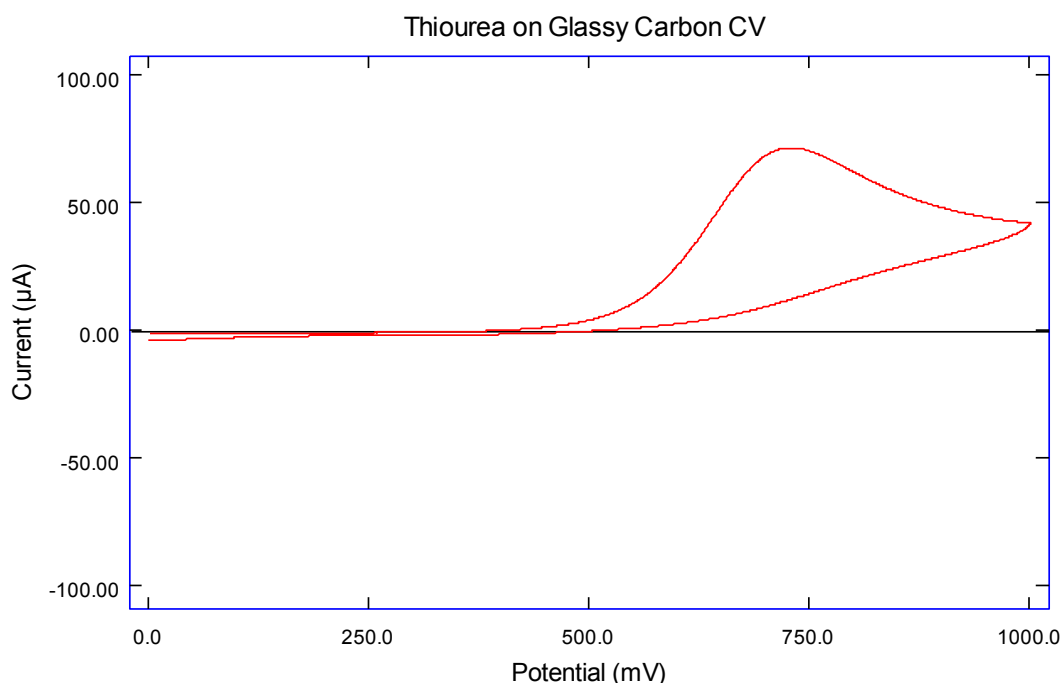


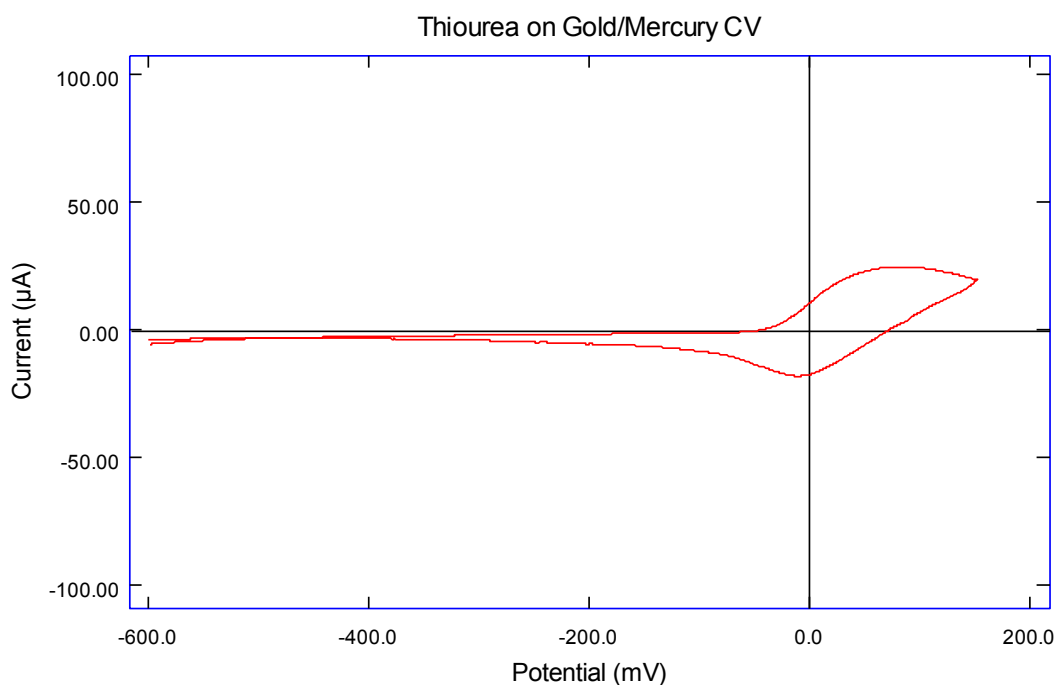
## Thiourea

Thiourea is an important compound in the plating and rubber industries. It can be oxidized directly to the disulfide on a glassy carbon electrode. Alternatively, it can be detected using a gold/mercury electrode at a much lower potential. In this case, it catalyzes the oxidation of mercury on the electrode surface by forming a mercury sulfide complex. The best choice of electrode depends on the type of analysis and interfering compounds. A glassy carbon electrode is best in solutions containing large amounts of halide and metal ions. The gold/mercury electrode provides more selectivity if organic compounds interfere in the analysis, since these are not normally oxidized at the lower potential.



### Experimental Parameters

<b>Sample:</b>	Thiourea, 5.0 mM
<b>Electrolyte:</b>	2M sulfuric acid
<b>Scan Rate:</b>	100 mV/s
<b>Working Electrode:</b>	Glassy Carbon, 3.0 mm diameter (MF-2012)
<b>Reference Electrode:</b>	Ag/AgCl in 3 M NaCl (MF-2052)
<b>Counter Electrode:</b>	Platinum wire (MW-1032)
<b>Electrochemical Analyzer:</b>	Epsilon EClipse (EF-1031)
<b>Cell Stand:</b>	C-3 Cell Stand (EF-1085)



### Experimental Parameters

<b>Sample:</b>	Thiourea, 5.0 mM
<b>Electrolyte:</b>	2M sulfuric acid
<b>Scan Rate:</b>	100 mV/s
<b>Working Electrode:</b>	Gold/Mercury, 1.6 mm diameter (MF-2014)
<b>Reference Electrode:</b>	Ag/AgCl in 3 M NaCl (MF-2052)
<b>Counter Electrode:</b>	Platinum wire (MW-1032)
<b>Electrochemical Analyzer:</b>	Epsilon EClipse (EF-1031)
<b>Cell Stand:</b>	C-3 Cell Stand (EF-1085)