

4-Vinylphenyl Glycidyl Ether: Synthesis, RAFT Polymerization, and Post-Polymerization Modifications with Alcohols

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Supporting Information

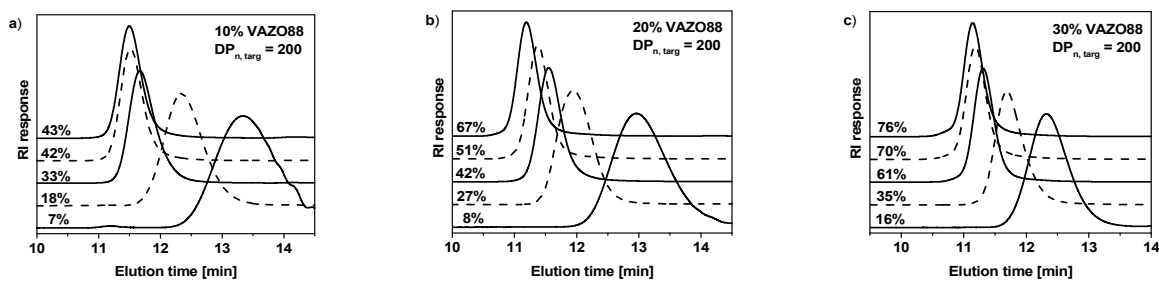


Figure S1. SEC traces of poly4VPGE with monomer conversion (shown at each curve) for the RAFT polymerization of 4VPGE (5.68 mol L⁻¹ in anisole) at 90 °C with BPT as CTA (DP_{n, targ} = 200) and using 10, 20, 30 mol % VAZO88 with respect to BPT.

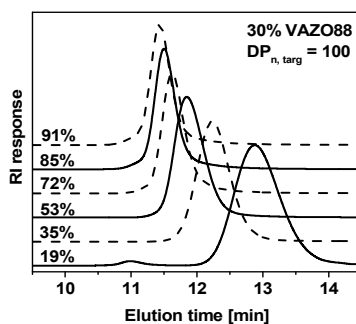


Figure S2. SEC trace for the RAFT polymerization of 4VPGE (5.68 mol L^{-1} in anisole) at 90°C with BPT as CTA ($\text{DP}_{n, \text{targ}} = 100$) and using 30 mol % VAZO88 with respect to the BPT (monomer conversion shown at each curve).

