Supporting Information

Green and Blue Electrochromic Polymers from Processable Siloxane Precursors

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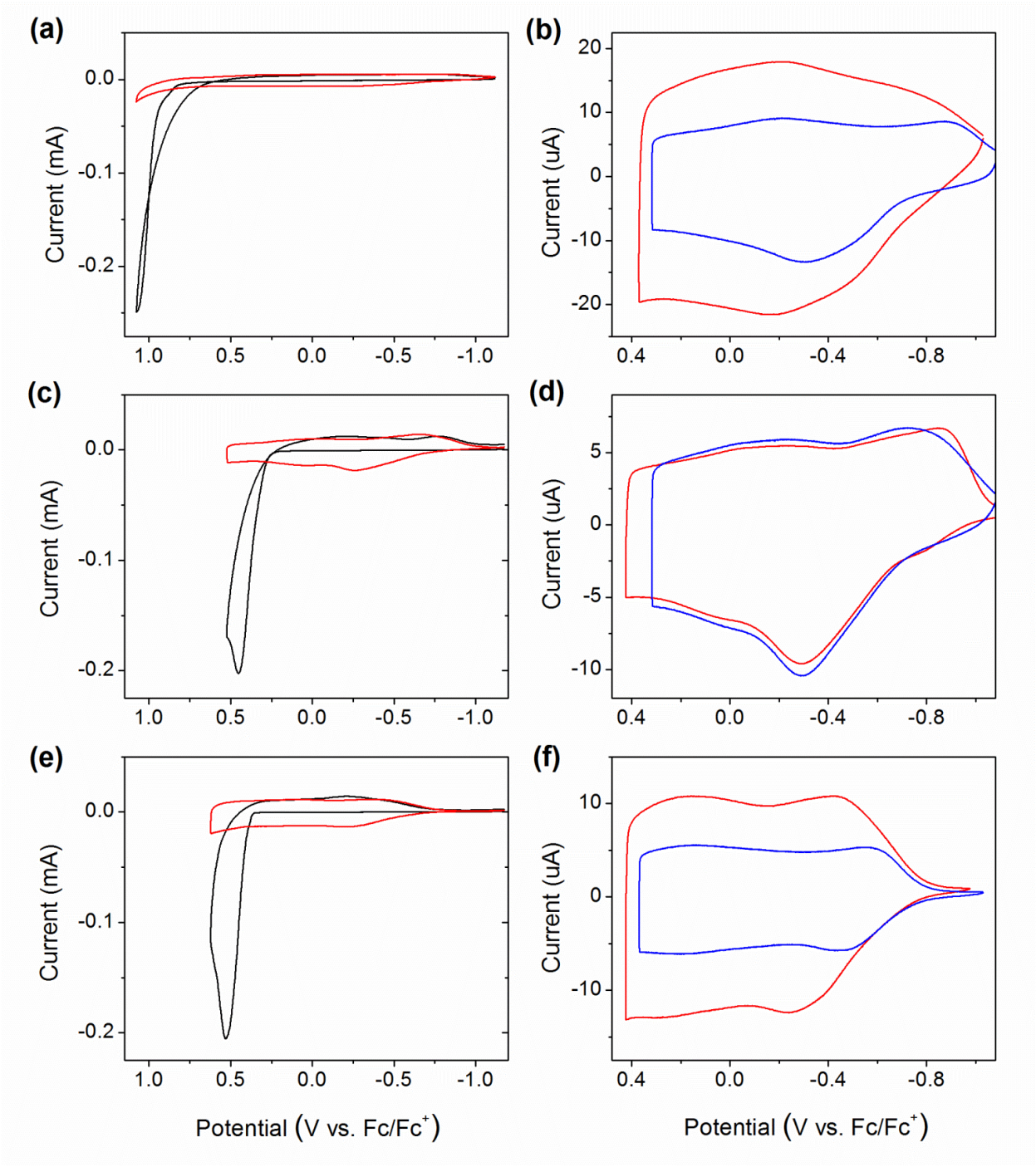
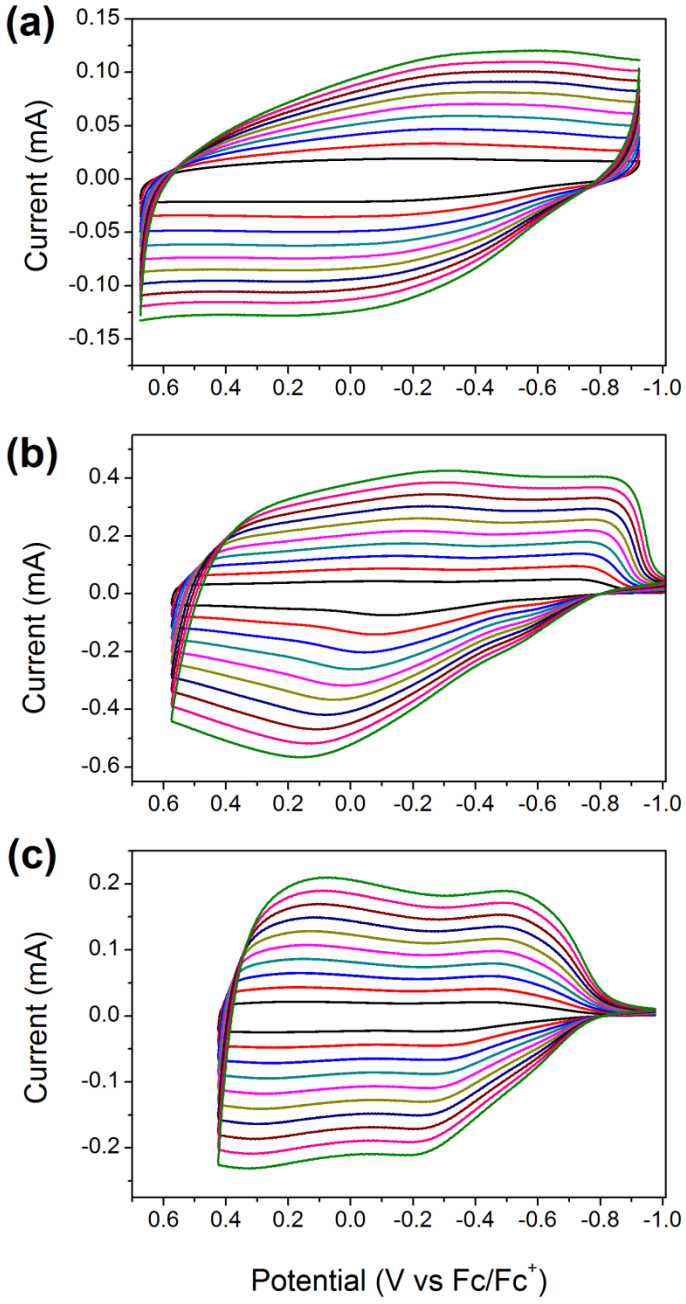
SI Table 1. The feed ratio and NMR determined actual ratio of siloxane/silane unit in **4**, **5**, and **6**. The feed was calculated with the molar ratio of 1,3-dichloro-1,1,3,3-tetramethyldisiloxane to dichlorodimethylsilane. The actual ratio was calculated by the integration of methyl groups in the siloxane compared to methyls in the silane using ^{1}H-NMR.

