

SUPPLEMENTARY INFORMATION FILE (SIF)

S1.TGA Measurements of the PS-PEG-PbO and -BN Nanocomposite PCMs

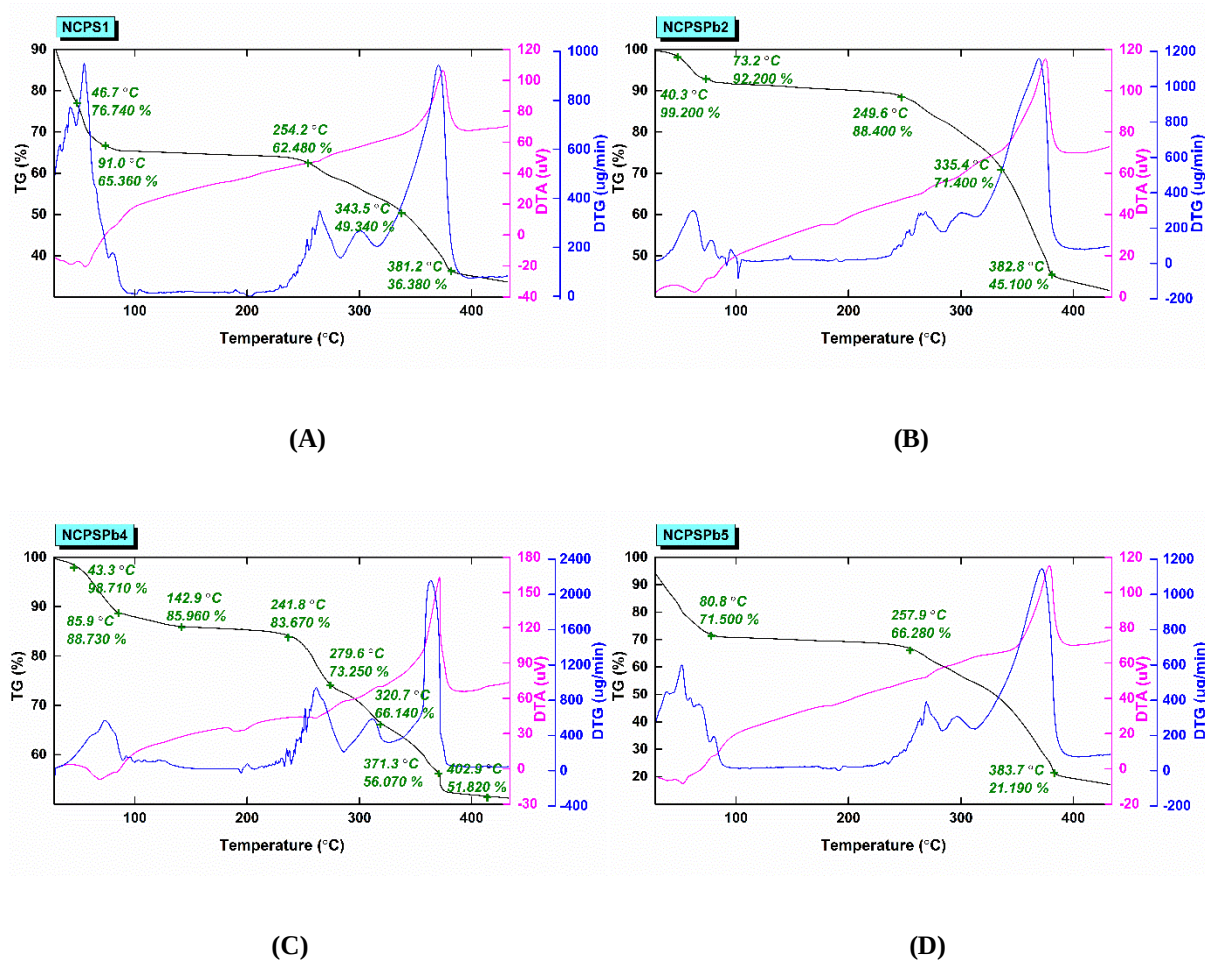


Figure S1. TGA thermograms of the PCM nanocomposites: (A) NCPS1, (B) NCPSPb2, (C) NCPSPb4, (D) NCPSPb5.

