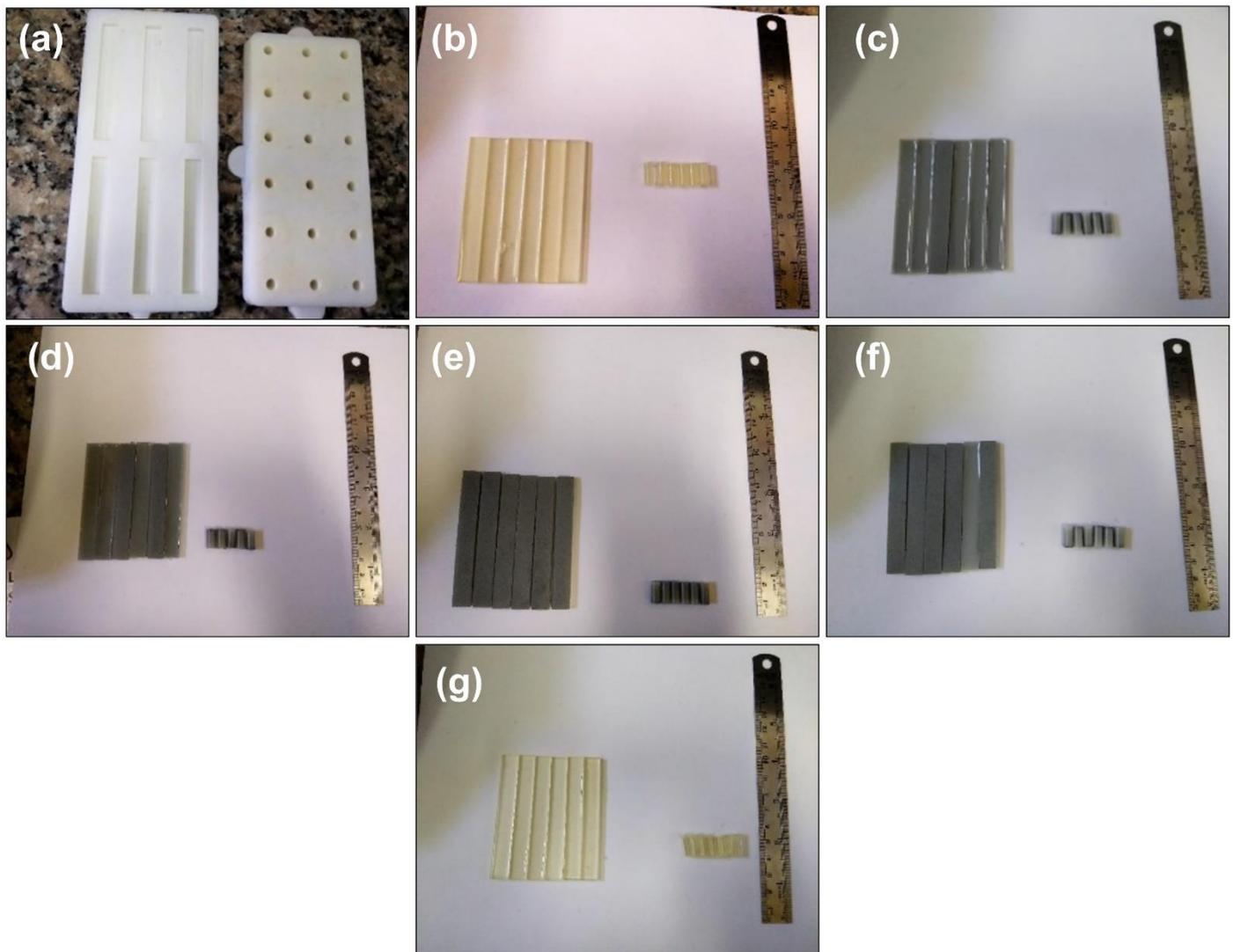
