

Supporting information

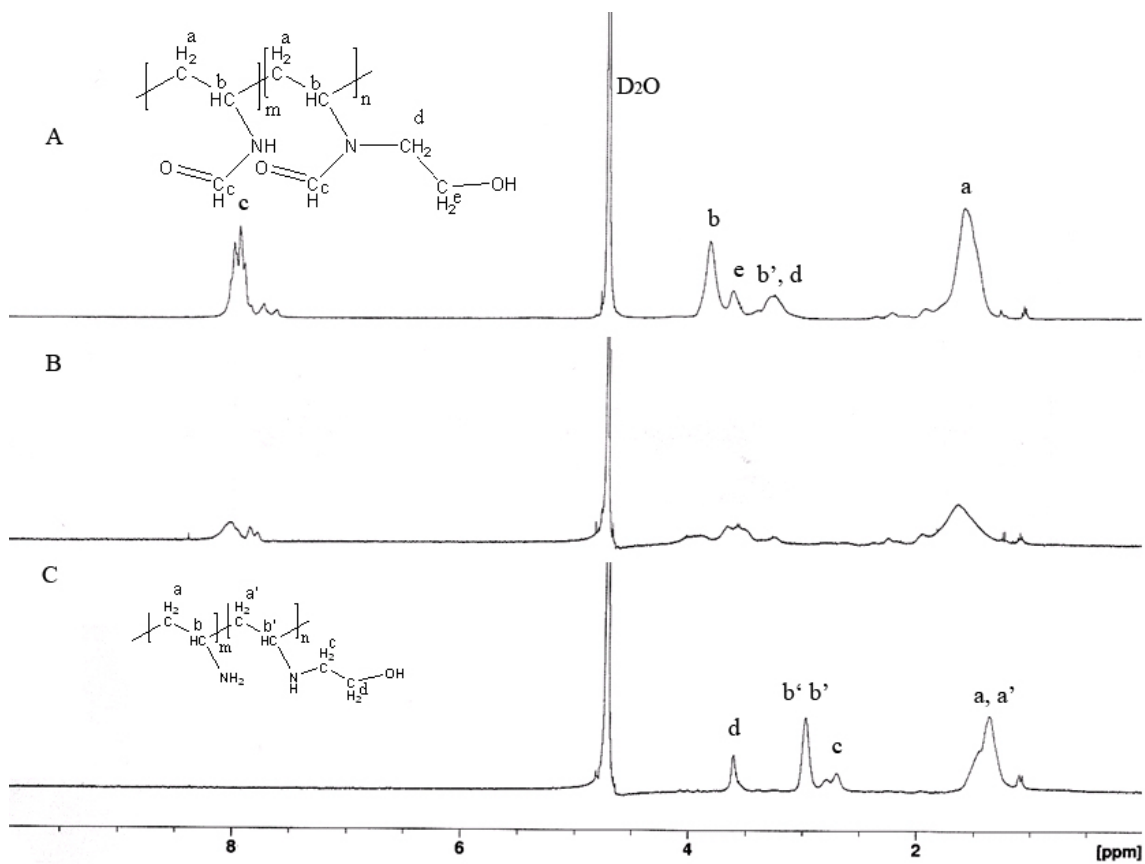


Fig 1: (A) <sup>1</sup>H-NMR spectra of PNVF, (B) 30% hydrolyzed PNVF, and (C) PVAm with BDEP residue.