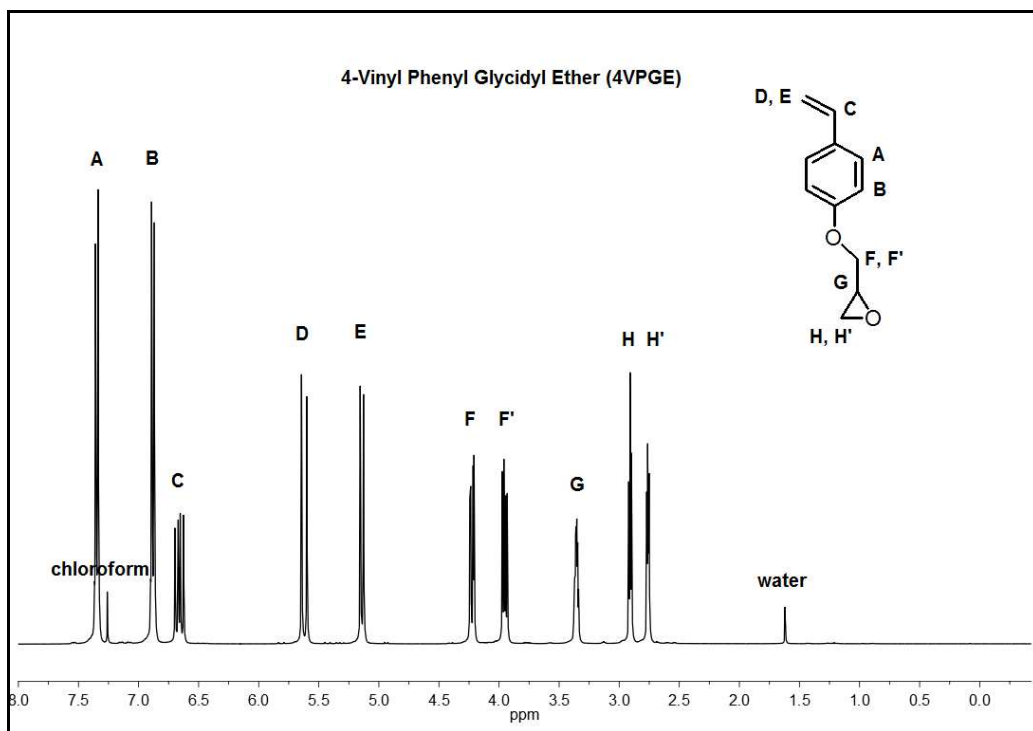
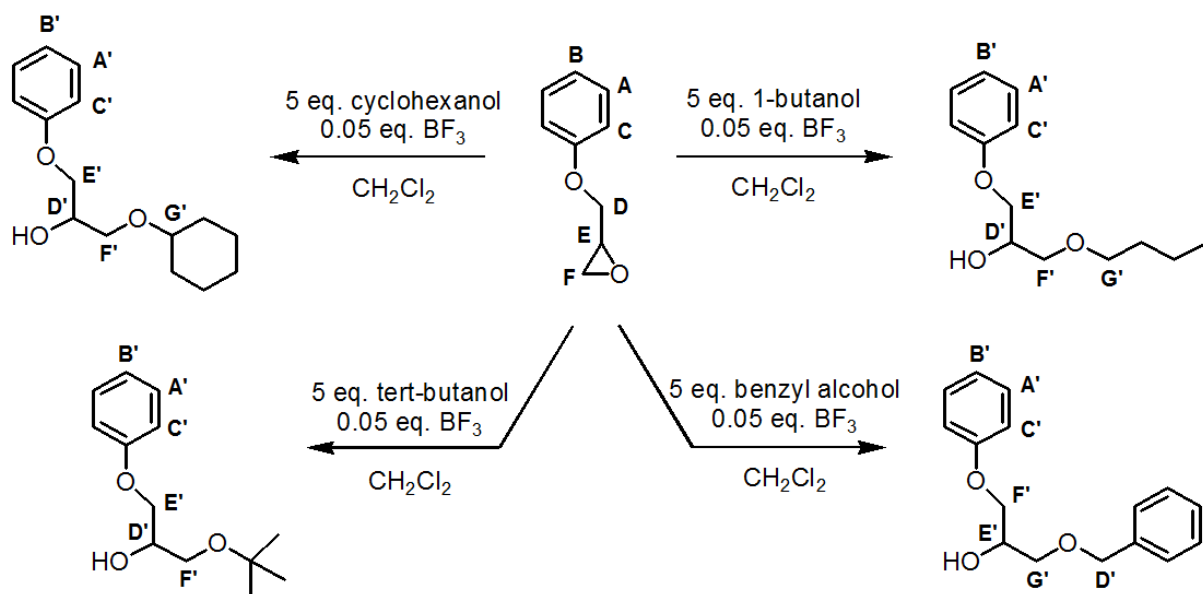


Figure S3. NMR spectrum of 4VPGE in CDCl_3 .



Scheme S1. Reaction scheme of PGE with 1-butanol, cyclohexanol, *tert*-butanol, and benzyl alcohol with accompanying labels for signal identification in the NMR spectra presented below (Figures. S5-8).

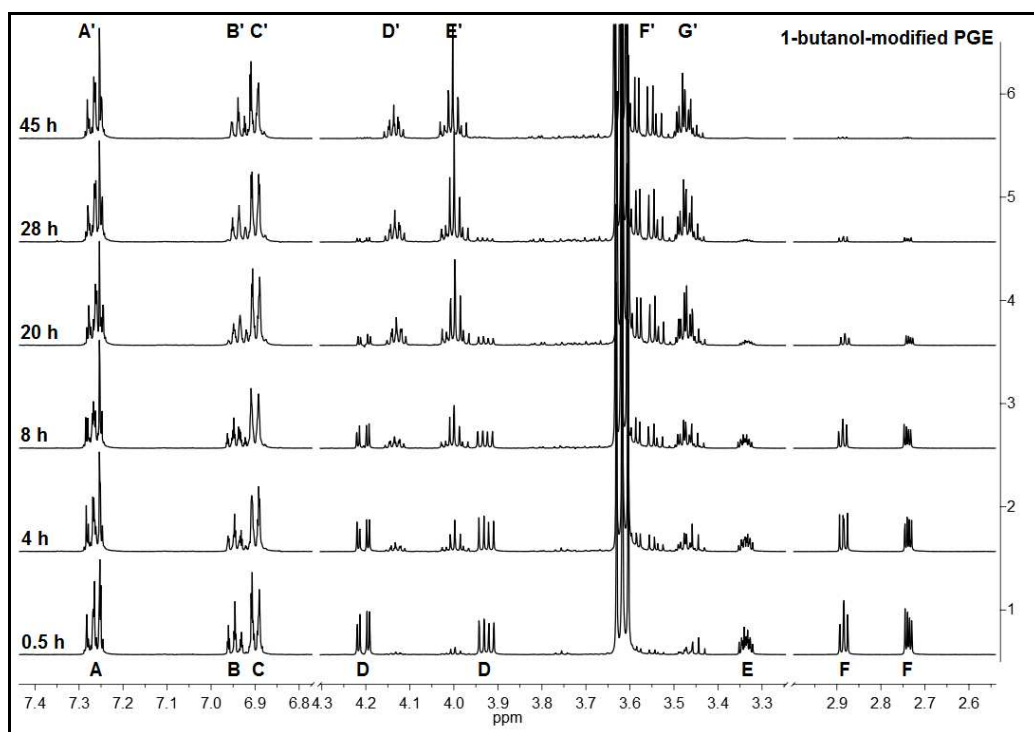


Figure S4. NMR spectra (in CDCl_3) of the reaction of PGE with 1-butanol.

