

Electronics Supporting Information

ESI-I. TGA Thermogram of the Boganvel (*Bougainvillea*) flower.

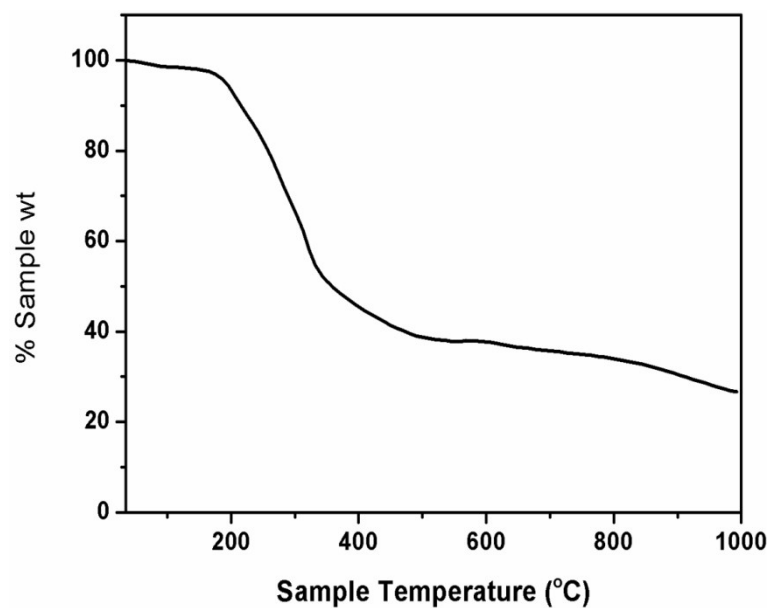


Figure S1. TGA Thermogram of the Boganvel (*Bougainvillea*) flower.

ESI-II: HR-FETEM images of RC-B sample

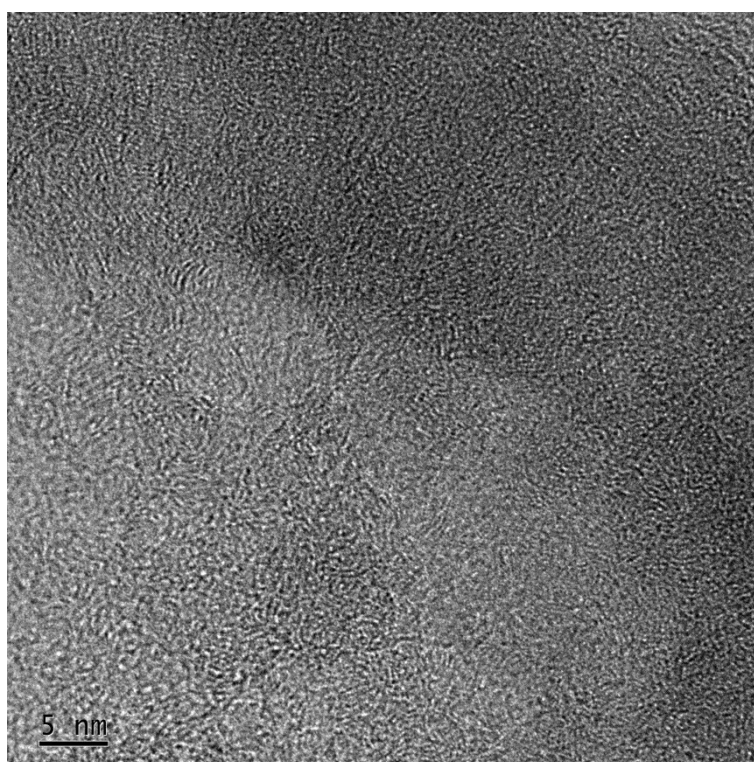


Figure S2 HR-FETEM images of RC-B sample

ESI-III. Schematic diagram of conductivity measurements under pressure (70.1 kg/cm²).

