

Synthesis, properties and water permeability of SWNT buckypaper membranes

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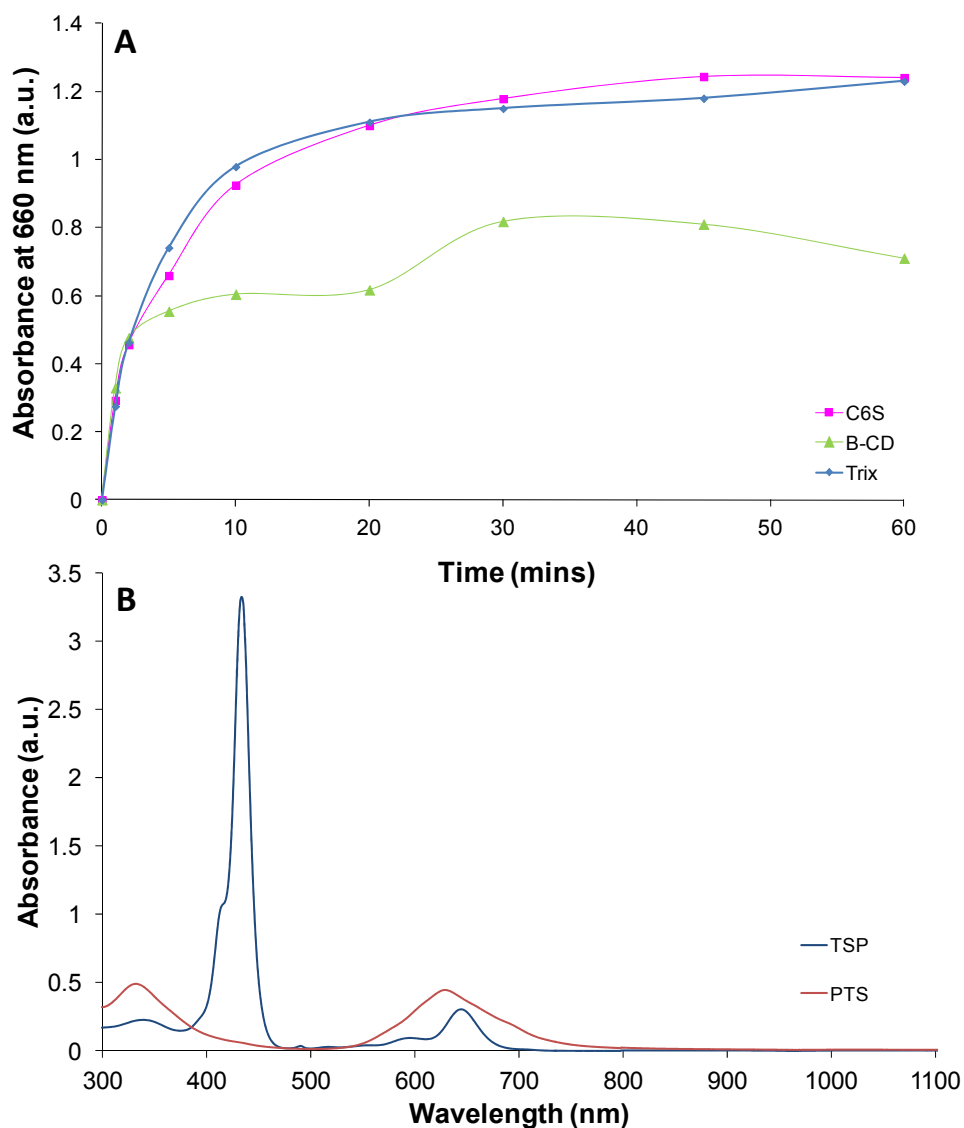


Figure S1: (a) The effect of increasing sonication time on the absorbance at 660 nm of SWNT dispersions containing different dispersants that do not have spectral interference in this region and (b) UV-vis-NIR spectra of aqueous solutions of PTS and TSP at the same concentration used to prepare SWNT dispersions showing spectral interference at 660 nm.

