Supporting Information

Self-assembly, photophysical, electrochemical properties and activation of TiO$_2$ photocatalyst by perylene bisimide

Adhimoolam Senthilraja$^a$, Balu Krishnakumar$^a$, Meenankhisundaram Swaminathan$^a$ and Samuthira Nagarajan$^b$*

$^a$Department of Chemistry, Annamalai University, Annamalainagar 608 002, Tamil Nadu, India.
$^b$Department of Chemistry, Central University of Tamil Nadu, Thiruvarur 601101, Tamil Nadu, India.

Email: snagarajan@cutn.ac.in  Tel: +91 94430 46272

Fig.S1 Dye RO 4 structure and UV spectrum
Fig. S2. Catalyst reusability; [RO 4] = 5×10^{-4}M, pH = 7, catalyst suspended = 2g L^{-1}, airflow rate = 8.1 mLs^{-1}, I_{UV} = 1.381×10^{-6}einstein L^{-1} s^{-1}, irradiation time = 60 min
**Fig. S3** The changes in UV-vis spectra of RO 4 on irradiation with UV light in the presence of 0.05 wt% DPBI loaded TiO$_2$

a) 0 min, b) 10 min, c) 20 min, d) 30 min, e) 40 min and f) 60 min

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