

Electronic Supplementary Information

**CO₂-Triggered Fluorescence “Turn-on” Response of
Perylene Diimide-Containing Poly(*N,N*-dimethylaminoethyl methacrylate)**

Li Qun Xu¹, Bin Zhang¹, Ming Sun¹, Liang Hong¹, Koon-Gee Neoh¹, En-Tang Kang^{1*}, Guo
Dong Fu²

¹ Department of Chemical & Biomolecular Engineering
National University of Singapore
Kent Ridge, Singapore 119260

² School of Chemistry and Chemical Engineering
Southeast University
Jiangning District, Nanjing, Jiangsu Province, P.R. China 211189

* To whom correspondence should be addressed:
E-mail: cheket@nus.edu.sg

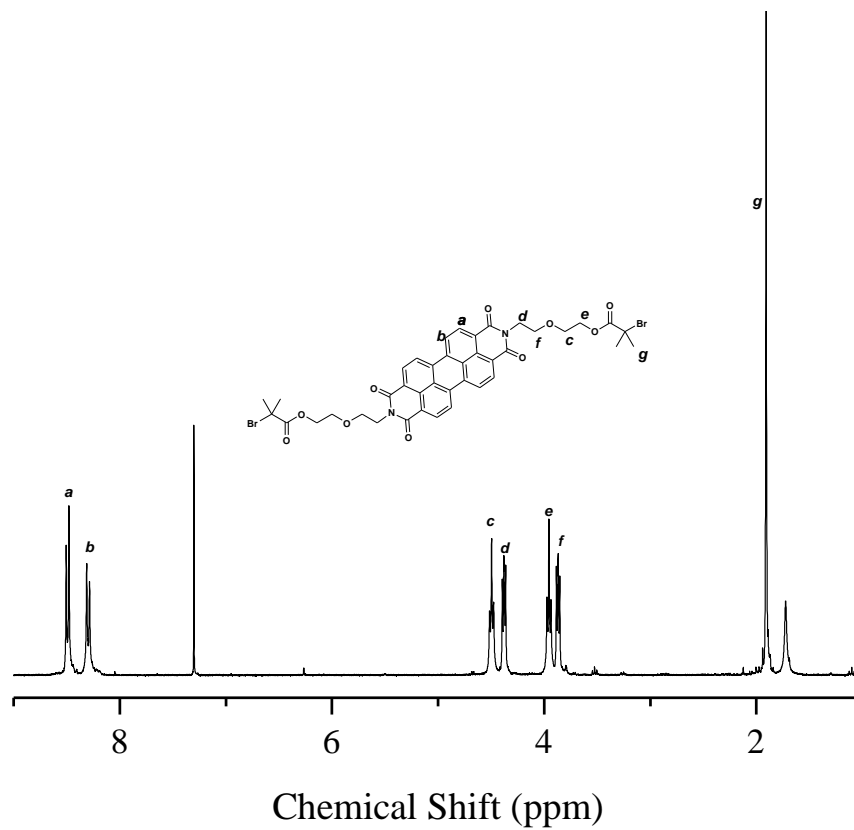


Fig. S1. ¹H NMR spectrum of PBI-Br in CDCl₃.

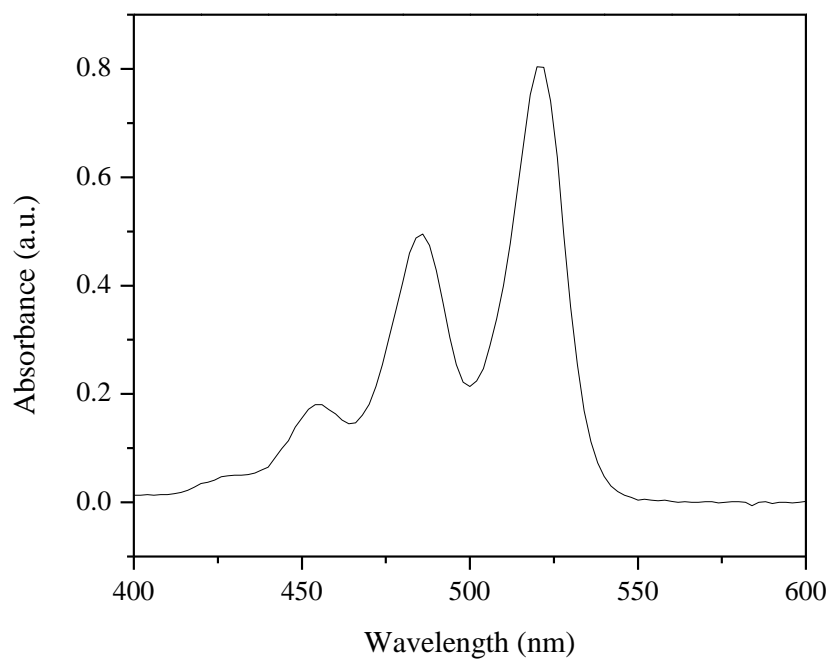


Fig. S2. UV-visible absorption spectrum of PBI-Br in THF with a concentration of 1.2×10^{-5} mol/L.

