Supporting Information:

Electrochemistry, Electrogenerated Chemiluminescence, and Electropolymerization of Oligothienyl-BODIPY Near Infrared Emitters

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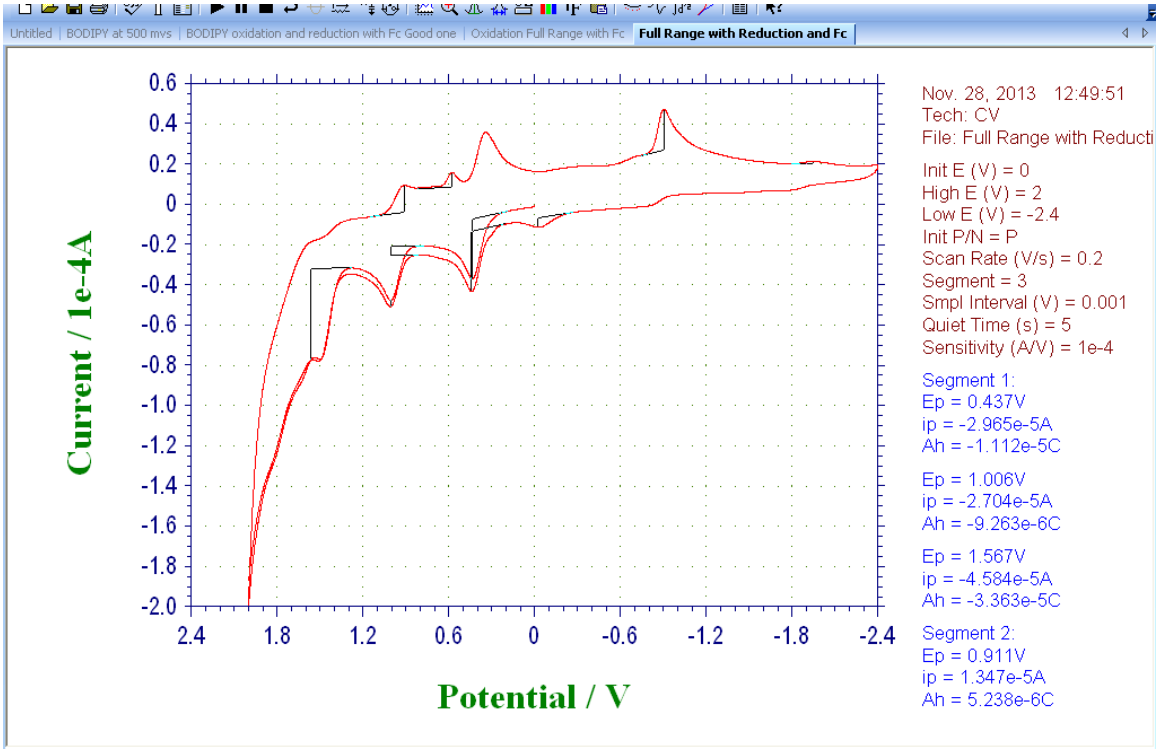
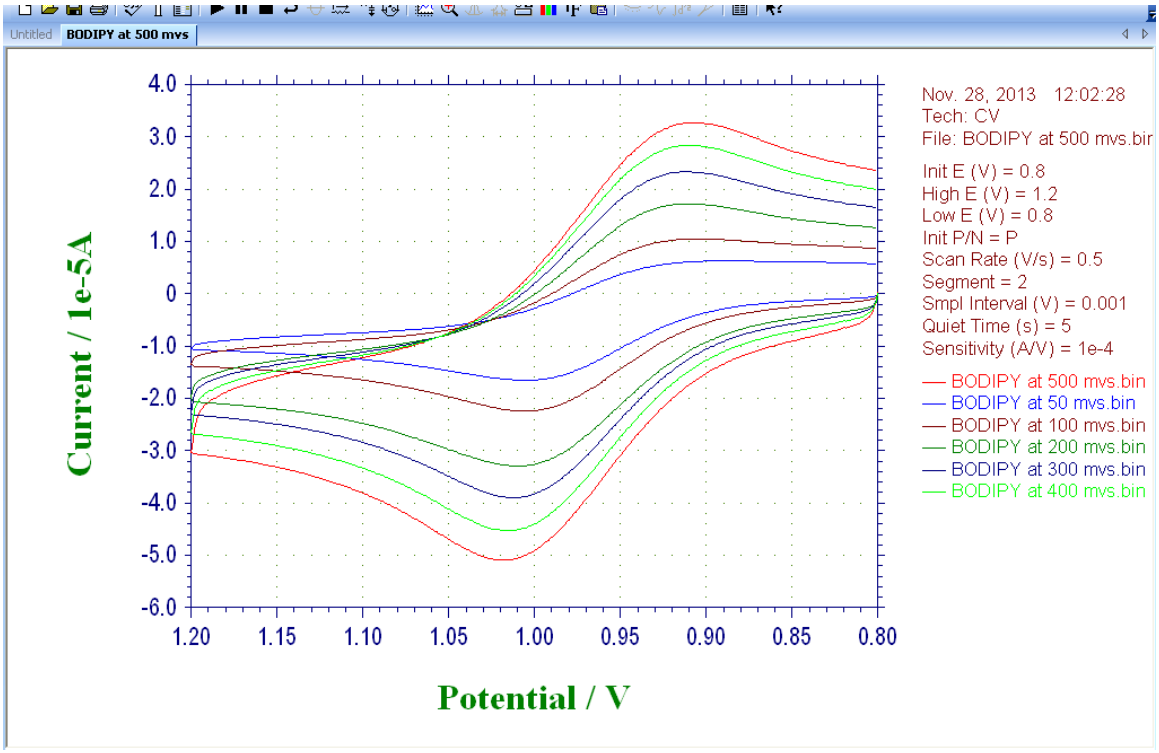
For the following: ACN was used except for 5, where a 1:1 (v/v) ACN to benzene was used to increase solubility.

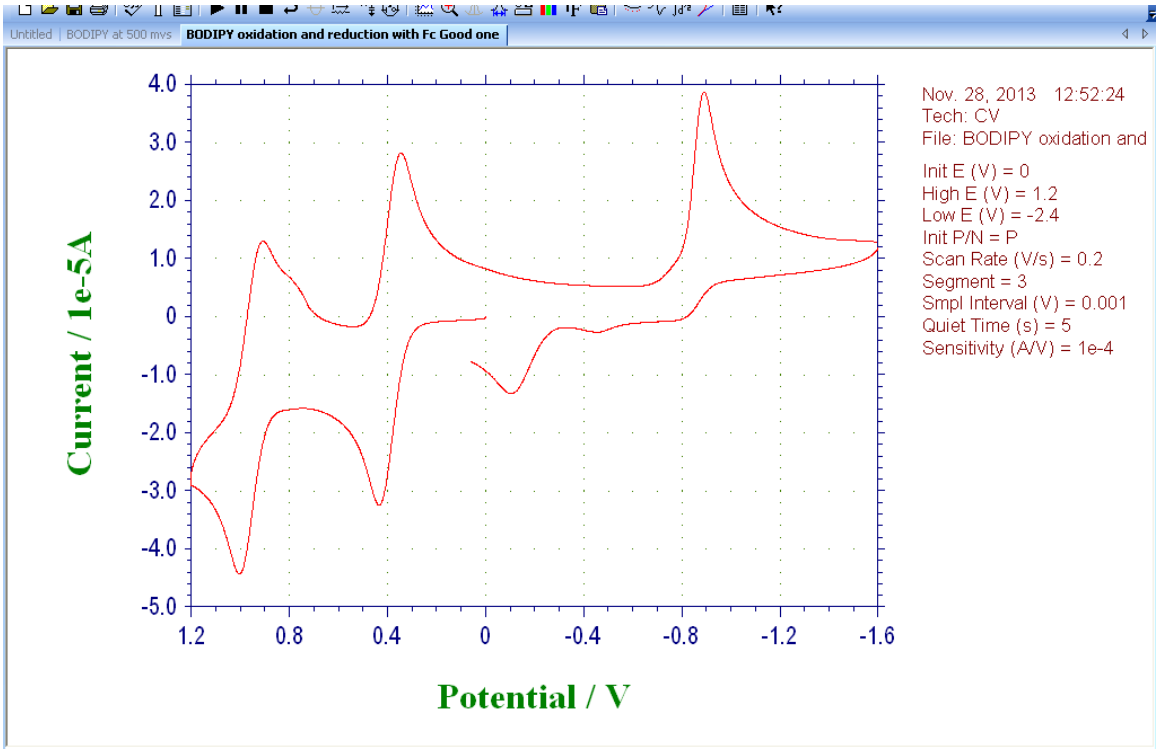
Cyclic Voltammetry Data
All species were held at *ca.* 1 mM