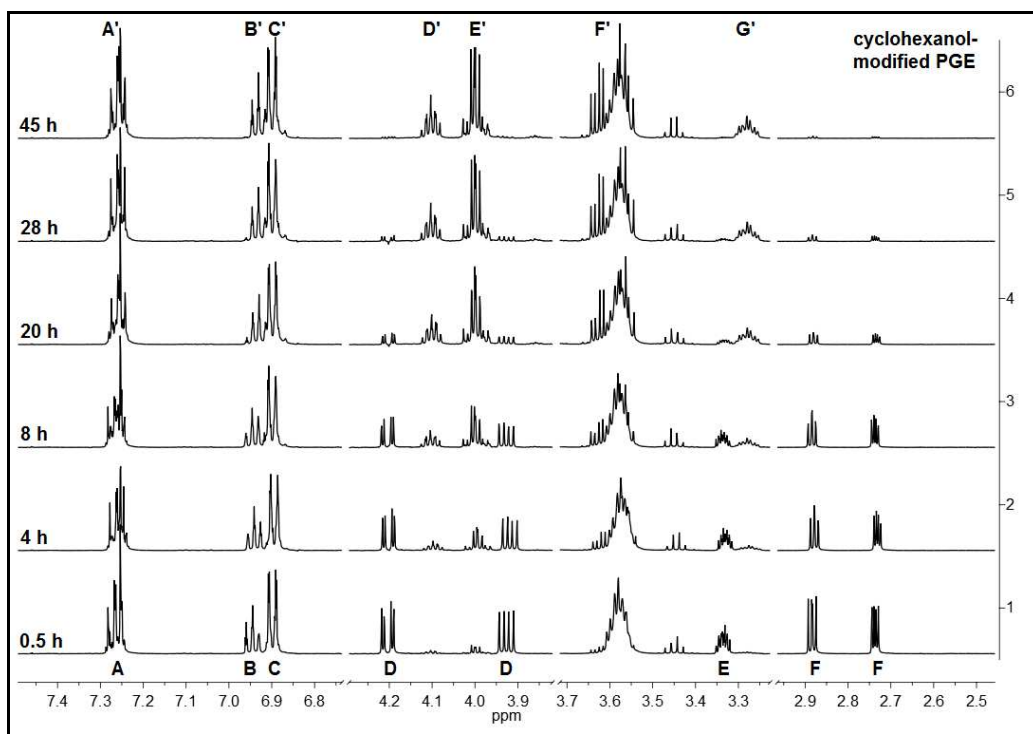


Figure S5. NMR spectra (in CDCl₃) of the reaction of PGE with cyclohexanol.