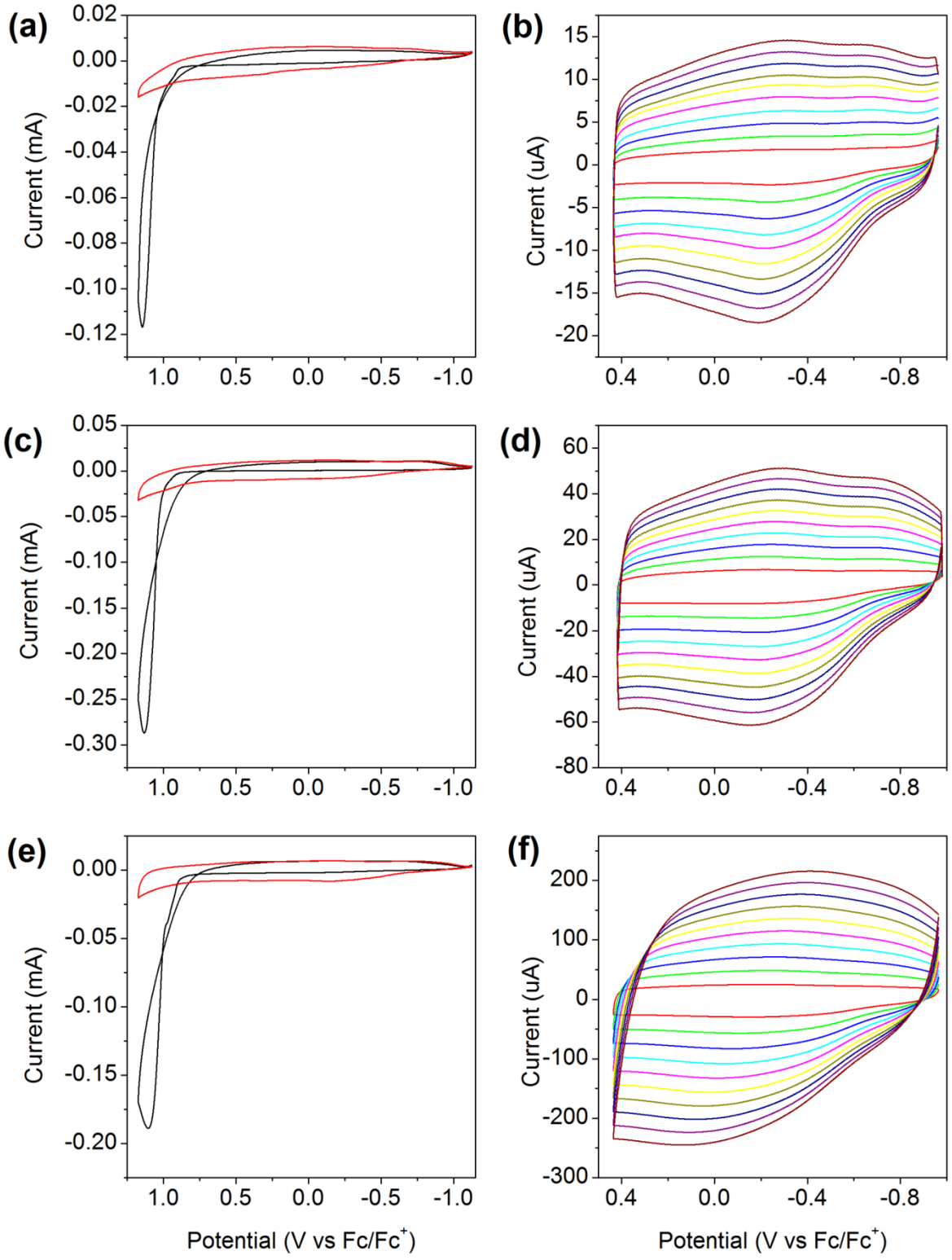
	Feed ratio Siloxane : Silane	Actual ratio Siloxane : Silane
4	0.67 : 0.33	0.68 : 0.32
5	0.50 : 0.50	0.51 : 0.49
6	0.33 : 0.67	0.31 : 0.69



