Supporting Information for:

Synthesis, Photophysics, Electrochemistry and Electrogenerated Chemiluminescence of PEG-Modified BODIPY dyes in Organic and Aqueous Solutions

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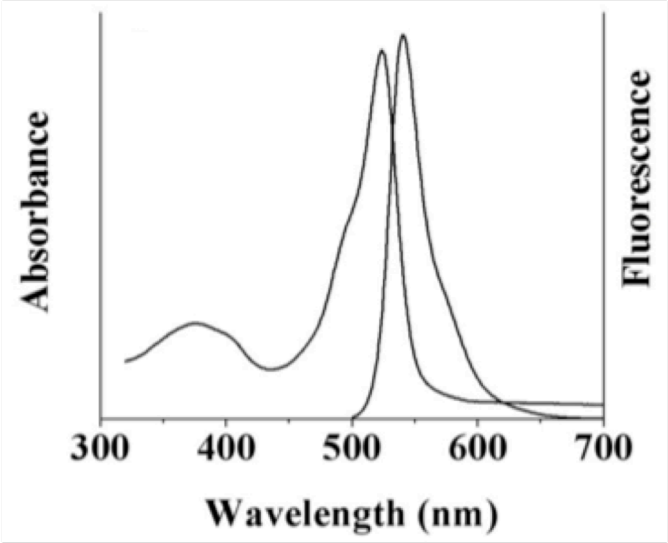

