Electronic Supplementary Material (ESI) for RSC Advances.

Supporting information for

Macroporous three-dimensional graphene oxide foams for dye adsorption and antibacterial applications

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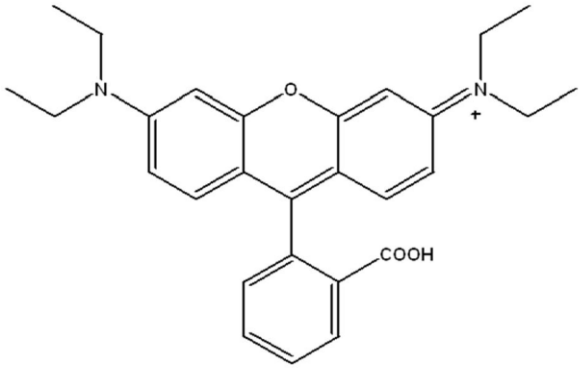
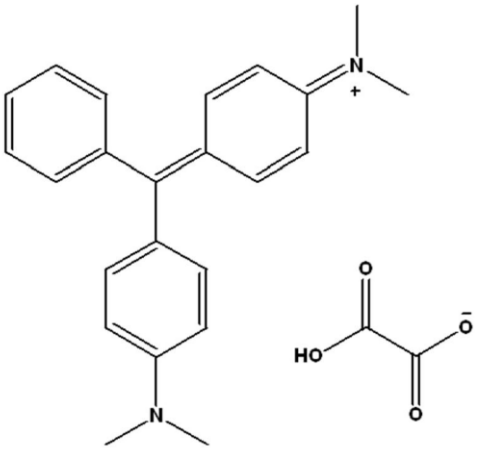


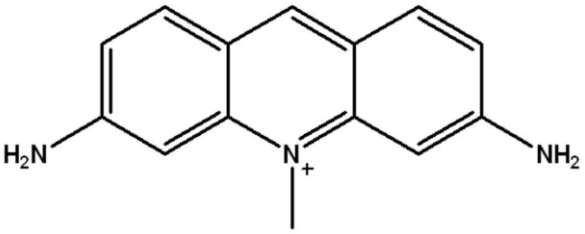
Rhodamine B

(Xanthene fluorine)



Malachite green oxalate

(Triaryl methane)



Acriflavine

(Acridine)

Figure S1: Structure of the dyes

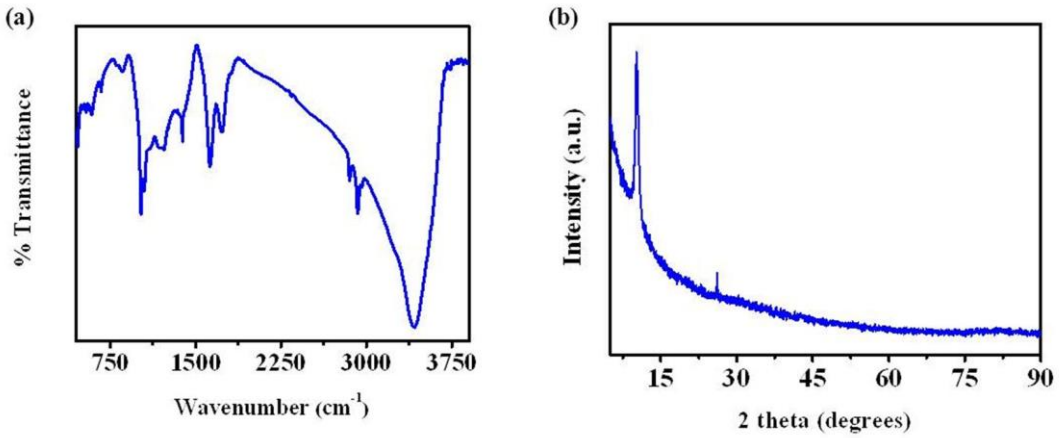


Figure S2: (a) FT-IR spectrum and (b) XRD spectrum of GO foam.

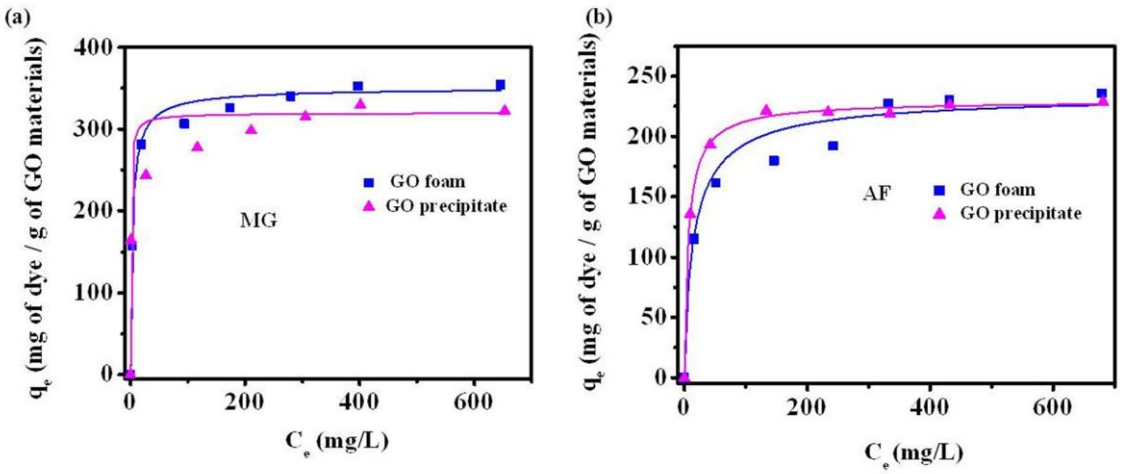


Figure S3: Comparison plot of adsorption isotherms of (a) MG and (b) AF on GO foam and GO precipitate.

