

SUPPLEMENTARY MATERIAL

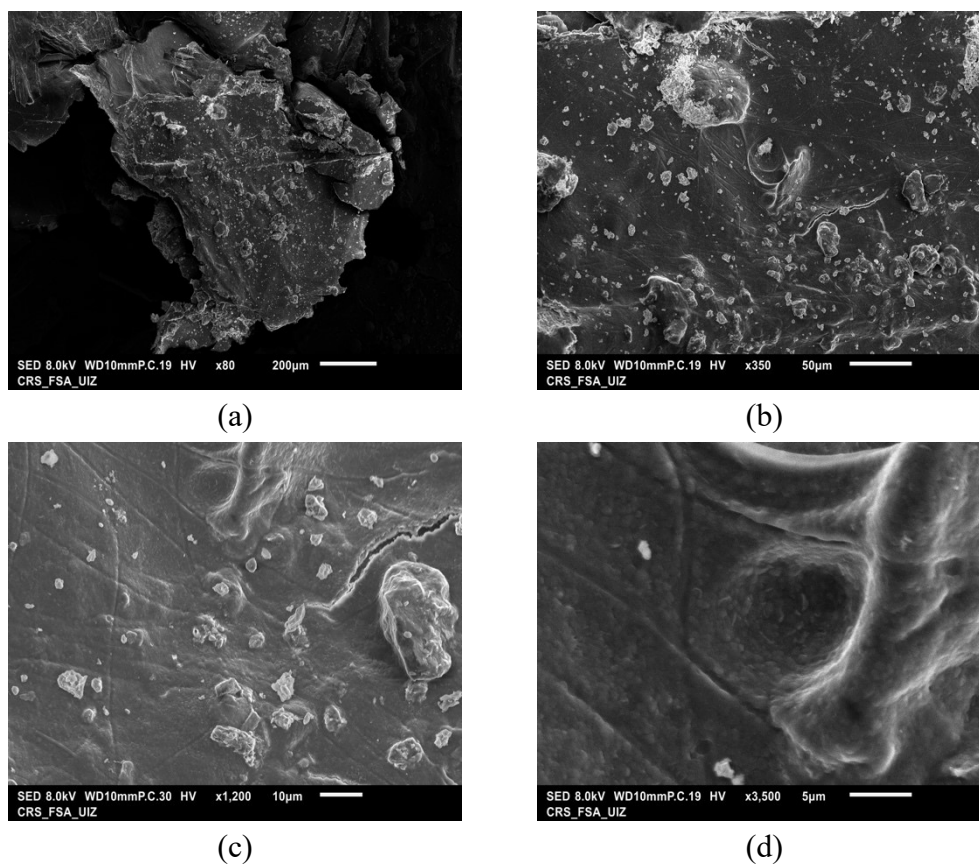
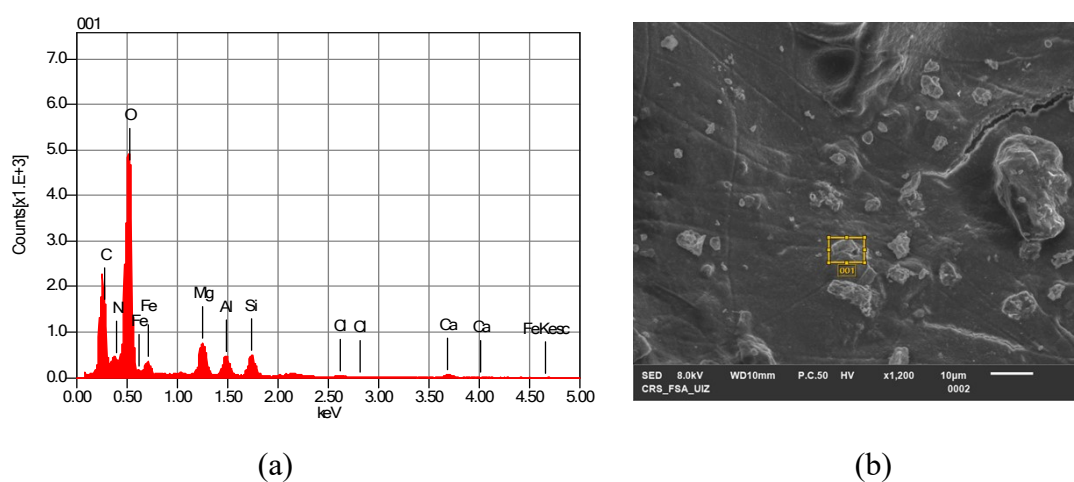
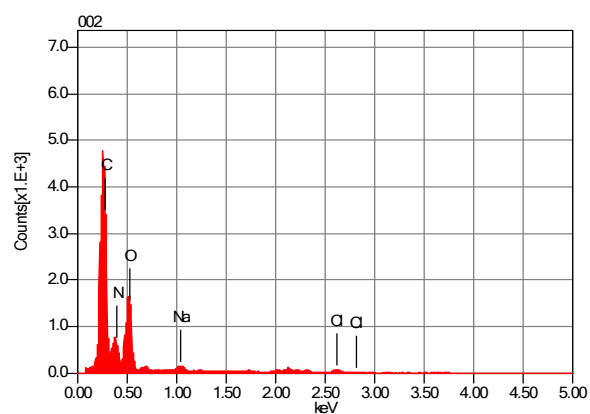
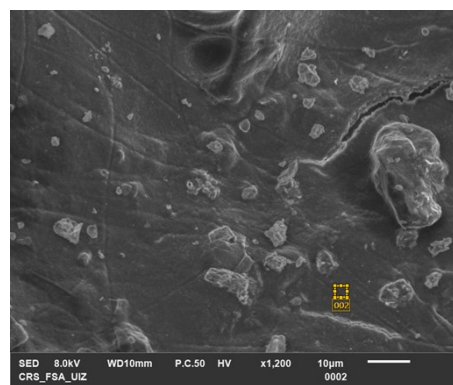


