Supporting information for

Syntheses and Supramolecular Associations of Block and Grafted Phosphonated- and Sulfoned-Silicone Copolymers

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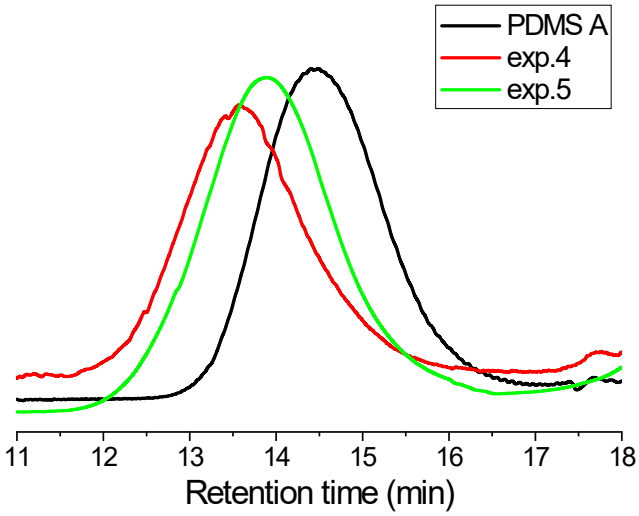

Figure S1. SEC curves of product of the reaction of telechelic PDMS A with DEVP. For experimental details see Table 1 in the main text.

