

Supplementary Data

Adsorption Enhancement of Methylene Blue Dye at Kaolinite Clay – Water Interface Influenced by Electrolyte Solutions

Khushi Mukherjee, Ankit Kedia, K. Jagajjanani Rao, Satarupa Dhir, Santanu Paria*

Interfaces and Nanomaterials Laboratory, Department of Chemical Engineering, National Institute of Technology, Rourkela 769008, Orissa, India.

* To whom correspondence should be addressed. E-mail: santanuparia@yahoo.com, or sparia@nitrkl.ac.in; Fax: +91 661 246 2999

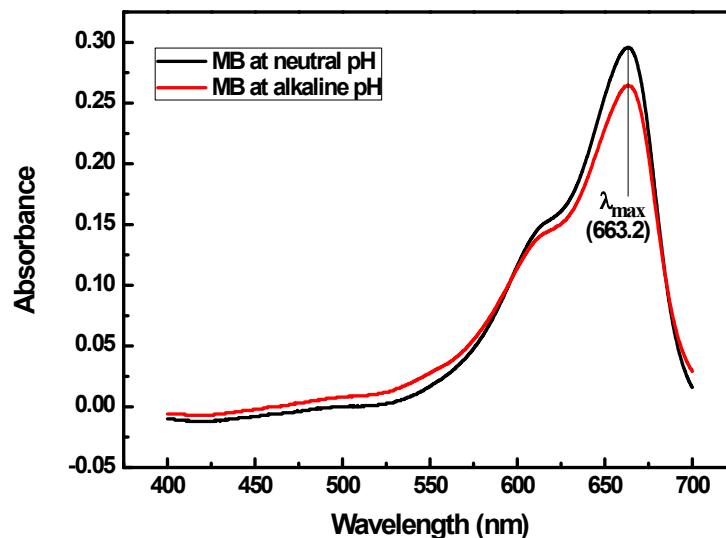


Figure 1. UV spectra of MB at neutral and alkaline pH (11).

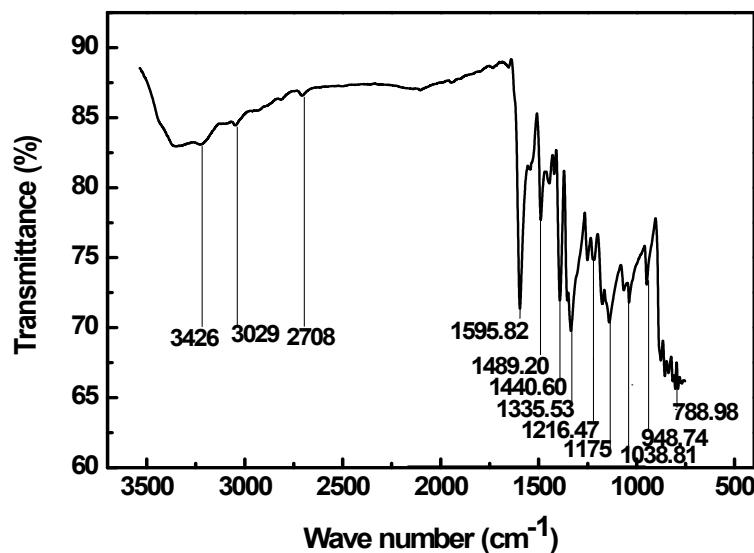


Fig S2. FTIR spectra of pure methylene blue.

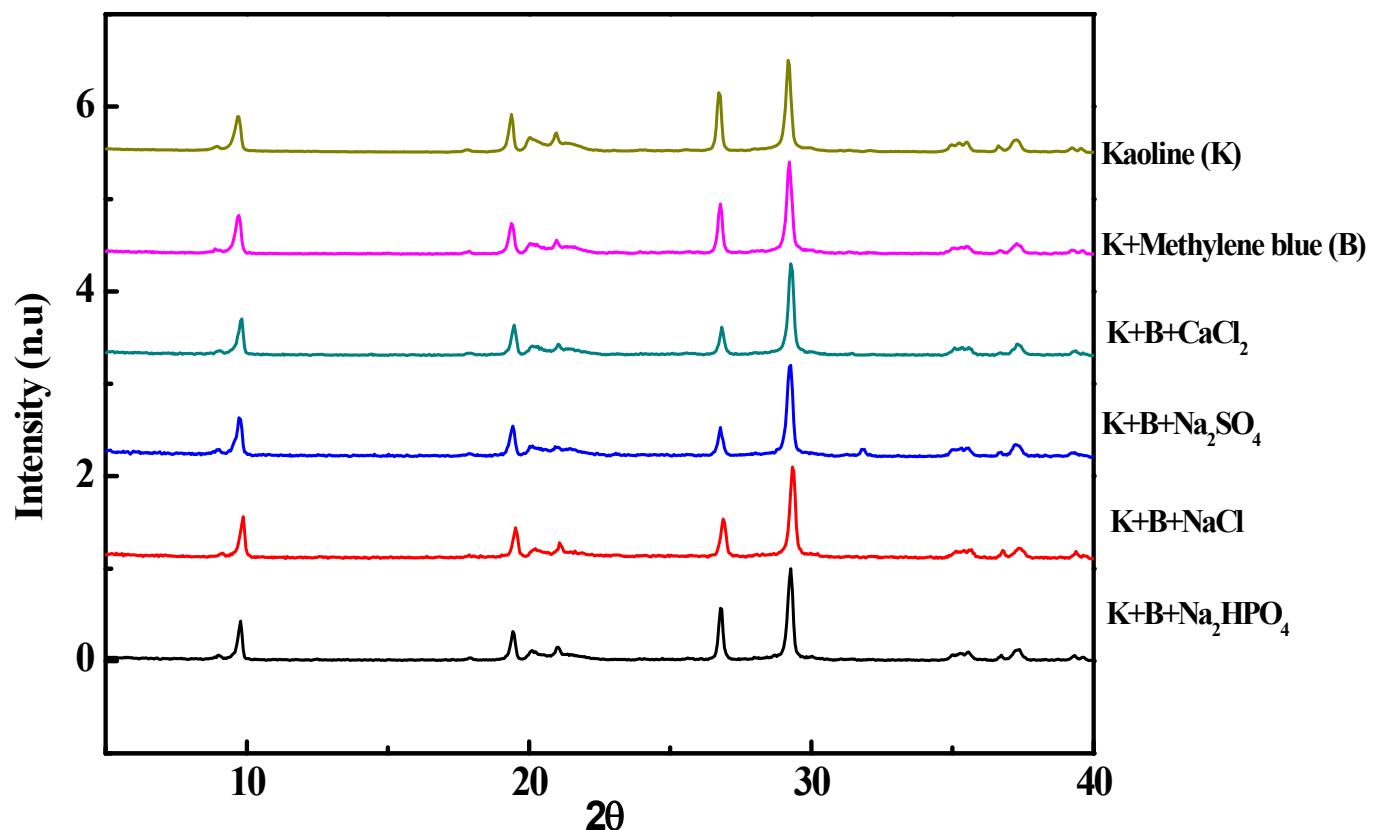


Fig. S3. XRD pattern of pure kaolinite clay and in presence of methylene blue and different electrolytes

Table S1. X-ray data for kaolinite (K), K+methylene blue (MB), K+MB+electrolyte complexes

Adsorbent	d-spacing (A°)
K	3.056
K+MB	3.054
K+MB+CaCl ₂	3.047
K+MB+Na ₂ SO ₄	3.041
K+MB+NaCl	3.051
K+MB+Na ₂ HPO ₄	3.049