Figure S1. Absorption and fluorescence spectra of 2 μM **BOPEG3** in water

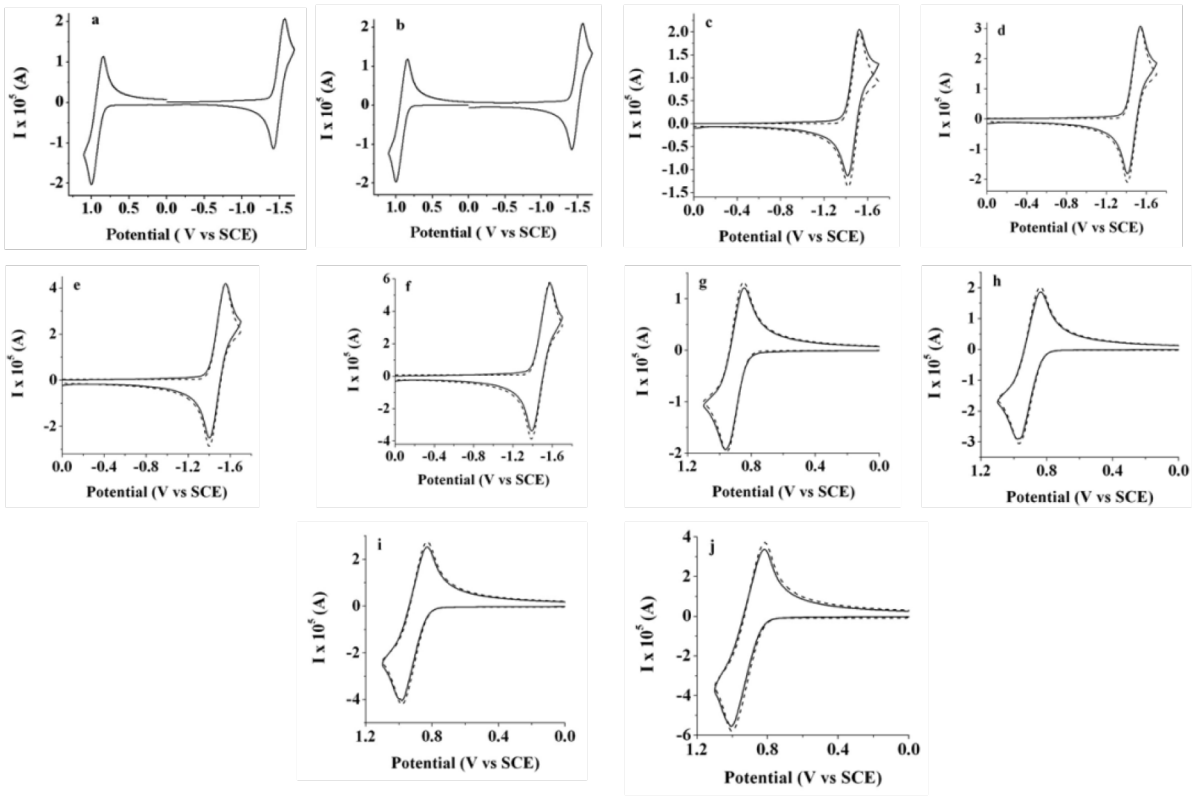

Figure S2. Cyclic voltammograms of 2.2 mM **BOPEG2** during scan in negative (a) and positive (b) direction. Experimental (solid line) and simulated (dashed line) data for oxidation of (c-h) 2.2 mM and (i-p) 3 mM of **BOPEG2;** (c) and (g) scan rate 0.1 V/s; (d) and (f) 0.25 V/s; (e) and (i) 0.5 V/s; (h) and (j) 1 V/s. Experimental data: solvent: methylene chloride; supporting electrolyte: 0.1 M $TBAPF_6$; electrode area: 0.0314 cm^2. Simulated data: diffusion coefficient of the dye is 6.6 x 10^{-6} cm^2/s; uncompensated resistance 800 Ω; capacitance 7 x 10^{-7} F was used in calculations.

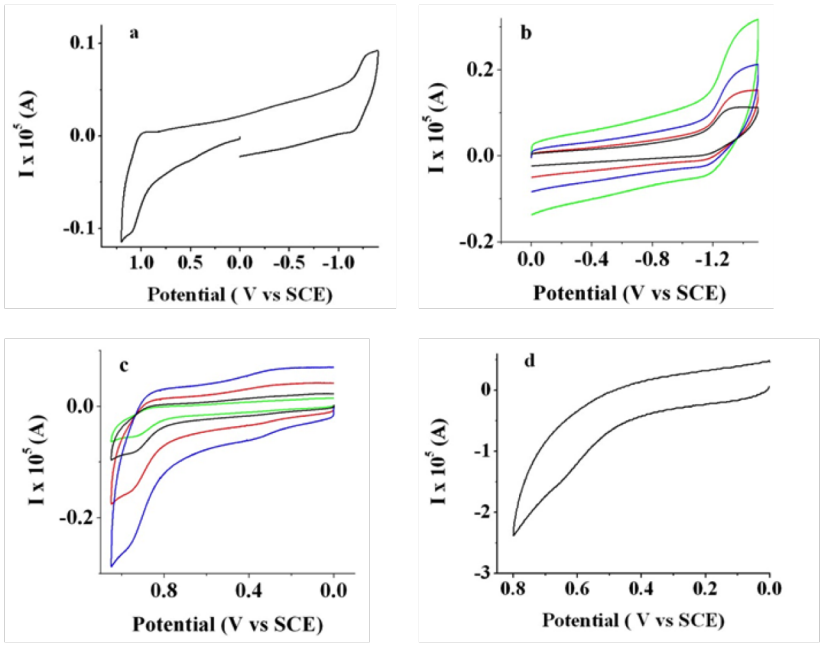

Figure S3. Cyclic voltammograms of 0.1 mM **BOPEG3** (a-d); (a) ful scan; (b) scan to the negative direction, where 0.05 V/s is black, 0.1 V/s red, 0.25 V/s (blue) and 0.5 V/s (red) and (c) 0.1 V/s (green line), 0.25 V/s (black line), 0.5 V/s (red line) and 1 V/s (blue line); (d) scan in water for 1 mM of **BOPEG3**. Solvent: methylene chloride (a-c); (d) water; supporting electrolyte: 0.1 M $TBAPF_6$ for the DCM scans and 0.2 M $NaNO_3$ for aqueous experiment; 50 mM phosphate buffer was applied for aqueous experiment; 0.0314 cm^2 platinum electrode was used for experiments in DCM and 0.071 cm^2 glassy carbon for aqueous solution experiments.