Fig. S1. Scanning electron microscope (SEM) images of SE-CP@SB (a): 200 μm , (b): 50 μm , (c): 10 μm and (d): 5 μm

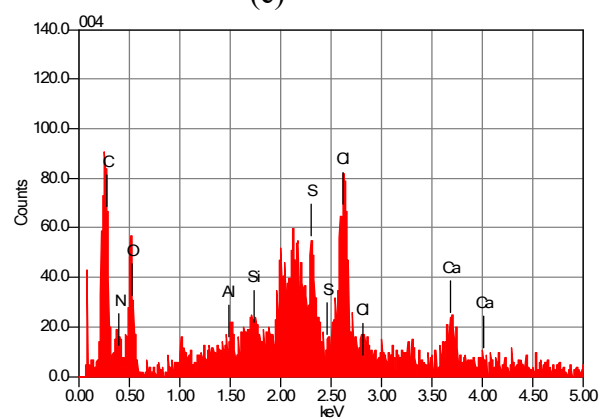




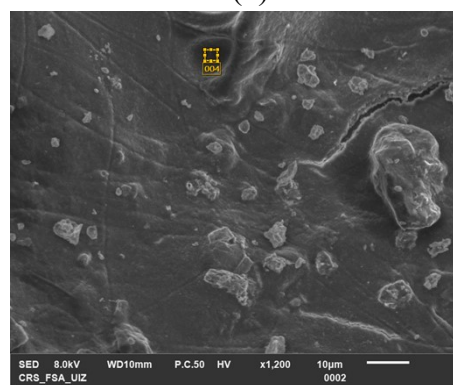
(c)



(d)