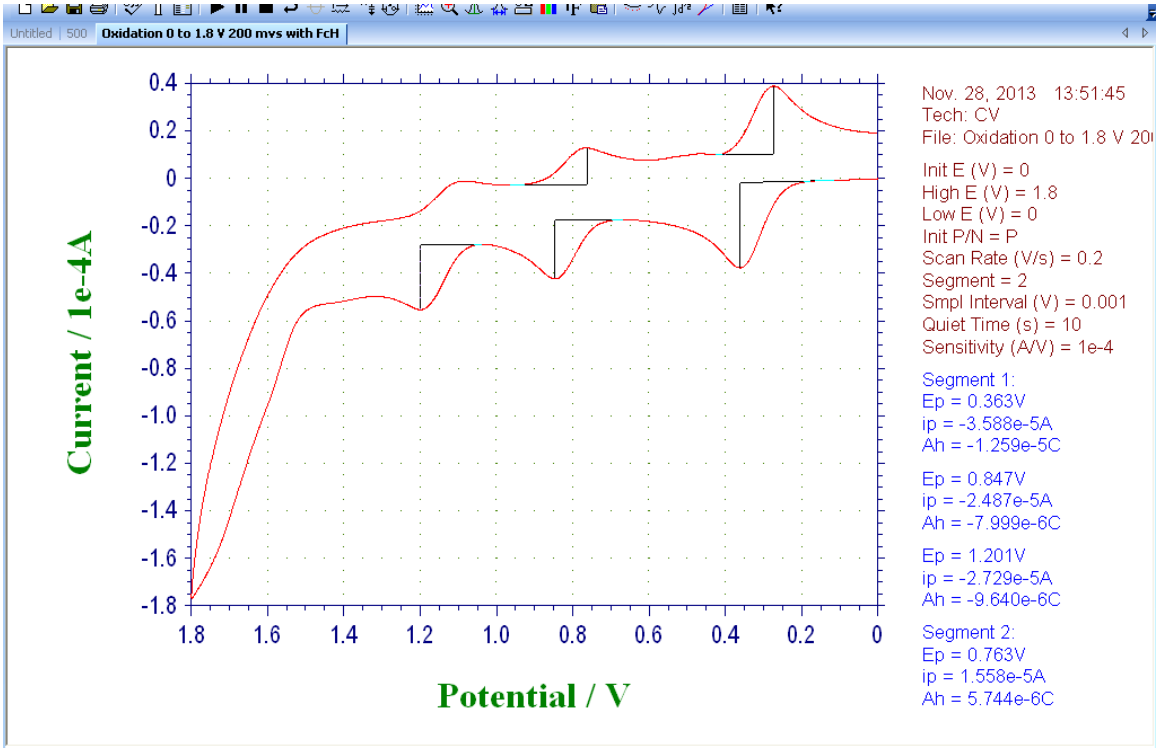
CV Figure 1 shows the full range for **1**. Conditions were ACN in 0.1 M $TBAPF_6$. A glassy carbon working electrode was employed, diam. = 3mm. The scan rate was 200 mV/second. The first reversible oxidation observed is Ferrocene.



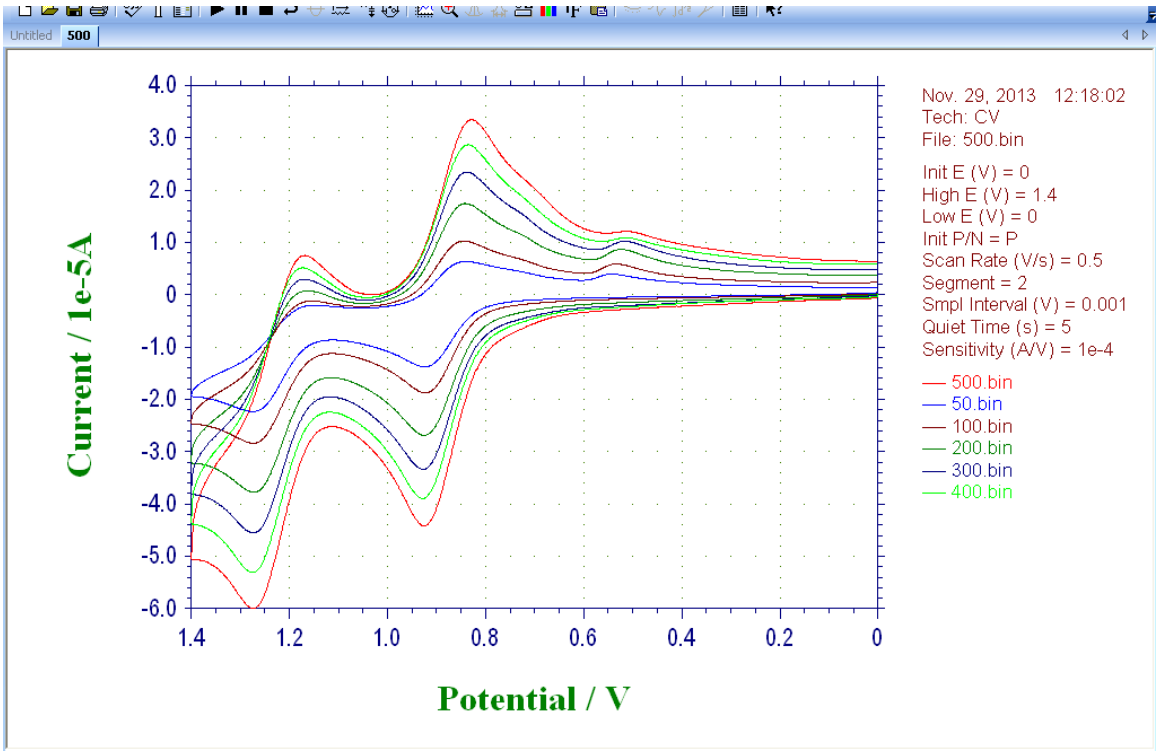
CV Figure 2 shows the current dependence on scan rate for **1**. Conditions were 1:1 Bz/ACN in 0.1 M $TBAPF_6$. A glassy carbon working electrode was employed, diam. = 3mm. The scan rate varied, as shown.



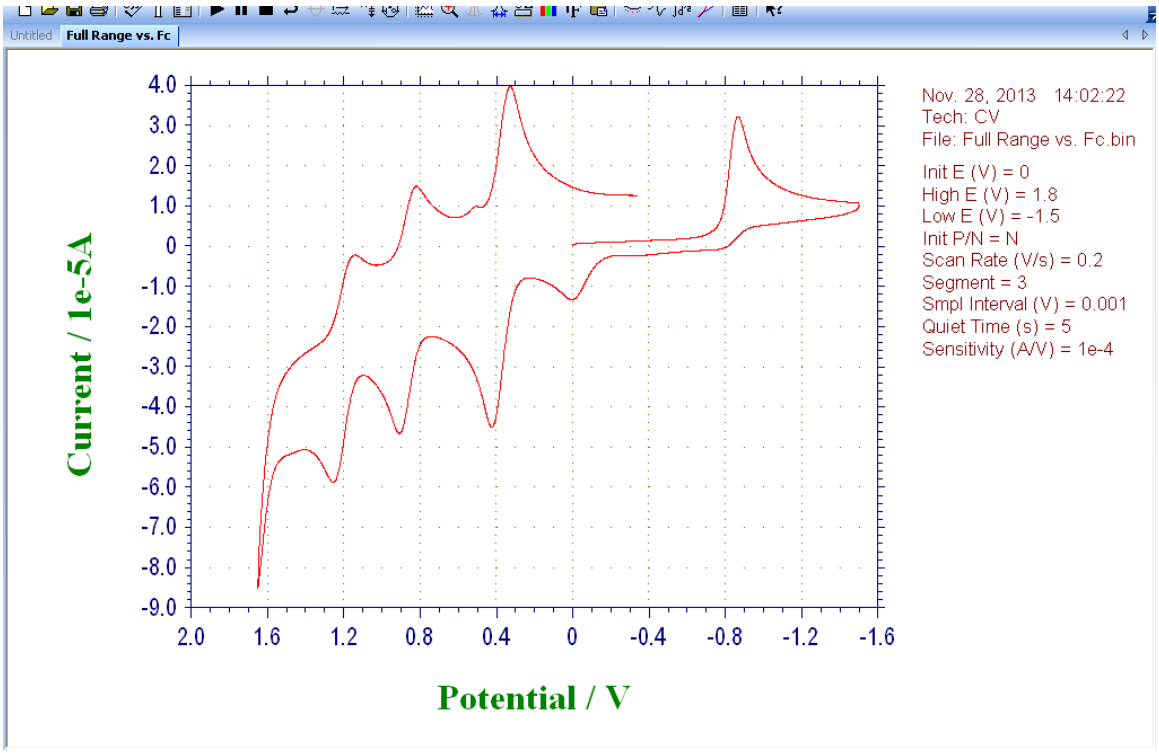
CV Figure 3 shows the BODIPY oxidation and reduction events for **1**. Conditions were 1:1 Bz/ACN in 0.1 M $TBAPF_6$. A glassy carbon working electrode was employed, diam. = 3mm. The scan rate was 200 mV/s. The first oxidation event is Ferrocene.



