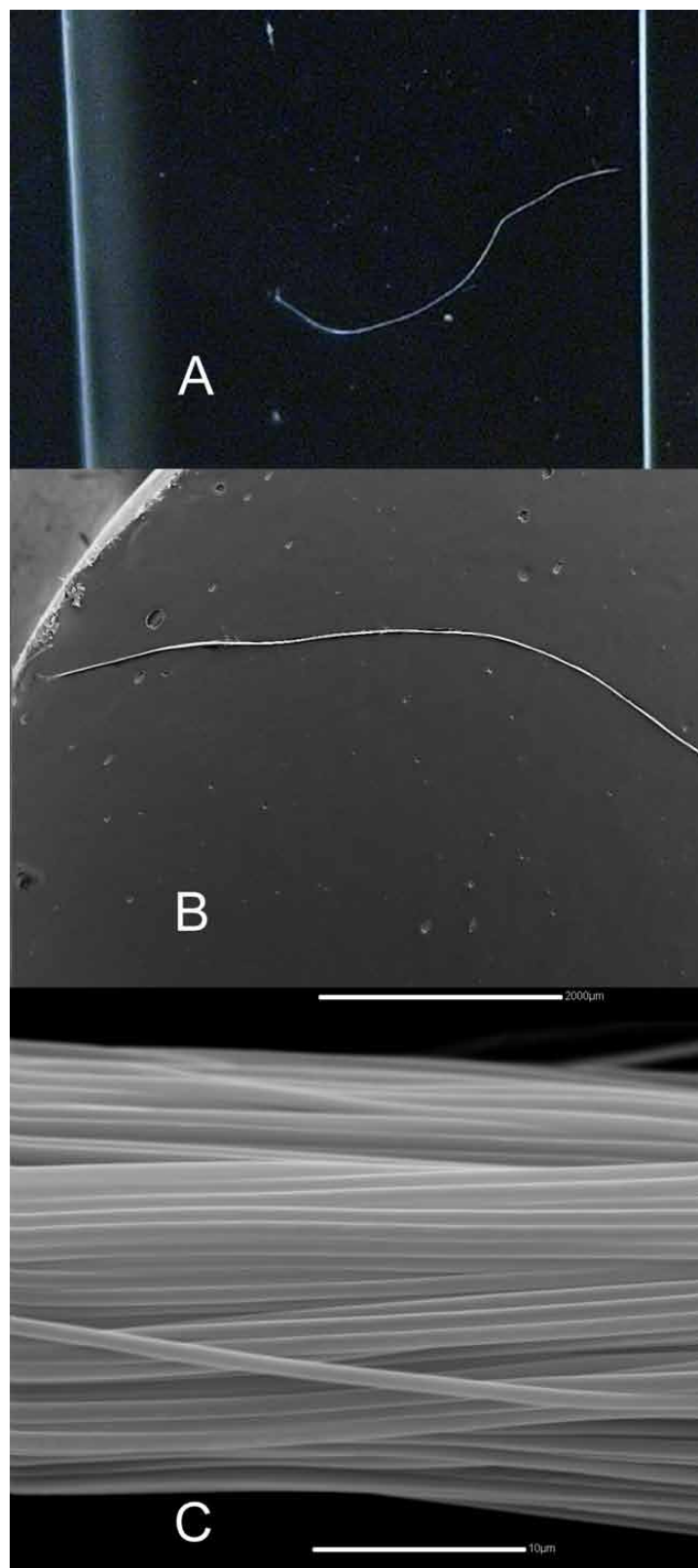


Fig. S1 Plot showing the dependence of tube wall thickness on the tube diameter. The straight line represents the theoretical tube wall thickness assuming the volume of polymer present relative to the channel in each case matches that of the volume fraction of monomer in the polymerization solution (30%).



**Fig. S2** Images of a full bundle of polyDVB tubes prepared in a 501-hole MSF template. A) Optical image of a ~2 cm length of tube bundle on a glass slide with a magnification of 5x (visible mounting slide is 2.5 cm); B) SEM image of a ~4 mm length of tube bundle on copper tape with a magnification of 20x (scale bar is 2000  $\mu\text{m}$ ); C) SEM image of the side of a tube bundle with a magnification of 3500x (scale bar is 10  $\mu\text{m}$ ).