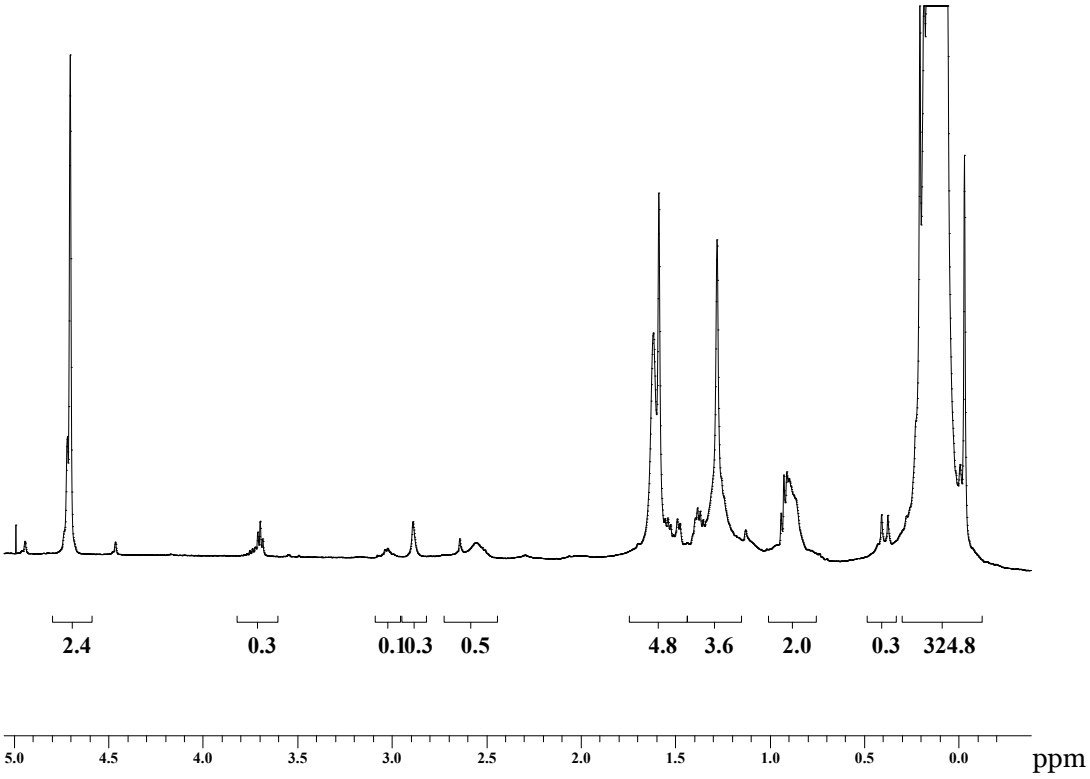

Figure S2. ^{1}H HR-MAS NMR spectrum of MVS-functionalized PDMS C (not shown in Table S3 since characterization were not possible, described in patent, see main text reference [37]). The peak at 4.5 ppm shows the content of SiH that did not react (here 50% conversion). Peaks at 2.9, 2.6, 1.5 and 0.4 ppm are representative of oligoMVS functionalization but their integration were not possible in such an ill-defined spectrum.

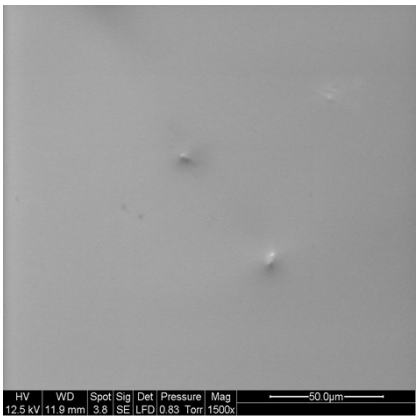

Figure S3. ESEM photo of MVS-functionalized block copolymer (Run 8, Table S3).

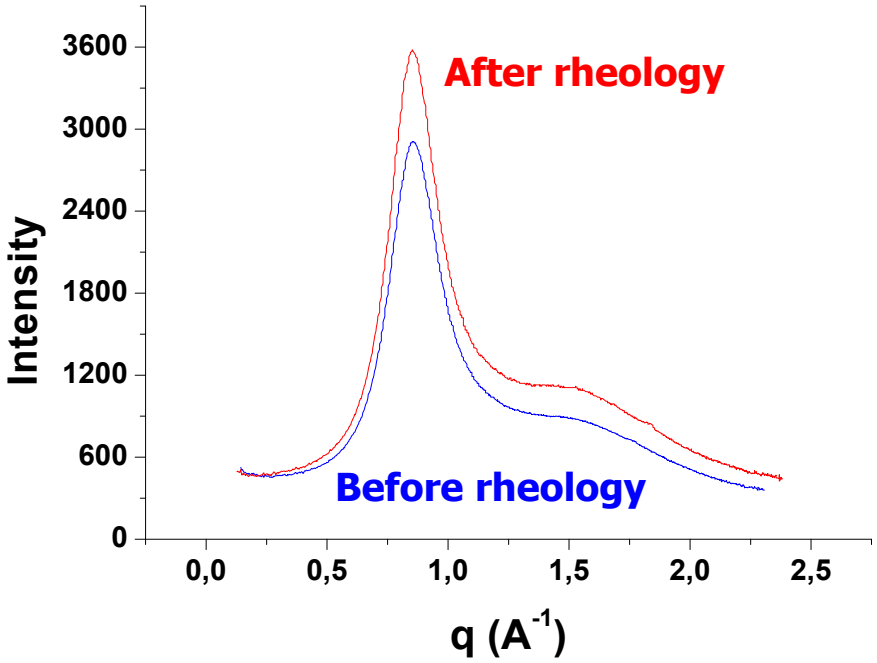

Figure S4: X-ray diffraction of the sulfoned PDMS (run 11, table S4) before and after rheology analysis.

