, f_R, in poly(Ph-*co*-R-SQ).