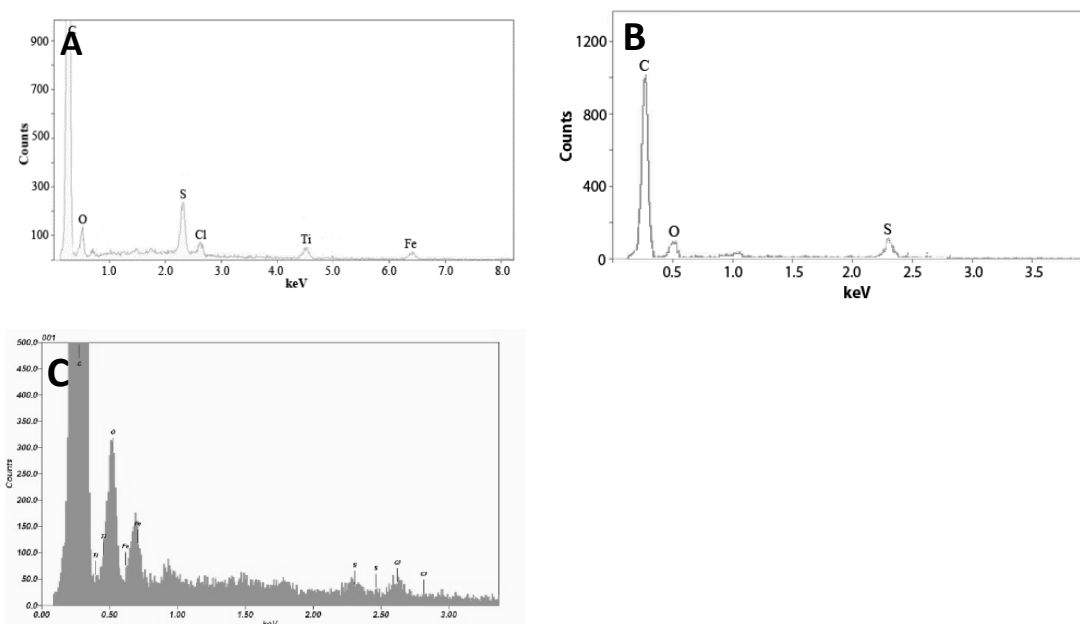


Figure S2: EDX spectra of: (a) a SWNT/PTS buckypaper, (b) a SWNT/TSP buckypaper, (c) a SWNT/C6S buckypaper.