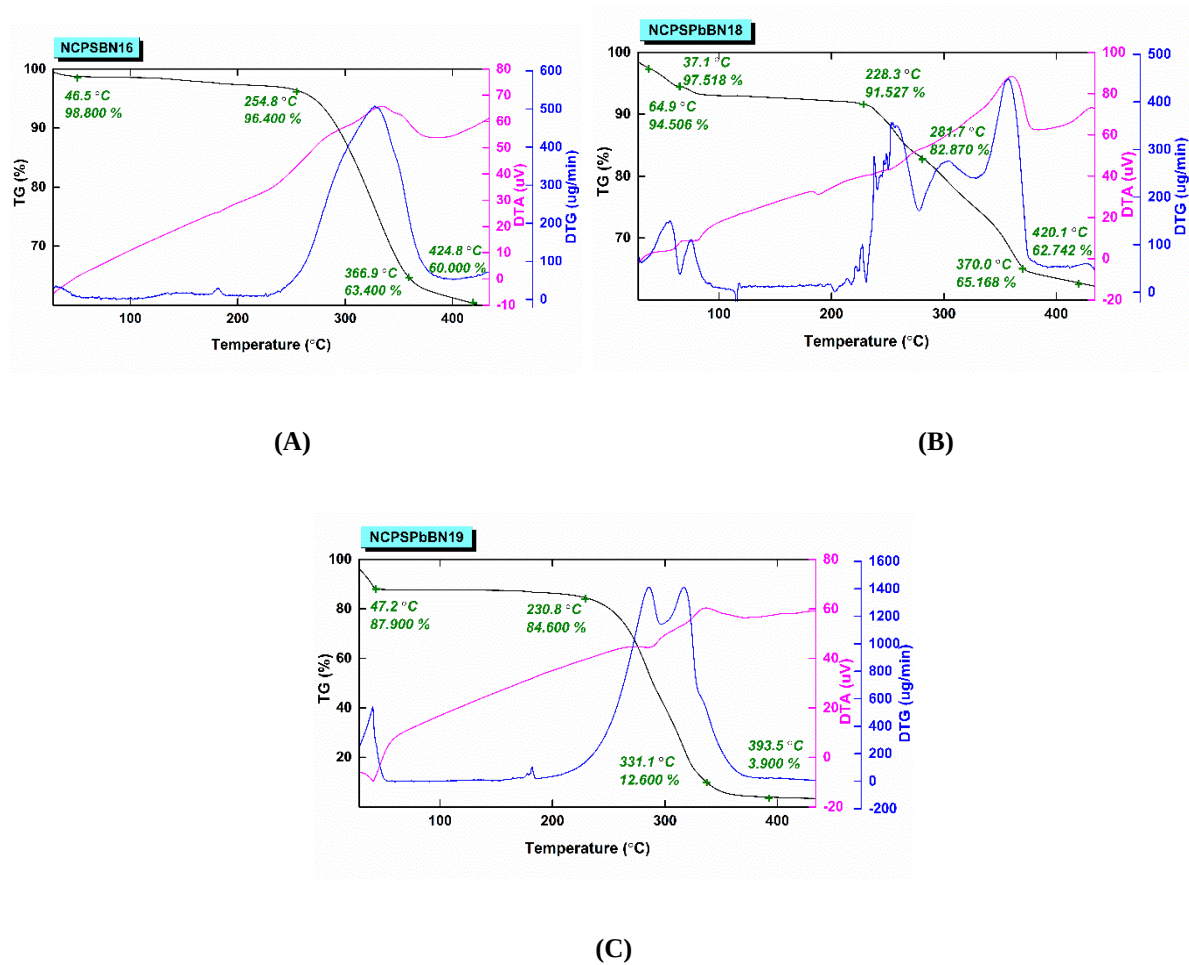
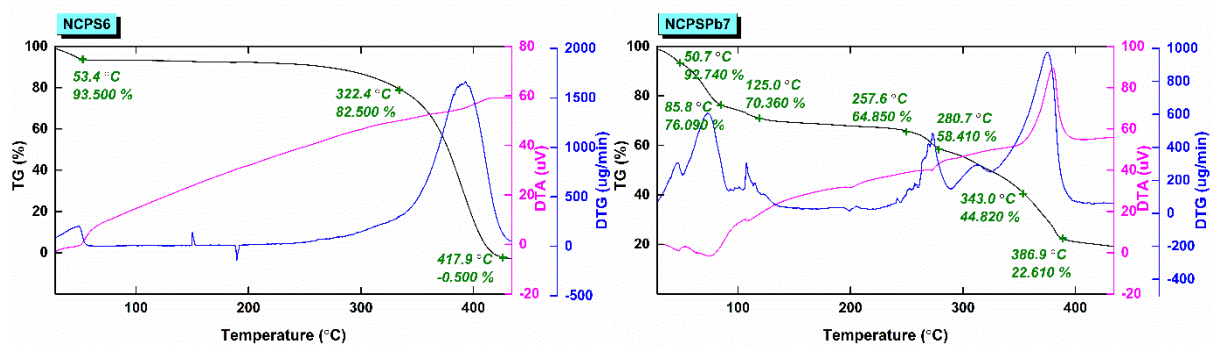
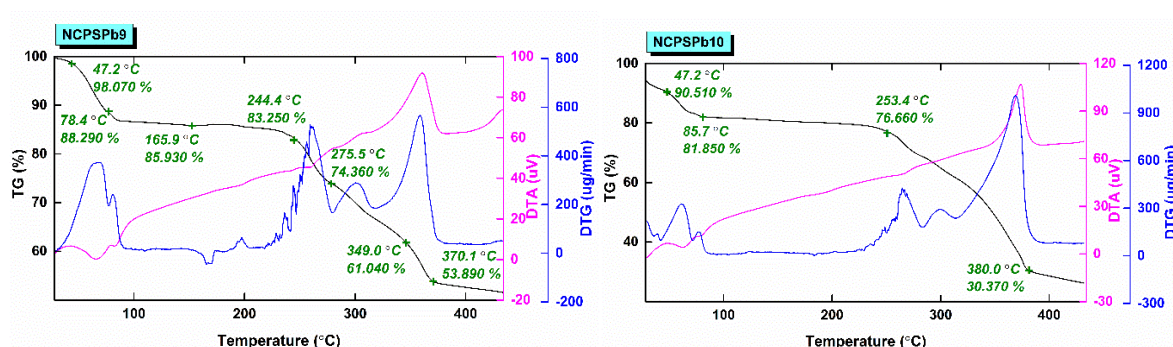


Figure S2. TGA thermograms of the PCM nanocomposites: (A) NCPSBN16, (B) NCPSPbBN18, (C) NCPSPbBN19.



(A)

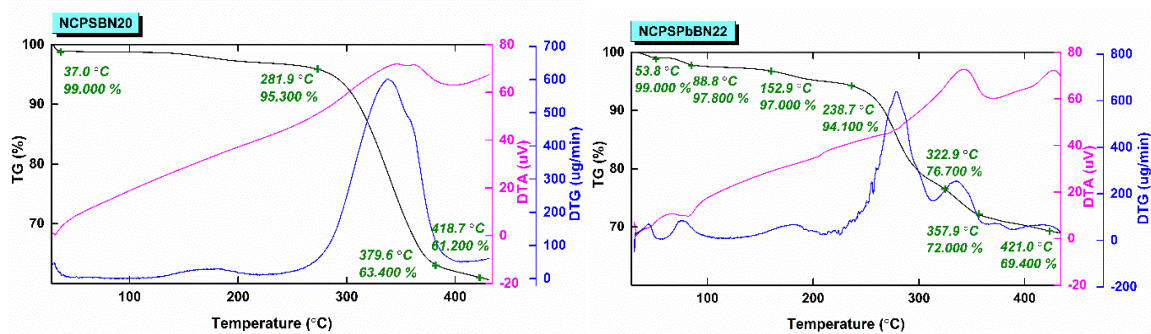
(B)



