

## **Supplementary Information**

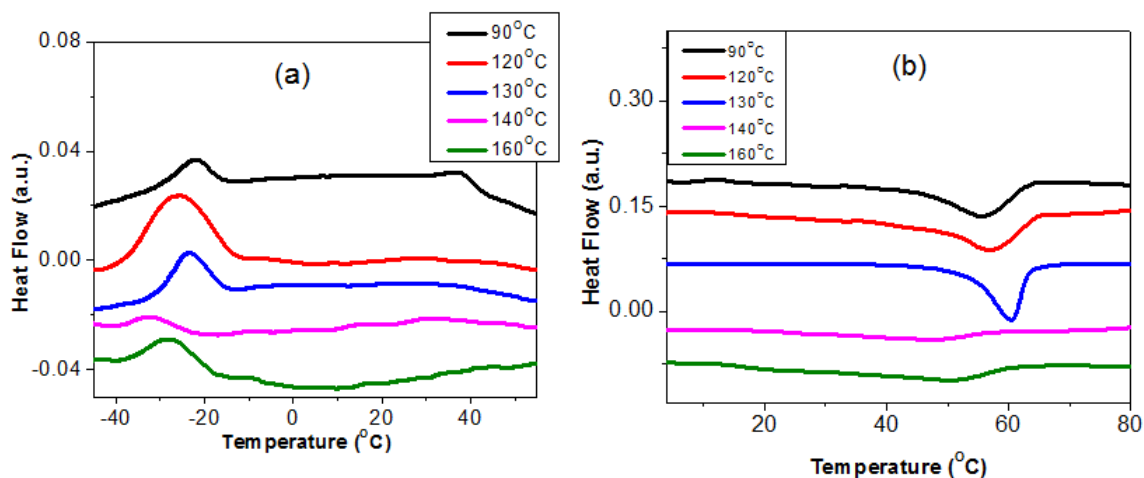
### **Crystallization Behaviour of Poly (ethylene oxide) Under Confinement in Electrospun Nanofibers of Polystyrene/Poly(ethylene oxide) Blends**

