**Supporting information for: BIJP-2022-043 R1**

**Non-conventional, Burnt *Shorea robusta* Leaf Extract Mediated Green Synthesis of Zinc Oxide Nanoparticles and Facile Removal of Eriochrome Black T dye from water**

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TGA and DTA analysis

The thermal stability of the synthesized ZnO NP was estimated. The obtained TGA curve is depicted in Fig S1 .It is seen in the figure that a minimal weight loss is obtained of 1.06% upto 350 °C which may be due to the loss of unrestrained volatile matter and associated water on the material. The second stage between 350-600 °C involves a weight loss of approx 2.50 % which may be due to restrained volatile product. Above 600 °C there is slight weight loss noticed till 800 °C. A total 3.65% weight loss is obtained when the sample was heated upto 800 °C. This reveals that the synthesized ZnO NP is thermally stable at elevated temperature.

tga dta zno.tif

Fig S1. (a) TGA curve for synthesized ZnO NP (b) DTA curve of ZnO