(C)

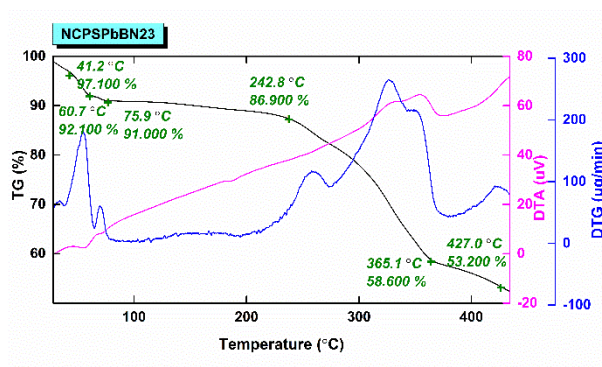
(D)

Figure S3. TGA thermograms of PCM nanocomposites : (A) NCPSP6, (B) NCPSPb7, (C) NCPSPb9, (D) NCPSPb10



(A)

(B)



(C)

Figure S4. TGA thermograms of researched PCMs: (A) NCPsBN20, (B) NCPSPbBN22 (C) NCPSPbBN23.

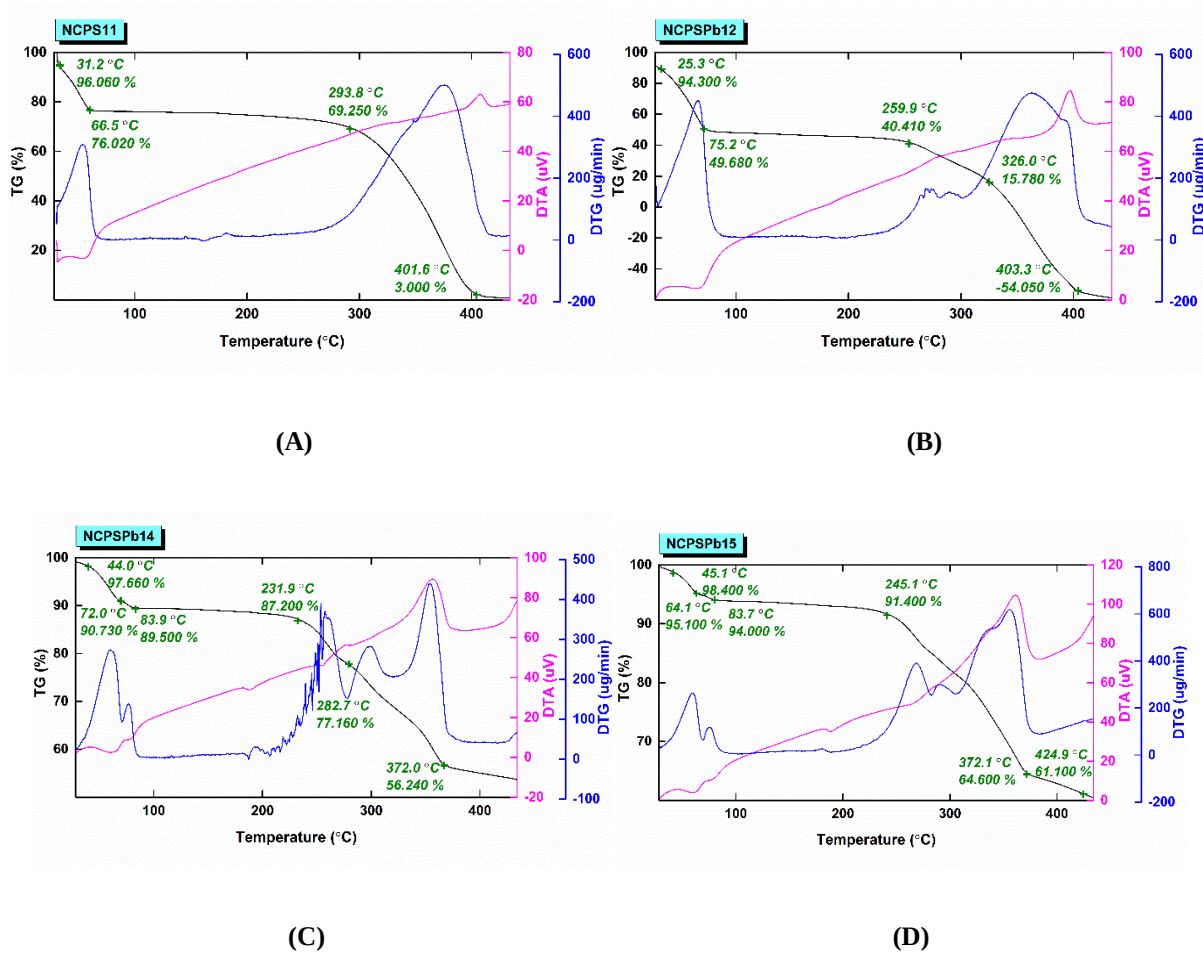
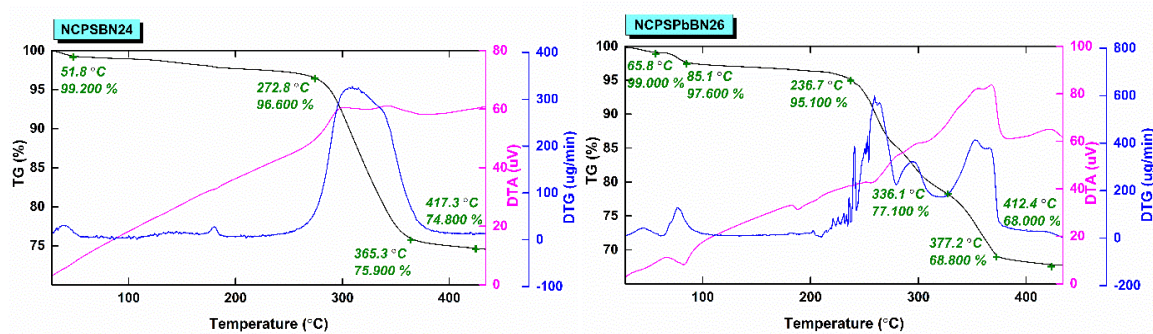
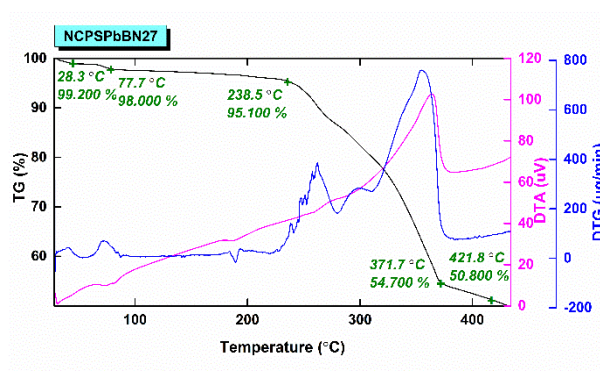


