Supporting Information Figure Captions

**Fig. S1.** XRD patterns of pure g-C₃N₄ and the g-C₃N₄/CdS, g-C₃N₄/RGO, and g-C₃N₄/CdS/RGO composites.

**Fig. S2** (a) TEM image of pure g-C₃N₄ sample shows sheet-like structure, (b) SAED pattern of g-C₃N₄ confirm amorphous structure of pure g-C₃N₄, (c) TEM image of CdS nanoparticles with a random shape and (d) SAED pattern of CdS shows crystalline structure of grown particles.

**Fig. S3.** FTIR spectra of the g-C₃N₄/CdS, g-C₃N₄/RGO, and g-C₃N₄/CdS/RGO composites. The spectra of pure g-C₃N₄, CdS and RGO are provided for comparison.

**Fig. S4.** (a) XPS spectrum of the g-C₃N₄/CdS/RGO composite. (b) A high-resolution spectrum of the C 1s region. (c) A high-resolution spectrum of the N 1s and Cd 3d regions. (d) A high-resolution spectrum of the S 2p region.

**Fig. S5.** UV–VIS absorbance spectra of the photocatalytic degradation of RhB under visible light using 100 mg L⁻¹ of photocatalyst for (a) pure g-C₃N₄, (b) g-C₃N₄/CdS, (c) CdS/RGO, (d) g-C₃N₄/RGO, and (e) g-C₃N₄/CdS/RGO.

**Fig. S6.** UV–VIS absorbance spectra for the photocatalytic degradation of RhB under UV light using 100 mg L⁻¹ of photocatalyst for (a) pure g-C₃N₄, (b) g-C₃N₄/CdS, (c) CdS/RGO, (d) g-C₃N₄/RGO, and (e) g-C₃N₄/CdS/RGO.

**Fig. S7.** UV–VIS absorbance spectra of the photocatalytic degradation of Congo red under visible light using 100 mg L⁻¹ of photocatalyst for (a) pure g-C₃N₄, (b) g-C₃N₄/CdS, (c) CdS/RGO, (d) g-C₃N₄/RGO, and (e) g-C₃N₄/CdS/RGO.
Fig. S8. UV–VIS absorbance spectra of the photocatalytic degradation of Congo red under UV light using 100 mg L$^{-1}$ of photocatalyst for (a) pure g-$\text{C}_3\text{N}_4$, (b) g-$\text{C}_3\text{N}_4$/CdS, (c) CdS/RGO, (d) g-$\text{C}_3\text{N}_4$/RGO, and (e) g-$\text{C}_3\text{N}_4$/CdS/RGO.
Figure S1
Figure S2
Figure S3
Figure S4
Figure S5 (a to e)
Figure S6(a to e)
Figure S7(a to e)
Figure S8(a to e)