Supporting Information

## Fast adsorption of methyl blue on zeolitic imidazolate framework-

## 8 and its adsorption mechanism

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Fig. S1 Chemical structure of methyl blue and methyl orange.



Fig. S2 Schematic illustration of mechanism of MB adsorbed onto ZIF-8 particles.



Fig. S3 Adsorption performance of ZIF-8 for (a) RhB-MB mixture (b) MO-MB mixture. 20 mg ZIF-8 particles was added 40 mL dye mixture with the concentration of 500 ppm. Inserted photos are the optical view of dye mixture before and after adsorption. In order to further detect the color change, all dyes were diluted for 10 times.



Fig. S4 (a) XRD and (b) SEM image of ZIF-8 after adsorbing MB