Supporting Information

Light-Induced Charge Separation in a Donor-Chromophore-Acceptor Nanocomposite Poly[TPA-Ru(tpy)_2]@ZnO

Fig. S1  FT-IR spectrum of [(H_2N-Gly-CONH-tpy)Ru(tpy-CONH-Gly-COOH)](PF_6)_2 (A)
Fig. S2  ^19F NMR spectra of P2 and P3a
Fig. S3  FT-IR spectra of P2, P3a and P3b
Fig. S4  TEM images
Fig. S5  Topography image of P3a@ZnO
Fig. S6  KPFM images of P3b@ZnO
Fig. S7  Atom numbering of A used for NMR assignments
Fig. S8  UV-Vis spectrum of P3b in THF
Fig. S1 FT-IR spectrum of \([\text{H}_2\text{N-CH}_2\text{-CONH-tpy}]\text{Ru(tpy-CONH-CH}_2\text{-COOH)}\)\text{(PF}_6\text{)}_2\) (A).

Fig. S2 FT-IR spectra of P2 and P3a and 3b.
Fig. S3 $^{19}$F NMR spectra of P2 and P3a in CDCl$_3$.

![NMR spectra](image)

Fig. S4 TEM images of a) pristine ZnO, b) and c) P3a@ZnO, drop cast from THF.

![TEM images](image)

Fig. S5 Topography image of P3a@ZnO.

![Topography image](image)
Fig. S6 KPFM images of P3b@ZnO. a) Topography b) Surface potential map recorded in darkness. c) Surface potential map recorded under laser illumination of a wavelength of 488 nm. d) Line profile of the surface potential across the particle indicated by the line in the respective surface potential map. No photo-response was observed for this D-A system.

Fig. S7 Atom numbering of A used for NMR assignments.

Fig. S8 UV-Vis spectrum of P3b in THF.