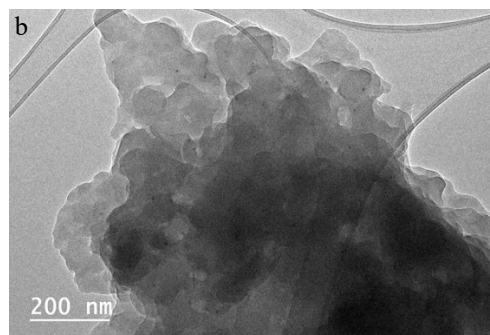
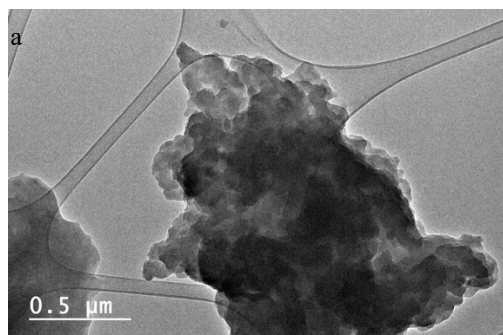


(e)



(f)

Fig. S2. EDX spectra of SE-CP@SB (a, c and e) at 10 μm from the same surface (b, d and f)



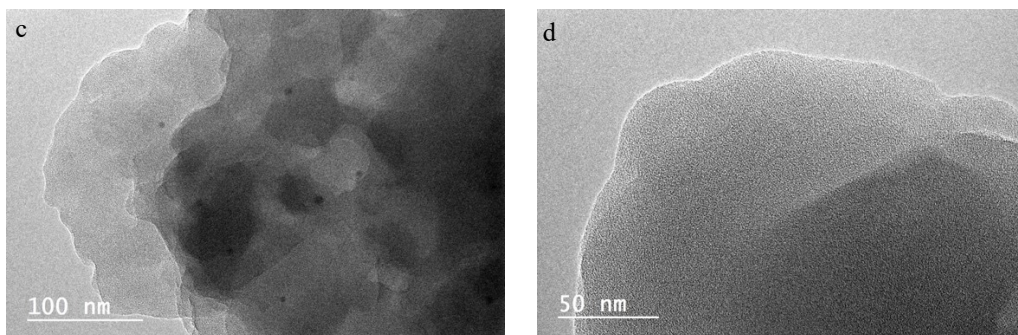


Fig. S3. TEM images of SE-CP biosorbent at different magnifications: (a): 0.5 μm , (b): 200 nm, (c): 100 nm, and (d): 50 nm

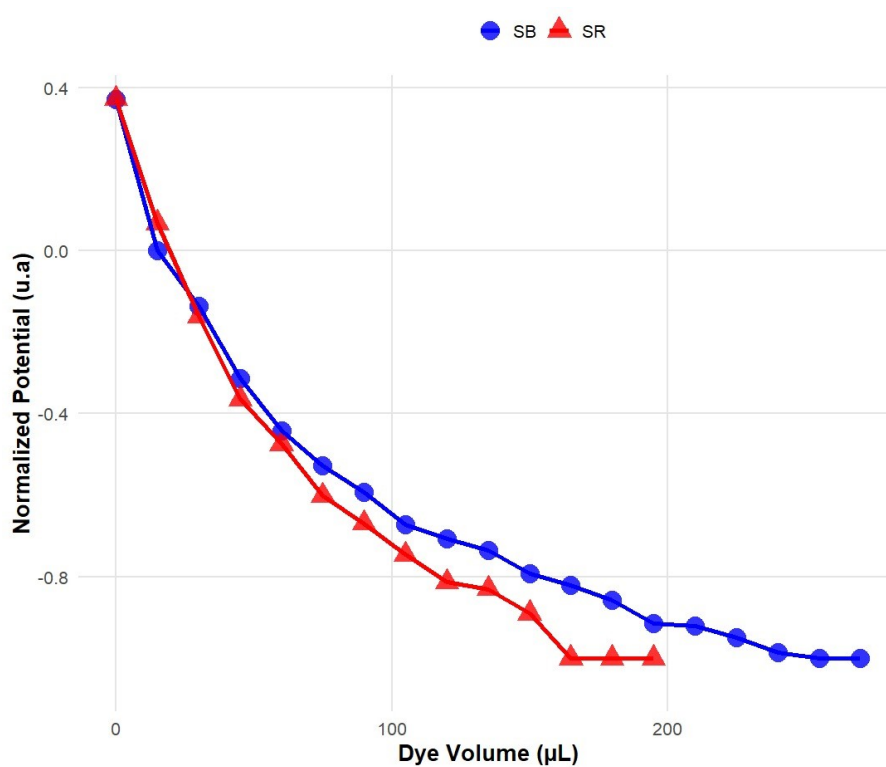


Fig. S4. Measurement of induced flow potential (IFP) variation: Titration of a solution of biosorbent SE-CP (5 g L⁻¹) with an aqueous solution of dyes SB and SR (10 g L⁻¹)