Figure S5. TGAs of researched PCMs: (A) NCPS11, (B) NCPSPb12, (C) NCPSPb14 (D) NCPSPb15.



(A)

(B)



(C)

Figure S6. TGA thermal lines of researched PCMs: (A) NCPsBN24, (B) NCPSPbBN26 (C) NCPSPbBN27.

S2.DSC Results of the PS-PEG/BN/PbO PCM Nanocomposites

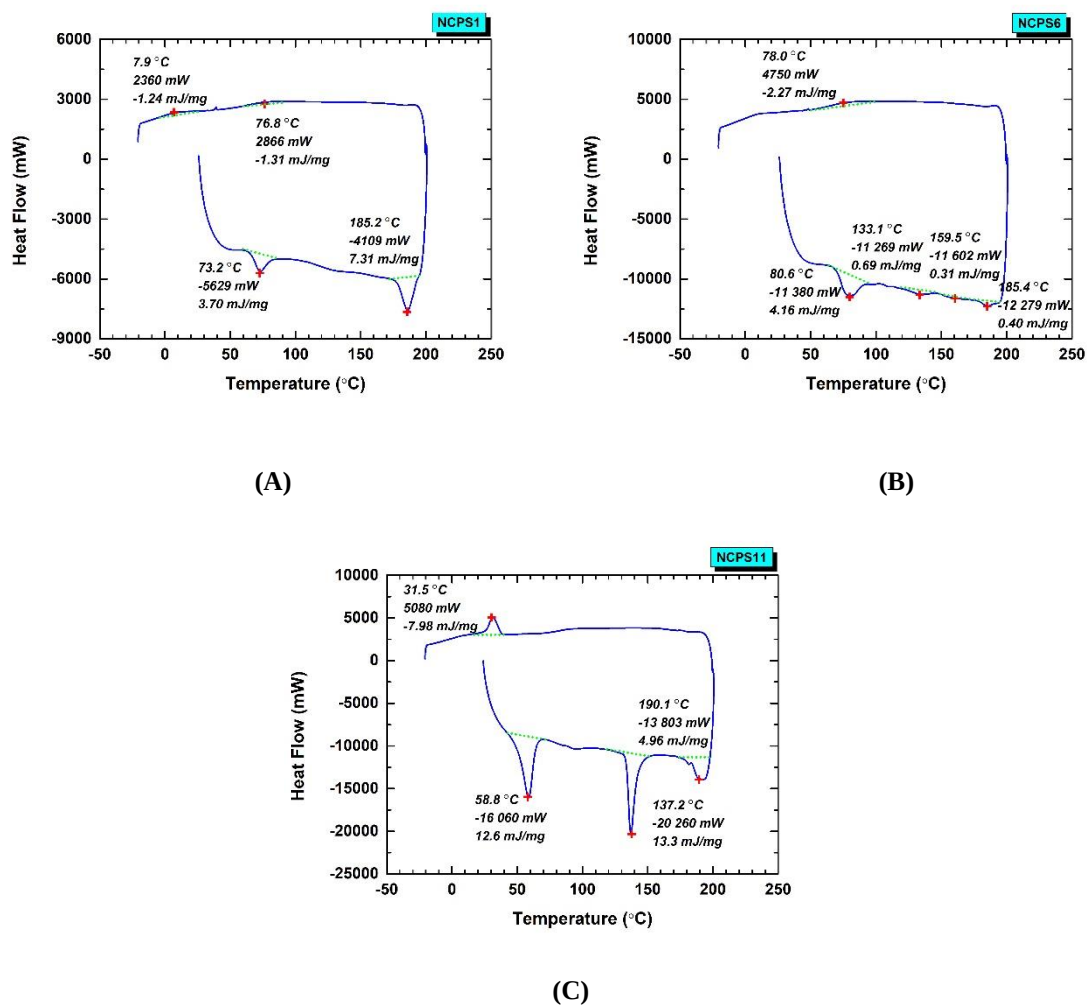