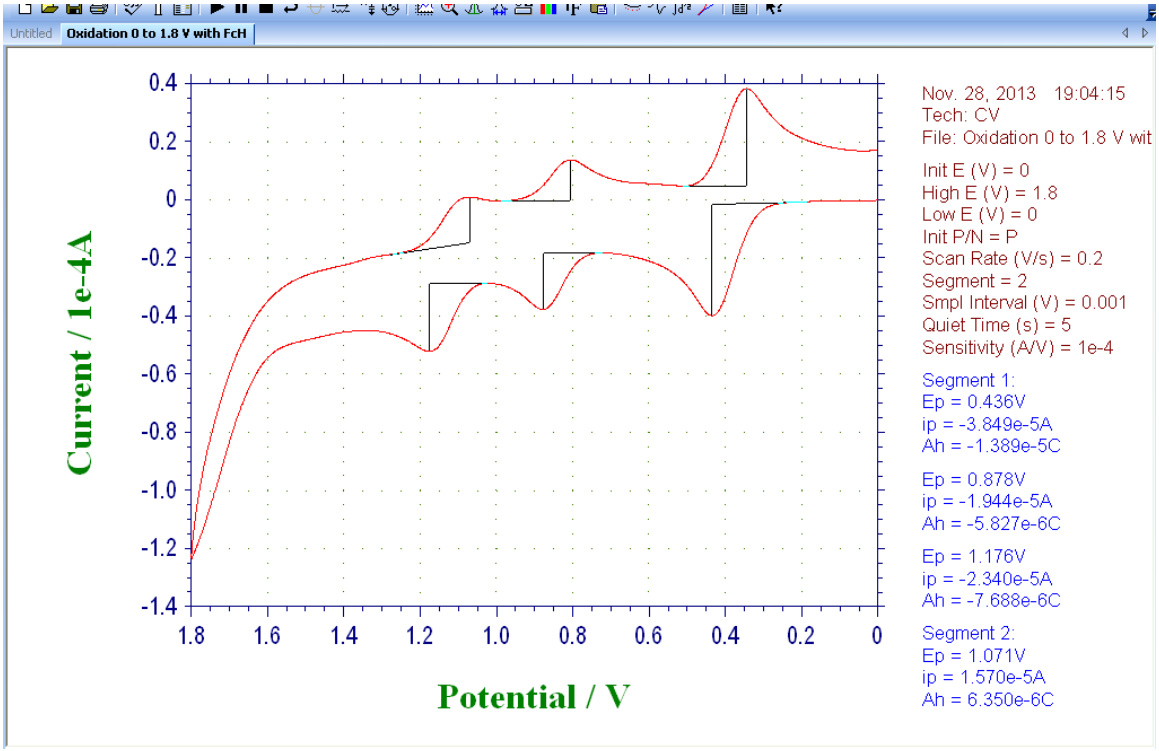
CV Figure 4 shows the oxidation events for the BODIPY and first thiophene for **2**. Conditions were 1:1 Bz/ACN in 0.1 M $TBAPF_6$. A glassy carbon working electrode was employed, diam. = 3mm. The scan rate was 200 mV/s. The first oxidation event is Ferrocene.



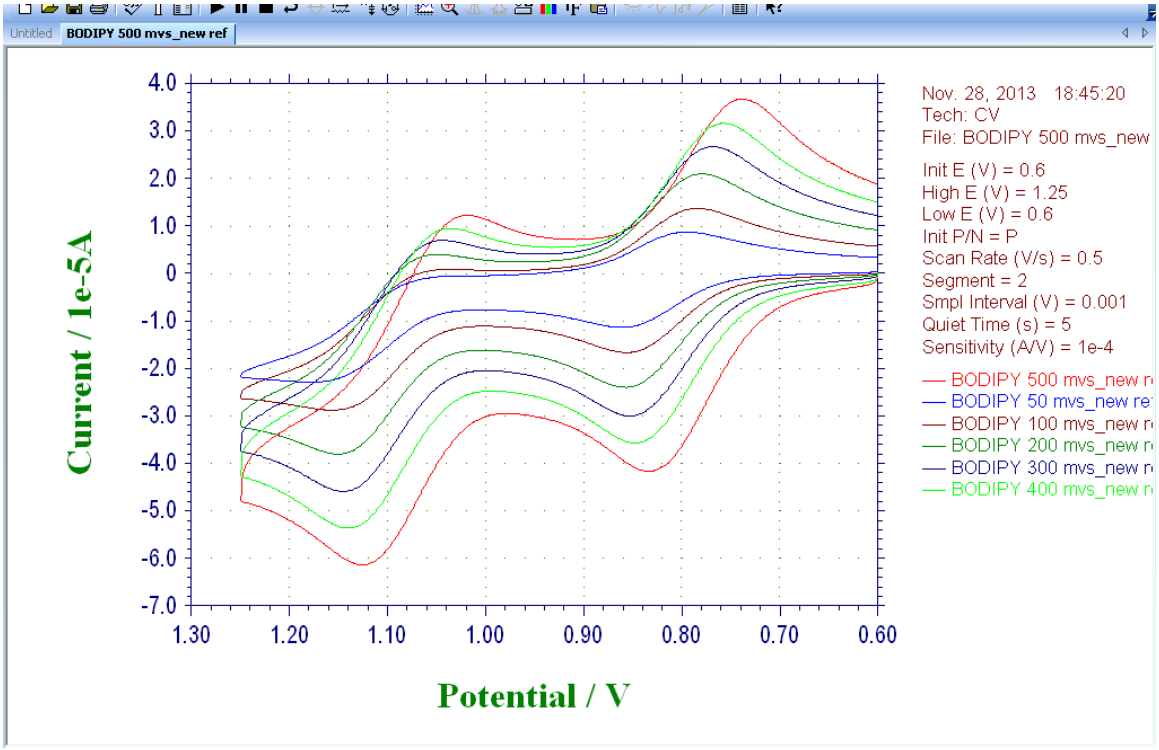
CV Figure 5 shows the current dependence on scan rate for **2**. Conditions were 1:1 Bz/ACN in 0.1 M $TBAPF_6$. A glassy carbon working electrode was employed, diam. = 3mm. The scan rate varied as shown. The first oxidation event BODIPY and the second is the thiophene, which is increasingly reversible at higher scan rates.



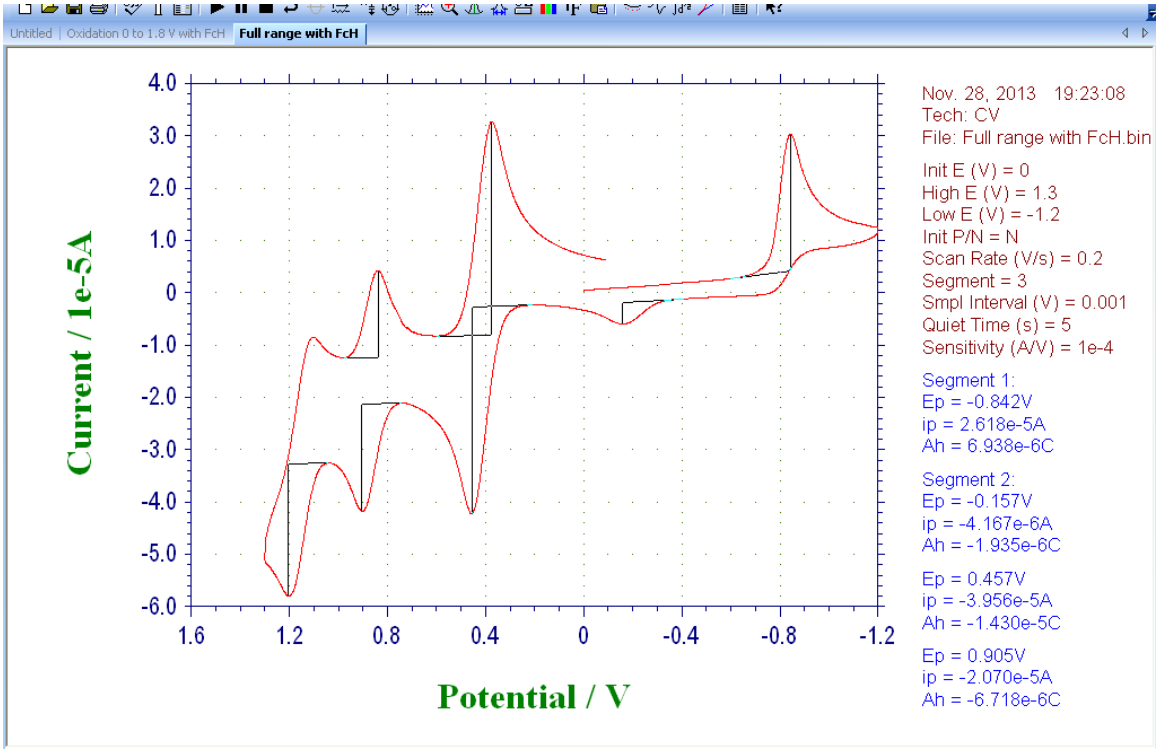
CV Figure 6 shows the oxidation events for the BODIPY and first thiophene and the reduction event for BODIPY for **2**. Conditions were 1:1 Bz/ACN in 0.1 M $TBAPF_6$. A glassy carbon working electrode was employed, diam. = 3mm. The scan rate was 200 mV/s. The first oxidation event is Ferrocene.



