

Supplementary Data

Supplementary Tables

Table S1. Dynamic viscosity of the different PU and gelatin solutions used for electrospinning co-axial fibre membranes, * viscosity was higher than measuring limit for the instrument.

Solvent Solution(polymer/solvent)	or Concentration (wt/wt) (%)	– wt/v	Dynamic Viscosity x 10⁻⁴ (Pa/s)
TFE	100		7.684±0.008
PU/TFE	2 (1.5)		332.763±1.038
PU/TFE	4 (2.9)		1373.714±0.968
PU/TFE	6 (4.3)		3764.733±6.055
PU/TFE	8 (5.8)		*
GE/TFE	10 (6.8)		797.122±1.006

Supplementary Figures

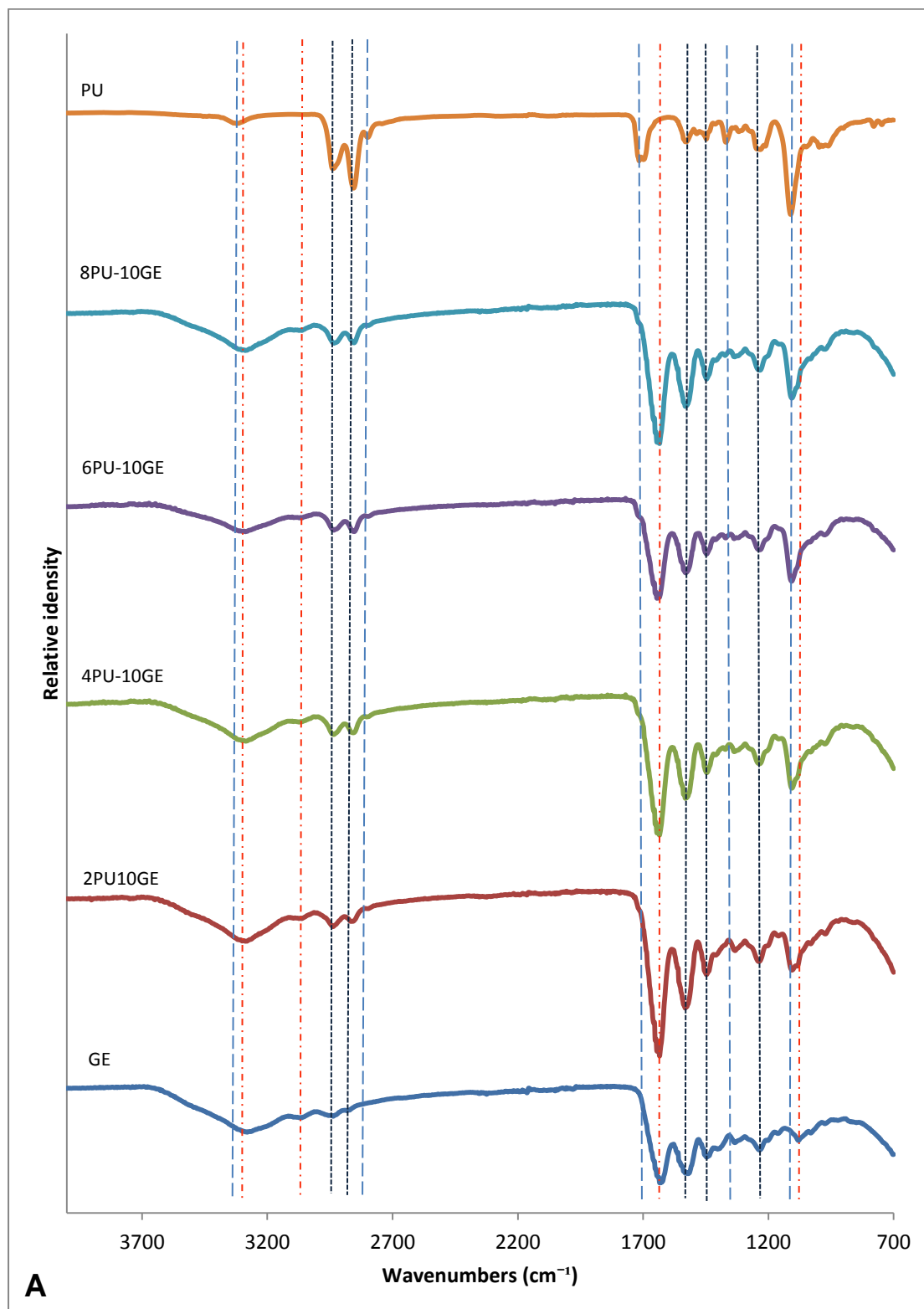


Figure S1. FTIR spectra (A & B) and SEM images (C to F) of electrospun co-axial fibre membranes with non-crosslinked