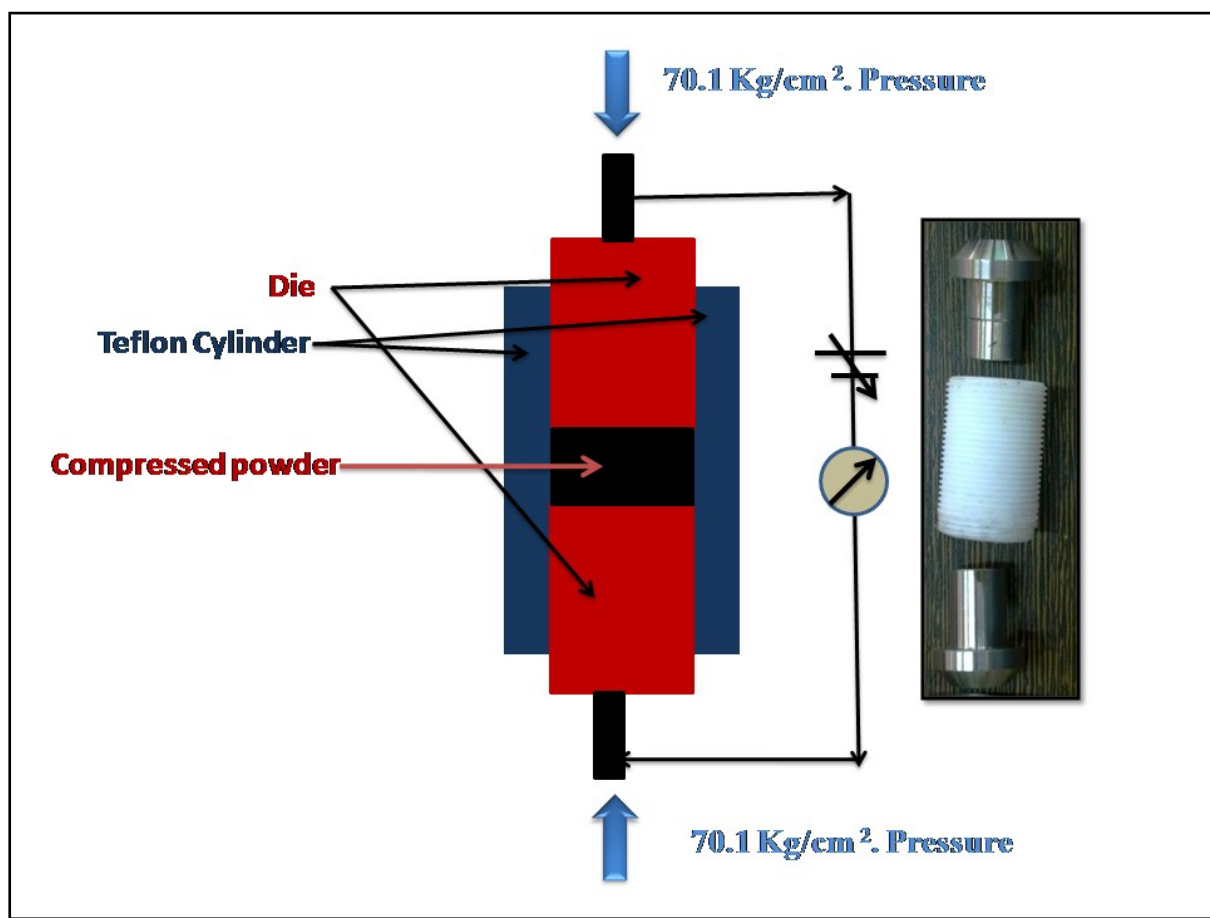


Figure S3. Schematic diagram of conductivity measurements under pressure (70.1 kg/cm²).

ESI-IV. Table S1 Comparison of the properties of carbon materials synthesized from waste and their use in supercapacitors

Natural waste Material	Maximum capacitance (F g ⁻¹)	Electrolyte	Energy density (WhKg ⁻¹)	Ref. No.
Acacia Gum	272 at 1.0 A g ⁻¹	6 M KOH	7.76 at 500 WKg ⁻¹	5
Paulownia Flower	297 at 1.0 A g ⁻¹	1 M H ₂ SO ₄	44.5 at 247 WKg ⁻¹	7
Pistachio nutshell	261 at 0.2 A g ⁻¹	6 M KOH	10 at 52000 WKg ⁻¹	12
Human Hair	340 at 1.0 A g ⁻¹	6 M KOH	45.33 at 0.1A g ⁻¹	23
Bamboo based by product	301 at 0.1 A g ⁻¹	6 M KOH	9.50 at 25 WKg ⁻¹	34
Honey	271 at 1.0 A g ⁻¹	6 M KOH	--	35
Corn Husk	350 at 1.0 A g ⁻¹	1 M Na ₂ SO ₄	21 at 5600 WKg ⁻¹	38
high-ash-content sewage sludge	379 at 0.5 A g ⁻¹	6 M KOH	30.5 at 181.2 WKg ⁻¹	39
natural product of alkali lignin	64 at 0.4 A g ⁻¹	6 M KOH	5.67 at 181.2 WKg ⁻¹	40
Rice Husk	250 at 1.0 A g ⁻¹	6 M KOH	22.2 at 400 WKg ⁻¹	41

ESI-V Photograph of the supercapacitor device

