Supplementary Information (SI) for RSC Applied Polymers.

Material Extrusion Additive Manufacturing of Wood Pulp-Reinforced Epoxy Composites

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SUPPORTING INFORMATION

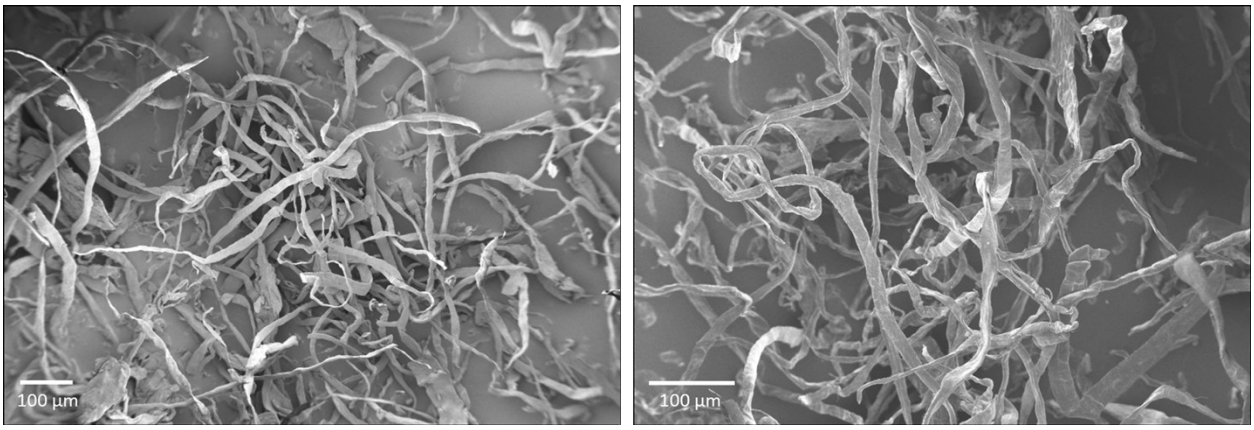

Figure S1. SEM images of the wood pulp filler.

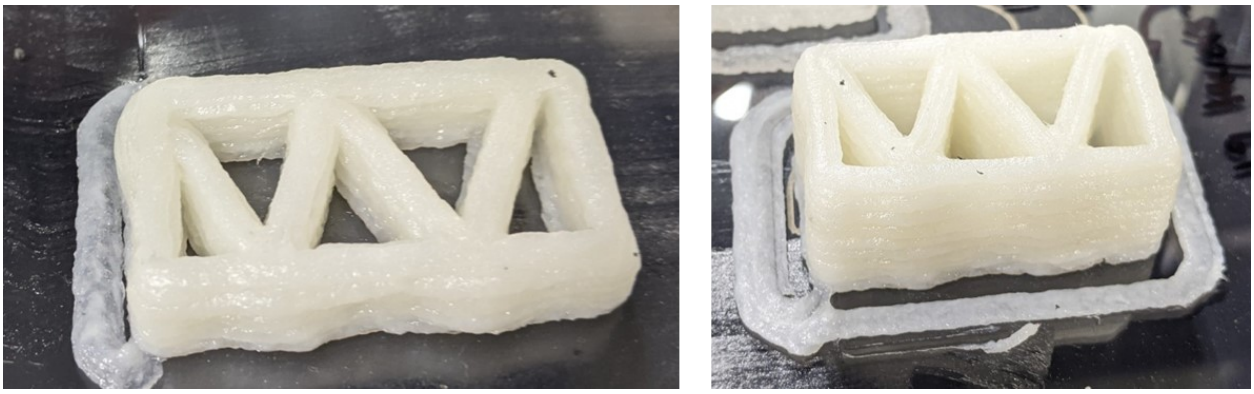

Figure S2. Small scale prints, about 30 x 10 centimeters in size, using to determine the printability and homogeneity of the composite mixture.