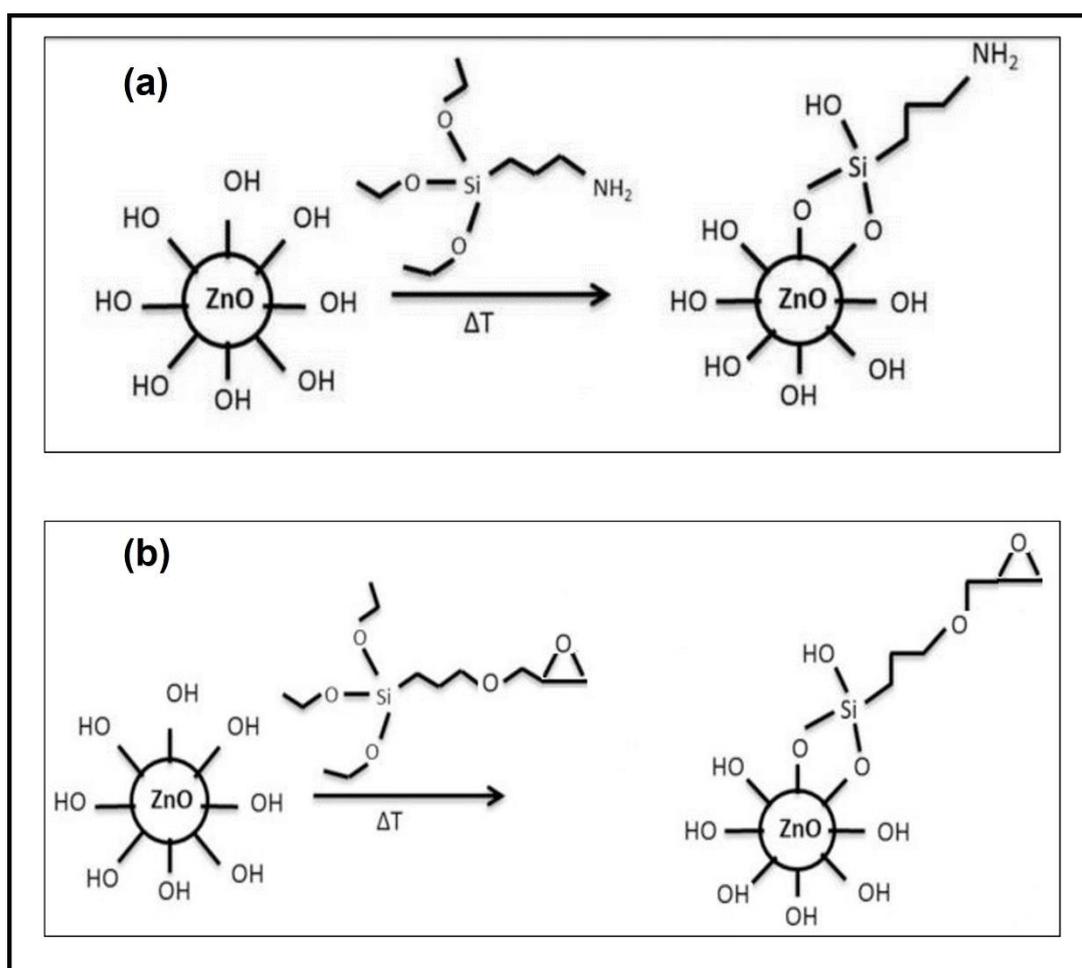