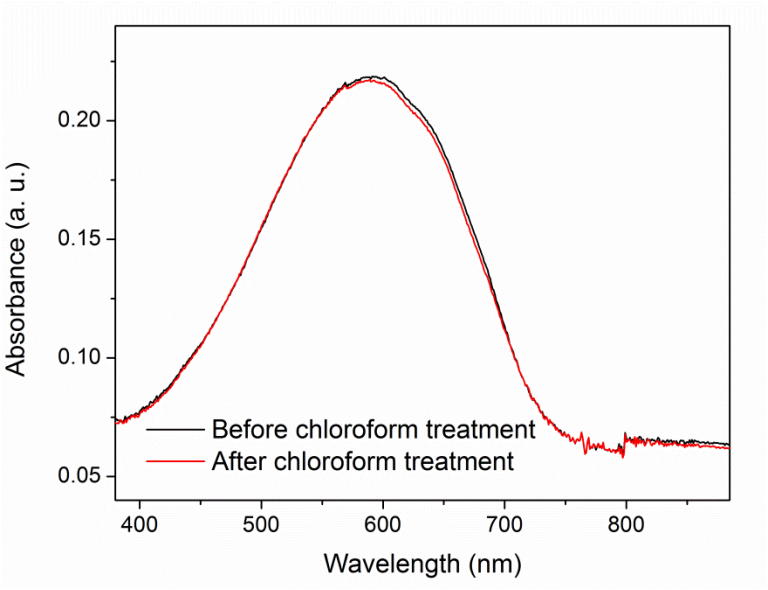
SI Figure 1. CVs showing electrochemical conversion of (a) **1**, (c) **2**, and (e) **3**, where black and red lines indicate first and second scans, respectively. Comparison of CVs of the resulting CP from precursor (red line) and CP from electrochemical polymerization of monomer (blue line), (b) **P1** and PEDOT, (d) **P2** and polyBiEDOT, and (e) **P3** and polyBEBTD.