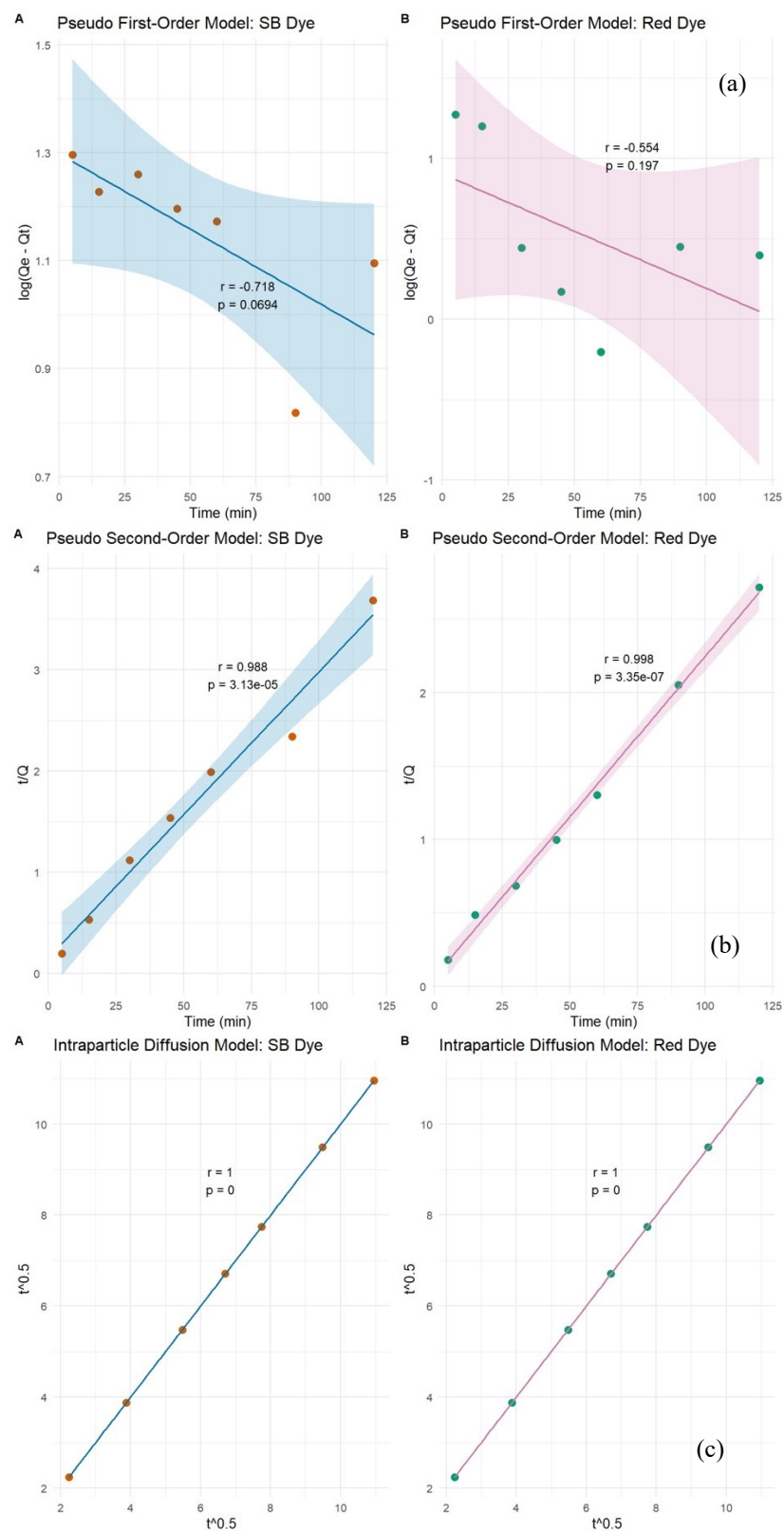


Fig. S5. Study of the biosorption kinetics of red (a) and blue (b) acid dyes on SE-CP at room temperature