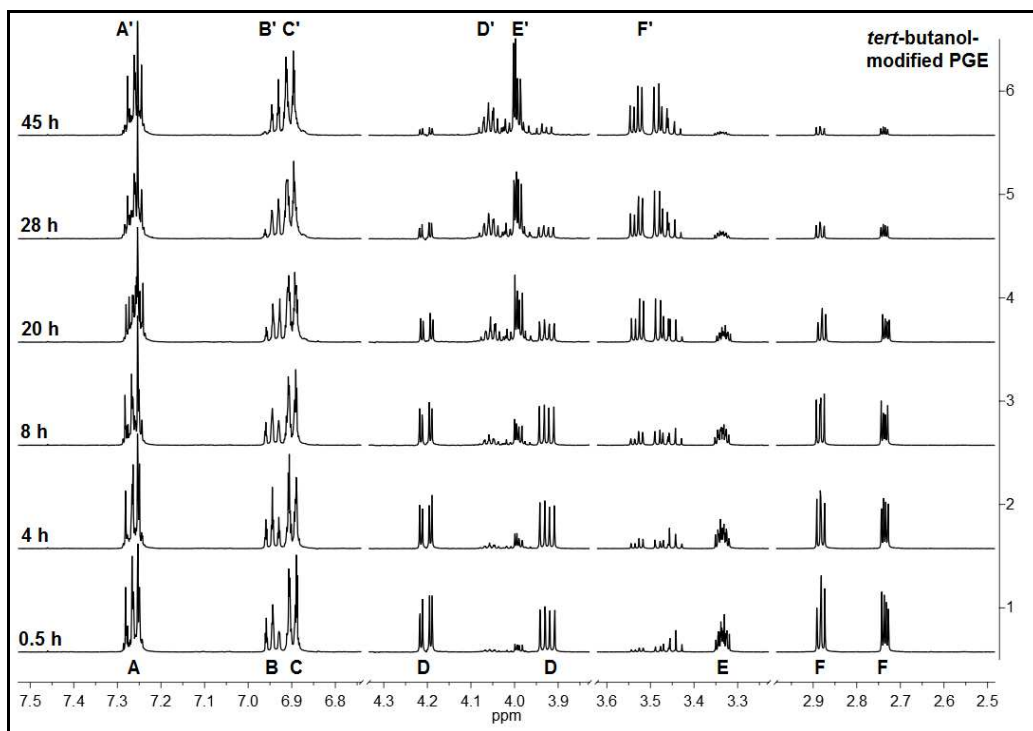


Figure S6. NMR spectra (in CDCl₃) of the reaction of PGE with *tert*-butanol.

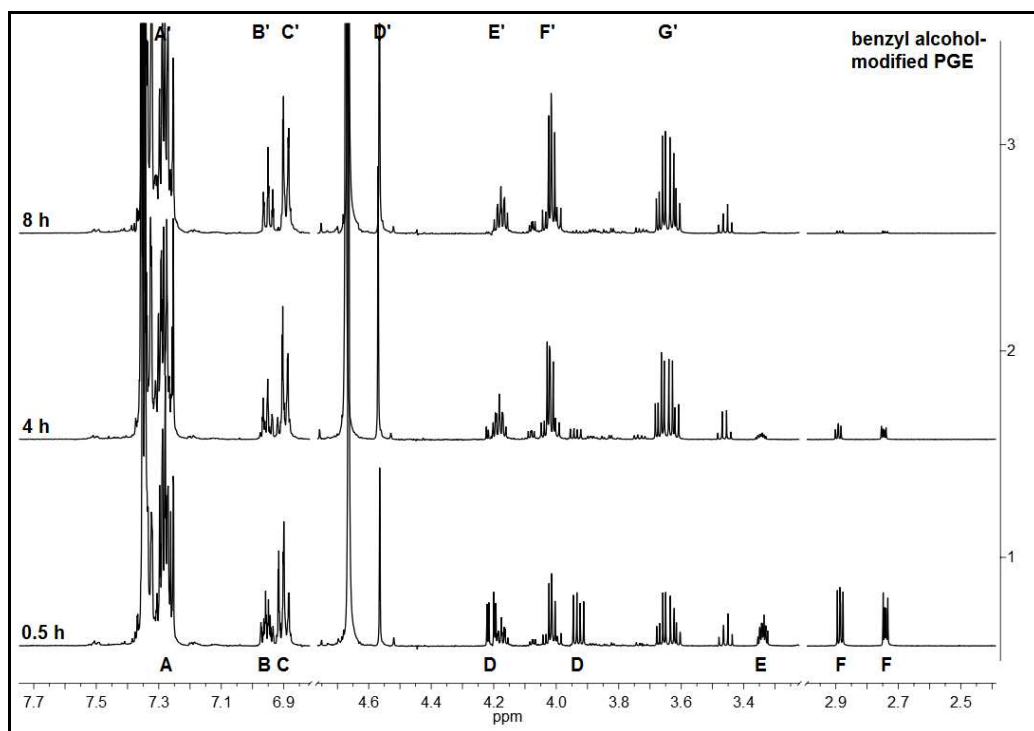


Figure S7. NMR spectra (in CDCl_3) of the reaction of PGE with benzyl alcohol.