Figure S7. Thermal behavior of PS-PEG PCMs: (A) NCPS1, (B) NCPS6, (C) NCPS11

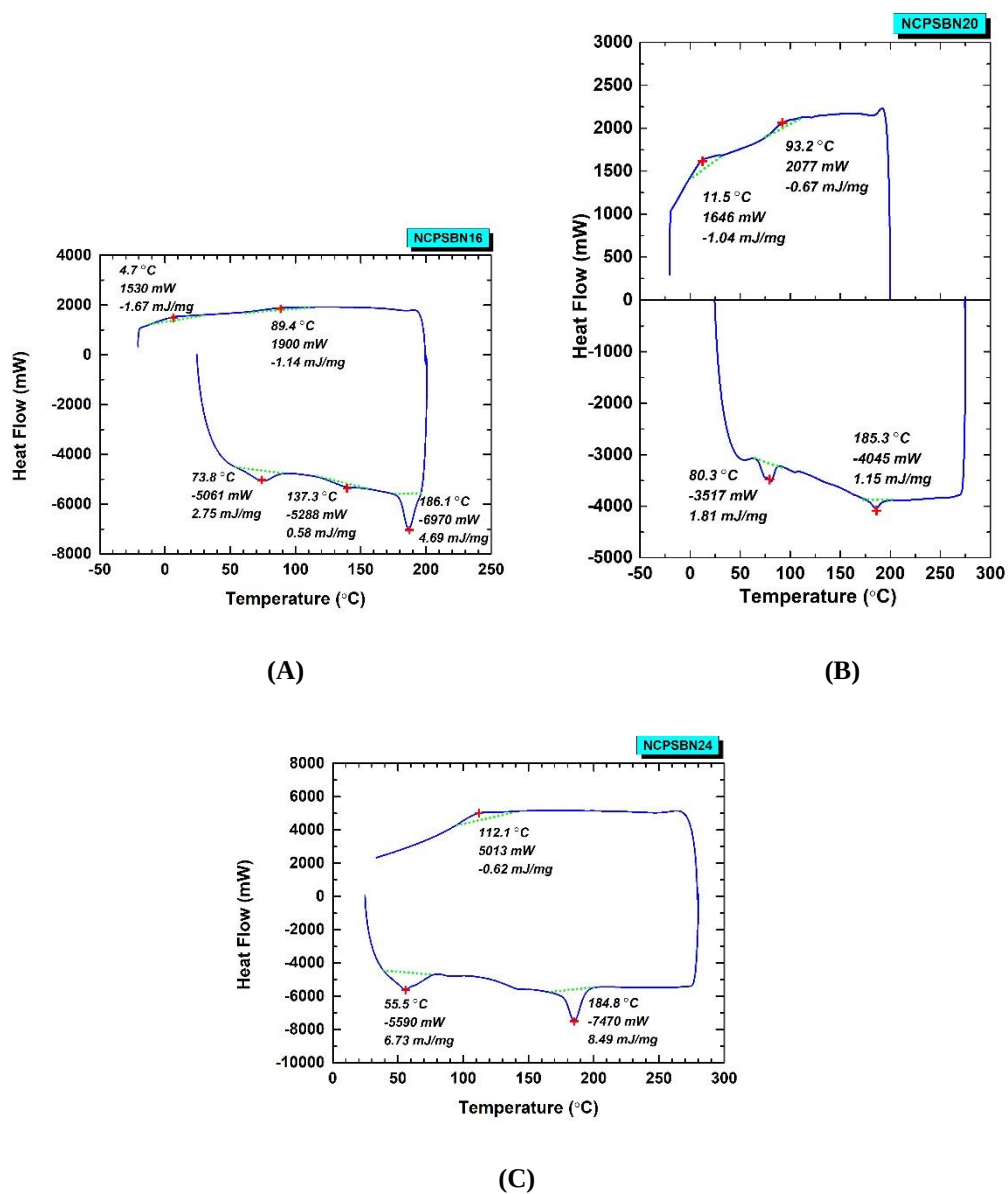
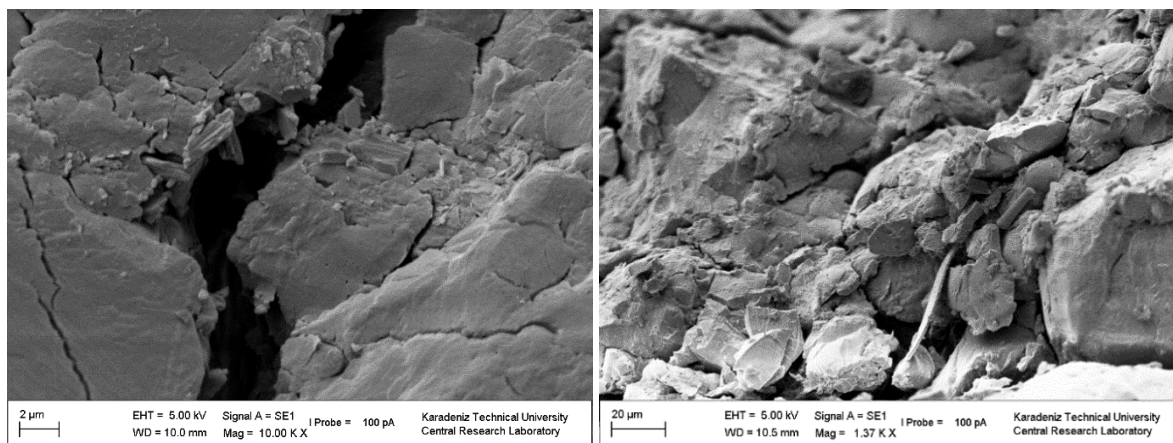


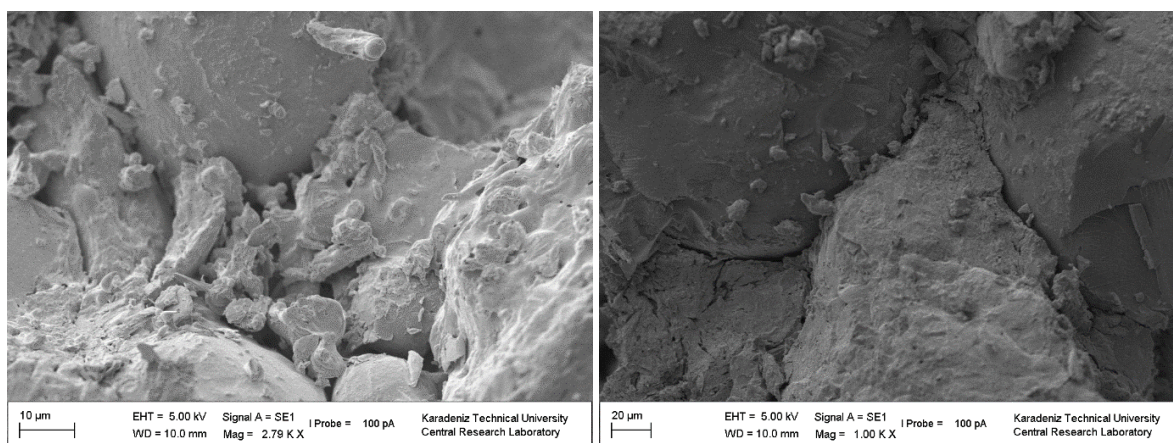
Figure S8. Thermal behavior of PS-PEG PCM Nanocomposites: (A) NCPSBN16, (B) NCPSBN20, (C) NCPSBN24