gelatin shell (A) and with gelatin shell washed off (B to F). Morphology: C) 2PU10GE, D) 4PU10GE, E) 6PU10GE and F) 8PU10GE.

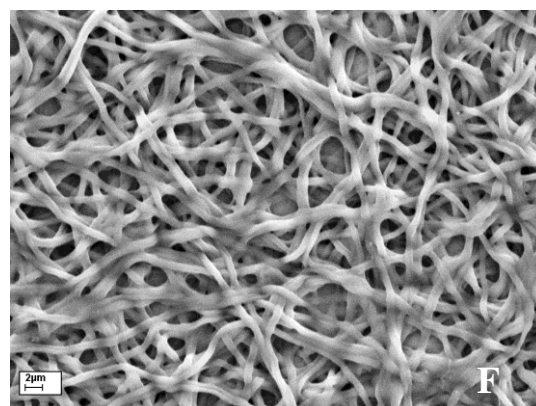
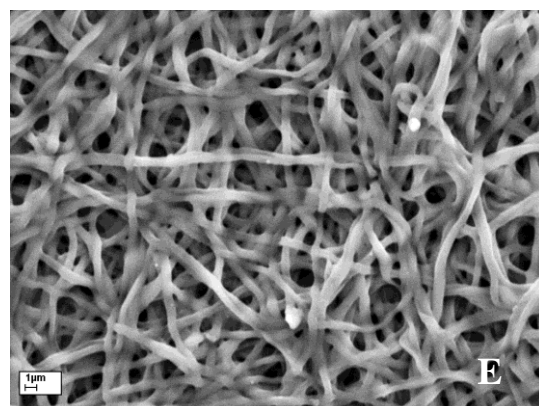
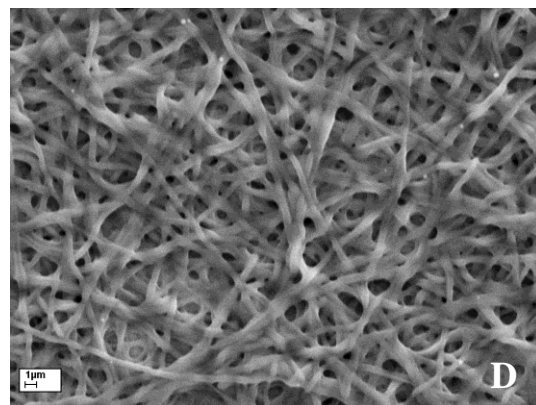
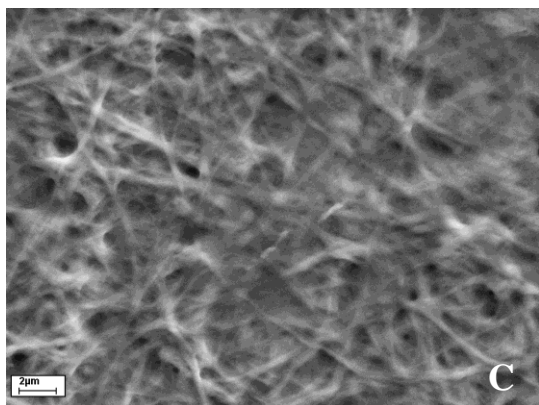
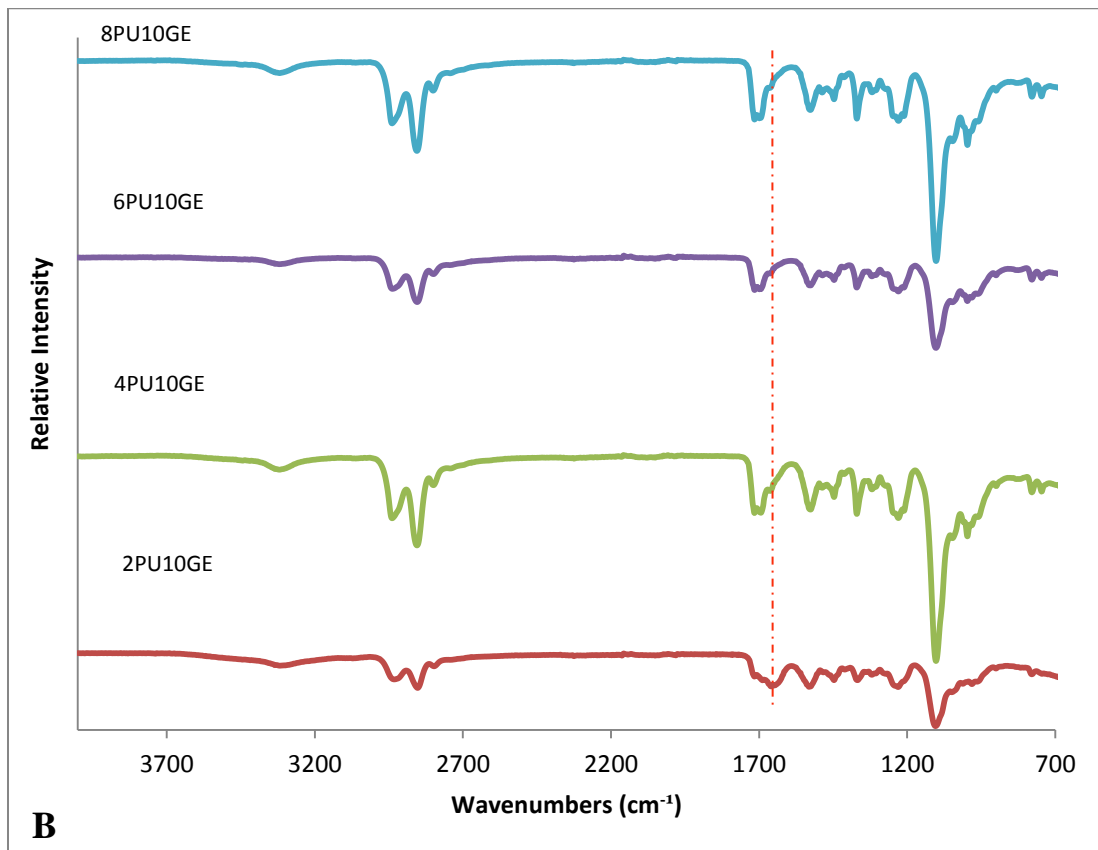