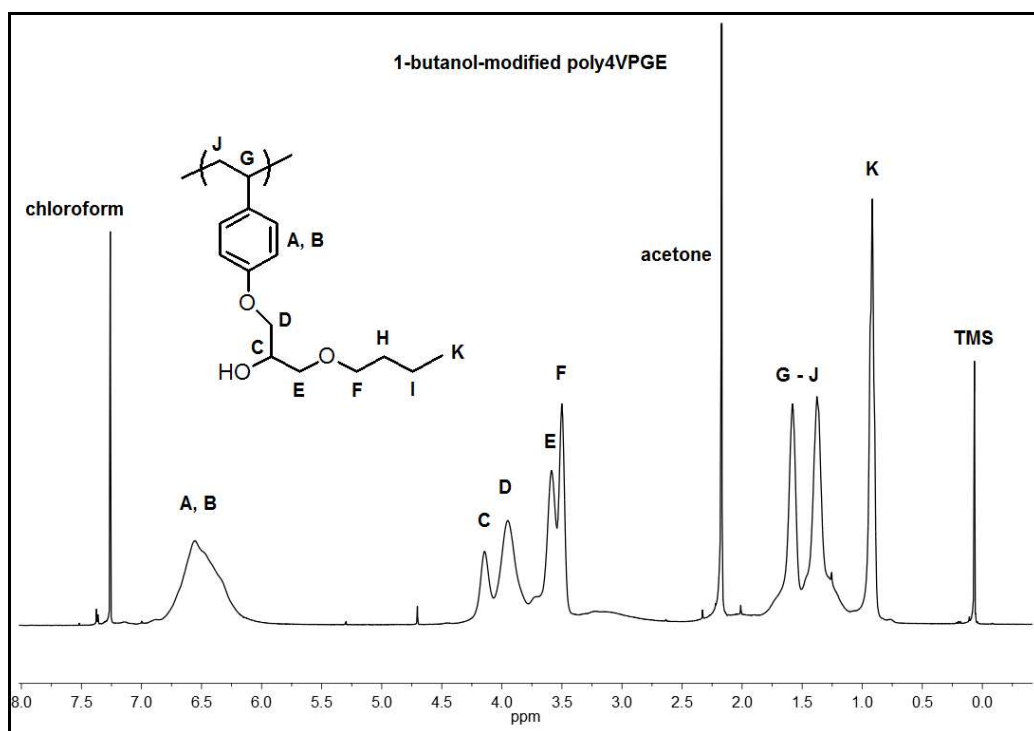


Figure S8. NMR spectrum and structure of 1-butanol-modified poly4VPGE after dialysis.

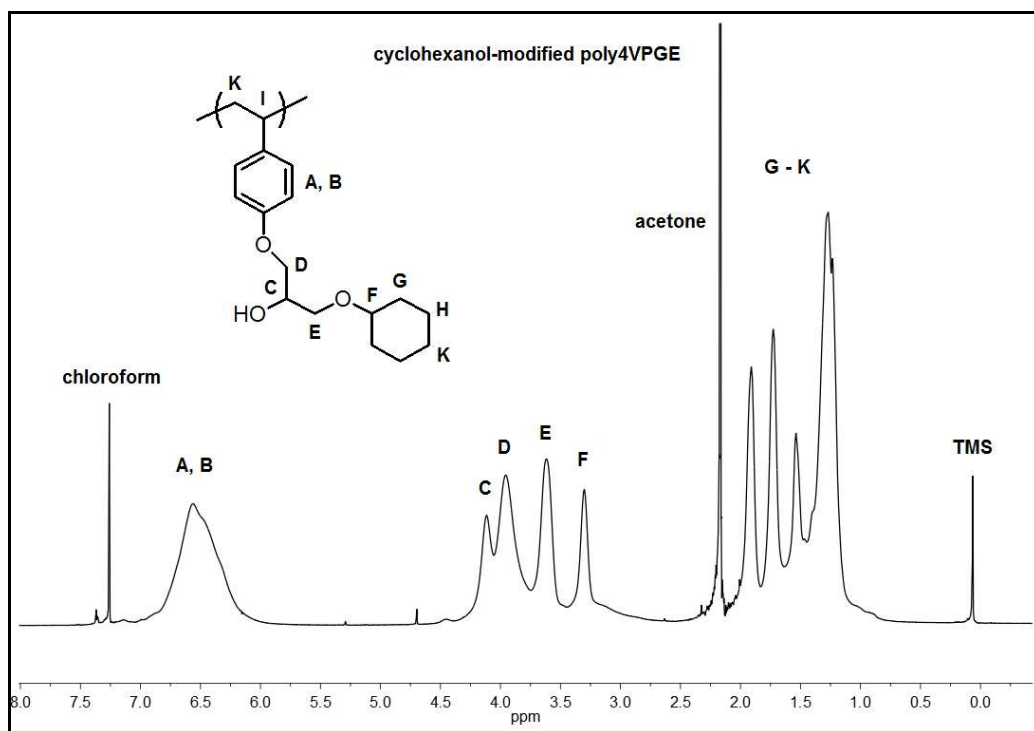


Figure S9. NMR spectrum and structure of cyclohexanol-modified poly4VPGE after dialysis.