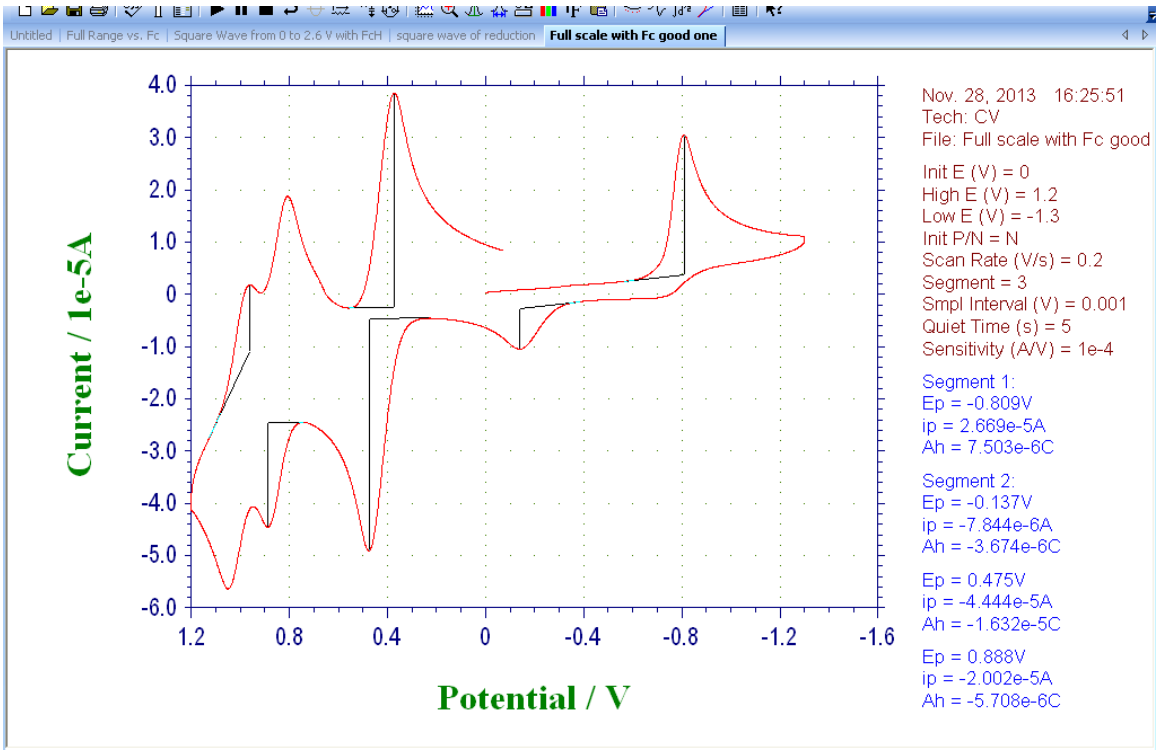
CV Figure 7 shows the oxidation events for the BODIPY and first thiophene for **3**. Conditions were 1:1 Bz/ACN in 0.1 M $TBAPF_6$. A glassy carbon working electrode was employed, diam. = 3mm. The scan rate was 200 mV/s. The first oxidation event is Ferrocene



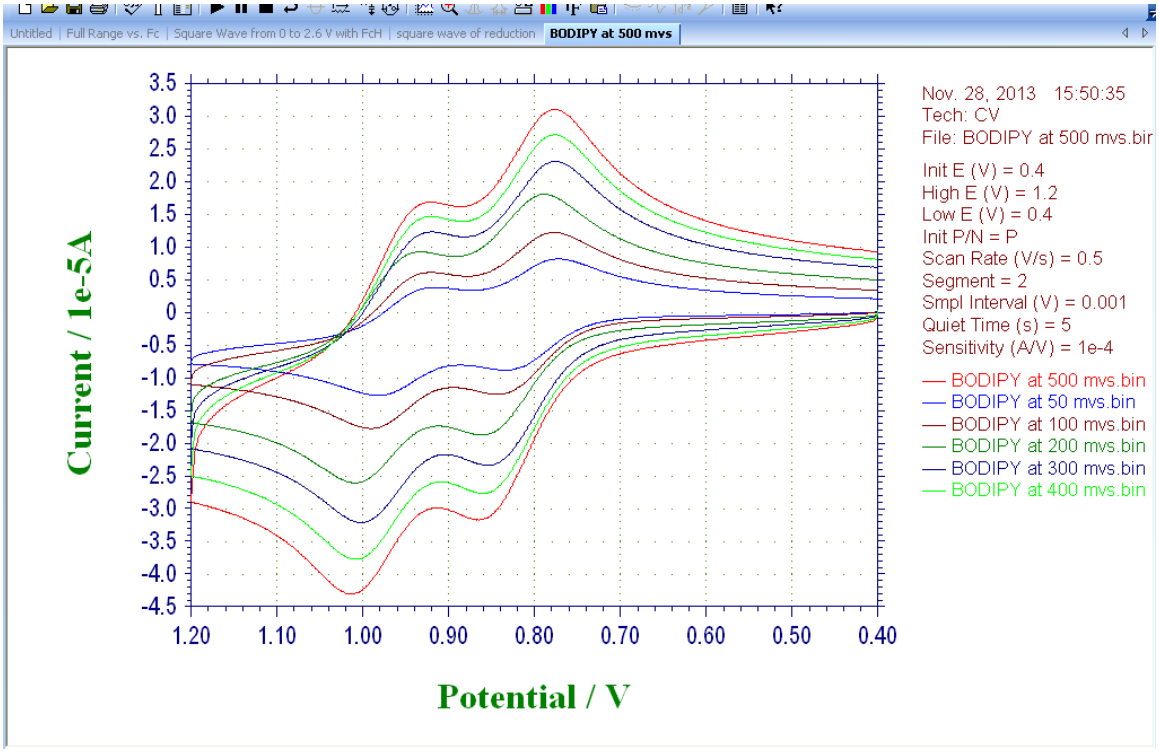
CV Figure 8 shows the current dependence on scan rate for **3**. Conditions were 1:1 Bz/ACN in 0.1 M $TBAPF_6$. A glassy carbon working electrode was employed, diam. = 3mm. The scan rate varied as shown. The first wave is BODIPY and the second is thiophene. The potential shift is due to the silver QRE.



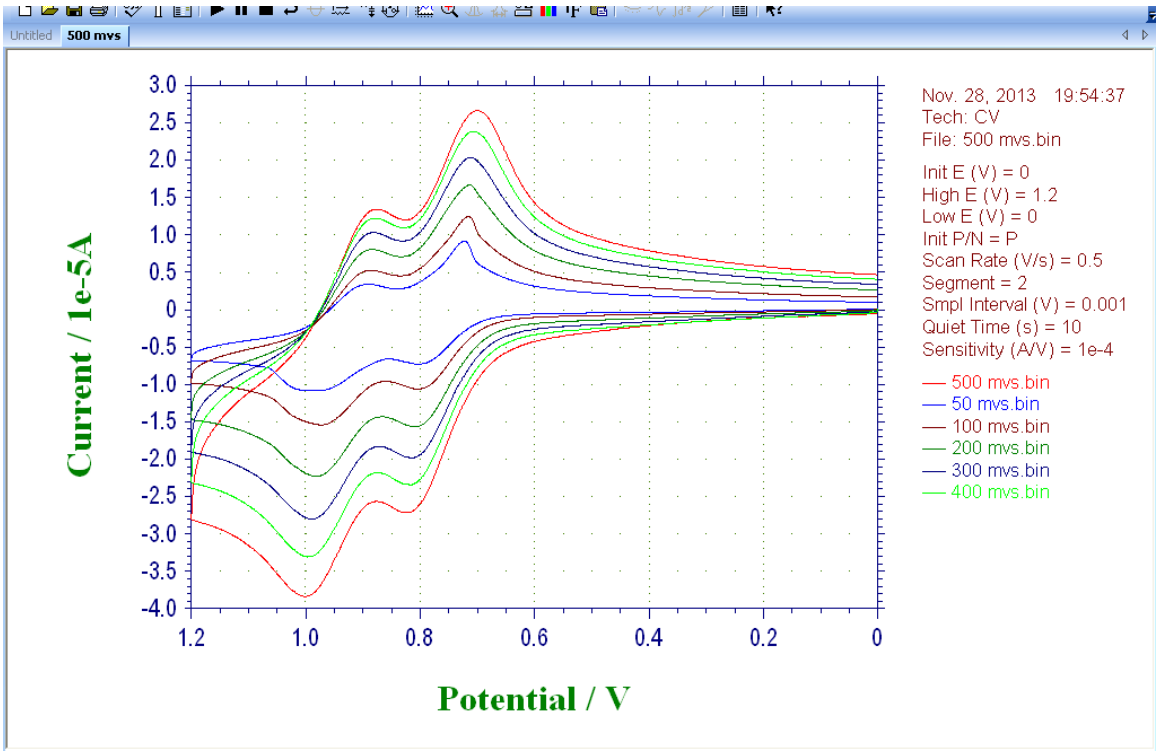
CV Figure 9 shows the oxidation events for the BODIPY and first thiophene and the reduction event for BODIPY for **3**. Conditions were 1:1 Bz/ACN in 0.1 M $TBAPF_6$. A glassy carbon working electrode was employed, diam. = 3mm. The scan rate was 200 mV/s. The first oxidation event is Ferrocene.



