

SUPPORTING INFORMATION

Visible light driven novel semiconductor nanocomposite ($\text{BiVO}_4/\text{CuCr}_2\text{O}_4$), for efficient degradation of organic dyes.

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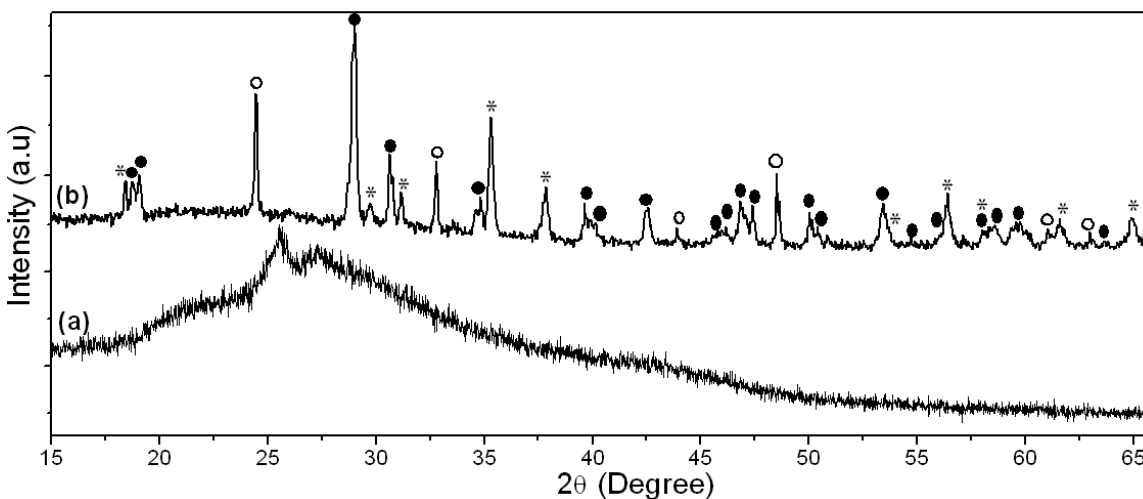


Fig. S1 XRD pattern of (a) polyaniline and (b) hybrid nanomaterial. Filled and hollow circles correspond to the monoclinic and tetragonal phase of BiVO_4 respectively, while star represents tetragonal phase of CuCr_2O_4 in the composite nanomaterial.

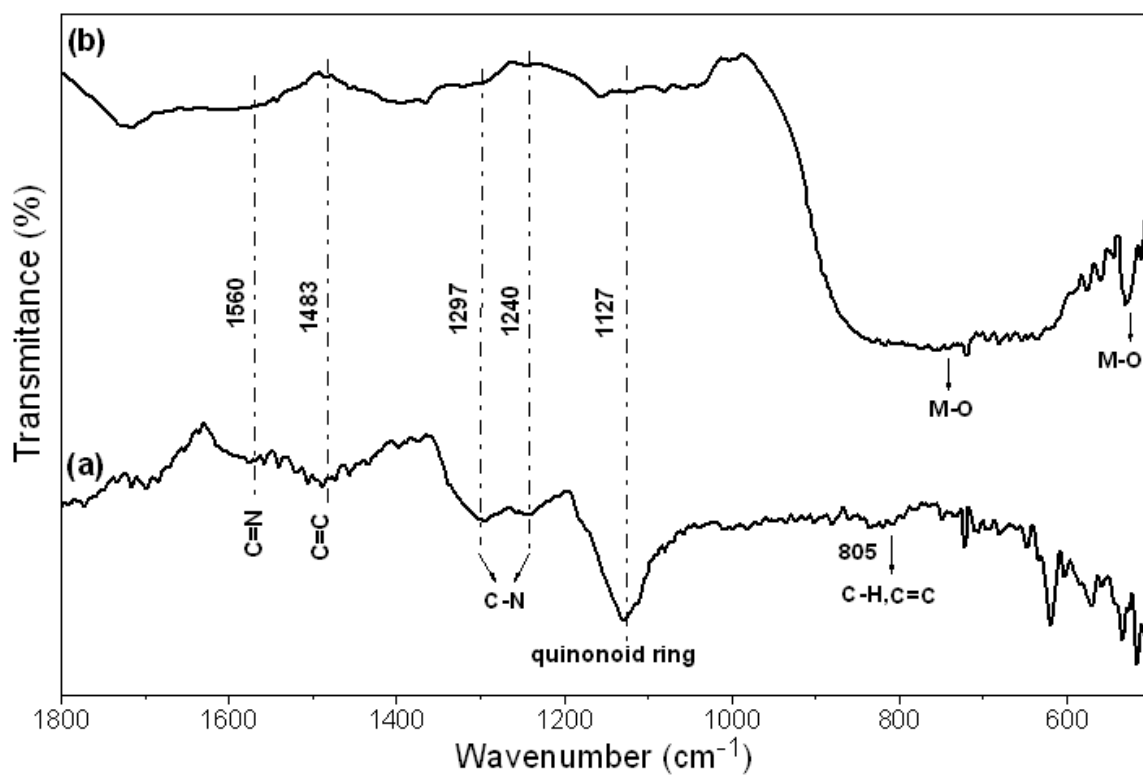


Fig. S2 FTIR spectra of (a) PANI and (b) $\text{BiVO}_4/\text{CuCr}_2\text{O}_4/\text{PANI}$ hybrid respectively.

Table S1 Concentration (ppm) of dye at different intervals of time corresponding to different composition (mass ratio of BiVO_4 and CuCr_2O_4) of photocatalyst

time(min.)	$\text{BiVO}_4 : \text{CuCr}_2\text{O}_4$			BiVO_4
	1:1	1:0.25	1:0.0625	
0	10.0	10.0	10.0	10.0
30	8.20	6.80	7.23	8.84
60	6.53	4.66	5.26	7.77
90	5.32	3.20	3.81	6.89
120	4.33	2.12	2.74	6.03
150	3.50	1.48	1.63	5.32
180	2.81	0.996	1.47	4.68

Table S2 Concentration of the dye (ppm) left at different intervals of time using hybrid and composite material as photocatalyst.

time(min.)	BiVO₄:CuCr₂O₄	(BiVO₄:CuCr₂O₄)/PANI
0	10.0	10.0
30	8.20	6.00
60	6.53	3.61
90	5.32	2.22
120	4.33	1.33
150	3.50	0.80
180	2.81	0.48