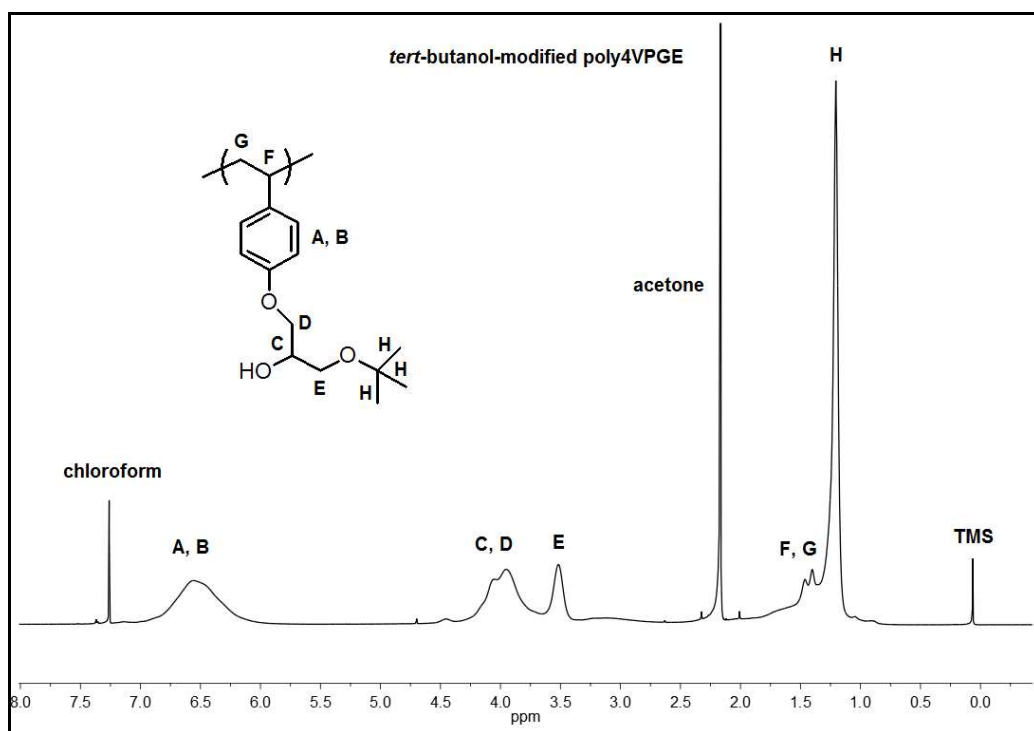


Figure S10. NMR spectrum and structure of *tert*-butanol-modified poly4VPGE after dialysis.

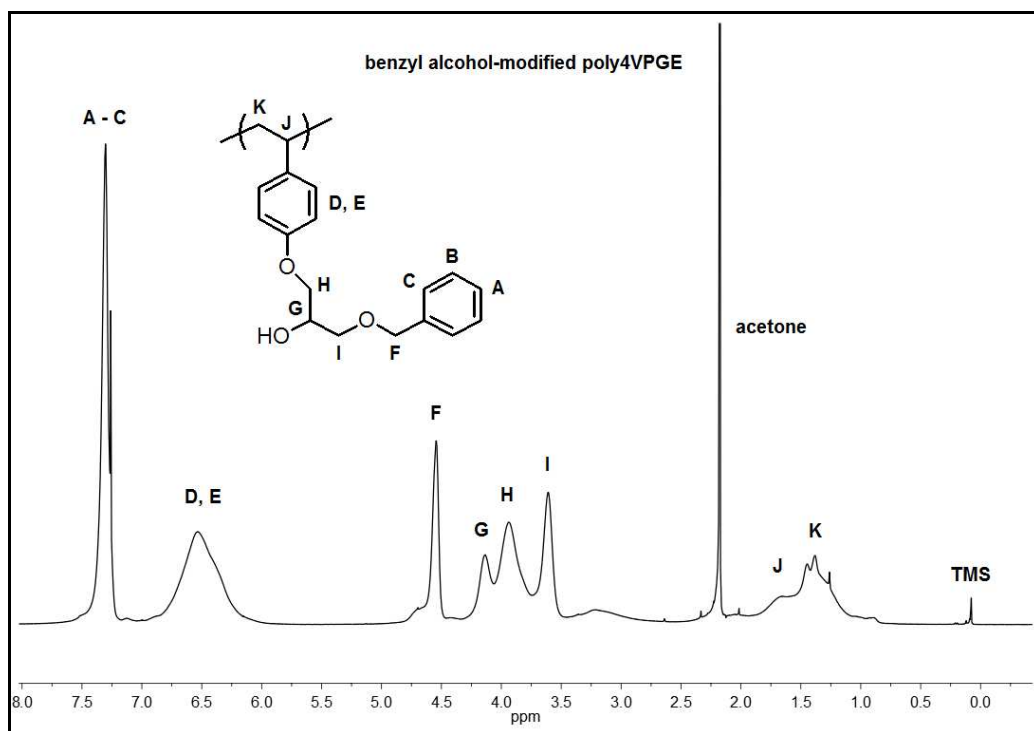


Figure S11. NMR spectrum and structure of benzyl alcohol-modified poly4VPGE after dialysis.

