

Fabrication of Composites of Sodium Alginate with Guar Gum and Iron Coated Activated Alumina for the Purification of Water from Direct Blue 86

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Supplementary Data

File Name: ALL.dts	Dispersant Name: Water		
Record Number: 15165	Dispersant RI: 1.330		
Date and Time: Monday, June 27, 2022 2:52:23 PM	Viscosity (cP): 0.8872		
Dispersant Dielectric Constant: 78.5			
<hr/>			
Temperature (°C): 25.0	Zeta Runs: 24		
Count Rate (kcps): 83.3	Measurement Position (mm): 2.00		
Cell Description: Clear disposable zeta cell	Attenuator: 7		
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	Mean (mV)	Area (%)	St Dev (mV)
Zeta Potential (mV): -47.7	Peak 1: 0.00	0.0	0.00
Zeta Deviation (mV): 0.00	Peak 2: 0.00	0.0	0.00
Conductivity (mS/cm): 18.2	Peak 3: 0.00	0.0	0.00
Result quality : Good			

Figure S 1: Zeta Potential of SA@GG@IACC Composites (B.A)

Table S 1. BET Analysis of SA@GG@ICAA Composites (Before Adsorption)

SA@GG@ICAA Composites (Before Adsorption)						
Surface Area (m ² /g)	SF-Method Micropore Volume (cc/g)	HK-Method Micropore Volume (cc/g)	SF-Method Pore Diameter (nm)	SF-Method Pore Diameter (Å)	HK-Method Pore Diameter (nm)	HK-Method Pore Diameter (Å)
5.606	0.0431	0.058	0.453	4.523	0.432	4.32
BET Summary						
Slope (1/g)		Intercept (1/g)		Correlation coefficient, r		C constant
950.412		$-3.292 \times 10^{+02}$		0.567575		-1.887

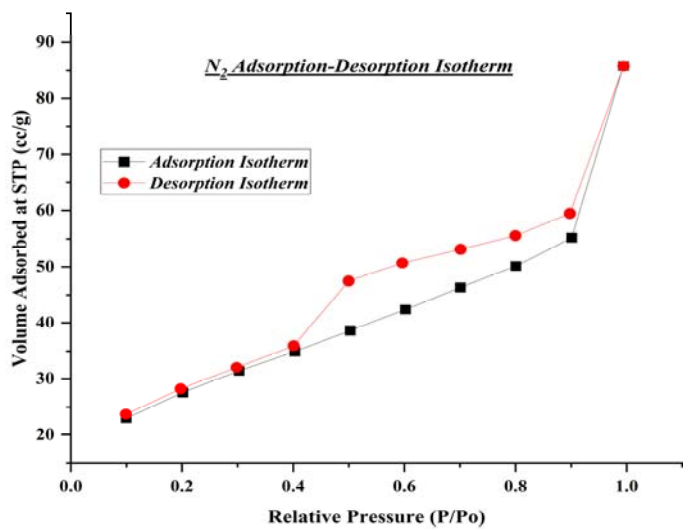


Figure S2. N₂ Adsorption-Desorption Isotherm

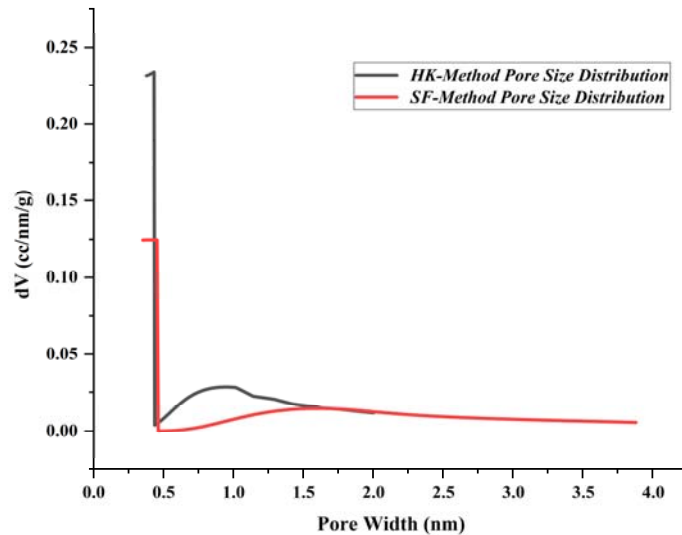


Figure S3. HK-SF Pore Size Distribution

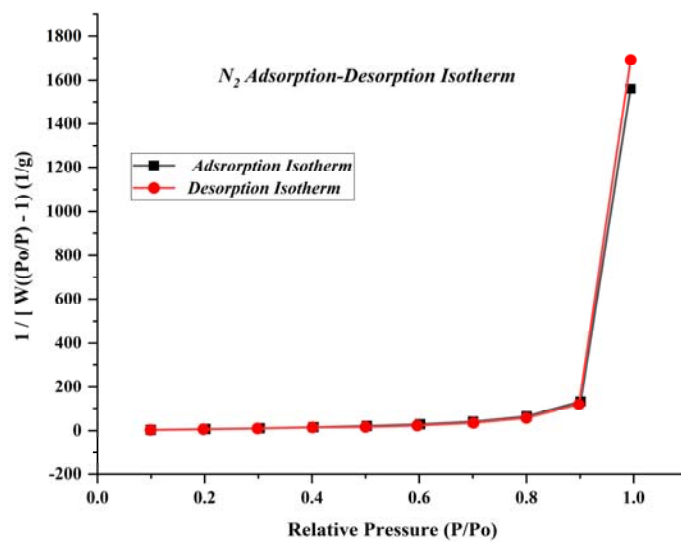


Figure S4. Plot P/Po Vs. $1/[W\{(P_o/P)-1]$