# Supplementary Materials: Hybrid Materials Based on Nanoparticles Functionalized with Alkylsilanes Covalently Anchored to Epoxy Matrices

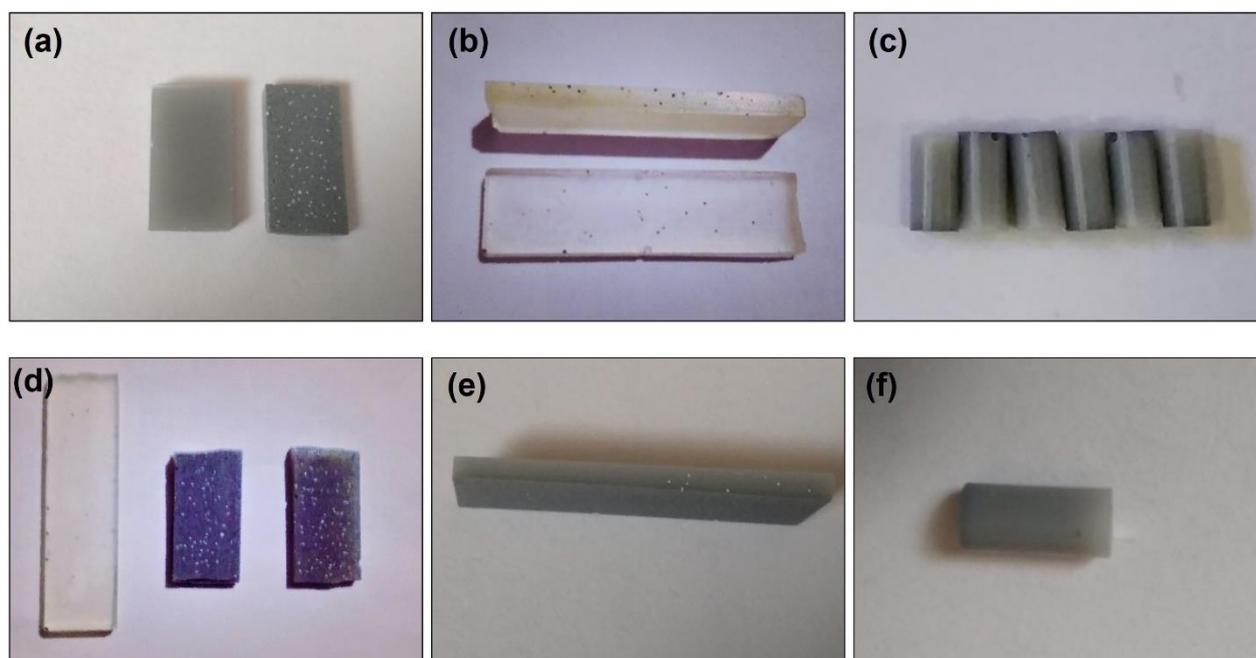
Alexis Salas, Andrés Felipe Jaramillo, Daniel Andrés Palacio, Andrés Díaz-Gómez, David Rojas, Carlos Medina, Eduardo Pérez-Tijerina, Francisco Solís-Pomar and Manuel Francisco Meléndrez



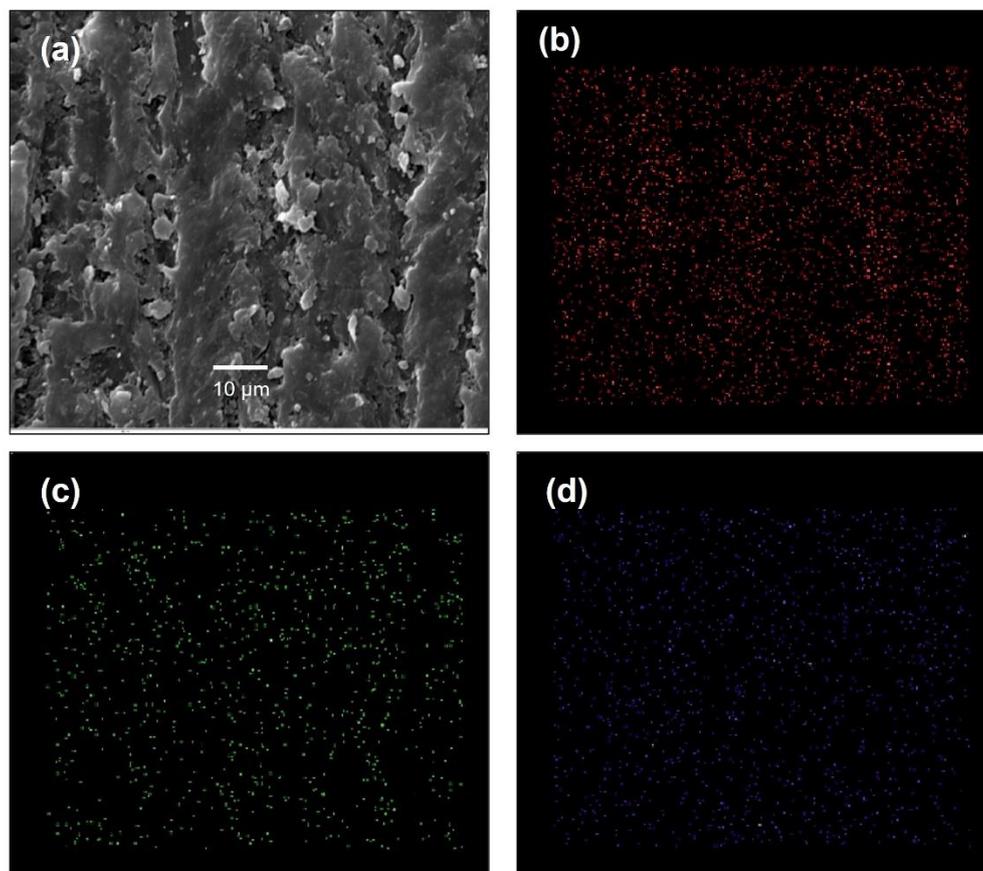
**Figure S1.** (a) Molds for making specimens for bending and compression tests, respectively. (b) Polymer P1 specimens; (c) HMF1 final hybrid material specimens; (d) NCM1 nanocomposite material specimens; (e) Polymer P2 specimens; (f) HMF2 final hybrid material specimens; (g) NCM2 nanocomposite material specimens.



