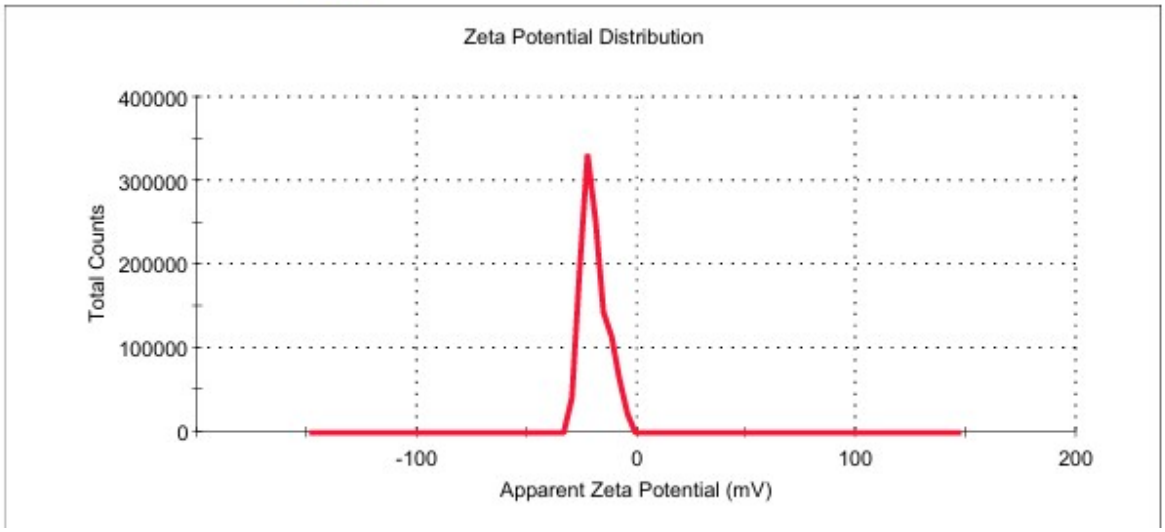
# Efficient Cationic Dye Removal in Water through *Arachis hypogaea* Skin-Derived Carbon Nanospheres: A Rapid and Sustainable Approach