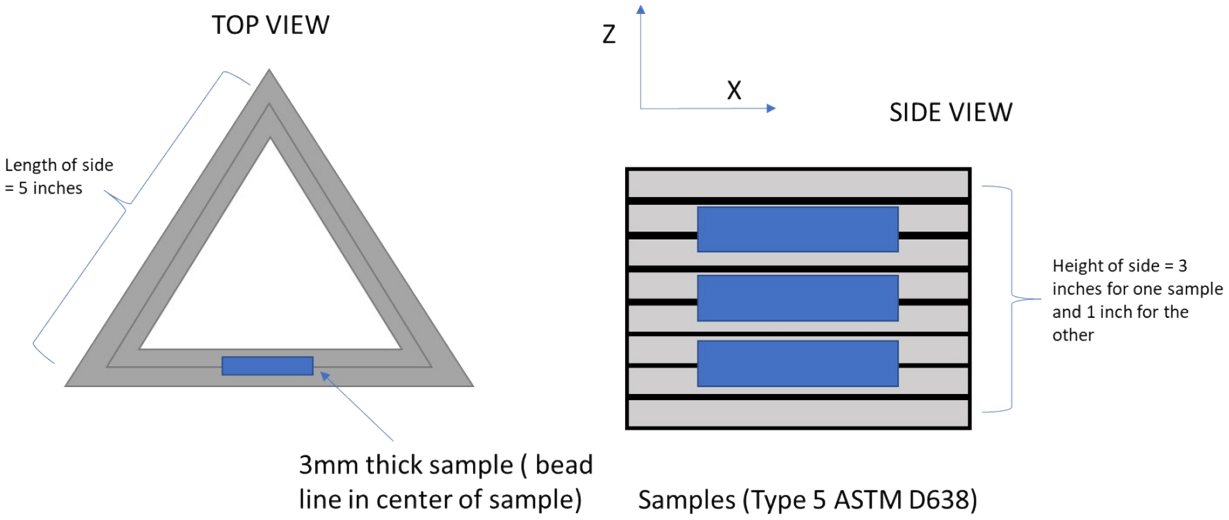

Figure S3. Top and side views of the printed triangle, noting printing direction and location of milled out specimen.