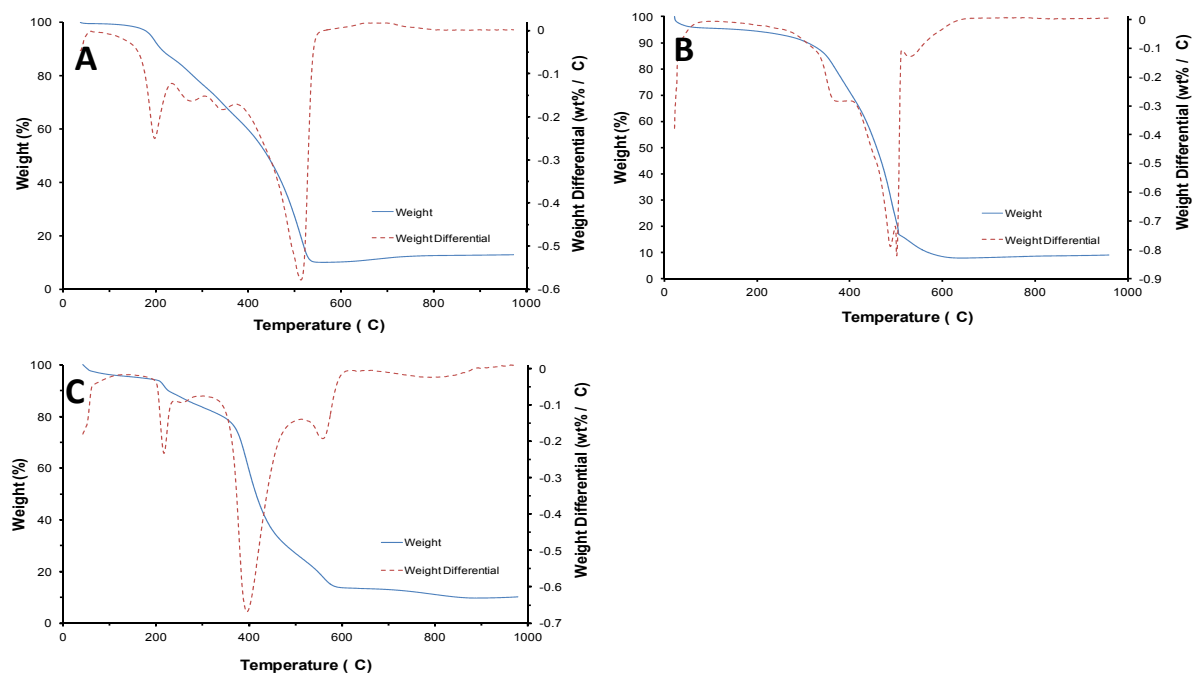


Figure S4: TGA data for (a) SWNT/Trix, (b) SWNT/C6S and (c) SWNT/ β -CD buckypapers, showing the weight loss and weight loss differential curves with respect to temperature.