CV Figure 10 shows the oxidation events for the BODIPY and first thiophene and the reduction event for BODIPY for **4**. Conditions were 1:1 Bz/ACN in 0.1 M $TBAPF_6$. A glassy carbon working electrode was employed, diam. = 3mm. The scan rate was 200 mV/s. The first oxidation event is Ferrocene

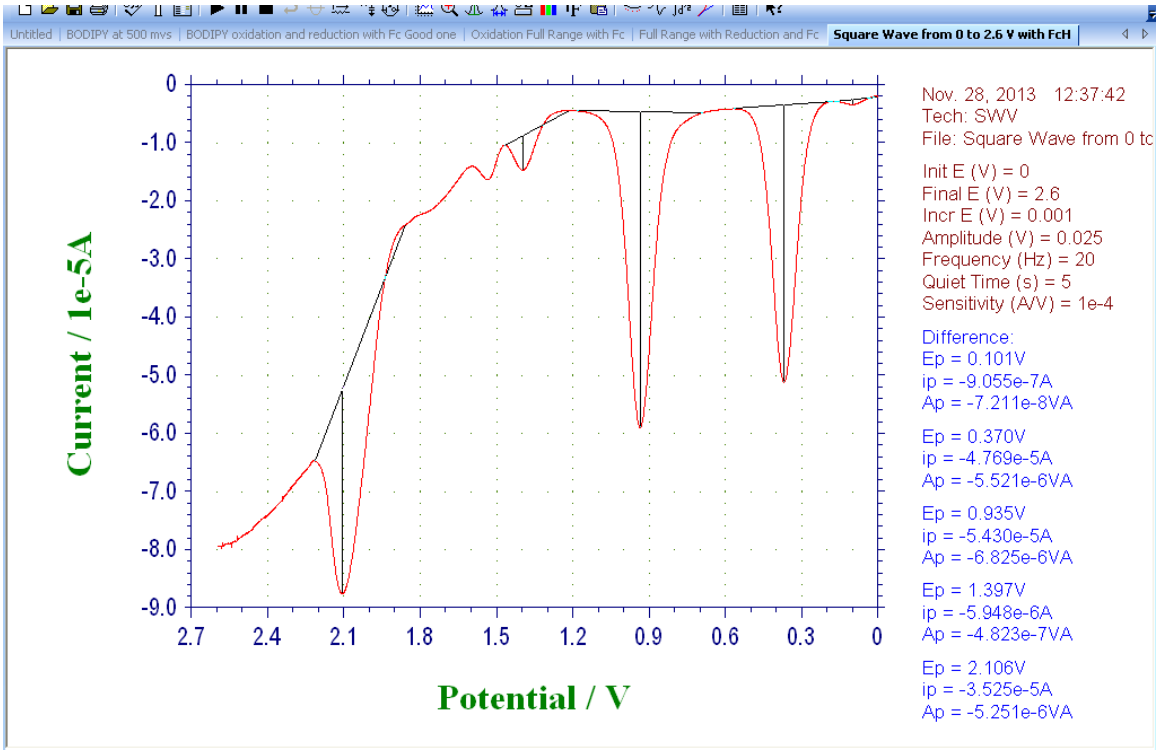


CV Figure 11 shows the current dependence on scan rate for **4**. Conditions were 1:1 Bz/ACN in 0.1 M $TBAPF_6$. A glassy carbon working electrode was employed, diam. = 3mm. The scan rate varied as shown. The first oxidation event BODIPY and the second is the thiophene.

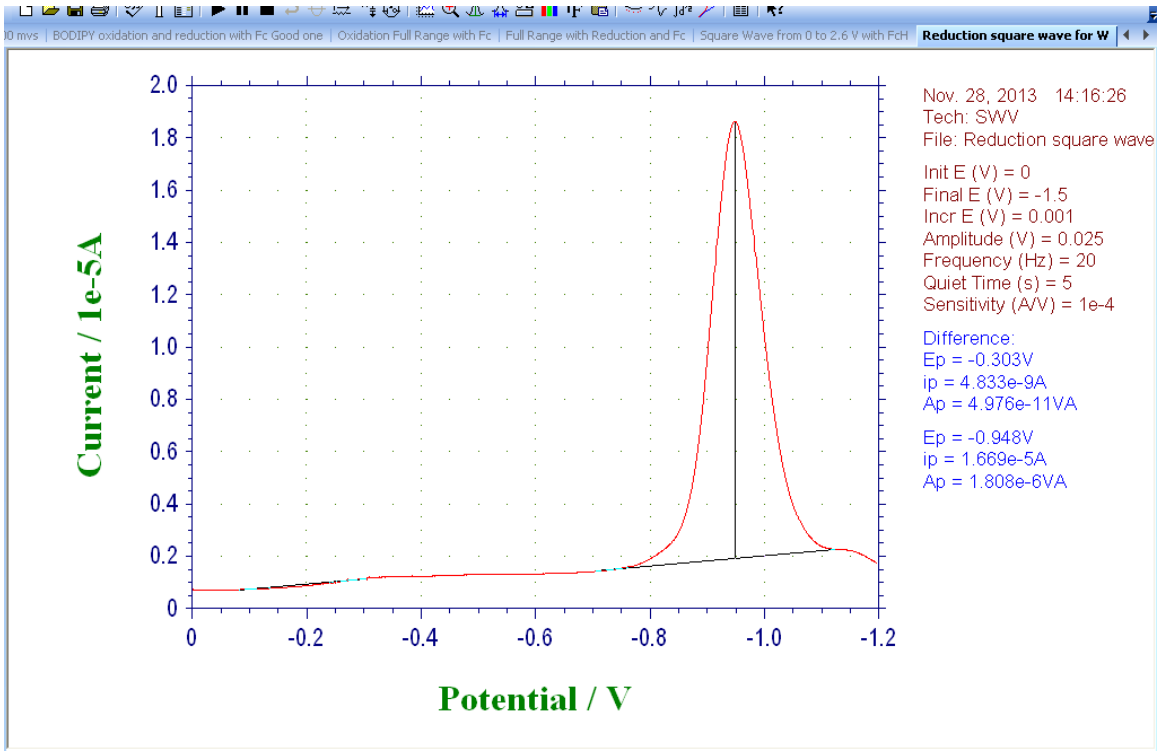


CV Figure 12 shows the current dependence on scan rate for **5**. Conditions were 1:1 Bz/ACN in 0.1 M $TBAPF_6$. A glassy carbon working electrode was employed, diam. = 3mm. The scan rate varied as shown. The first oxidation event BODIPY and the second is the thiophene. Because of the instability of the radical cation in this medium, this compound was not completely soluble, as seen in the slower scan rates for re-reduction.