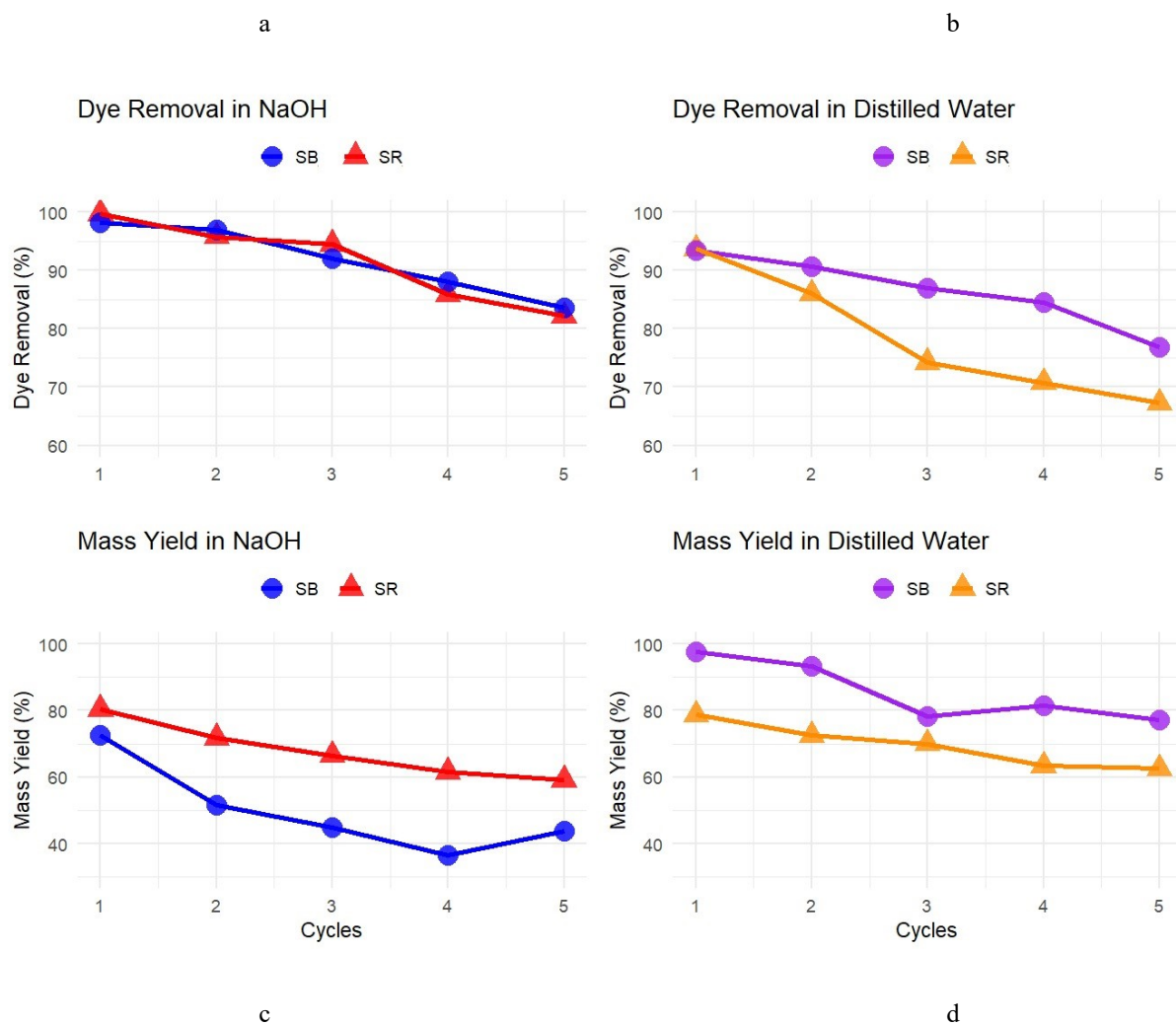
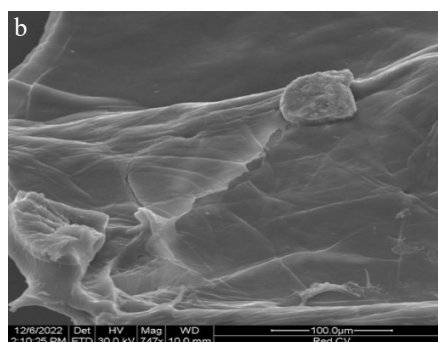


