Supporting information

Fruit Peels as an Efficient Renewable Adsorbents for Removal of Dissolved Heavy Metals and Dyes from Water

Ramakrishna Mallampati¹, Li Xuanjun², Avner Adin^{1†}and Suresh Valiyaveettil²*

¹NUS Environmental Research Institute National University of Singapore, -Lab Building, 5A Engineering Drive 1, Singapore 117411.

²Department of chemistry, National University of Singapore, 3 Science Drive 3, Singapore 117543; Email. <u>chmsv@nus.edu.sg</u>.

†Adin is currently visiting from Hebrew University of Jerusalem, Israel

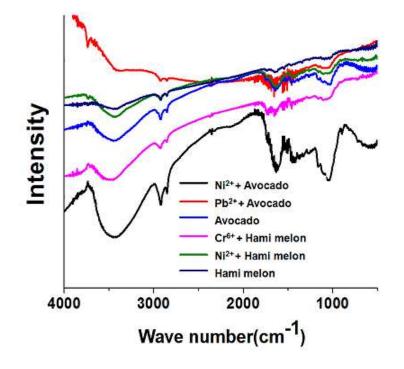


Figure S1. FT-IR spectra of avocado peel and hamimelon peel before and after adsorption of pollutants.

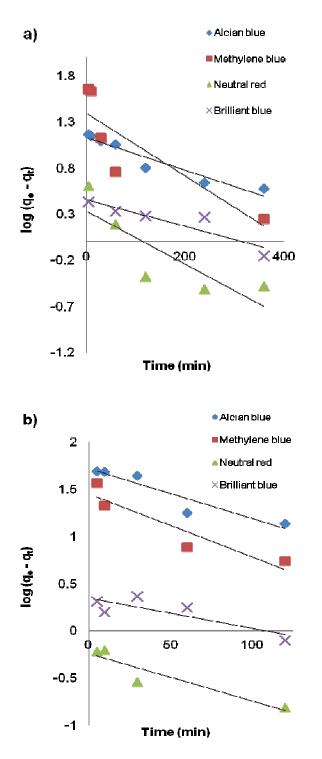
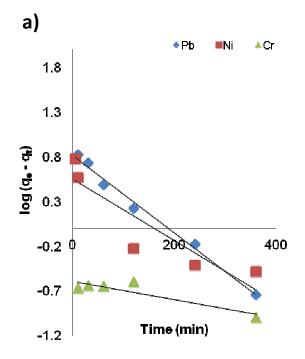


Figure S2. Pseudo-first order kinetics for adsorption of dyes onto hamimelon peel (a) and dragon fruit peel (b).



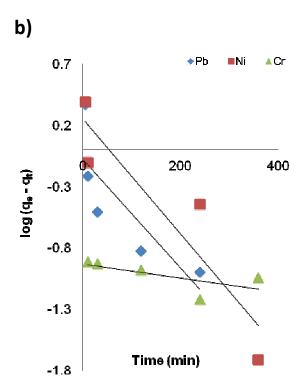


Figure S3. Pseudo-first order kinetics for adsorption of heavy metal ions onto hamimelon peel (a) and dragon fruit peel (b).

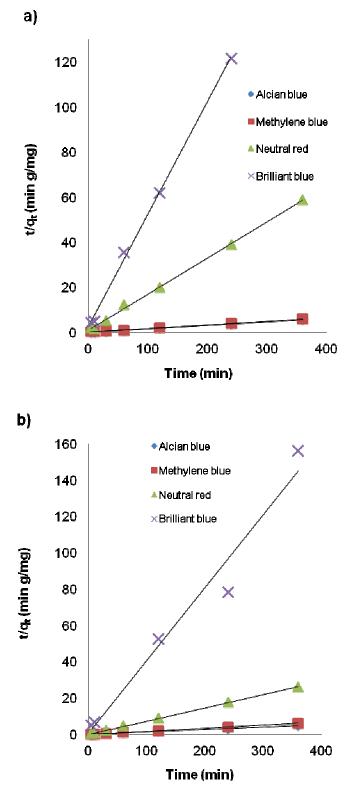


Figure S4. Pseudo-second order kinetics for adsorption of dyes onto hamimelon peel (a) and dragon fruit peel (b).

