**Supplementary Information** 

## Sustainable robust waste recycled ocean water resistant fly ash-carbon nanotubes nanocomposite based triboelectric nanogenerator

Ashish Kumar Chaturvedi, Simadri Badatya, Asokan Pappu, Avanish Kumar Srivastava, Manoj KumarGupta\*

Green Engineered Materials and Additive Manufacturing Division, CSIR-Advanced Materials and Processes Research Institute, Bhopal, Madhya Pradesh 462042, India

<sup>b</sup>Academy of Scientific and Innovative Research (AcSIR), Ghaziabad, Uttar Pradesh-201002, India

\*E-mail: mkgupta@ampri.res.in , manojampri@gmail.com

## WD-XRF Result of Fly ash waste

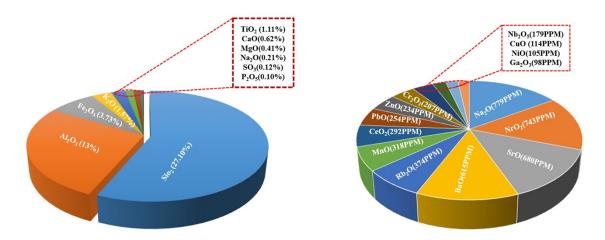


Figure S1: WD-XRF result of the fly ash waste

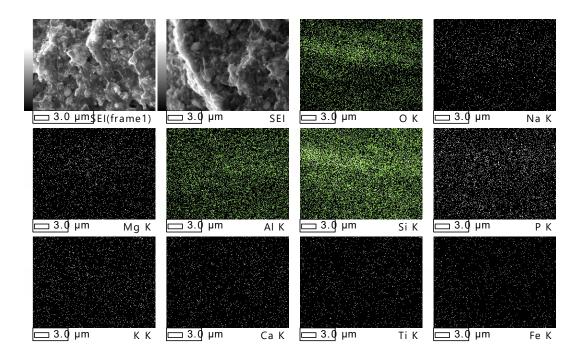


Figure S2: Elemental mapping of the CNT reinforced fly ash epoxy composites

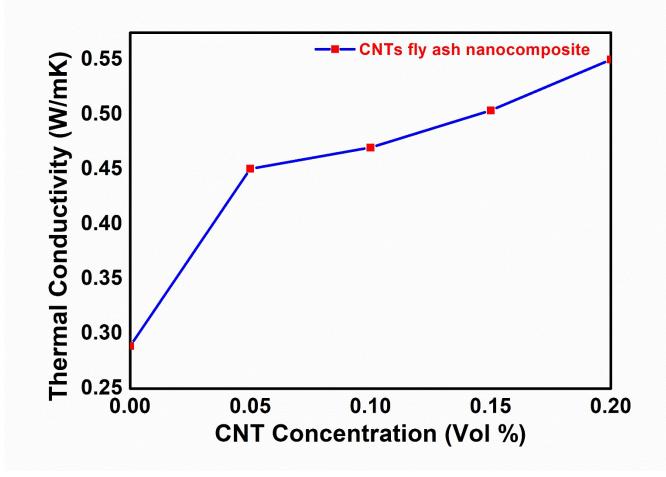


Figure S3: Thermal Conductivity of the CNT reinforced fly ash nanocomposites

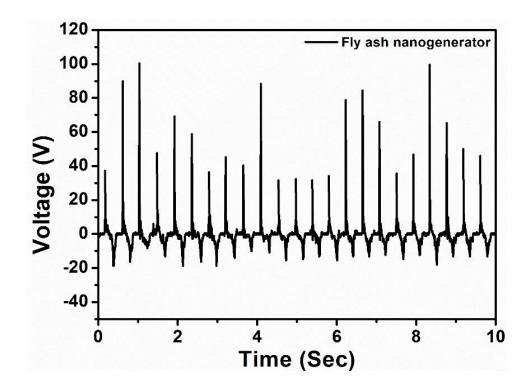


Figure S4. Output voltage from pristine fly ash based RTNG

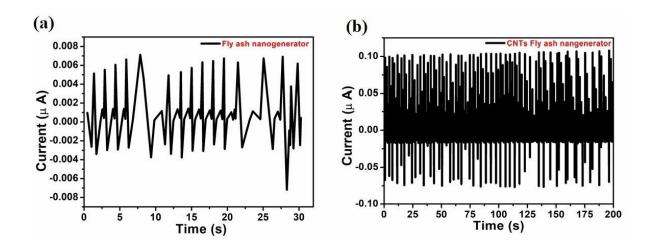


Figure S5. Output current from (a) pristine and (b) CNT reinforced fly ash based RTNG device.

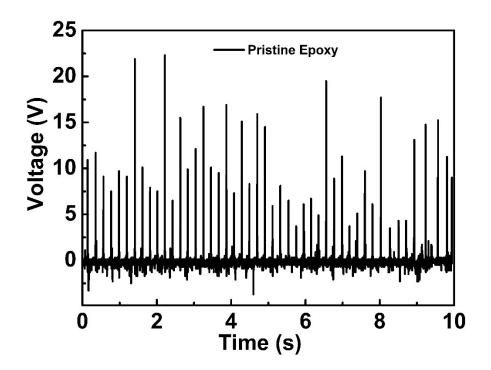
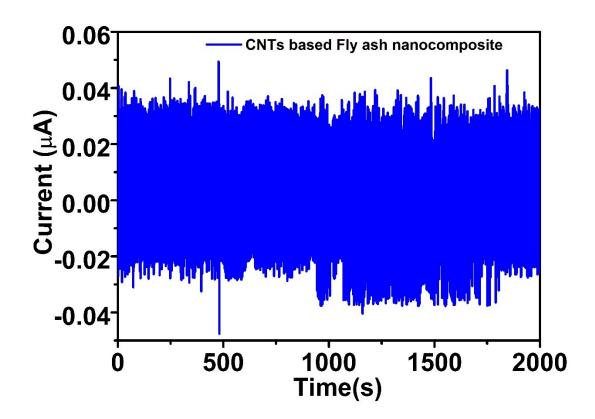
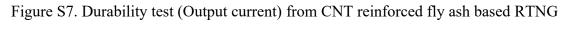


Figure S6. Output voltage from pristine epoxy based TENG





device.