

Supplementary Materials

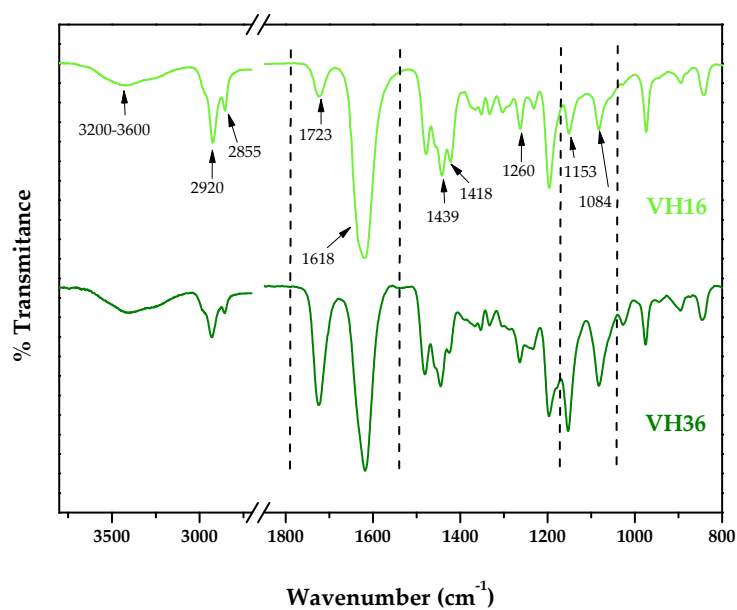


Figure S1. FTIR spectra of VH copolymers.

Table S1. Wavenumber and corresponding assignments for the main peaks in FTIR spectra of VH copolymers.

Assignment	Wavenumber (cm ⁻¹)
ν O-H H-bonded	3200-3600
ν C-H in CH ₂ and CH ₃ groups (asymmetric and symmetric)	2920
	2855
ν C=O in ester group	1723
ν C=O amide I	1618
δ C-H in CH ₂ and CH ₃ groups (asymmetrical)	1439
δ -CH ₃ (symmetrical)	1418
Twisting and wagging CH ₂	1260
ν C-O asym.	1153
ν C-O sym.	1084

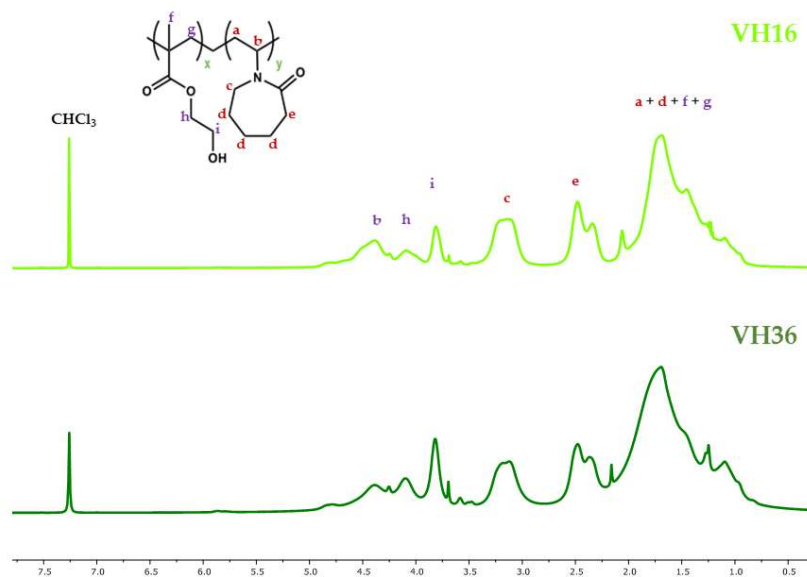


Figure S2. ^1H -NMR spectra of VH copolymers in CDCl_3 .

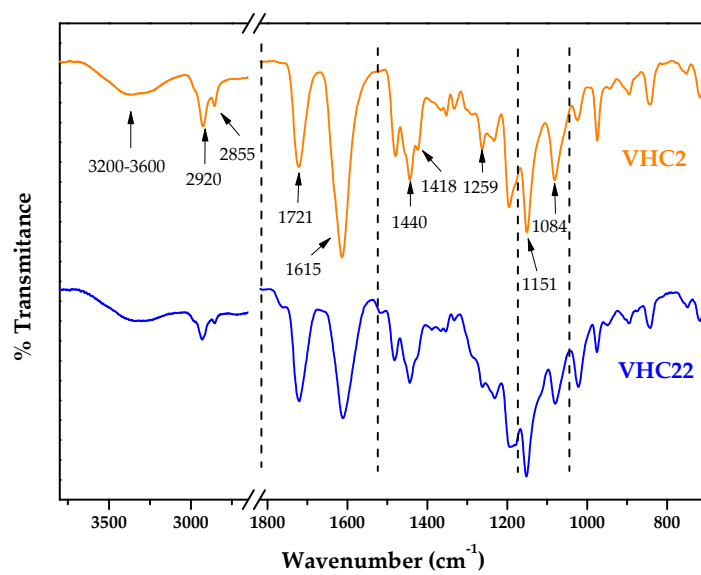


Figure S3. FTIR spectra of VHC terpolymers.

Table S2. Wavenumber and corresponding assignments for the main peaks in FTIR spectra of VHC terpolymers.

Assignment	Wavenumber (cm ⁻¹)
ν O-H H-bonded	3200-3600
ν C-H in CH ₂ and CH ₃ groups (asymmetric and symmetric)	2925 2855
ν C=O in ester group	1721
ν C=O amide I	1615
δ C-H in CH ₂ and CH ₃ groups (asymmetrical)	1439
δ -CH ₃ (symmetrical)	1418
Twisting and wagging CH ₂	1259
ν C-O asym.	1151
ν C-O sym.	1084

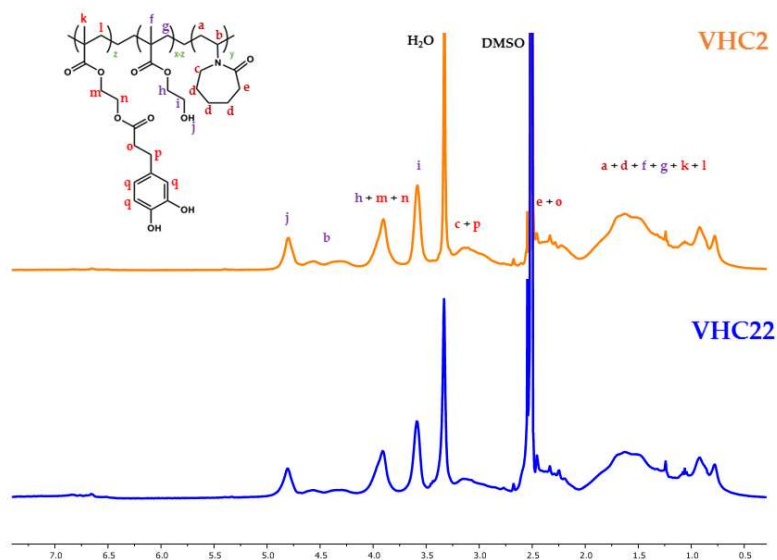


Figure S4. ¹H-NMR spectra of VHC terpolymers in DMSO-d₆.