

Supporting Information

Preparation of Porous Graphene Oxide/Hydrogel Nanocomposites and Their Ability for Efficient Adsorption of Methylene Blue

Ali Pourjavadi^{1,*}, Mojtaba Nazari¹, Bahareh Kabiri¹, Seyed Hassan Hosseini¹, Craig Bennett²

¹*Polymer Research Laboratory, Department of Chemistry, Sharif University of Technology, Tehran, Iran*

²*Department of Physics, Acadia University, Wolfville, Nova Scotia, Canada*

E-mail address: purjavad@sharif.edu; Phone/fax: (982)166165311

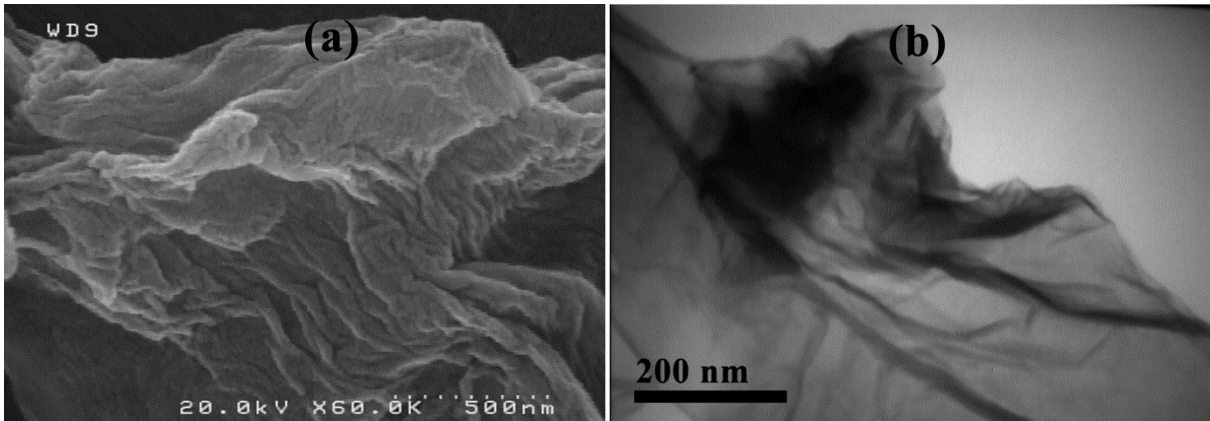


Fig. S1 SEM (a) and TEM (b) image of GO.

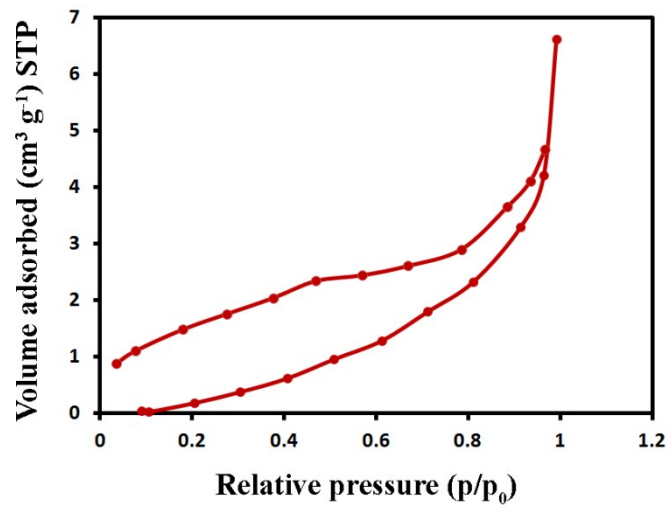


Fig. S2 N₂ adsorption-desorption isotherm of ATH12.

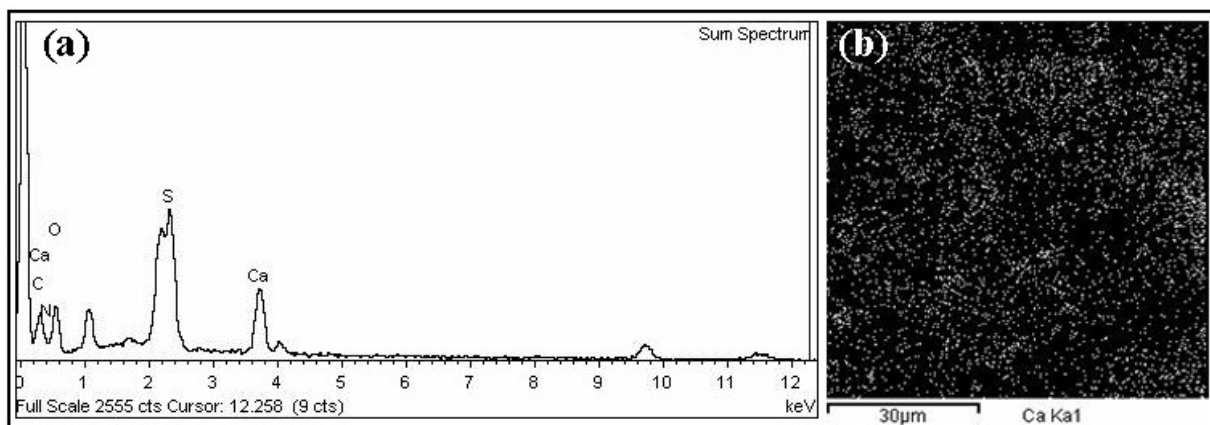


Fig. S3 EDX analysis of the HCC12. Elemental pattern (a) and Ca mapping (b).