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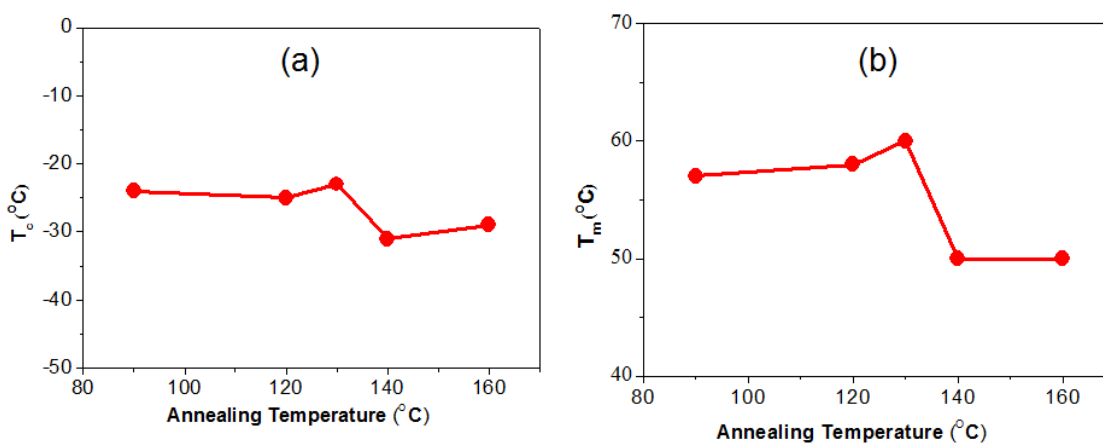
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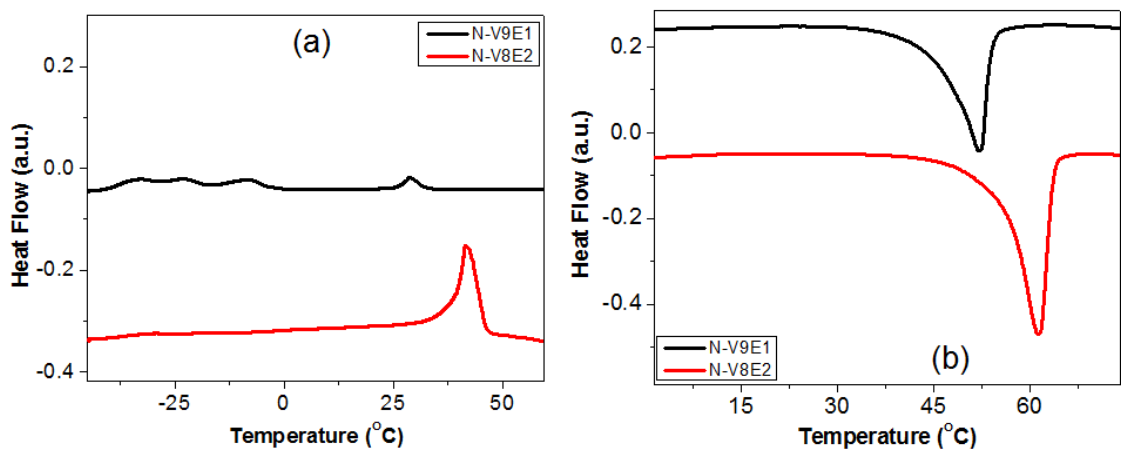
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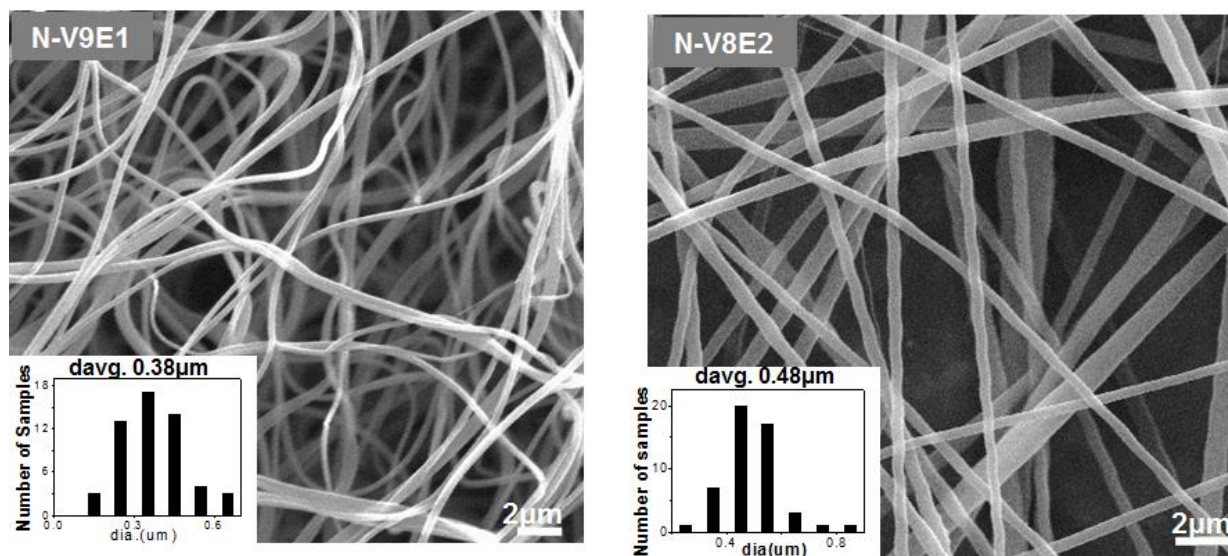
**Figure S1.** DSC cooling (a) and heating (b) curves of S8/E2 electrospun nanofiber blends after thermal treatment of the samples at different melt annealing temperatures ( $T_a$ ).



**Figure S2.** Variation of different thermal properties for S8/E2 electrospun nanofiber blends with melt annealing temperature ( $T_a$ ), as ascertained from DSC measurements, (a) melt crystallization temperature ( $T_c$ ); (b) crystalline melting temperature ( $T_m$ ).



**Figure S3.** DSC cooling (a) and heating (b) curves of P4VP/PEO (90/10) (N-V9E1) and P4VP/PEO (80/20) (N-V8E2) blend nanofibers after first heating upto 90°C.



**Figure S4.** SEM micrographs of electrospun P4VP/PEO blend nanofibers (a) N-V9E1; (b); N-V8E2