(A)

(B)

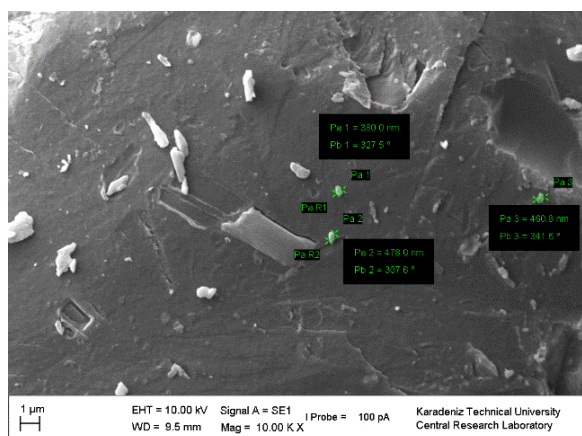
Figure S9. SEM images of the NCPS6



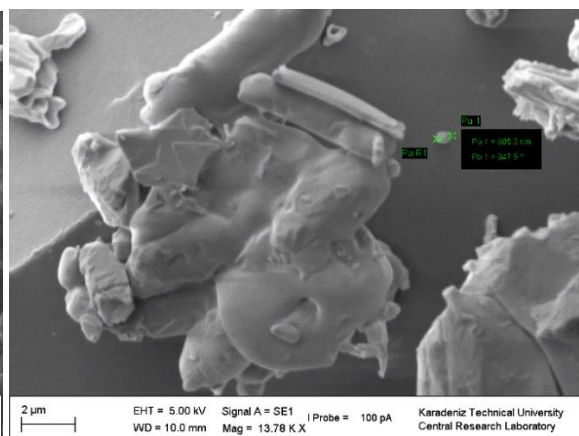
(A)

(B)

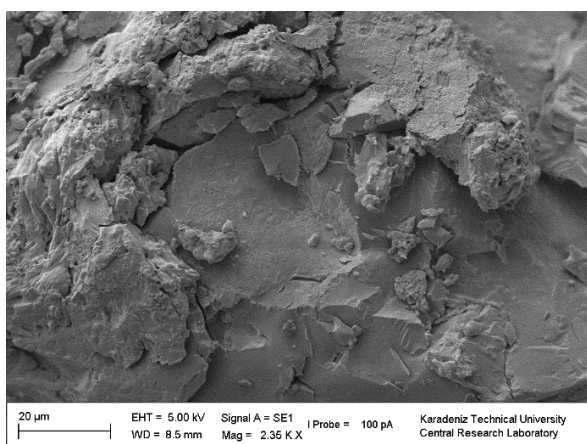
Figure S10. SEM images of the NCPSPb3 (magnified images from 2000 to 20000)



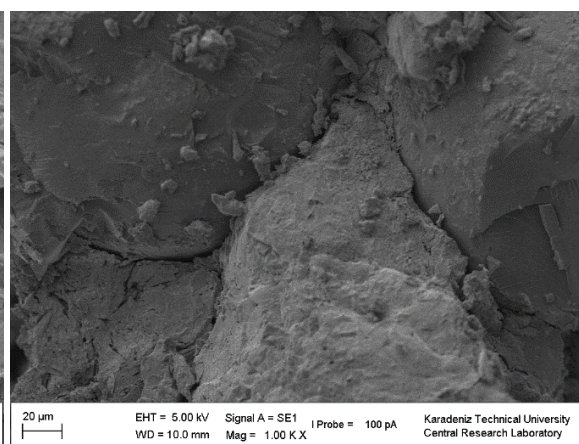
(A)



(B)



(C)



(D)

Figure S11. SEM images of the NCPSPB8

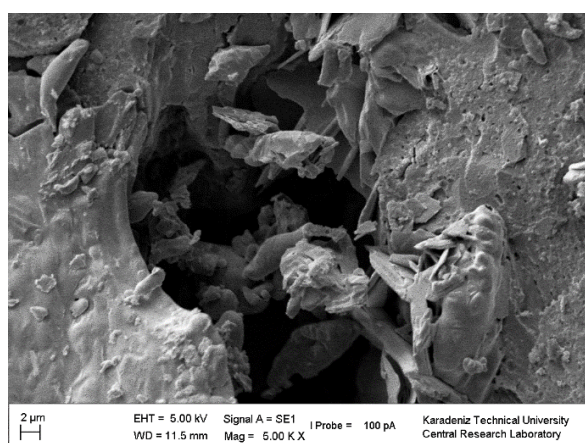
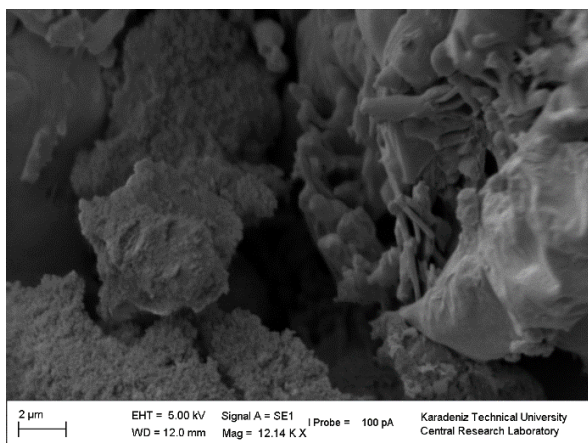
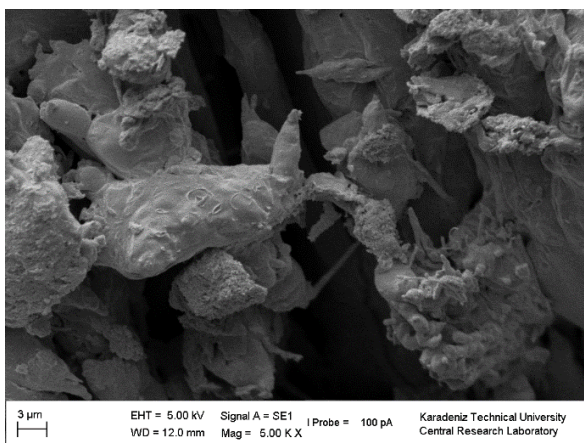