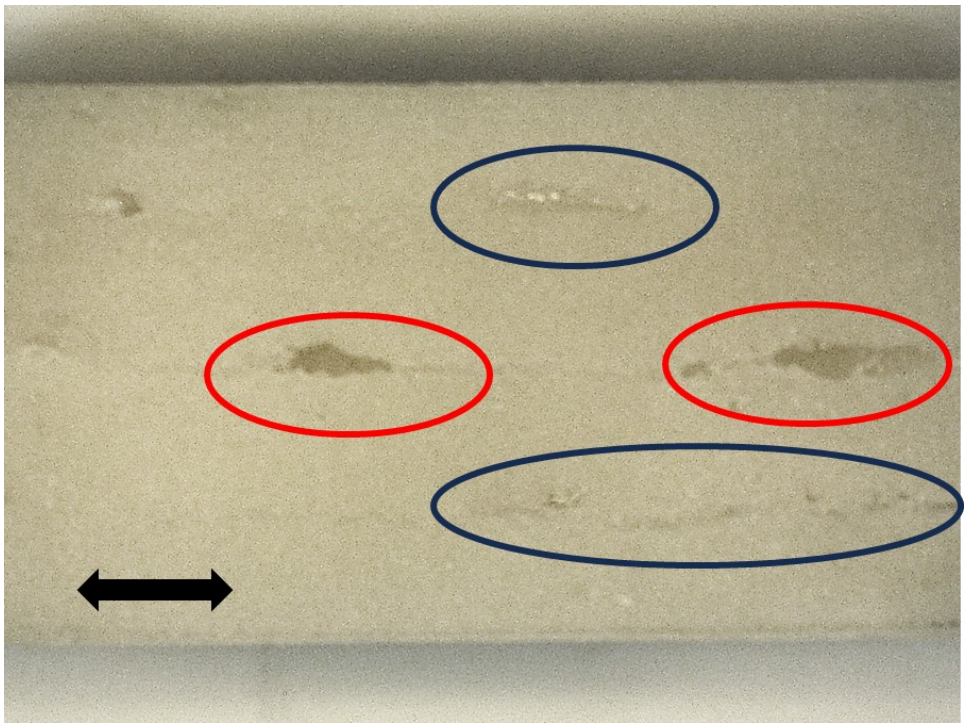

Figure S4. Microscopy image of the epoxy resin featuring 8 wt.% wood pulp and 5 wt.% nanoclay. Red circles show voids in the sample from printing while black circles show wood pulp aligned along the print direction. The print direction is shown with the black arrow.

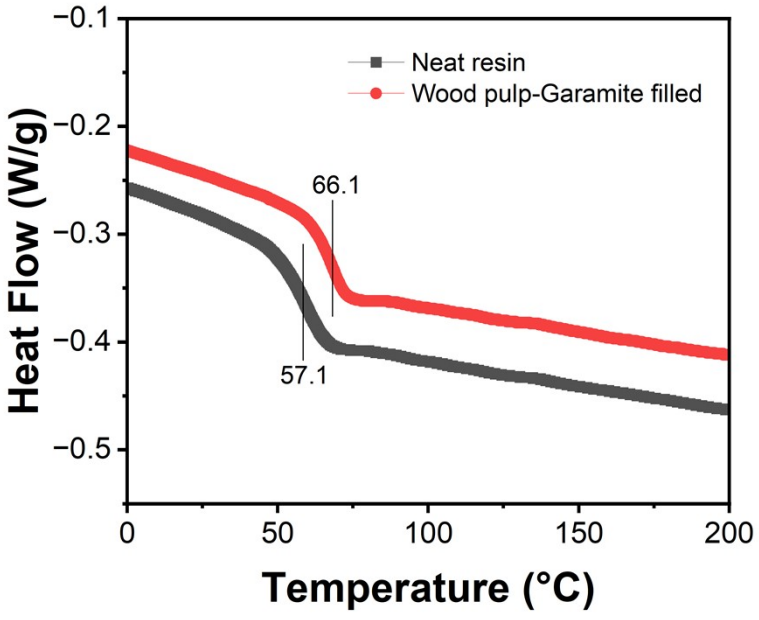

Figure S5. DSC spectra of the neat resin and wood pulp and nanoclay (Garamite)- filled resin with the glass transition temperature (T_g) indicated for each.

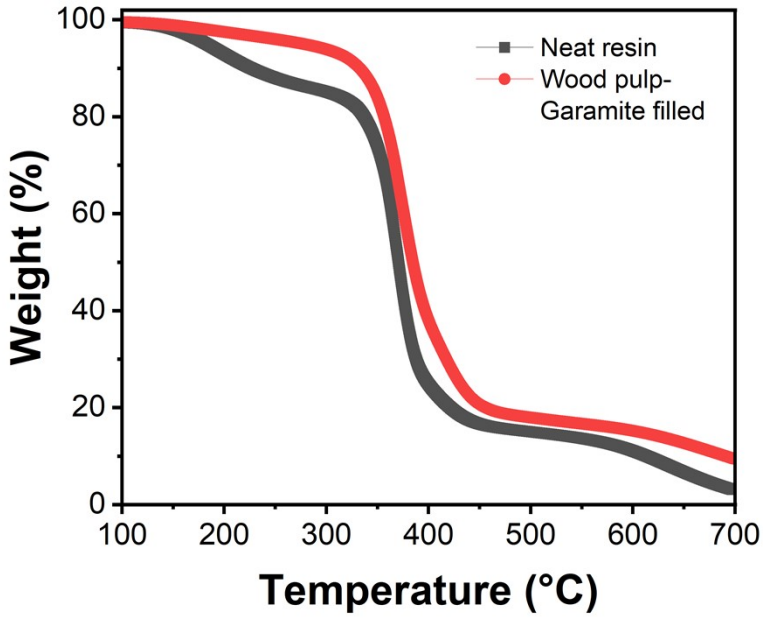

Figure S6. TGA spectra of the neat resin and wood pulp and Garamite filled resin.