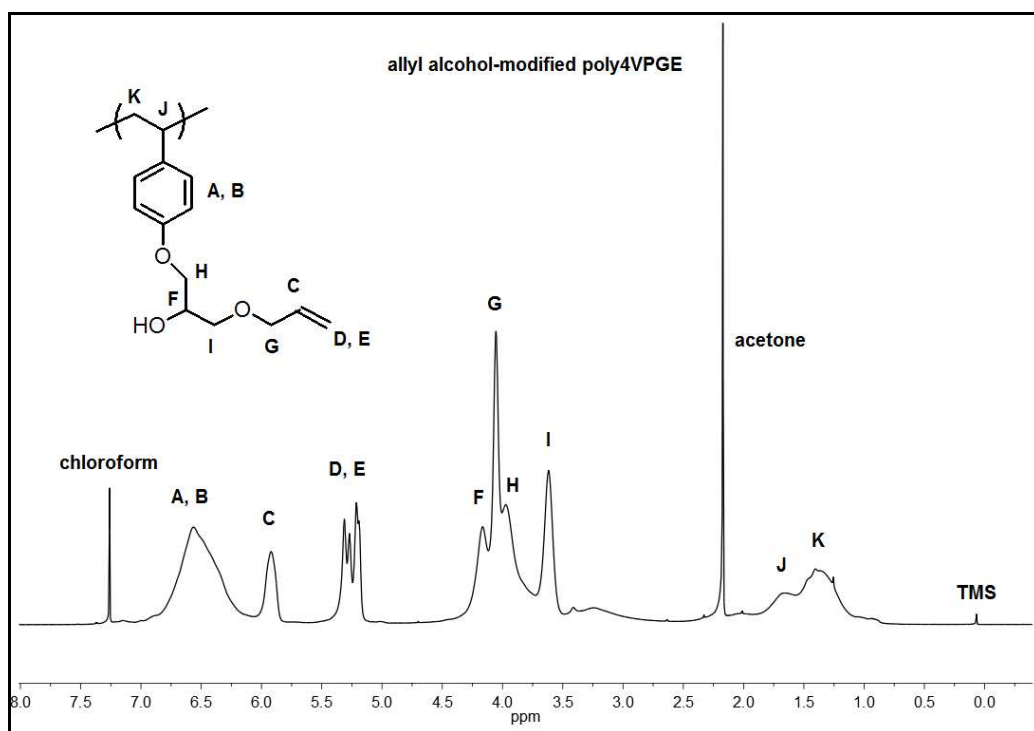
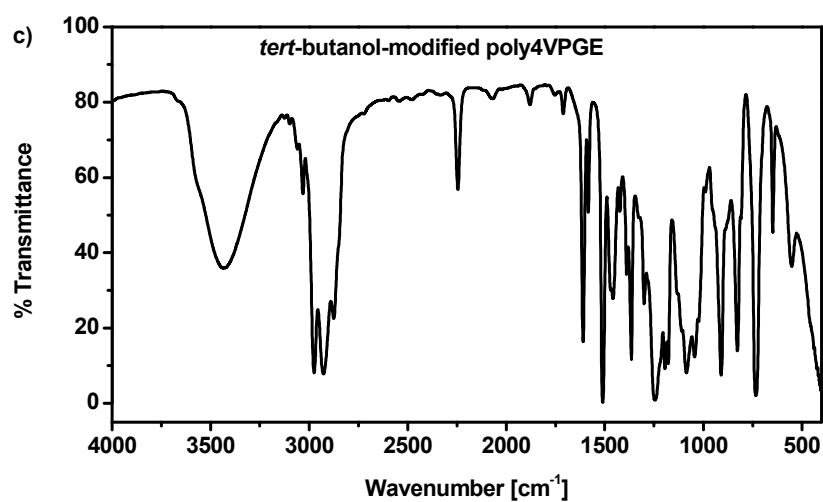
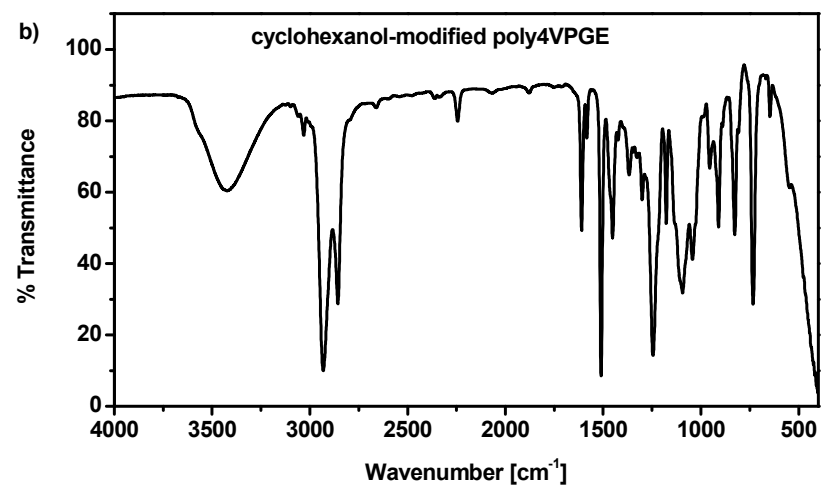
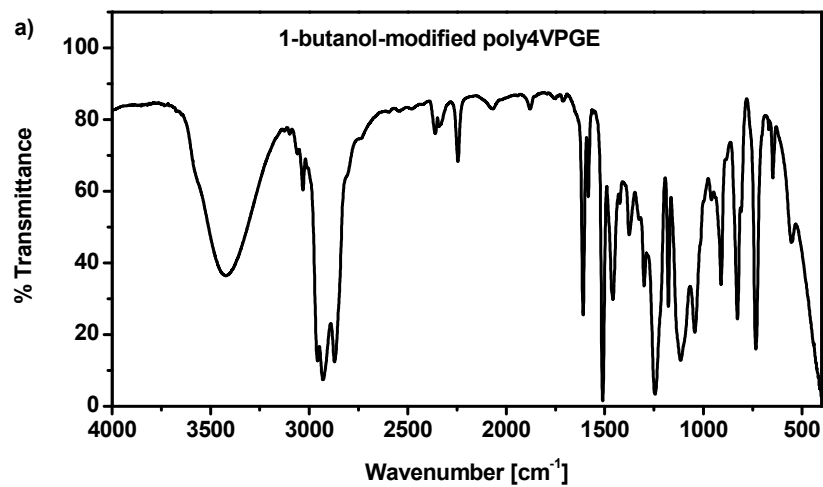