Figure S12. SEM images of the NCPSPb13 (magnified images from 1000 to 5000)

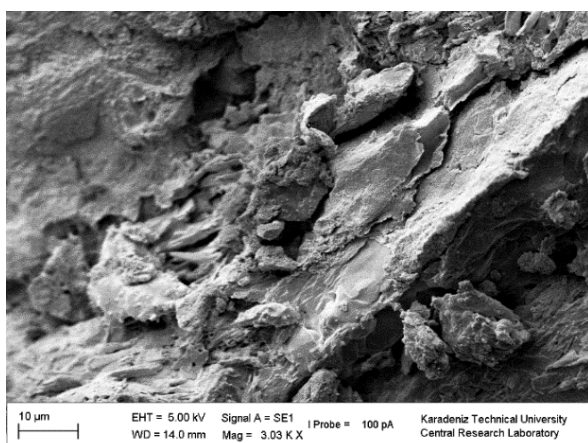


(A)

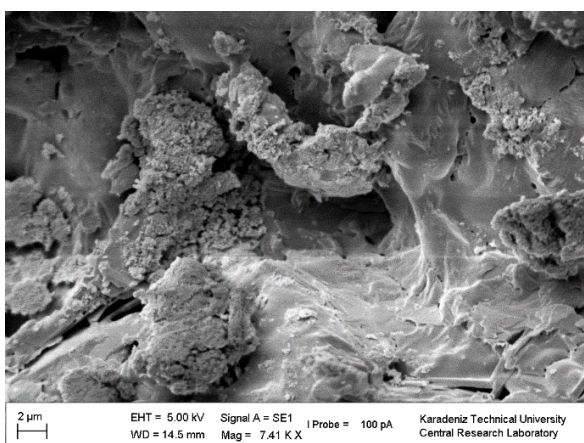


(B)

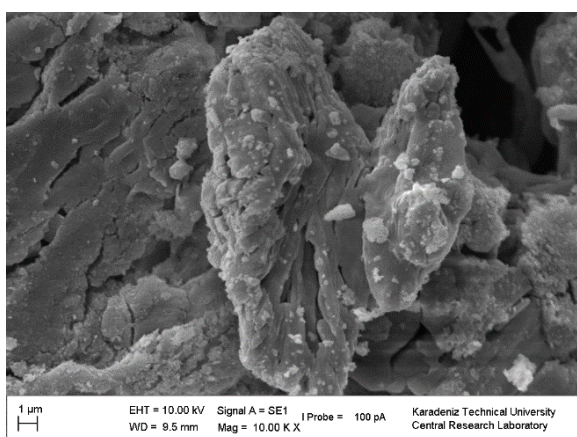
Figure S13. SEM images of the NCPSPBBN17



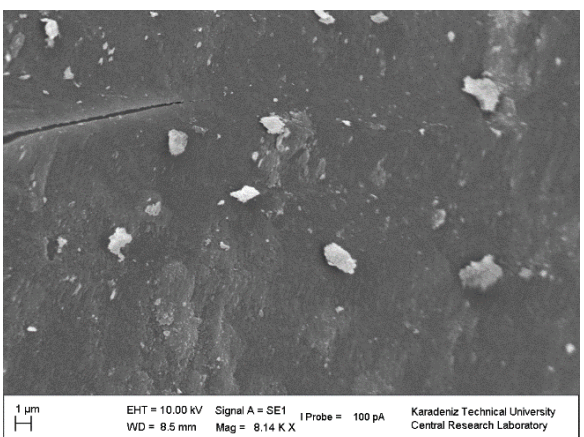
(A)



(B)



(C)



(D)

