

## Supplementary Materials

### Waste to value-added product: Developing electrically conductive nanocomposites using a non-recyclable plastic waste containing vulcanized rubber

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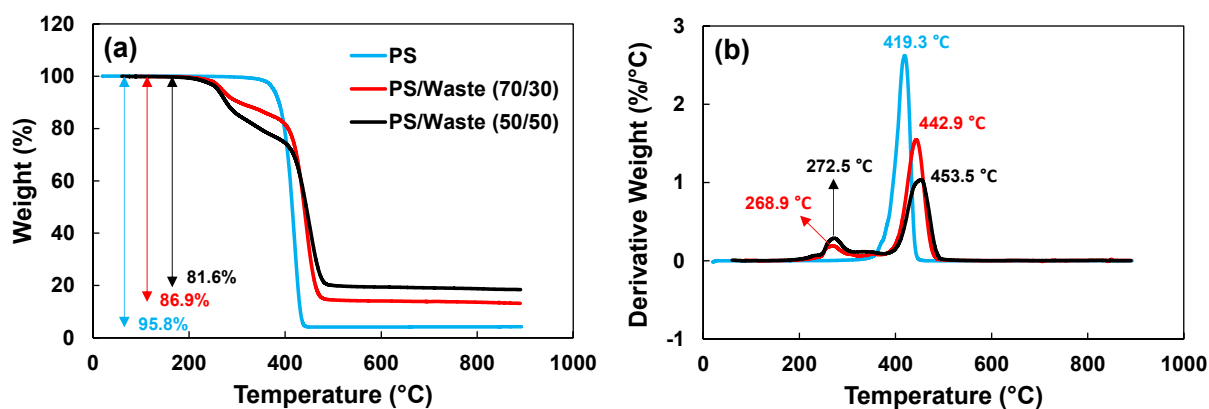


Figure S1: Thermogravimetric analysis (TGA) of PS and PS/Waste composites under nitrogen gas flow and temperature ramp of 20 °C/min from room temperature to 900 °C, (a) weight loss percentage, and (b) derivative of weight loss over temperature.

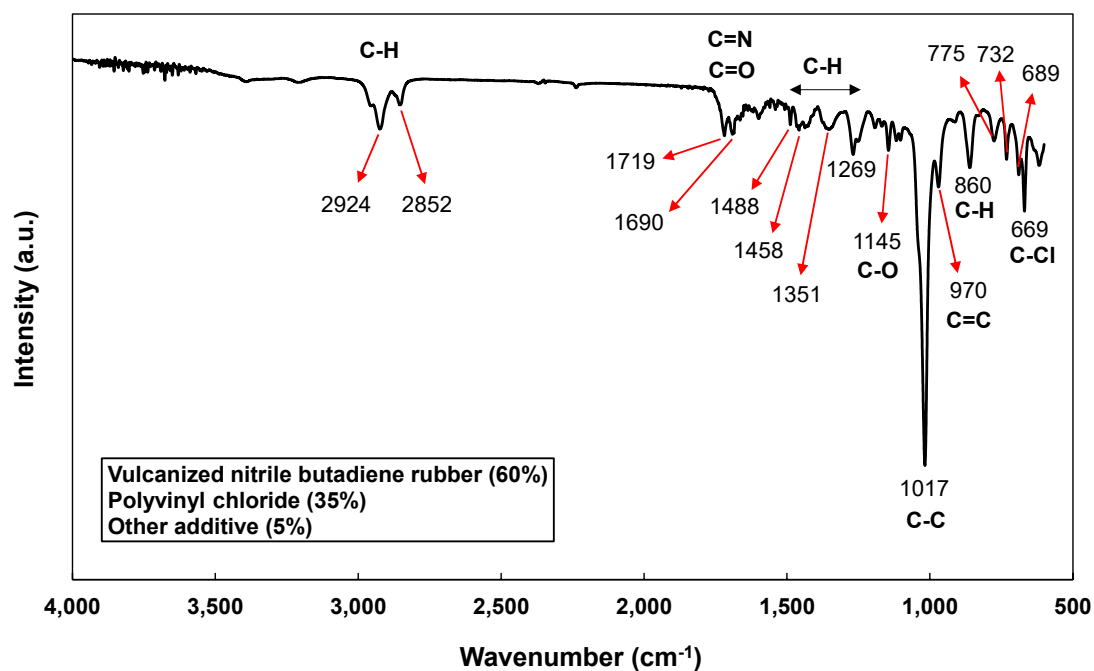


Figure S2: Fourier transform infrared (FTIR) spectrum of the plastic waste material.

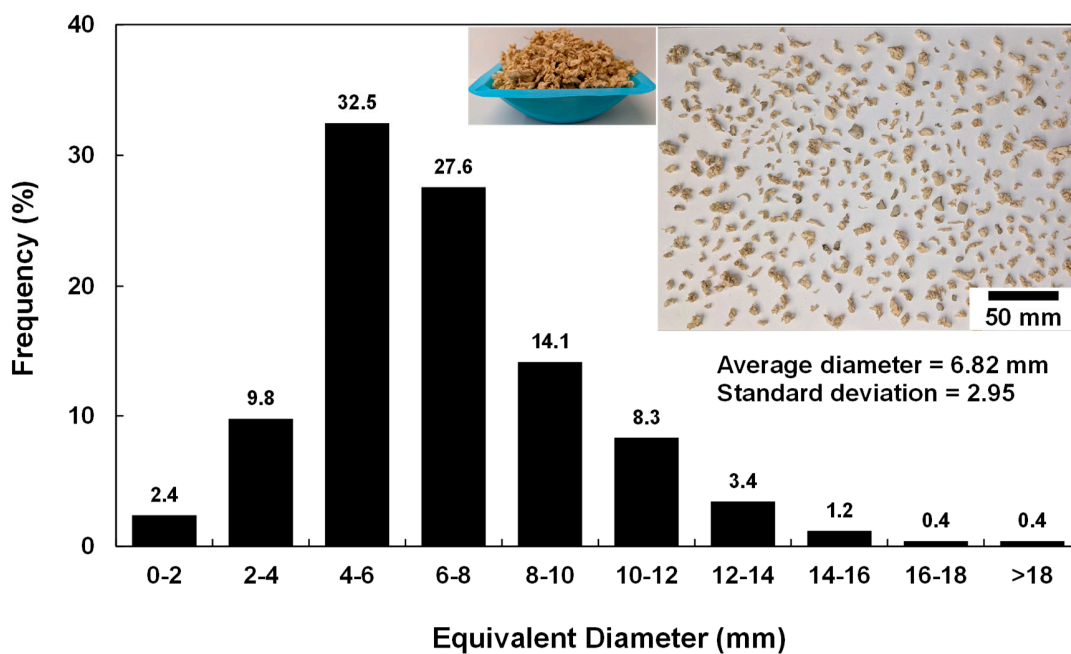


Figure S3: Particle size distribution of the plastic waste material. ImageJ software package is used to perform image analysis.