Figure S1 (Continued)

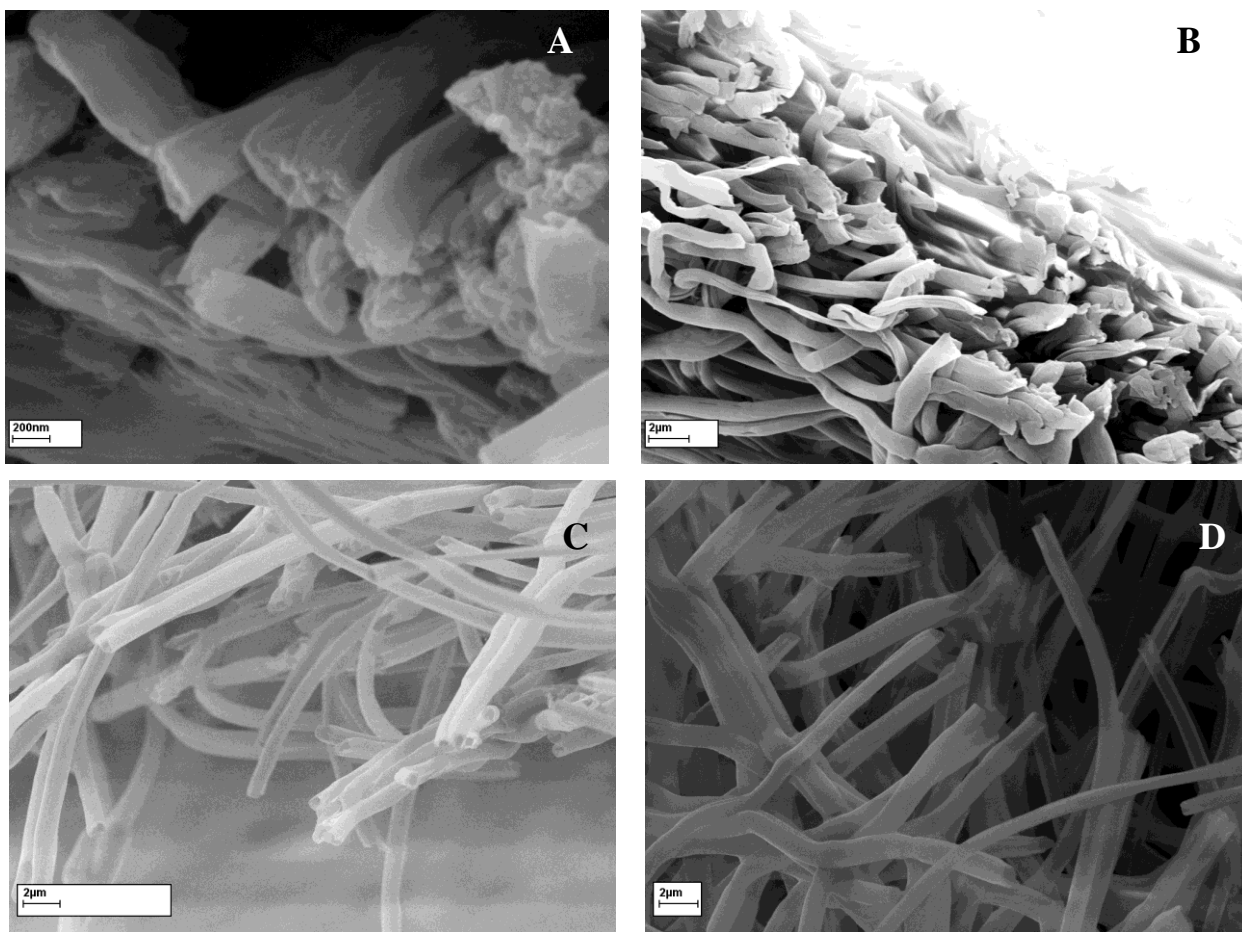


Figure S2. SEM images showing the hollow fibres (with PU core removed by dissolving in THF) for A) 2PU10GE, B) 4PU10GE, C) 6PU10GE and D) 8PU10GE electrospun co-axial fibre membranes.

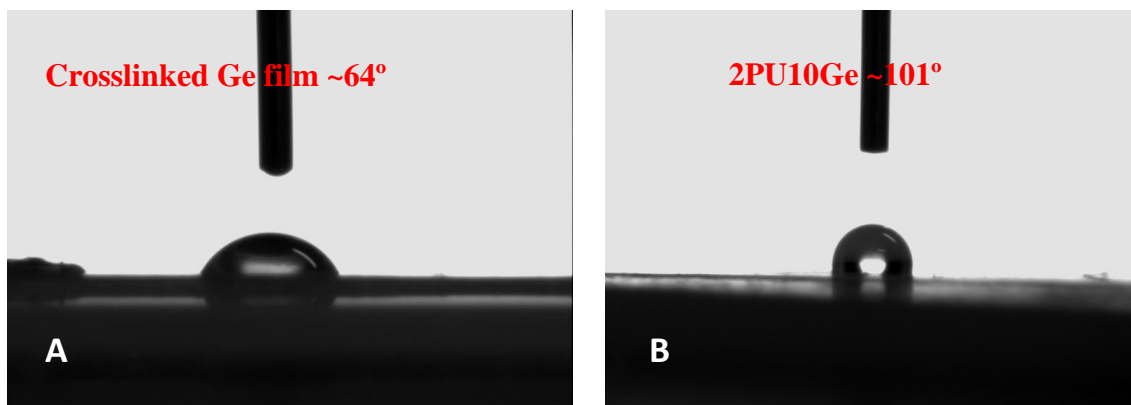


Figure S3. The contact angle for A) glutaraldehyde crosslinked gelatin film and B) 2PU10GE coaxial fibre membrane. The surface wetting for 4PU10GE, 6PU10GE and 8PU10GE membranes was too quick to take any contact angle measurements.