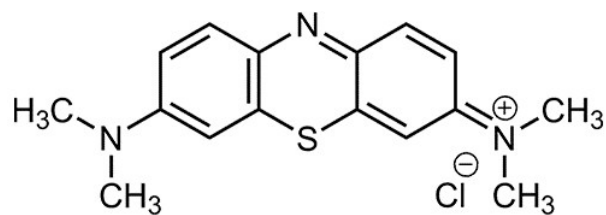


Fig. S4 Molecular structure of MB.

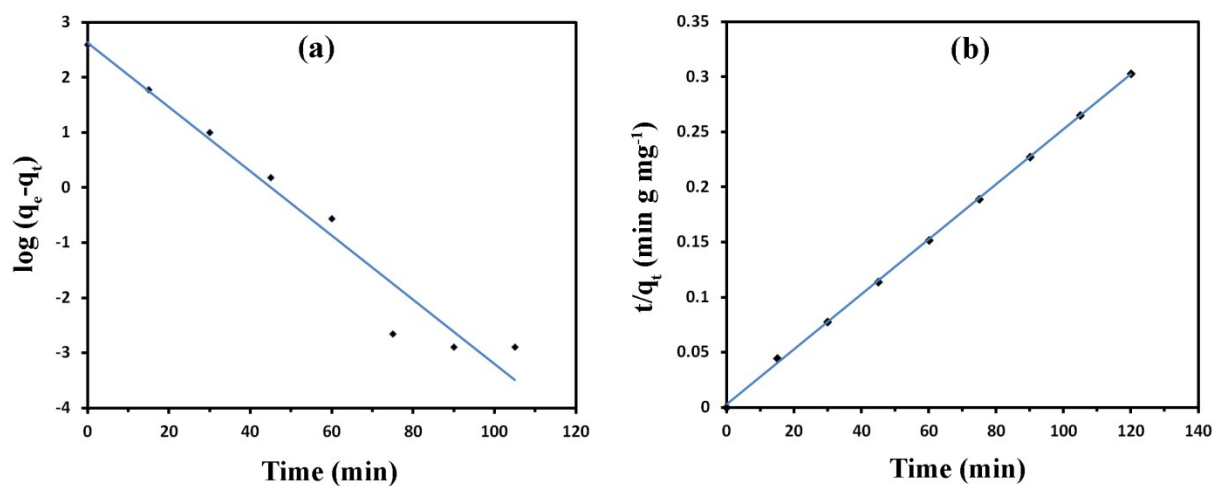


Fig. S5 Plot of pseudo-first-order (a) and pseudo-second-order (b) kinetic model.

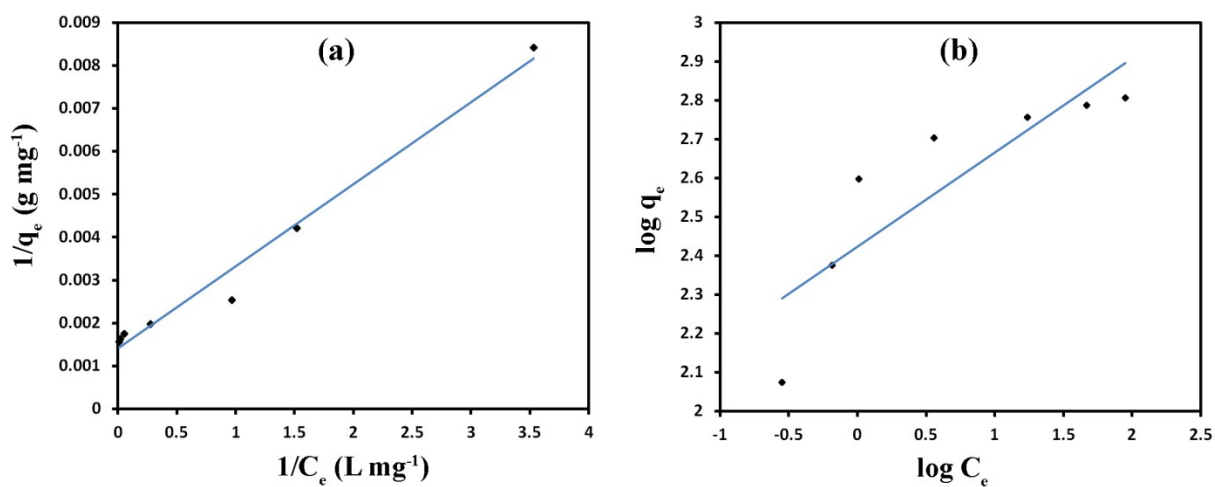


Fig. S6 Plot of Langmuir (a) and Freundlich (b) adsorption isotherm.

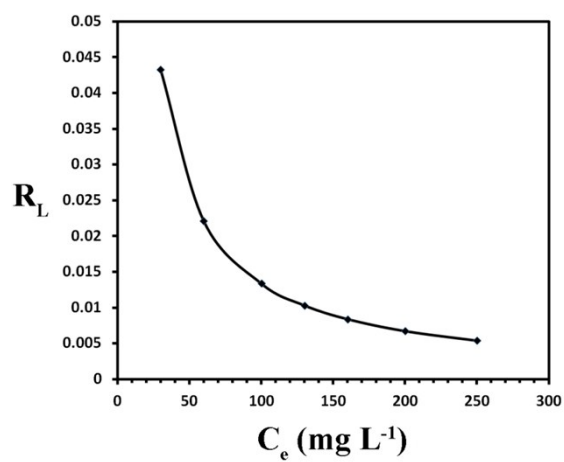


Fig. S7 Plot of equilibrium parameter (R_L) versus initial concentration of MB.



Fig. S8 Photographs of dye solutions before (left) and after (right) adsorption process.