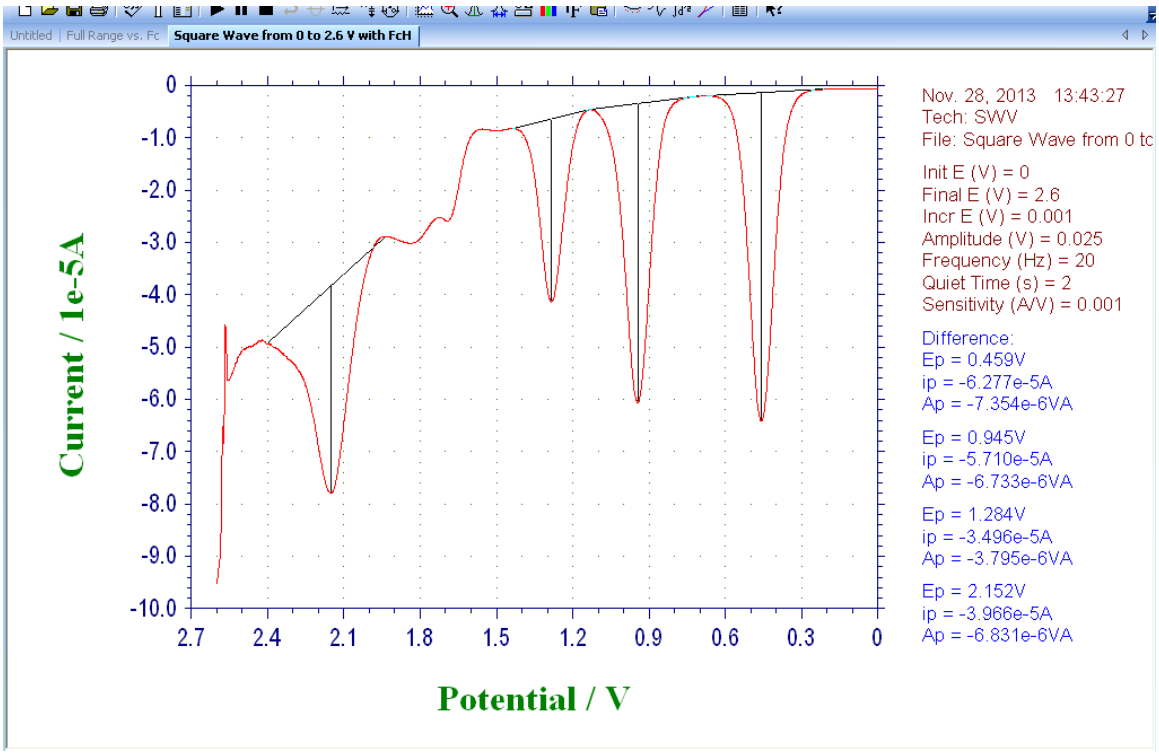
Square Wave Voltammetry Data



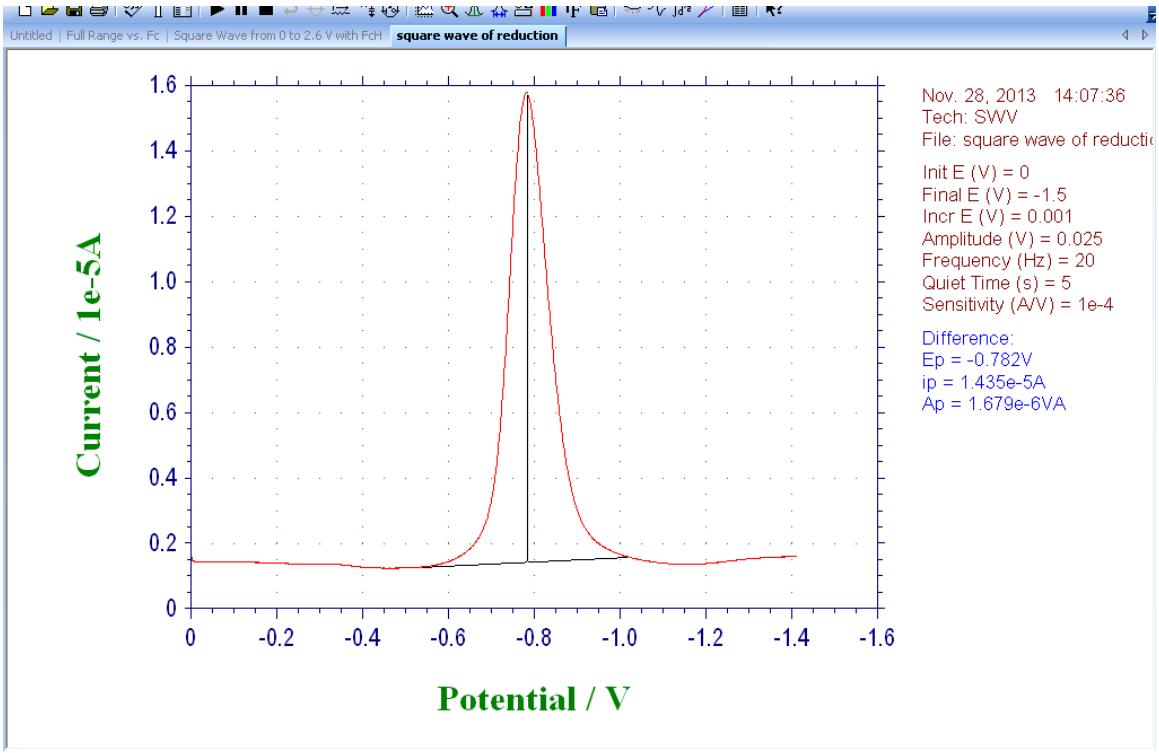
SWV Figure 1 shows the oxidation events for **1**. Conditions were 1:1 Bz/ACN in 0.1 M $TBAPF_6$. A glassy carbon working electrode was employed, diam. = 3mm. The scan increase was 1 mV with an amplitude of 25 mV. Frequency was 20 Hz.



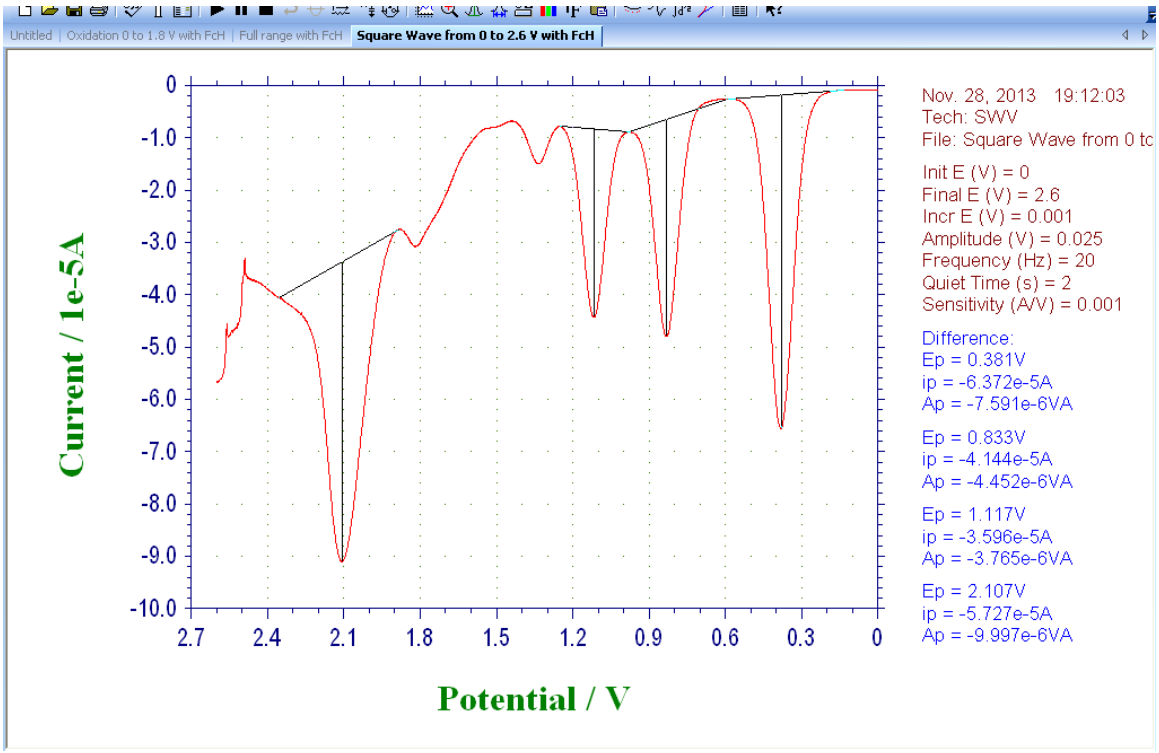
SWV Figure 2 shows the reduction event for **1**. Conditions were 1:1 Bz/ACN in 0.1 M $TBAPF_6$. A glassy carbon working electrode was employed, diam. = 3mm. The scan increase was 1 mV with an amplitude of 25 mV. Frequency was 20 Hz.



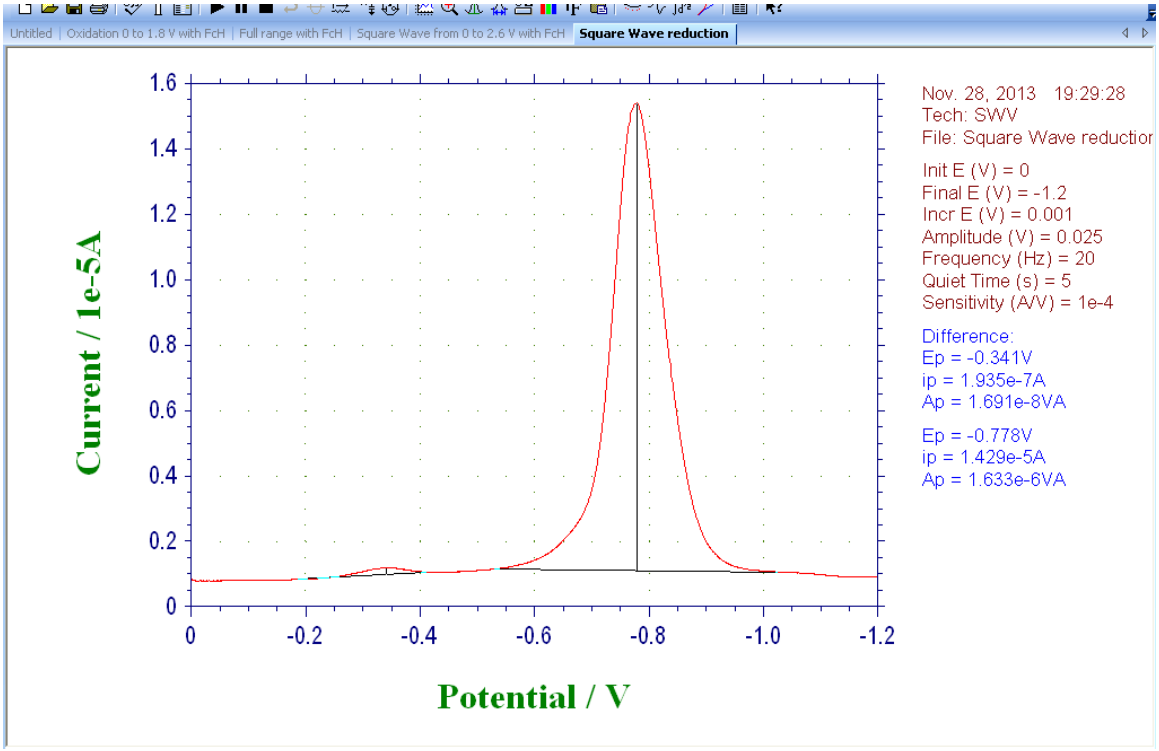
SWV Figure 3 shows the oxidation events for **2**. Conditions were 1:1 Bz/ACN in 0.1 M $TBAPF_6$. A glassy carbon working electrode was employed, diam. = 3mm. The scan increase was 1 mV with an amplitude of 25 mV. Frequency was 20 Hz



