Electronic Supplementary Material (ESI) for RSC Advances.

SUPPORTING INFORMATION

Nanocomposite polymer electrolytes based on poly (poly(ethylene glycol) methacrylate), MMT or ZSM-5 formulated with LiTFSI and PYR11TFSI for Li-ion batteries

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Figure 1S Differential Scanning Calorimetry (DSC) Thermograms of pPEGMA and SN (pPEGMA), BN (pPEGMA+LiTFSI) and TN (pPEGMA+LiTFSI+PYR11TFSI) nanocomposites in the range from -70 to 0 °C. (a) montmorillonite-K 10 MMT and (b) zeolite ZSM-5.

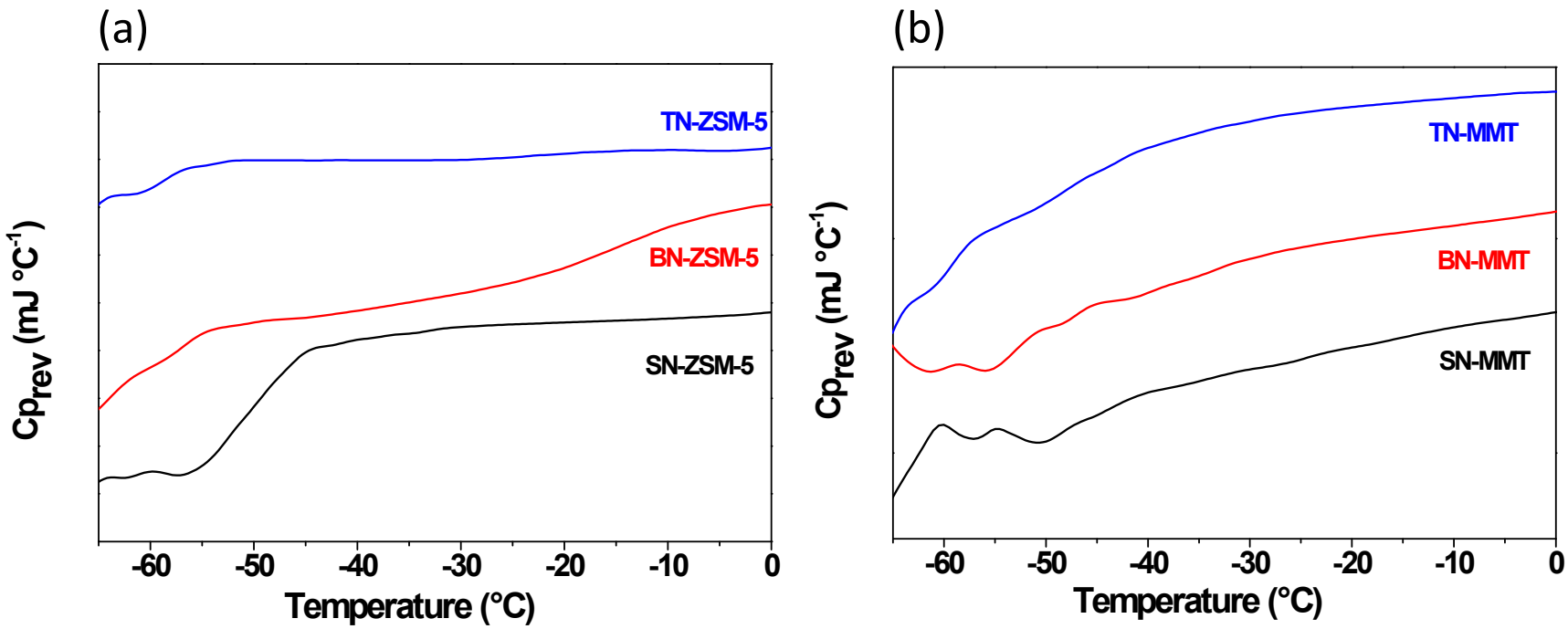

Figure 2S SEM image of 5 wt% SN-MMT nanocomposite. The image shows clay particles uniformly distributed with a lower size of 1 μm, as indicated by arrows.