Figure S12. NMR spectrum and structure of allyl alcohol-modified poly4VPGE after dialysis.



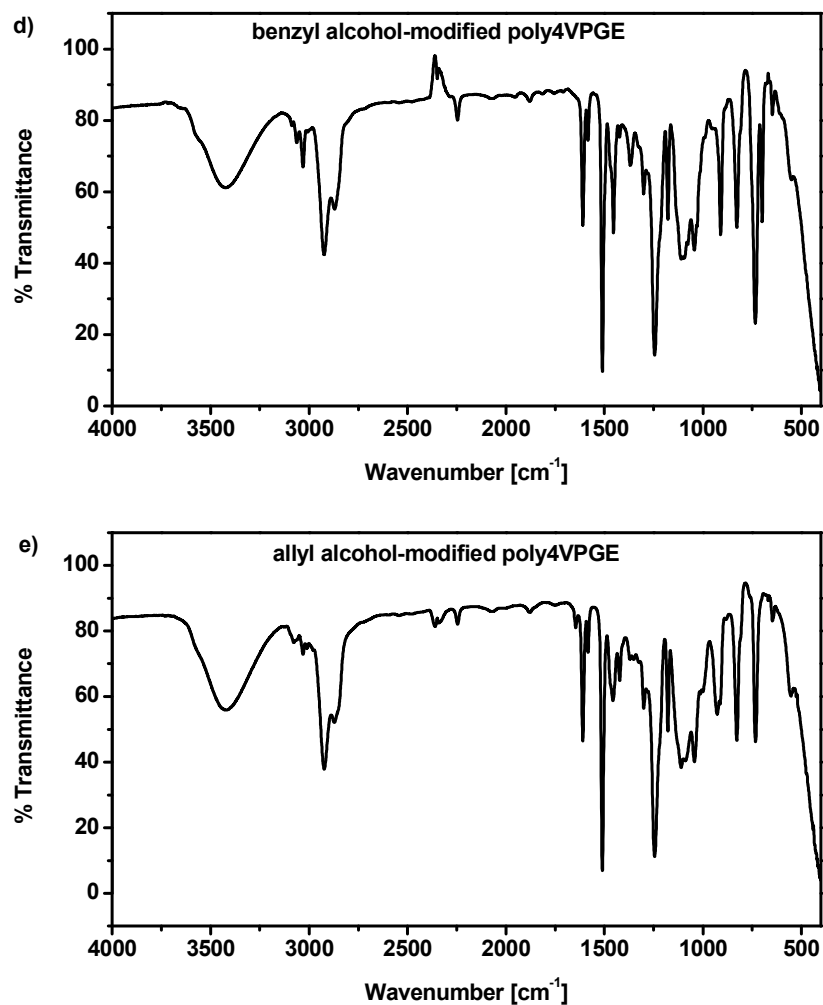


Figure S13. IR spectra of thin films (cast on NaCl plates from solutions in chloroform) of β -hydroxy ether-functionalized polymers.