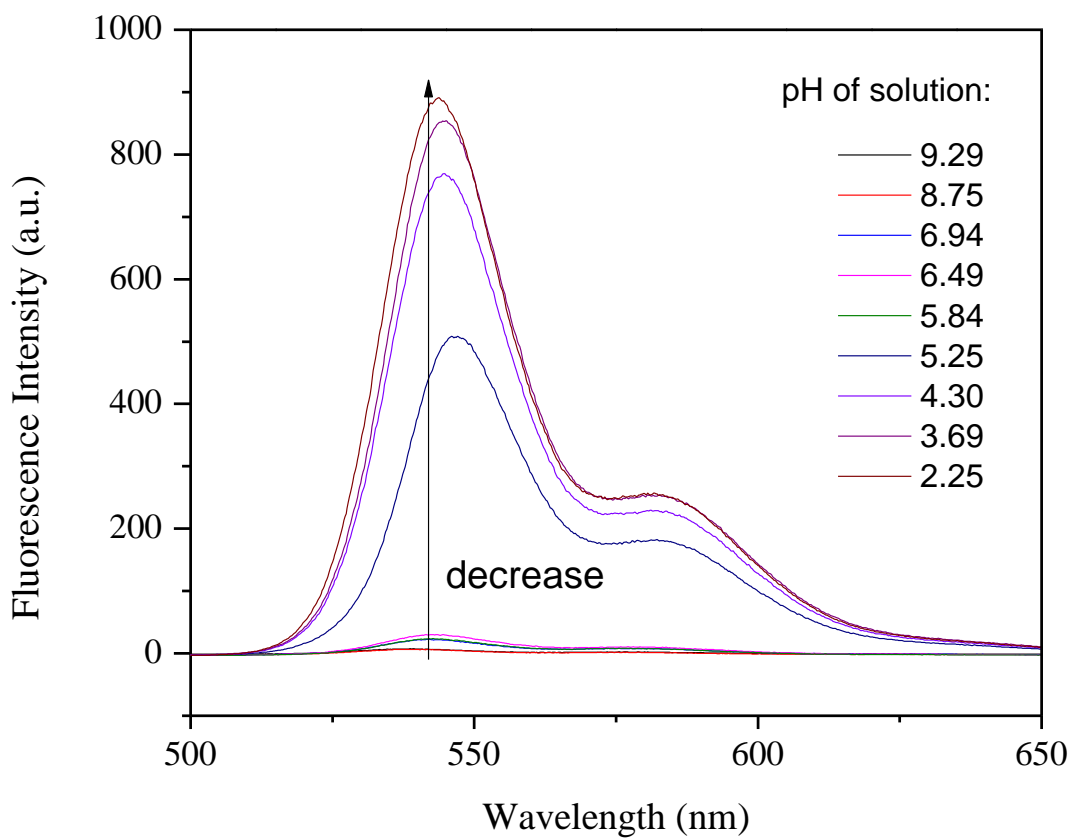


Fig. S3. pH dependent fluorescence spectra of **P2** aqueous solution at an excitation wavelength of 494 nm.

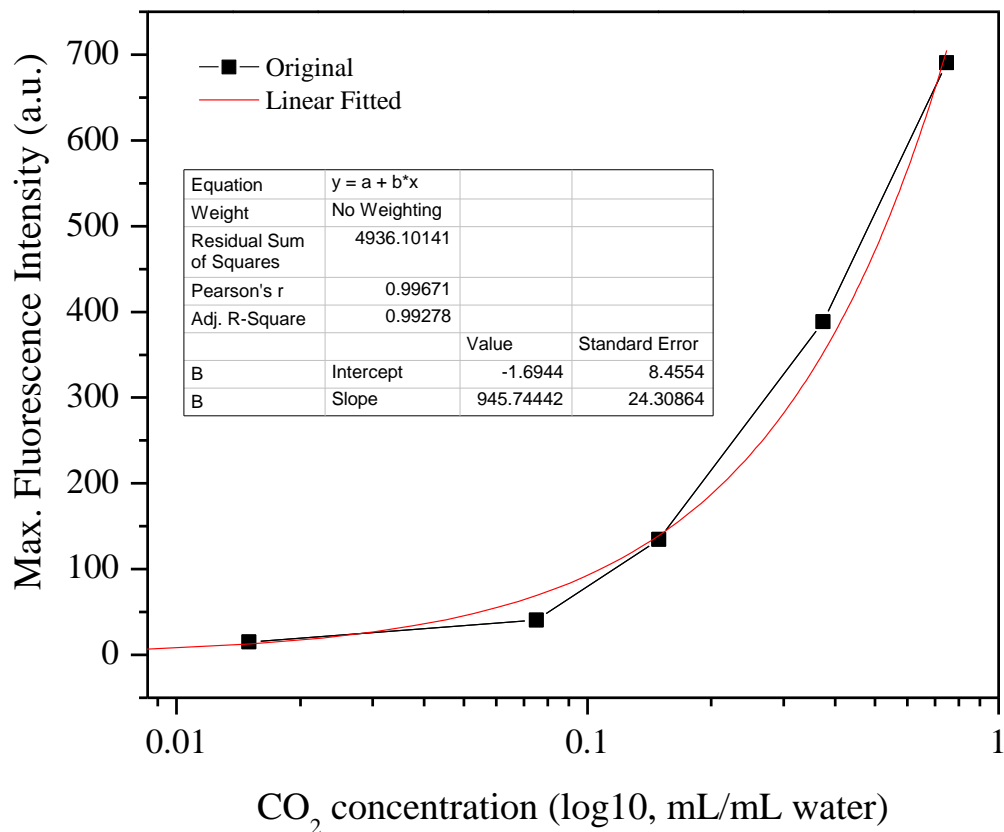


Fig. S4. The plot and fitted calibration curve of dissolved CO₂ concentrations versus fluorescence emission intensity of **P2** at 547 nm.