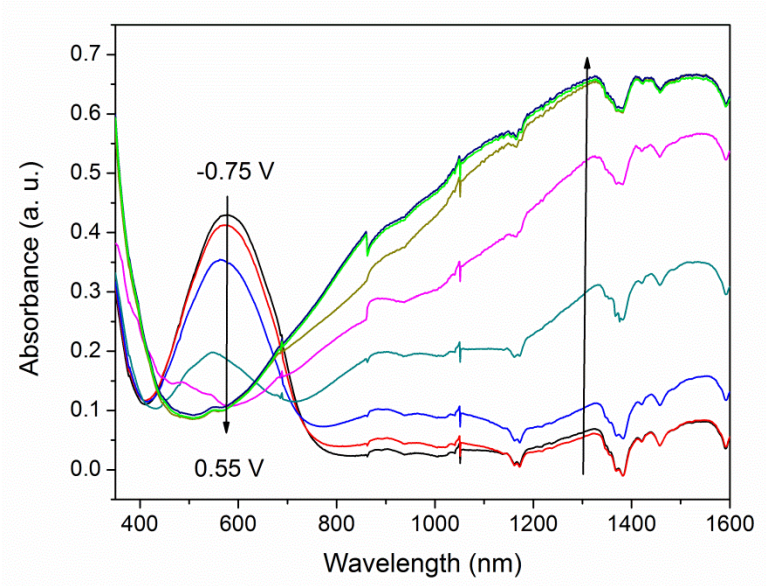
SI Figure 2. Scan rate study of resulting conjugated polymers, (a) **P1**, (b) **P2**, and (c) **P3**. The scan rate was increased in 0.1 V increments from 0.1 V/s (black line) to 1.0 V/s (green line).