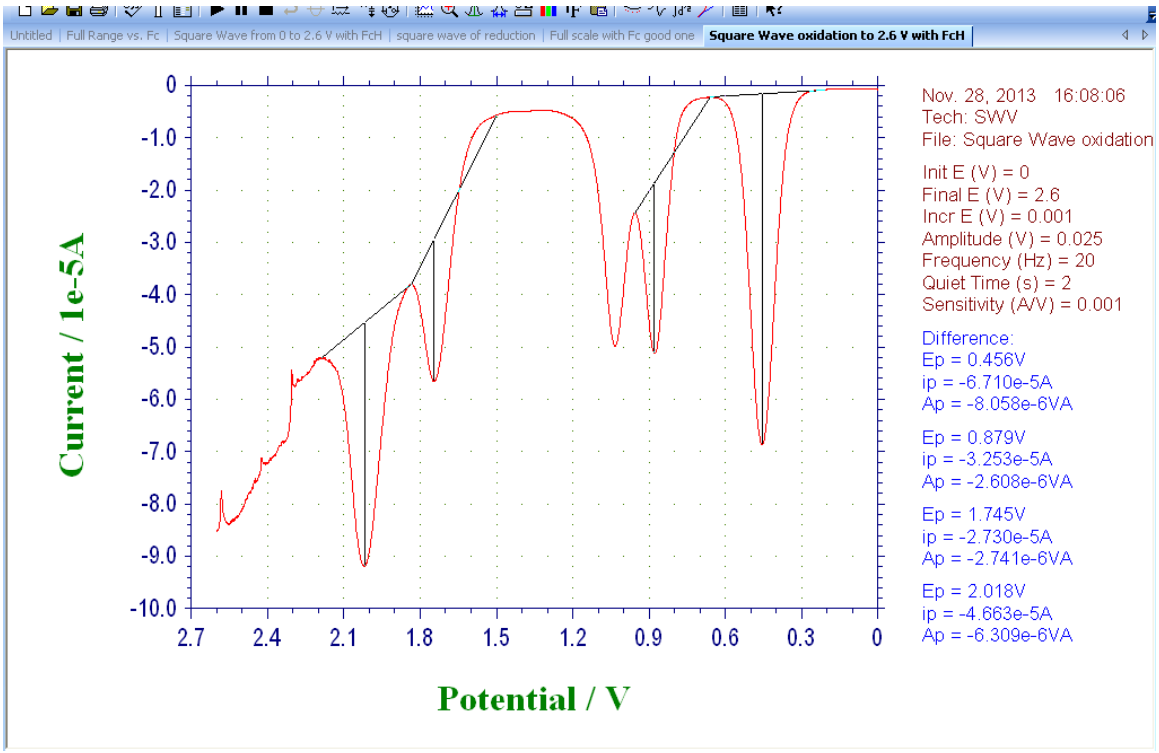
SWV Figure 4 shows the reduction event for **2**. Conditions were 1:1 Bz/ACN in 0.1 M $TBAPF_6$. A glassy carbon working electrode was employed, diam. = 3mm. The scan increase was 1 mV with an amplitude of 25 mV. Frequency was 20 Hz



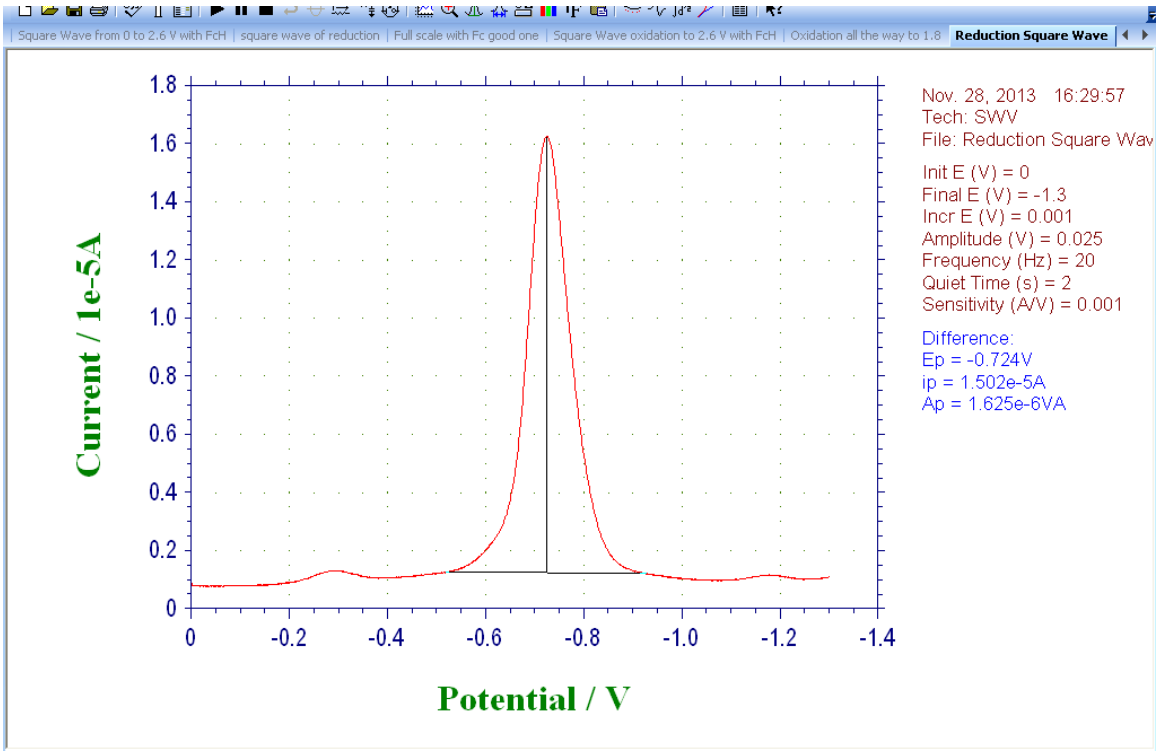
SWV Figure 5 shows the oxidation events for **3**. Conditions were 1:1 Bz/ACN in 0.1 M $TBAPF_6$. A glassy carbon working electrode was employed, diam. = 3mm. The scan increase was 1 mV with an amplitude of 25 mV. Frequency was 20 Hz



SWV Figure 6 shows the reduction event for **3**. Conditions were 1:1 Bz/ACN in 0.1 M $TBAPF_6$. A glassy carbon working electrode was employed, diam. = 3mm. The scan increase was 1 mV with an amplitude of 25 mV. Frequency was 20 Hz. The small peak is likely trace oxygen in the system.



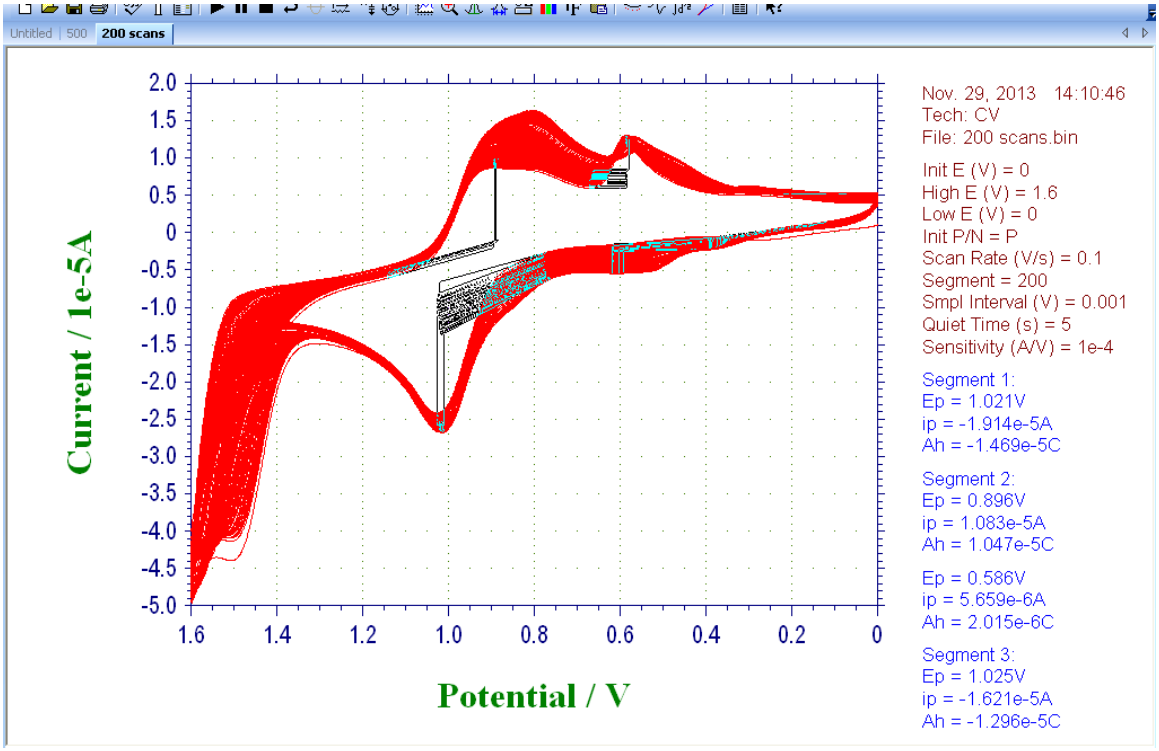
SWV Figure 7 shows the oxidation events for **4**. Conditions were 1:1 Bz/ACN in 0.1 M $TBAPF_6$. A glassy carbon working electrode was employed, diam. = 3mm. The scan increase was 1 mV with an amplitude of 25 mV. Frequency was 20 Hz.