Fig. S6. Stability and reusability/Reusability performance of SE-CP regenerated with distilled water (a,c), and with NaOH (b,d)



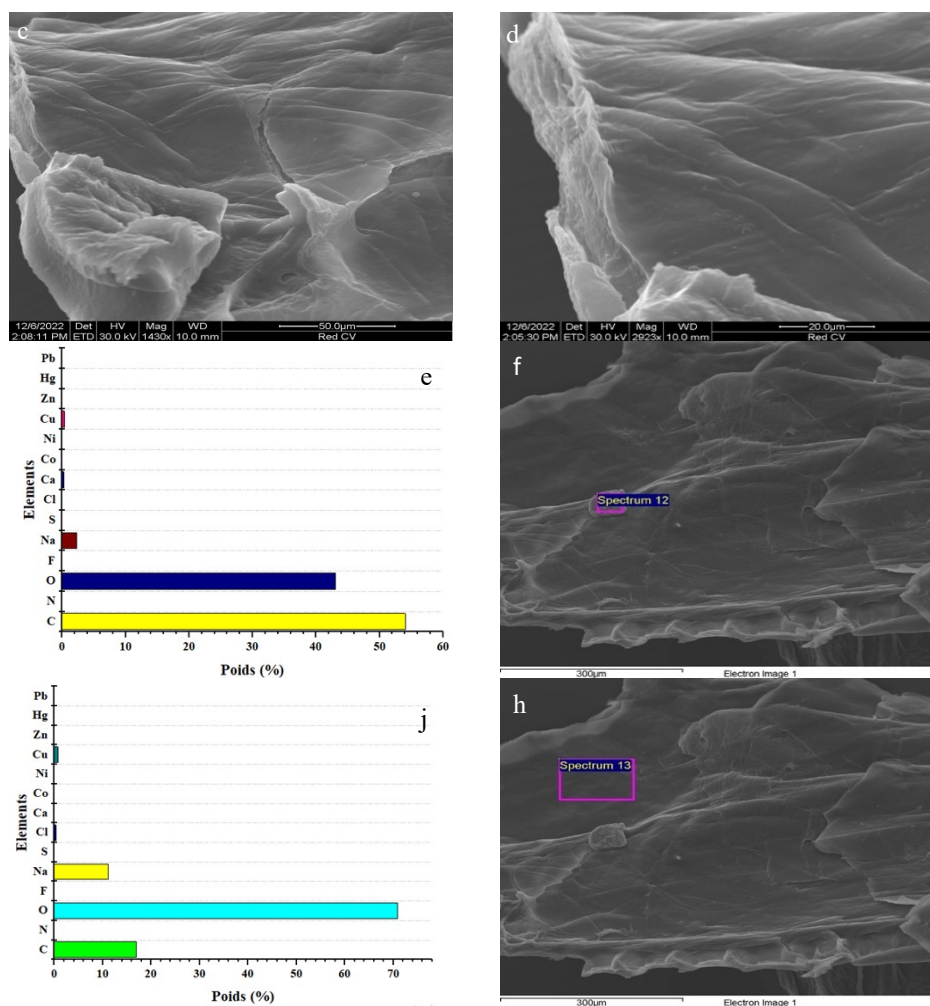
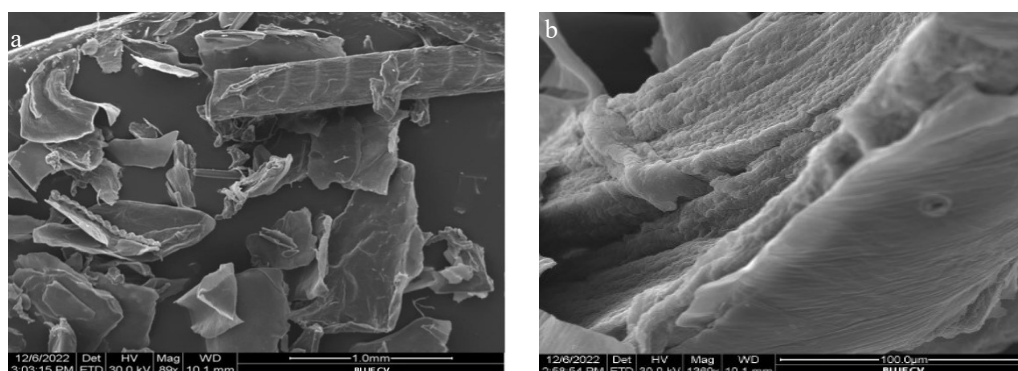