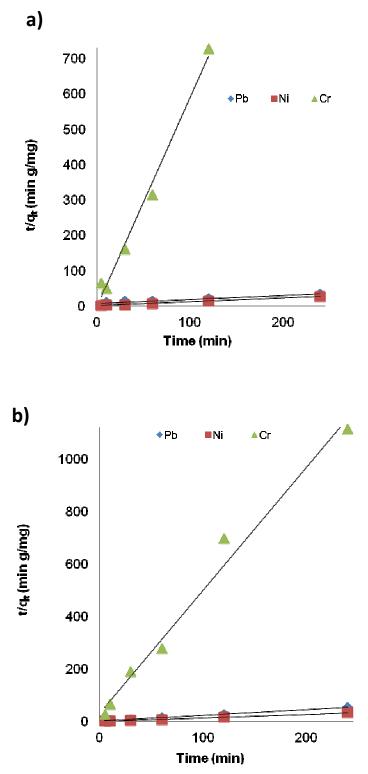


Figure S5. Pseudo-second order kinetics for adsorption of heavy metal ions onto hamimelon peel (a) and dragon fruit peel (b).

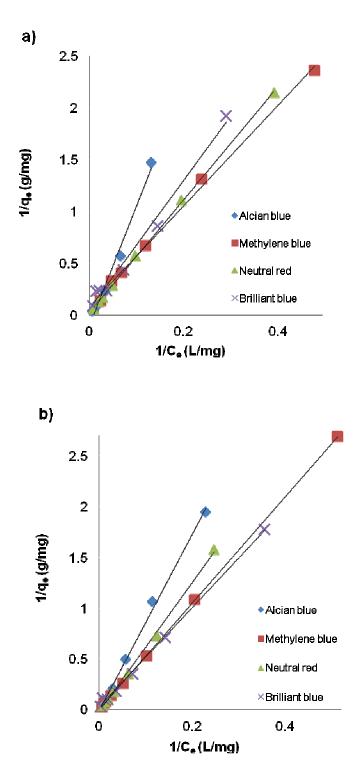


Figure S6. Langmuir isotherms for dyes for hamimelon peel (a) and dragon fruit peel (b).

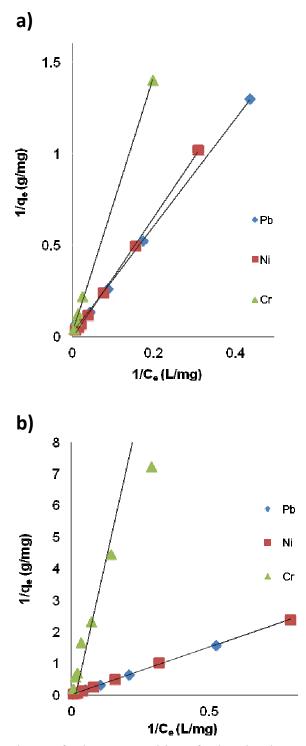
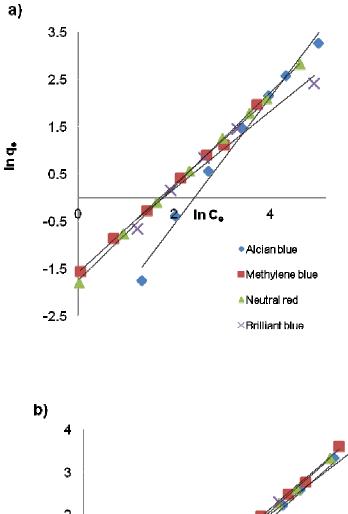


Figure S7. Langmuir isotherms for heavy metal ions for hamimelon peel (a) and dragon fruit peel (b).



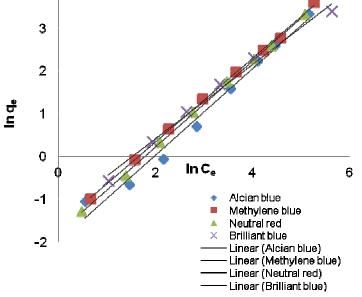
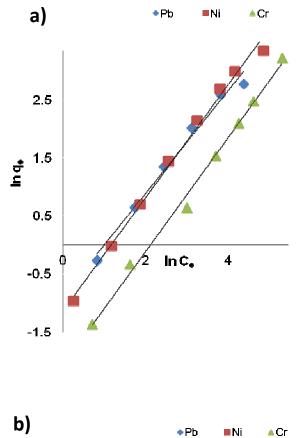


Figure S8. Freundlich isotherms for dyes for hamimelon peel (a) and dragon fruit peel (b).



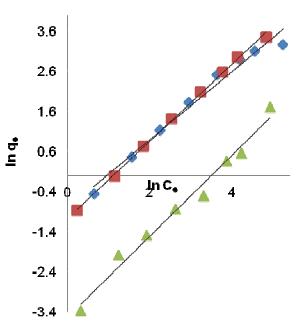


Figure S9. Freundlich isotherms for heavy metal ions for hamimelon peel (a) and dragon fruit peel (b).