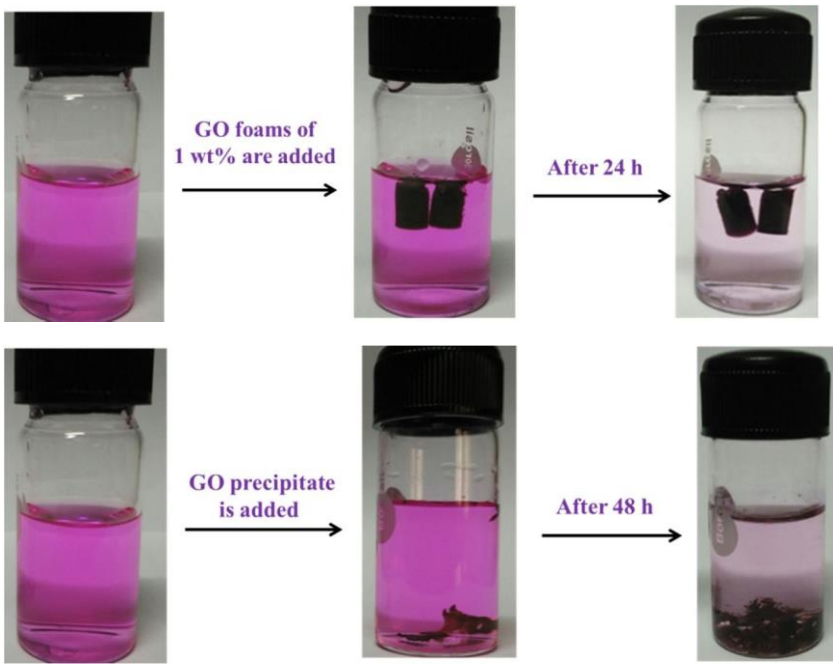


Figure S4: Photographs displaying the complete adsorption of RB dye on GO foam and GO precipitate.

Concentration of the dye solution is 5 ppm and the amount of the material used is 6 mg.

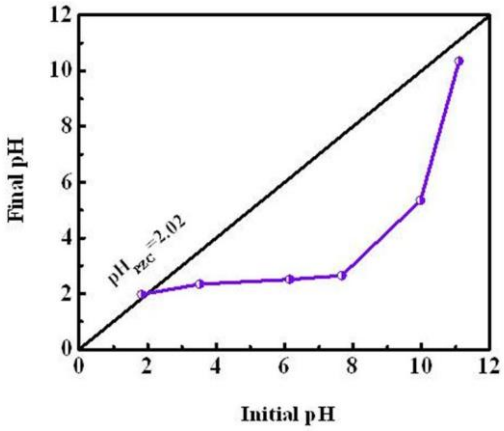


Figure S5: Plot showing point of zero charge of GO foam under different pH conditions

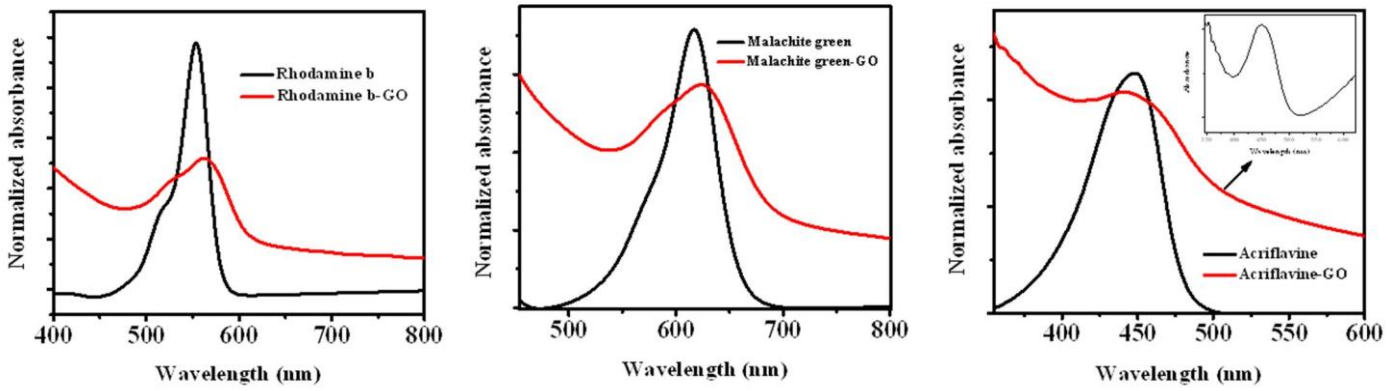


Figure S6: UV-Vis spectra of GO foam before and after interactions with RB, MG and AF dye molecules.

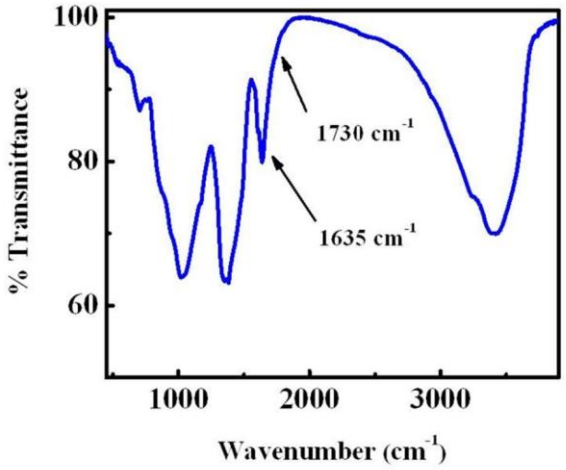


Figure S7: FT-IR spectrum of GO foam adsorbed with AF molecules under alkaline conditions.