Fig. S7. SEM images of SE-CP after the fifth regeneration and SR dye adsorption (a): 1 mm, (b): 100 μm, (c): 50 μm and (d): 20 μm and EDX analysis (e), (j) for 300 μm images (f), (h)



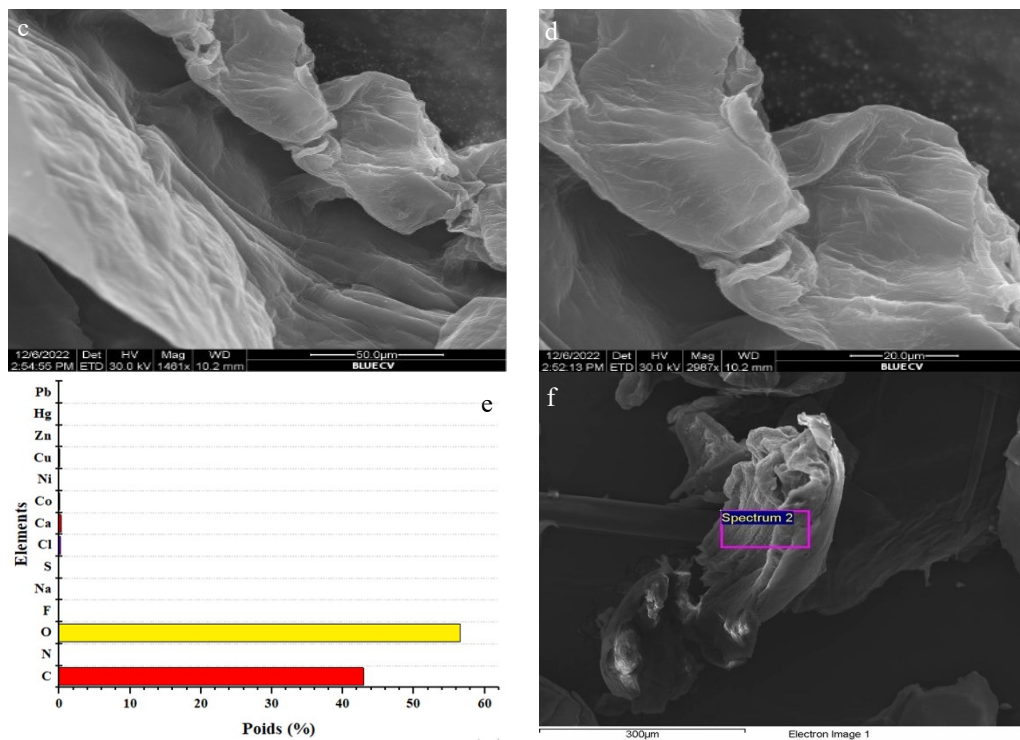


Fig. S8. SEM images of SE-CP after the fifth regeneration and SB dye biosorption (a): 1 mm, (b): 100 μm, (c): 50 μm and (d): 20 μm and EDX analysis (e) for 300 μm image (f)