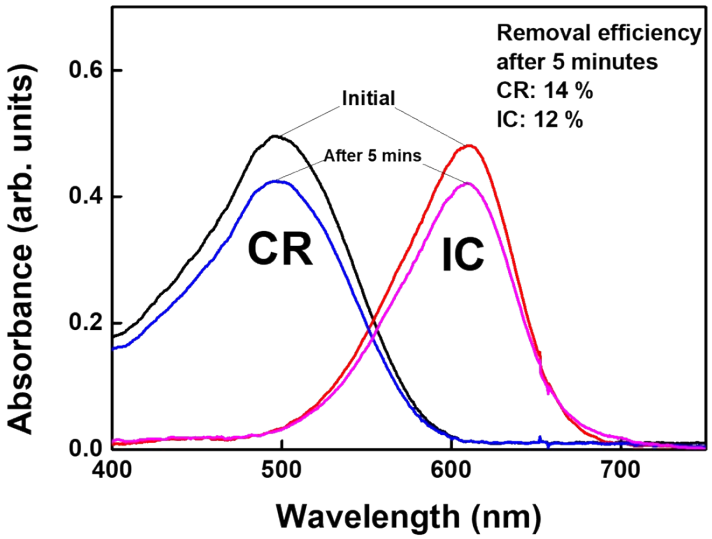
Aman Sharma et al.,

**Supplementary information:**

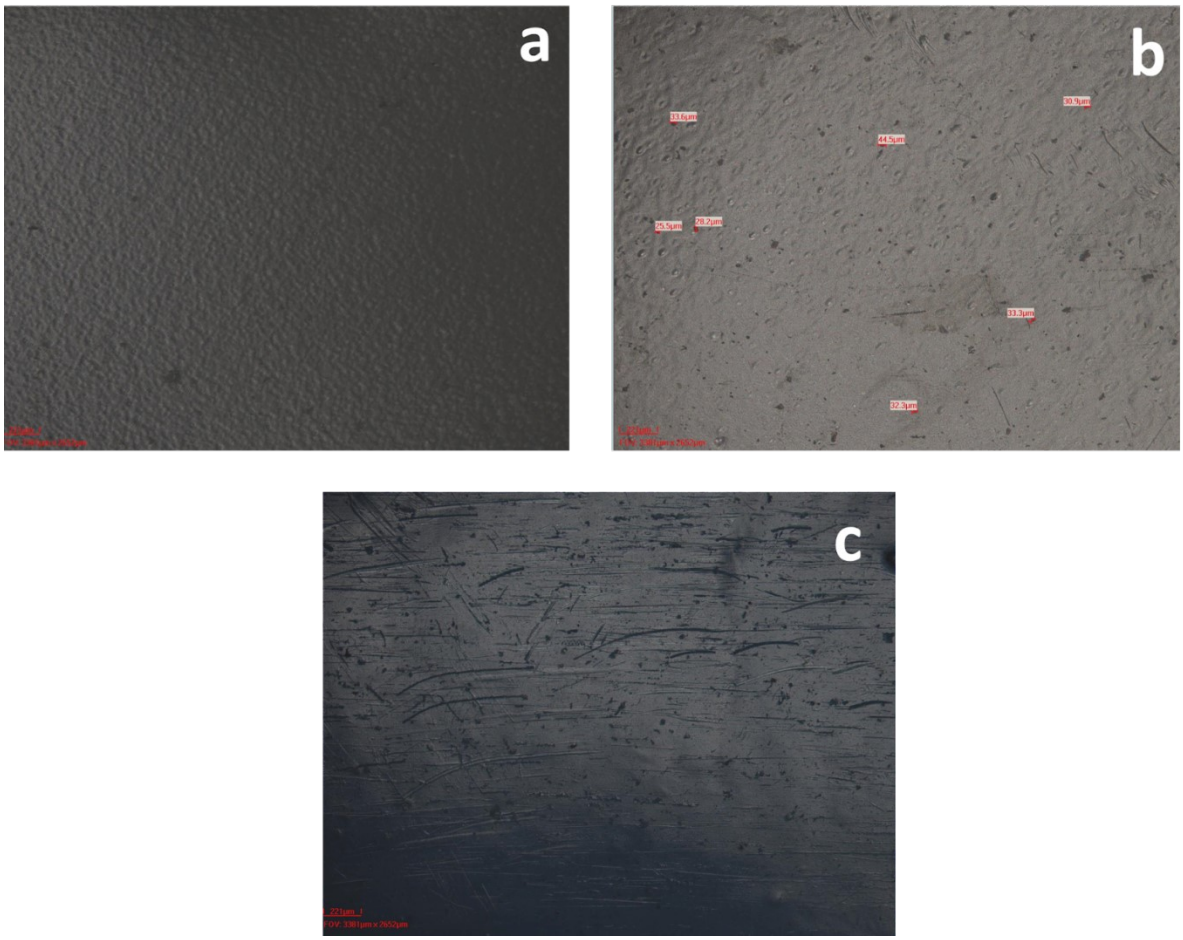
| | | | Mean (mV) | Area (%) | St Dev (mV) |
|---|---|---|---|---|---|
| Zeta Potential (mV): | -19.2 | Peak 1: | -19.2 | 100.0 | 5.78 |
| Zeta Deviation (mV): | 5.78 | Peak 2: | 0.00 | 0.0 | 0.00 |
| Conductivity (mS/cm): | 0.119 | Peak 3: | 0.00 | 0.0 | 0.00 |
| Result quality | Good | | | | |



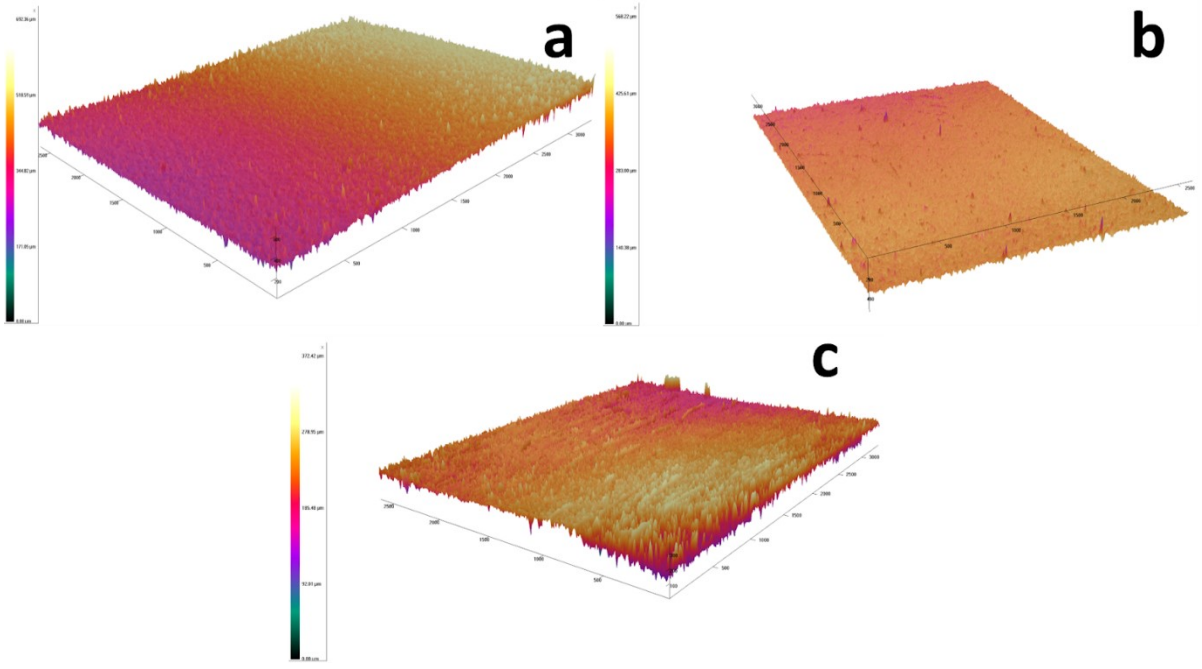

**S1:** Zeta potential curve for GS-CNS




**S2:** a) Removal efficiency for Indigo Carmine (IC) and Congo Red (CR) with 10 mg/L dye concentration




**S3:** Optical Profilometry 2D- image of a) Pure Polysulfone membrane, b) GS-CNSs polysulfone membrane, and c) GS-CNSs membrane after dye adsorption



**S4:** Optical Profilometry 3D- image of a) Pure polysulfone membrane, b) GS-CNSs polysulfone membrane, and c) GS-CNSs membrane after dye adsorption