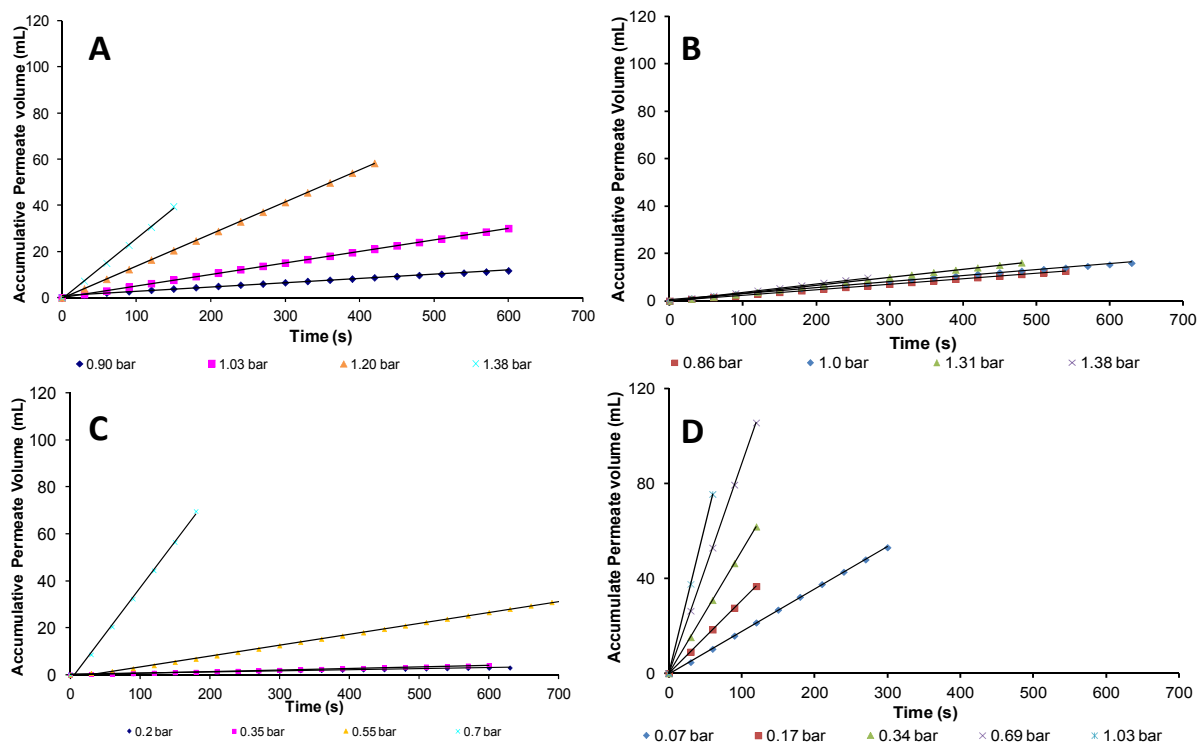


Figure S4: Water permeability plots for selected buckypaper and commercial membranes obtained using applied pressures between 0.07 and 1.52 bar: (a) SWNT/C6S, (b) SWNT/ β -CD, (c) SWNT/TSP and (d) PVDF Durapore® membrane (0.22 μ m).

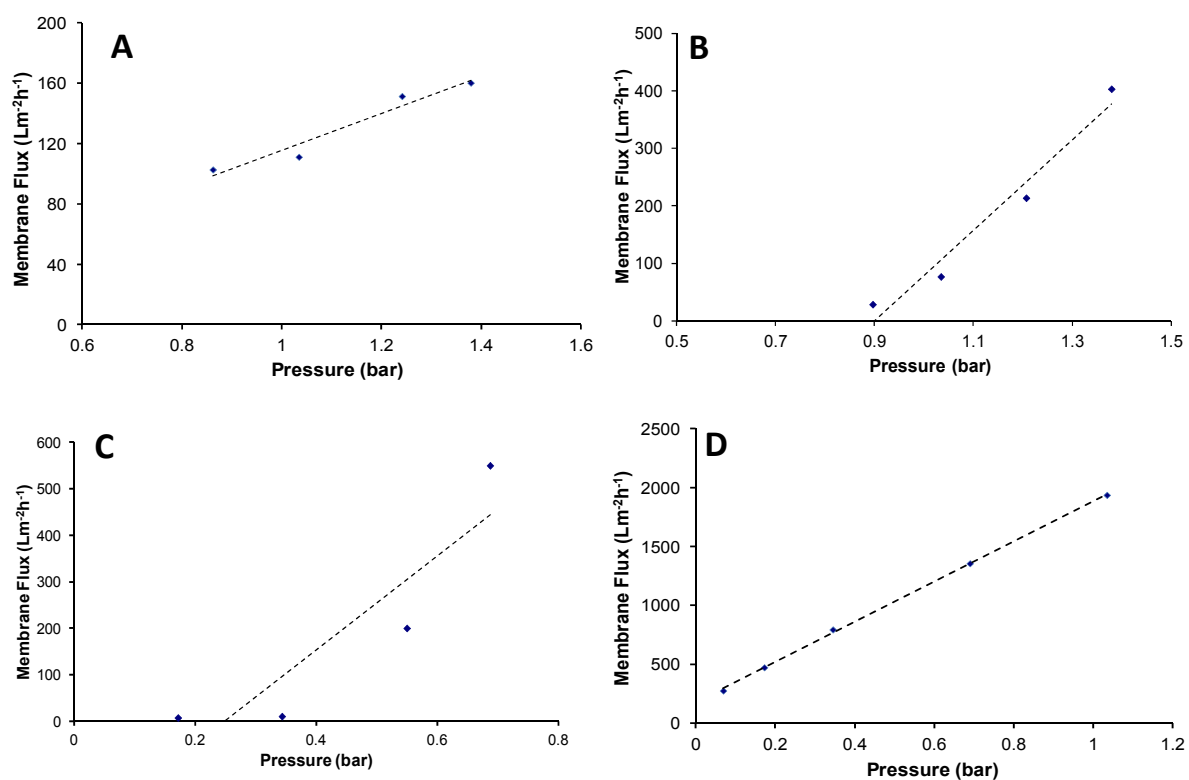


Figure S5: Effect of applied pressure on the permeate flux rate (J) for SWNT buckypapers and a commercial membrane: (a) SWNT/ β -CD, (b) SWNT/C6S, (c) SWNT/TSP and (d) PVDF Durapore® membrane (0.22 μm).