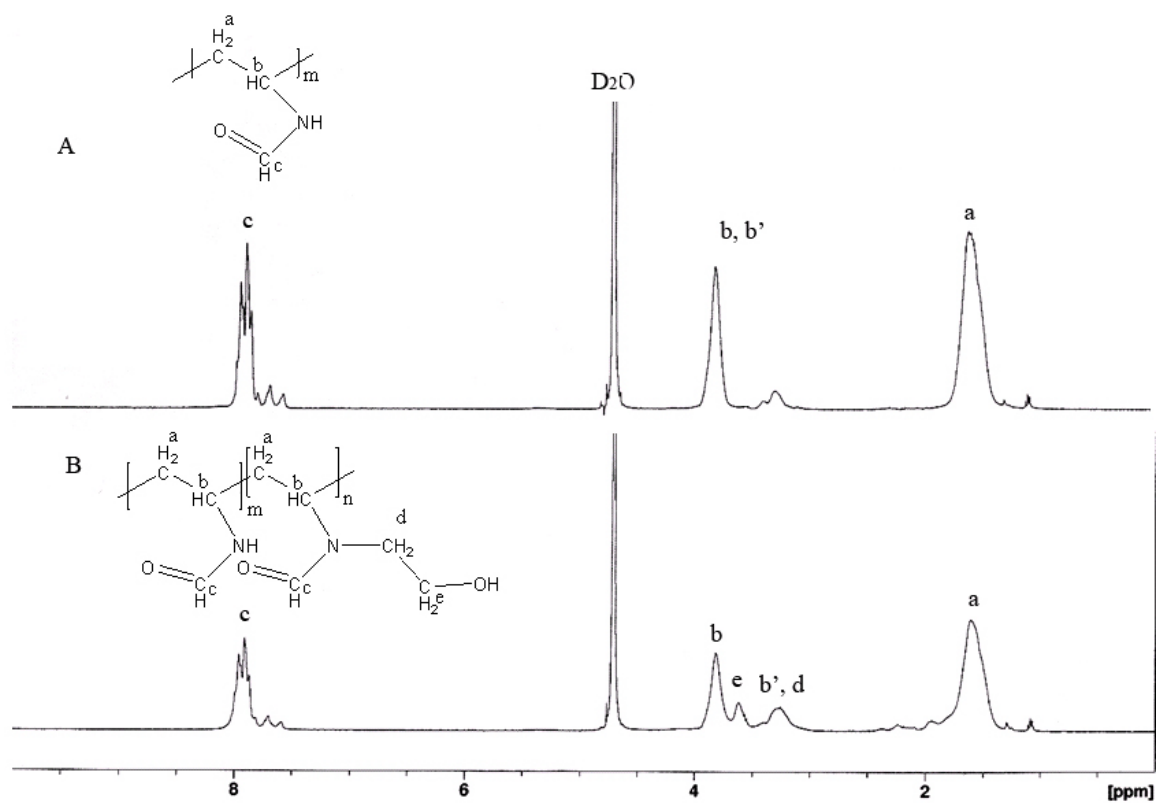


Figure 2, (A)  $^1\text{H-NMR}$  spectra of PNVF, (B) PNVF with BDEP residue obtained by degradation of PNVF shell in 10% HF.

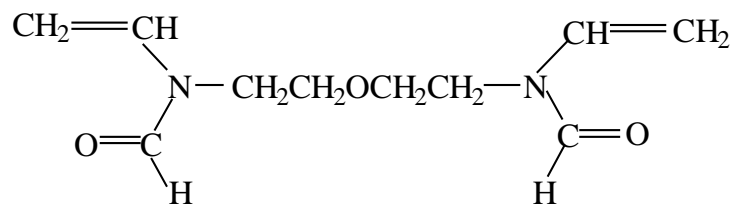


Figure 3. 2-(N-vinylformamido)ethyl ether

IR (NaCl,  $\nu$ :  $\text{cm}^{-1}$ ): 1688 (-NHC(=O)H); 1632 (C=C).

$^1\text{H-NMR}$  ( $\text{CDCl}_3$ ;  $\delta$ , ppm): 8.38, 8.08, 8.05 (m, 2H, -C(=O)H); 7.11-7.03, 6.80-6.72(m, 2H,  $\text{H}_2\text{C}=\text{CH}$ -); 4.93-4.63 (m, 4H,  $\text{CH}_2=\text{CH}$ -); 3.85-3.72 (m, 8H,  $-\text{CH}_2\text{CH}_2-$ ).

$^{13}\text{C-NMR}$  ( $\text{CDCl}_3$ ,  $\delta$ , ppm): 39.99, 45.14, 66.50, 66.86, 67.35, 94.43, 94.64, 128.59, 133.32, 161.56, 161.84, 162.59, 162.68.

MS calcd for  $\text{C}_{10}\text{H}_{16}\text{N}_2\text{O}_3$ : 212.1160, FOUND (EI): 212.1169