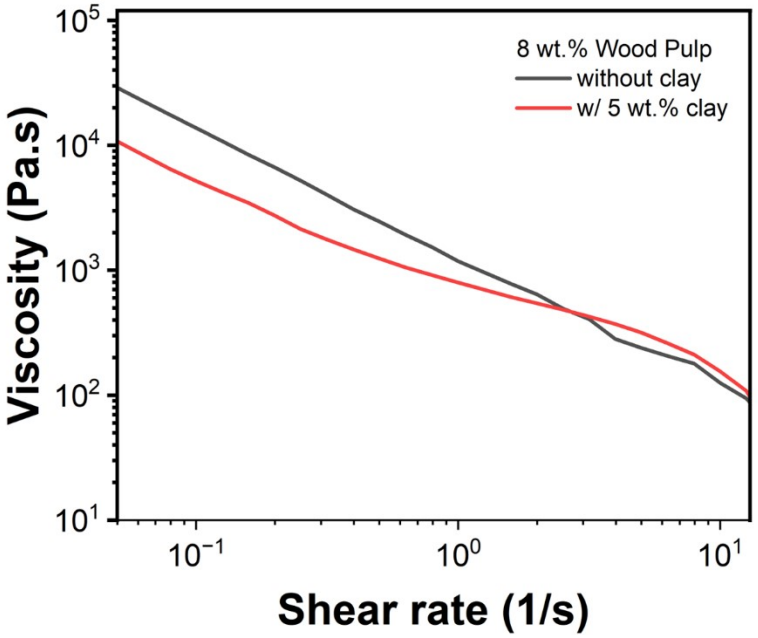

Figure S7. Flow studies on the composite featuring 8 wt.% wood pulp with and without 5 wt.% clay.

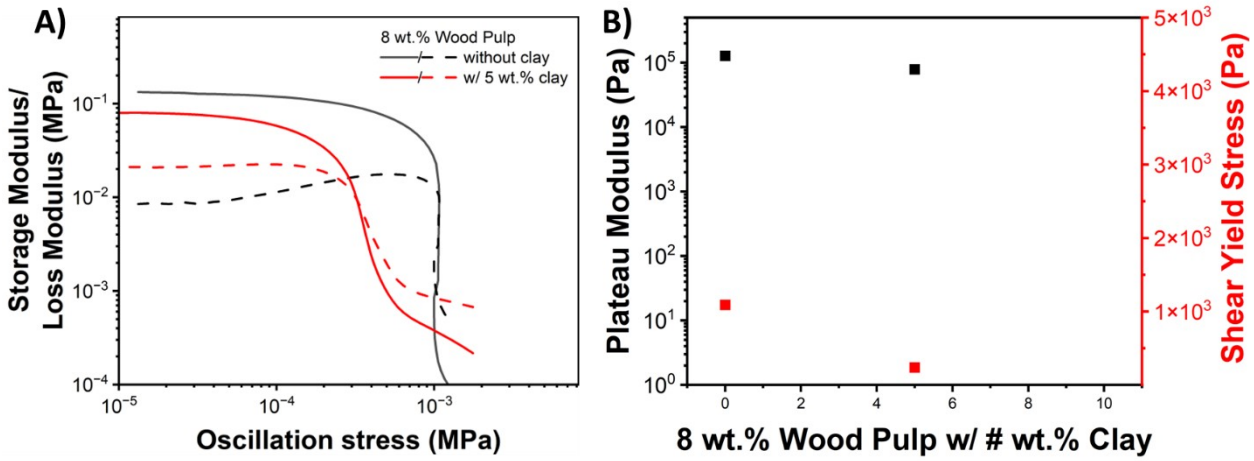

Figure S8. Rheological studies including A) stress sweep and B) plateau modulus and shear yield stress on the epoxy composite featuring 8 wt.% wood pulp with and without 5 wt.% clay.