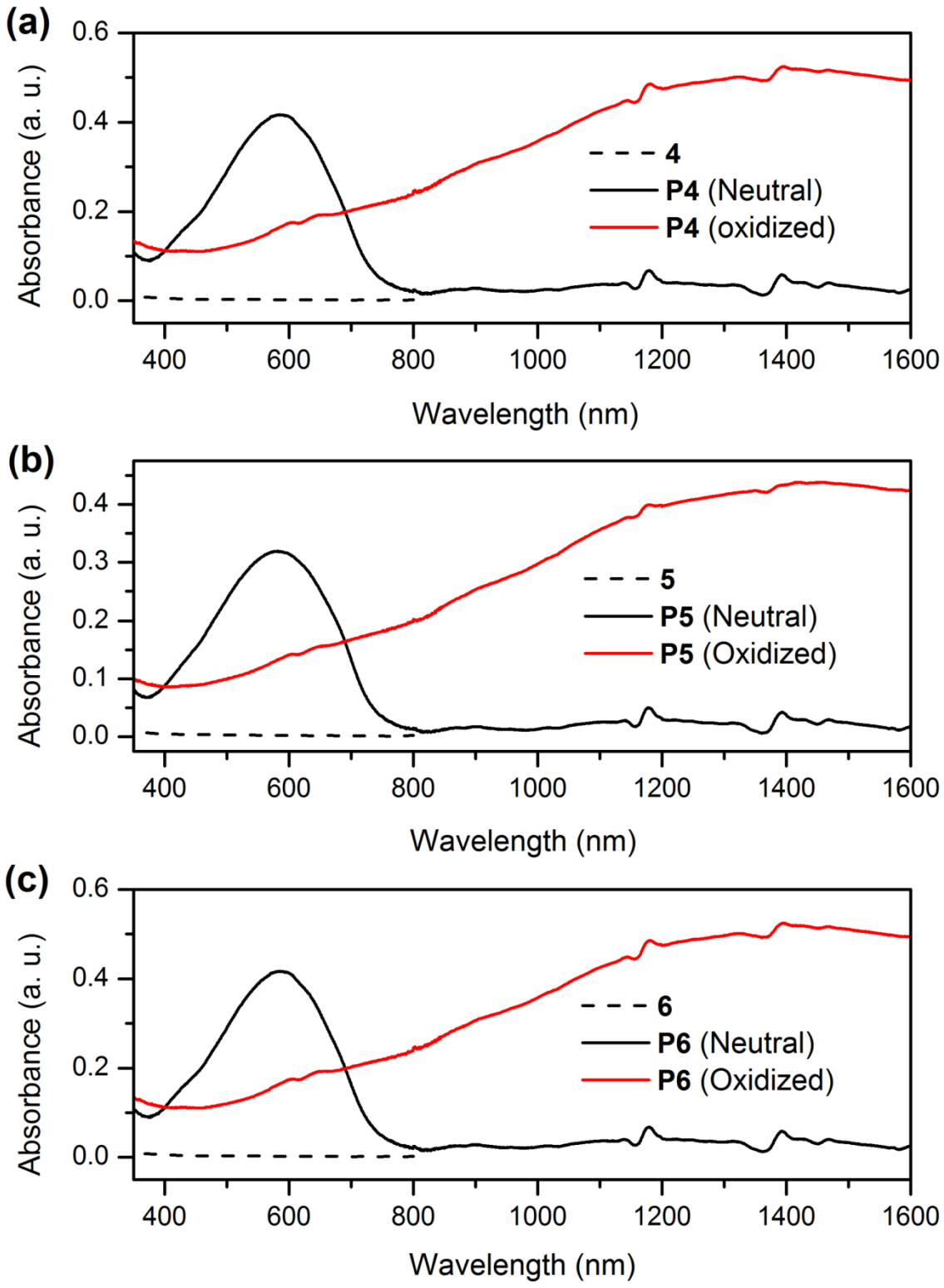
SI Figure 3. CVs of electrochemical conversions of (a) **4**, (c) **5**, and (e) **6**, and scan rate study of resulting conjugated polymers, (b) **P4**, (d) **P5**, and (f) **P6**. For electrochemical conversion (left column), black and red lines indicate first and second scan, respectively. For scan rate studies (right column), the scan rate was increased in 0.1 V increments from 0.1 V/s (red line) to 1.0 V/s (brown line).



