

Supporting information

Preparation and Characterization of Thermoregulated Rigid Polyurethane Foams Containing Nanoencapsulated Phase Change Materials

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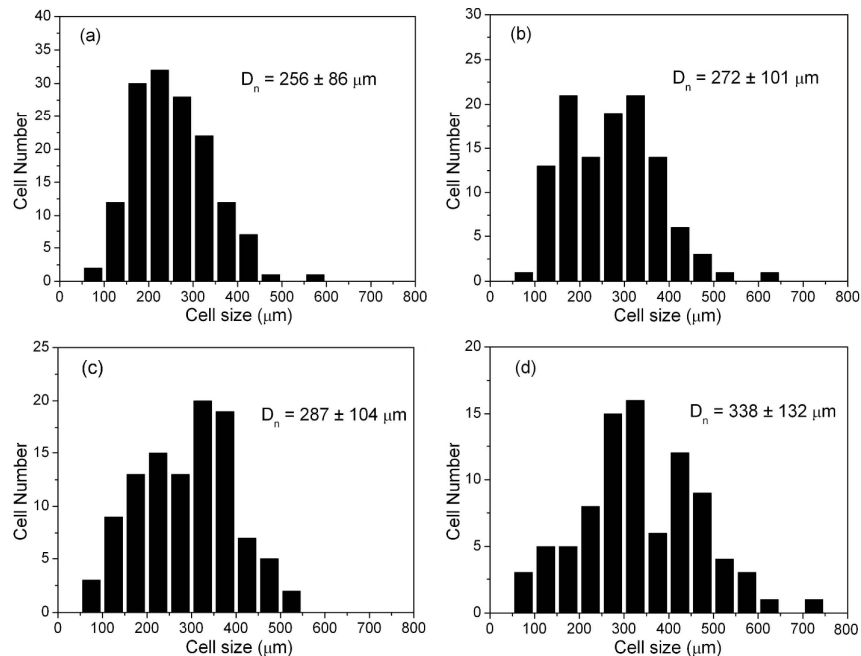


Figure S1. Cell size distribution of the RPU foams containing different contents of NanoPCMs: (a) pure RPU foam, (b) 4.04 wt%, (c) 11.22 wt%, (d) 17.40 wt%. Density of the foams: $\sim 200 \text{ kg/m}^3$.

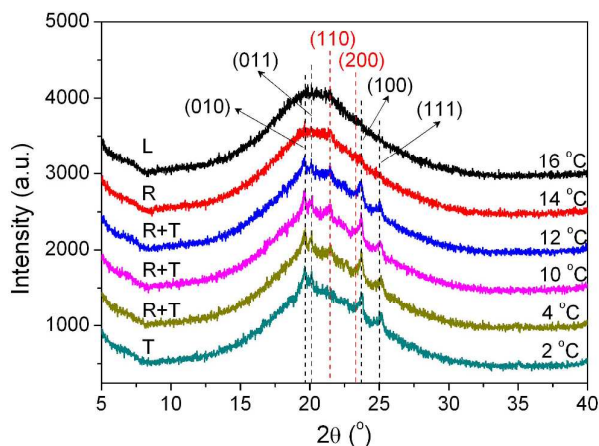


Figure S2. Temperature dependent XRD results of representative NanoPCMs/RPU composite foam during cooling process. T: triclinic crystal phase. L: liquid phase. R: rotator crystal phase. Density of the foam: $\sim 200 \text{ g/cm}^3$. Content of NanoPCMs in the composite foam: 11.22 wt%.

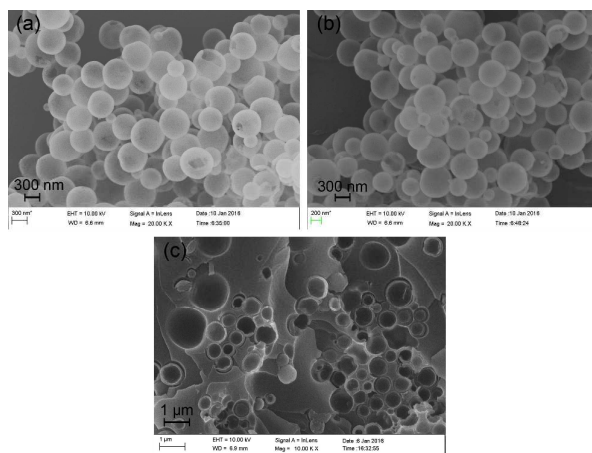


Figure S3. SEM images of the NanoPCMs (a) before and (b) after 50 melting/solidifying cycles and (c) representative NanoPCMs/RPU composite foam after thermal cycles. Density of the foam: $\sim 200 \text{ g/cm}^3$. Content of NanoPCMs in the composite foam: 11.22 wt%.