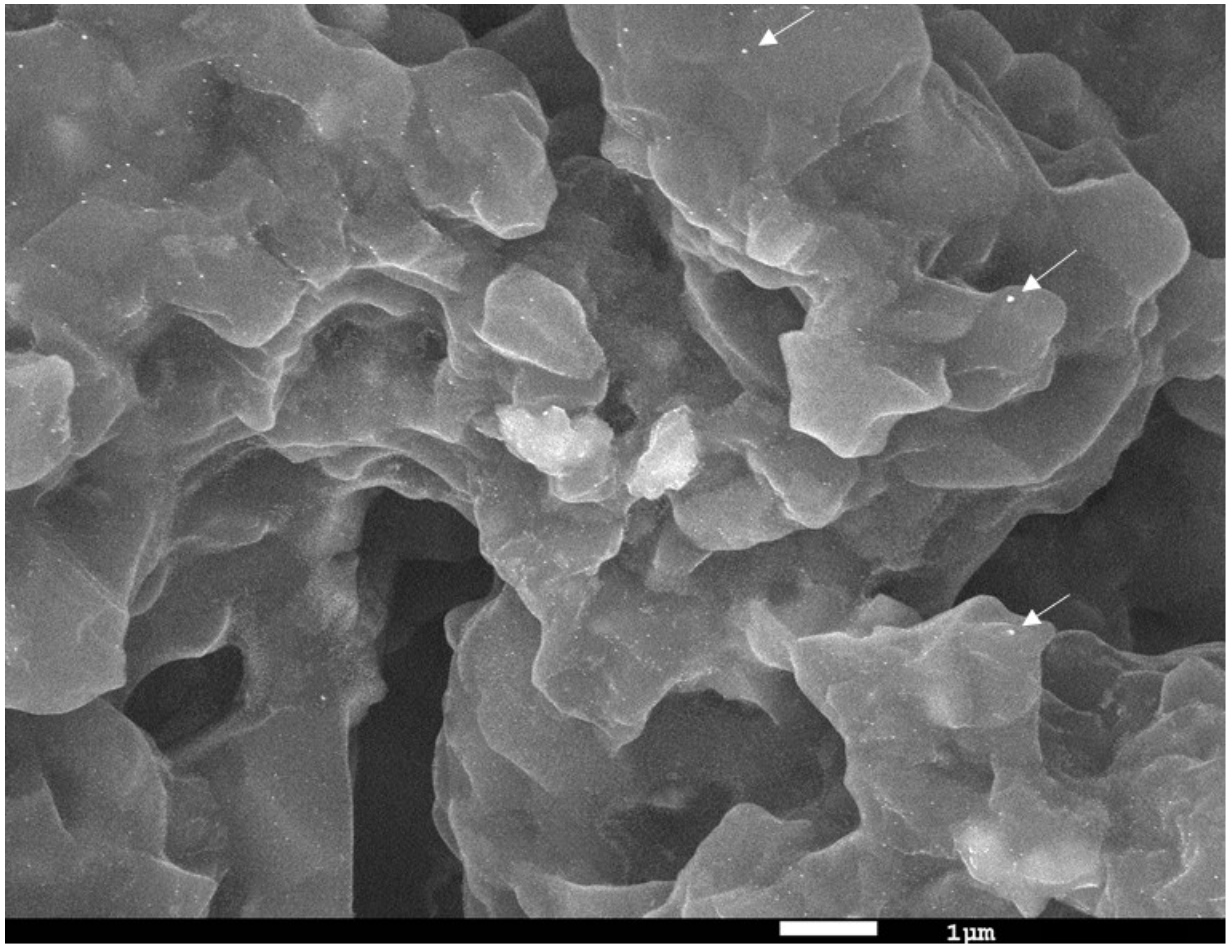

Figure 3S TEM image of 5 wt% SN-MMT nanocomposite. The image shows a particle size of approximately 20 nm.

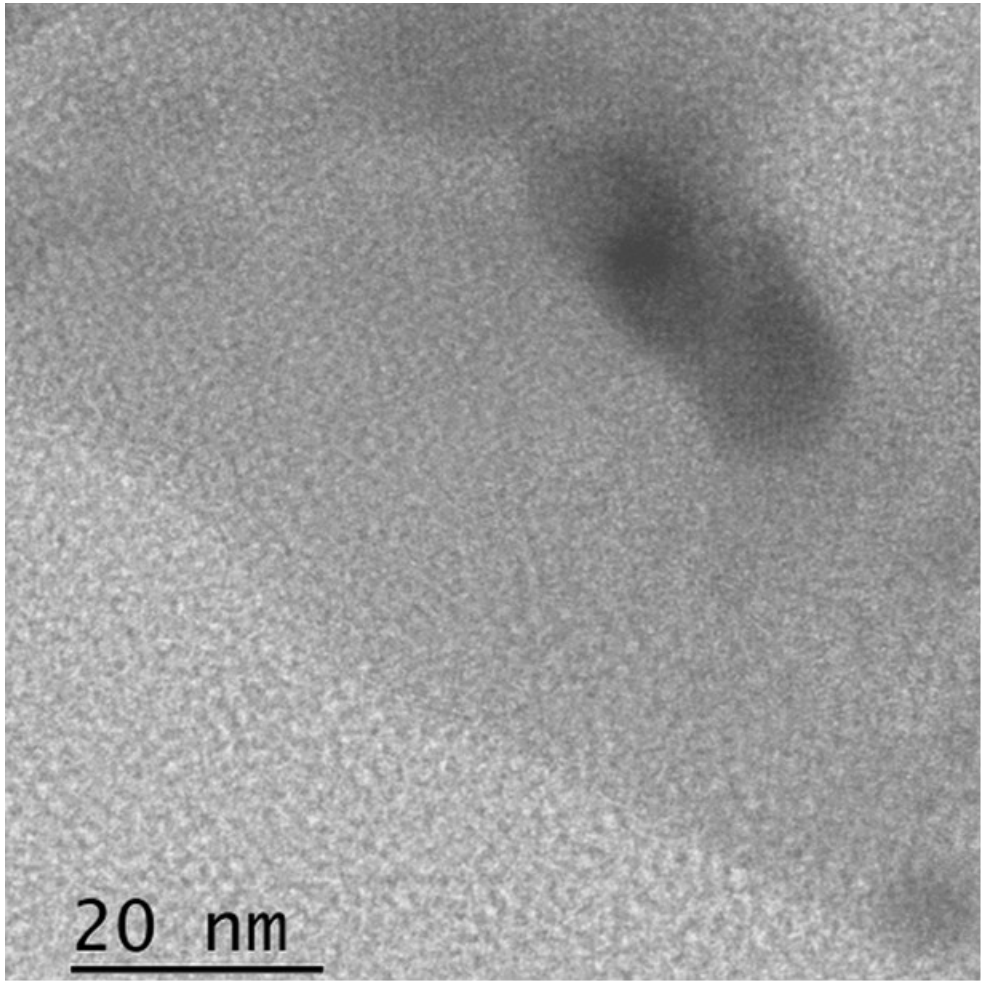

Figure 4S TEM image of 5 wt% SN-ZSM-5 nanocomposites. The image shows the embedding of 5 wt% zeolite into the polymer matrix for SN-ZSM-5 nanocomposites.