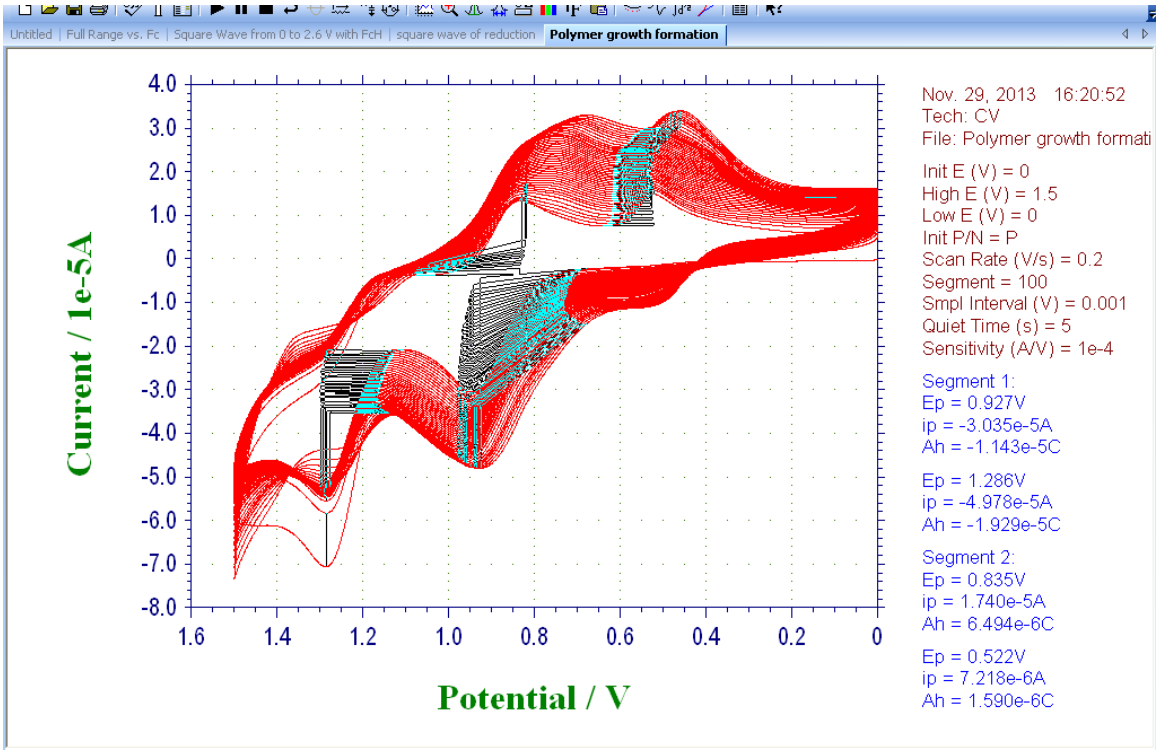
SWV Figure 8 shows the reduction event for **3**. Conditions were 1:1 Bz/ACN in 0.1 M $TBAPF_6$. A glassy carbon working electrode was employed, diam. = 3mm. The scan increase was 1 mV with an amplitude of 25 mV. Frequency was 20 Hz. The small peak is likely trace oxygen in the system.

SWV Figure 9 shows the oxidation events for **5**. Conditions were 1:1 Bz/ACN in 0.1 M $TBAPF_6$. A glassy carbon working electrode was employed, diam. = 3mm. The scan increase was 1 mV with an amplitude of 25 mV. Frequency was

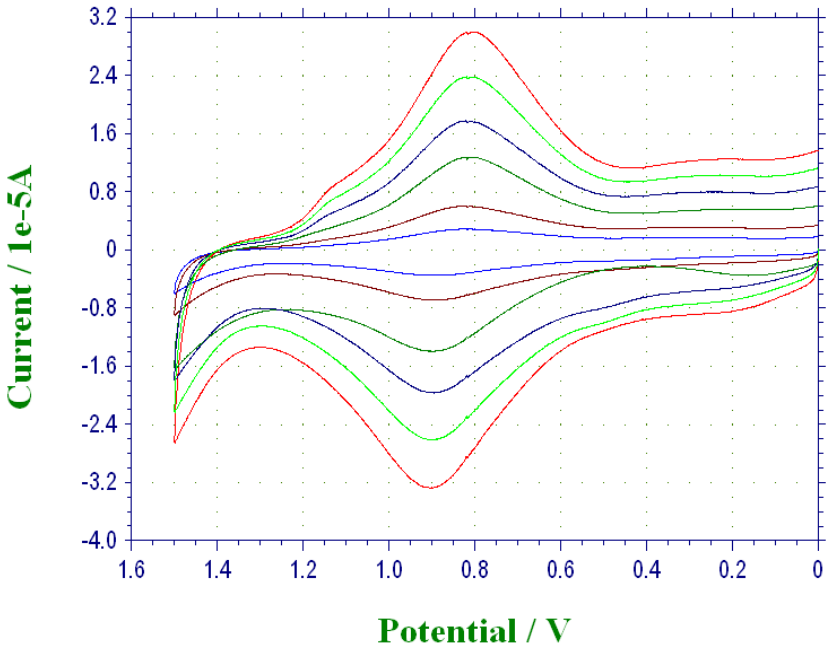
Polymerization



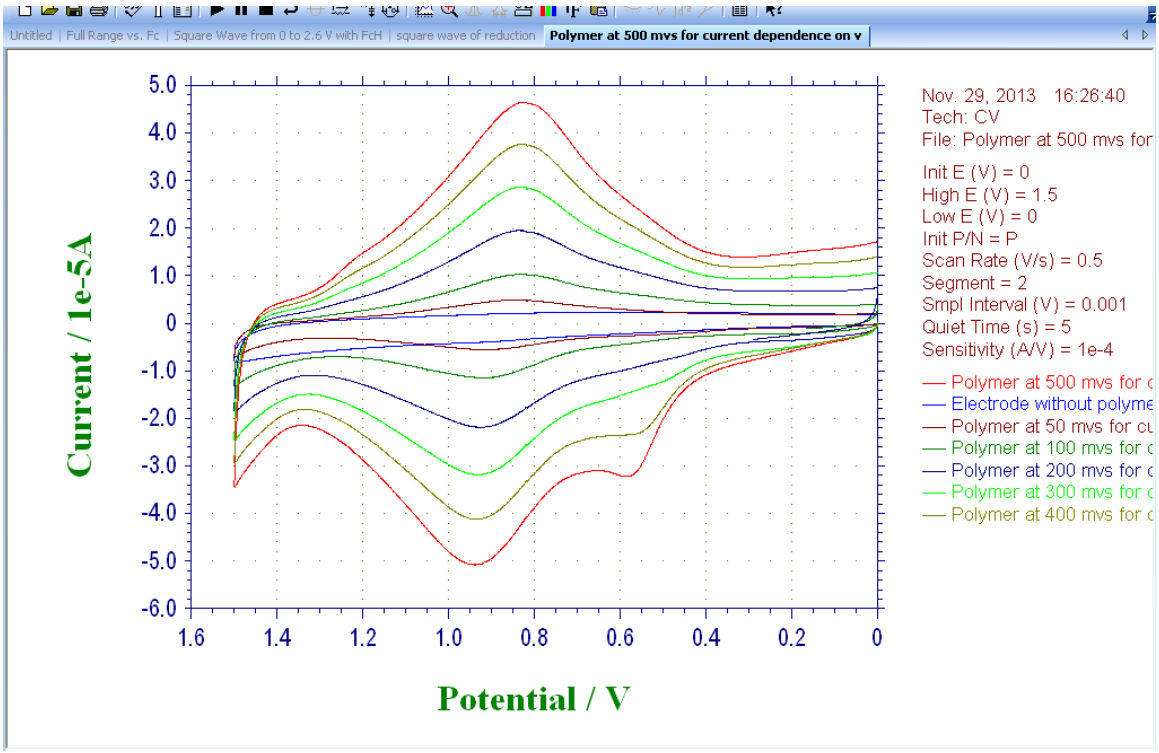
Electropolymerization CV Figure 1 shows the growth of the polymer of 1 mM **1** over several sweeps at 100 mV/s on a 3mm GC electrode.



Electropolymerization CV Figure 2 shows the growth of the polymer of 1 mM **2** over several sweeps at 200 mV/s on a 3mm GC electrode.



Electropolymerization CV Figure 3 shows the current dependence on scan rate of the polymerized product of **1** on the surface of the electrode in a fresh solvent/electrolyte solution with no analyte.



Electropolymerization CV Figure 4 shows the current dependence on scan rate of the polymerized product of **2** on the surface of the electrode in a fresh solvent/electrolyte solution with no analyte.