Figure S14. SEM images of the NCPSPBBN21

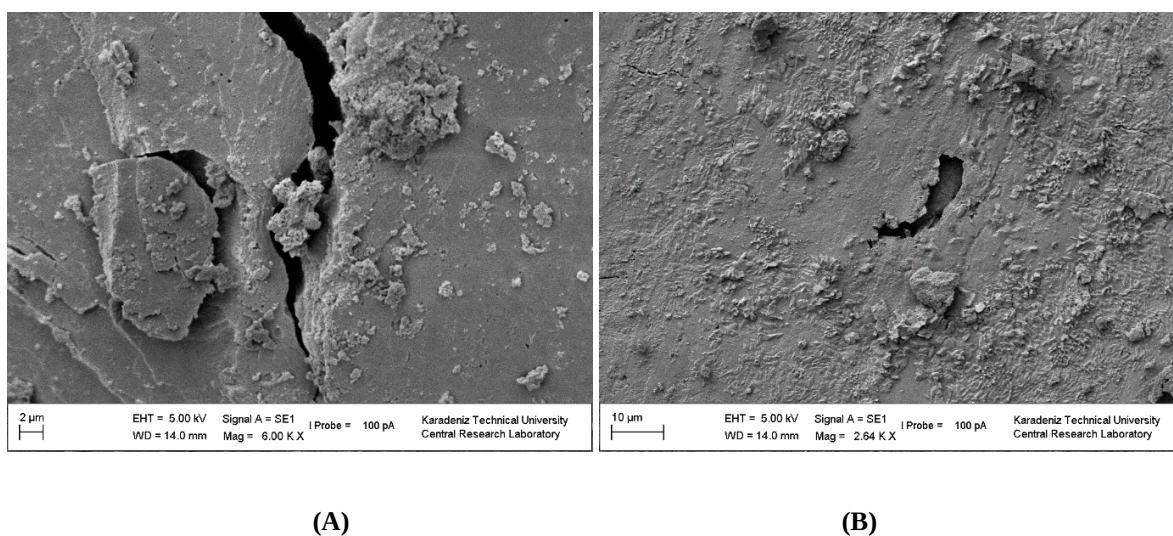


Figure S15. SEM images of the NCPSPbBN25

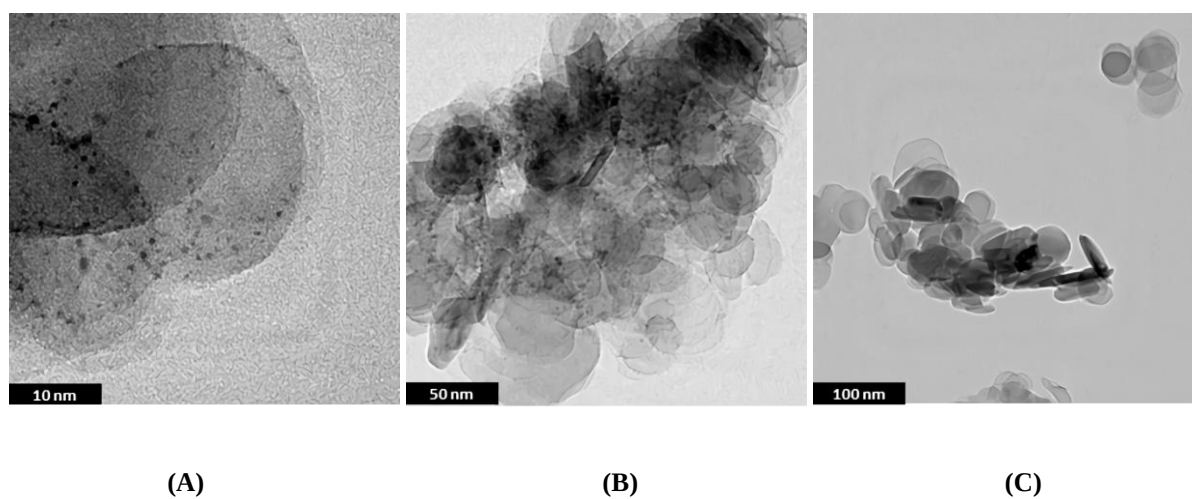


Figure S16. TEM images of NCPSPbBN25

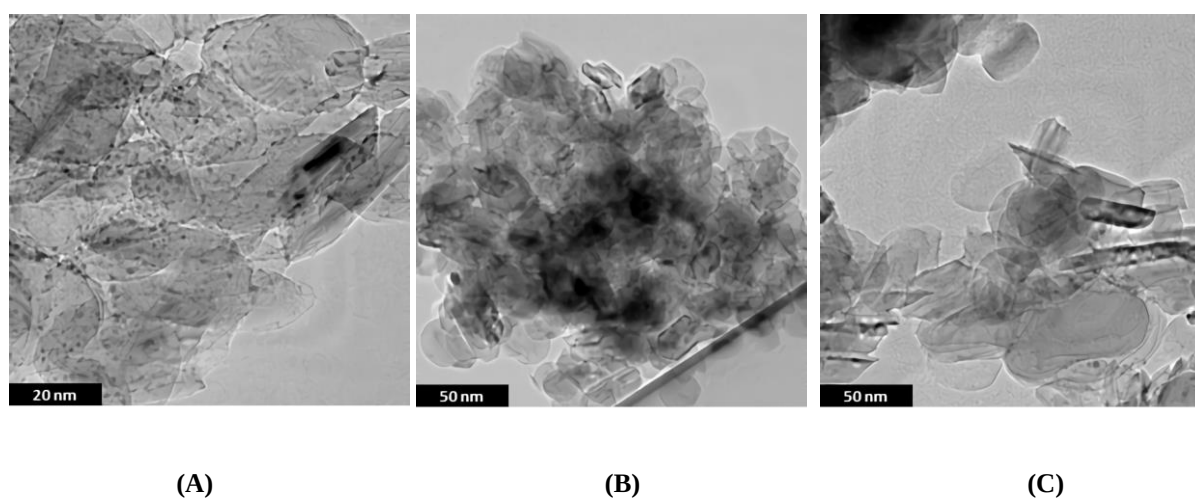
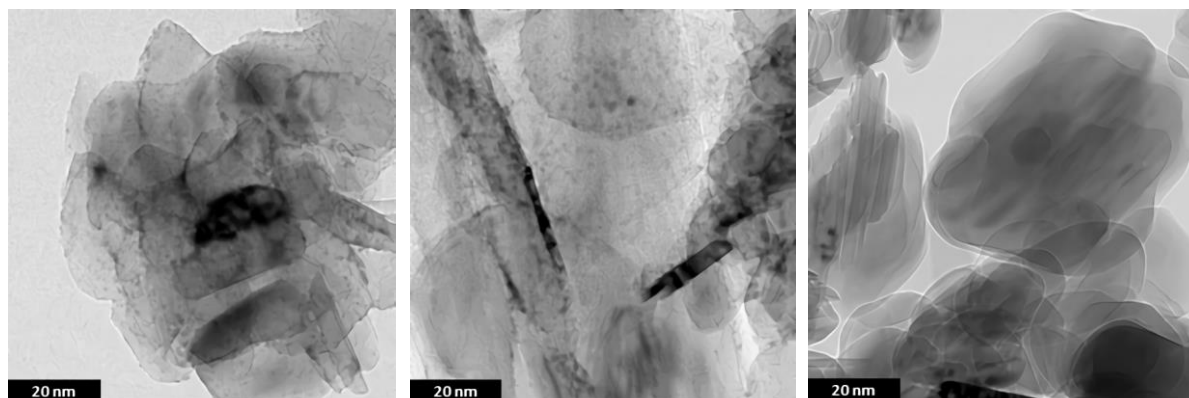


Figure S17. TEM images of NCPSPbBN21



(A)

(B)

(C)

Figure S18. TEM images of NCPSPbBN17