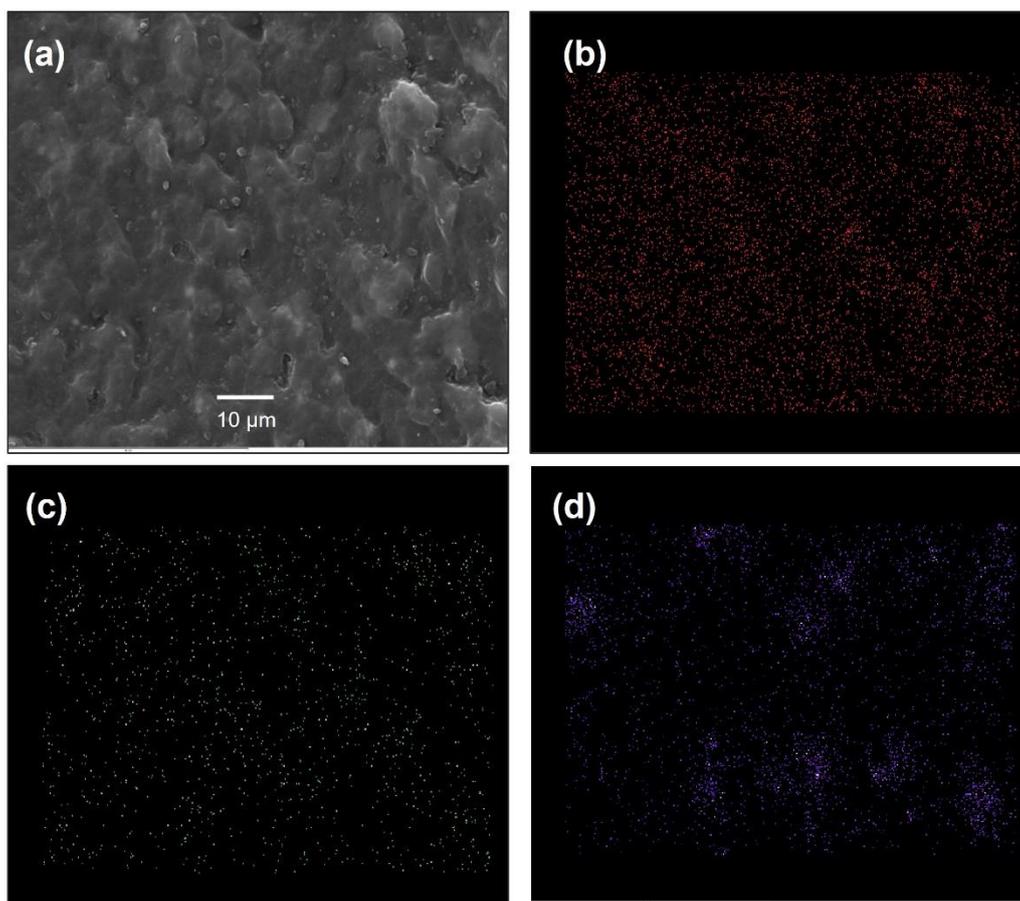
**Figure S2.** (a) Functionalization scheme proposed by Jaramillo et al. [37] and (b) proposed functionalization scheme with GPTMS.



**Figure S3.** (a) Inhomogeneity of the ZnO-NP within the matrix (NCM1); (b) Surface defects of the specimen and small difference in thickness in specimen (P1), (c) Final hybrid material compression specimens MHF1, (d) Surface defects of the specimen (P2 and NCM2); (e) Differences in thickness in the specimen (MHF2), (f) Inhomogeneity of the ZnO-NP-funct-GPTMS within the matrix (HM2-G).



**Figure S4.** (a) SEM-mapping analysis micrograph for final hybrid material HMF1, (b) Carbon element; (c) Oxygen element; (d) Zinc element.



**Figure S5.** (a) SEM-mapping analysis micrograph for final hybrid material HMF2, (b) Carbon element; (c) Oxygen element; (d) Zinc element.