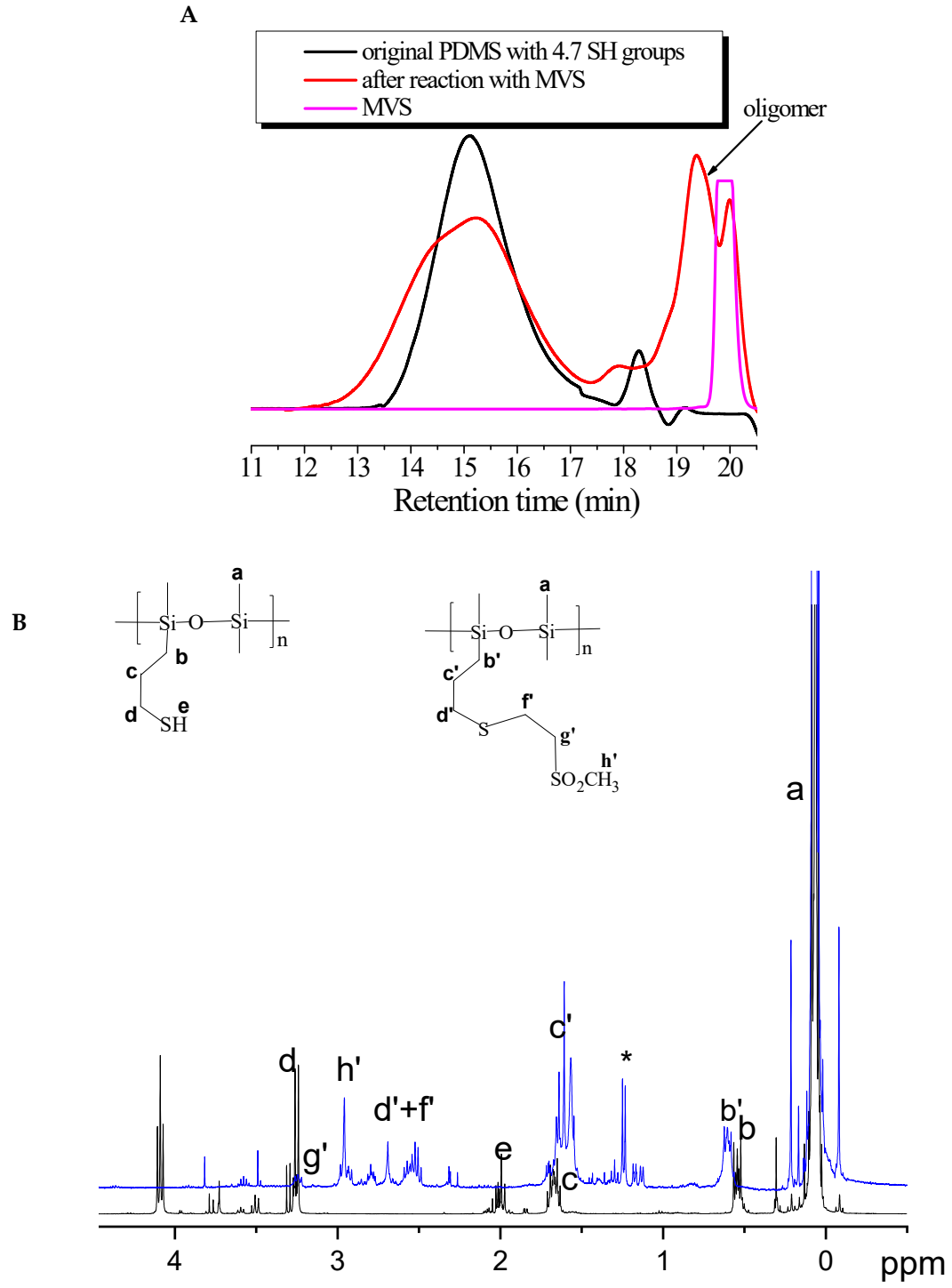

Figure S5. (**A**) SEC curves of product of the thiol-ene monoaddition of MVS on 4-6% mercaptopropylmethy siloxane-dimethylsiloxane copolymer. (**B**) corresponding full ^{1}H NMR spectra of this copolymer (blue) and pristine PDMS (black). Peak of SH (*e* at 2 ppm) has disappeared whereas the methyl attached to the sulfone group make a strong sharp peak (*h*' around 3 ppm). Assignmeents are based on the paper of Opris et al (see ref[25] in the main text) and ACD NMR simulation.