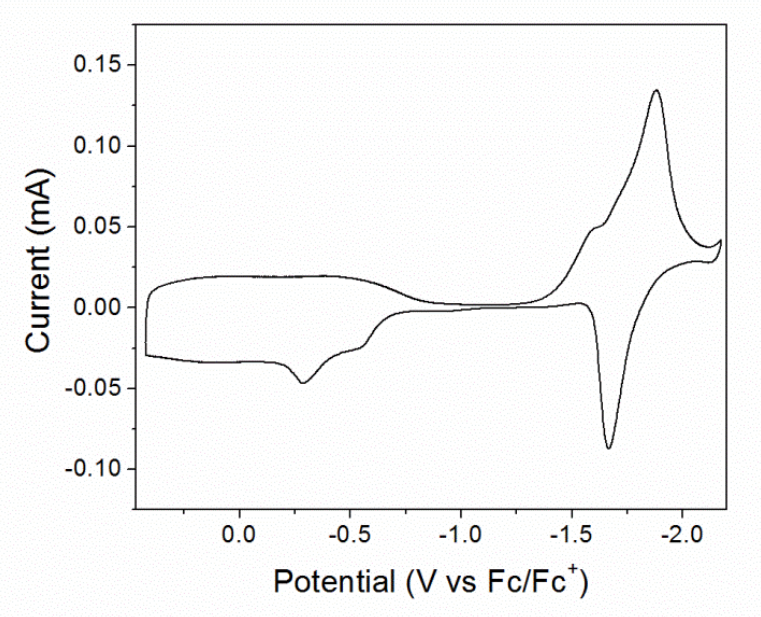
SI Figure 4. Absorbance spectra of **P1** before (black) and after (red) chloroform treatment for 30 min.



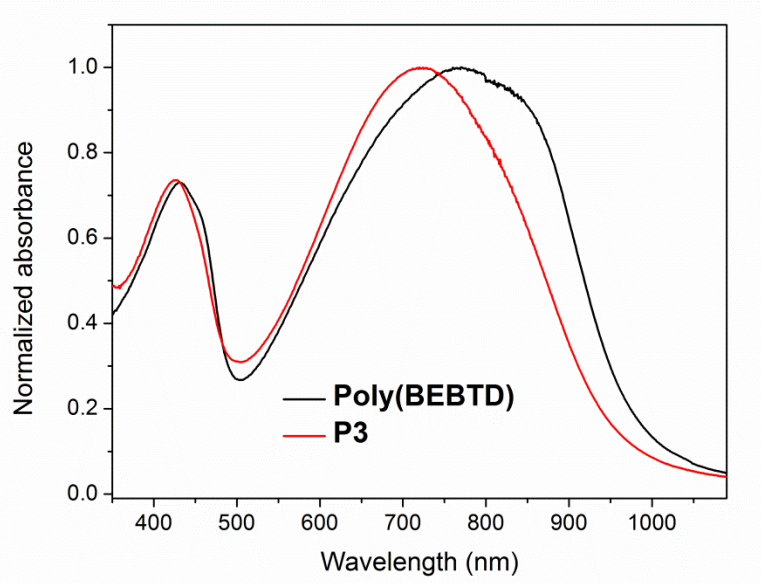
SI Figure 5. Spectroelectrochemistry of **P1**. The applied potential was increased in 0.2 V increments from -0.75 V (black line) to 0.55 V (light green line).



SI Figure 6. UV-vis-NIR spectra of precursor and resulting conjugated polymers in the neutral and oxidized state. (a) **4** and **P4**, (b) **5** and **P5**, and (c) **6** and **P6**.



SI Figure 7. *p*- and *n*-doping of **P3**. CV was taken from -2.30 V to 0.45 V with a scan rate of 100 mV/s.



SI Figure 8. Comparison of absorption spectra of electropolymerized poly(BEBTD) and **P3**.