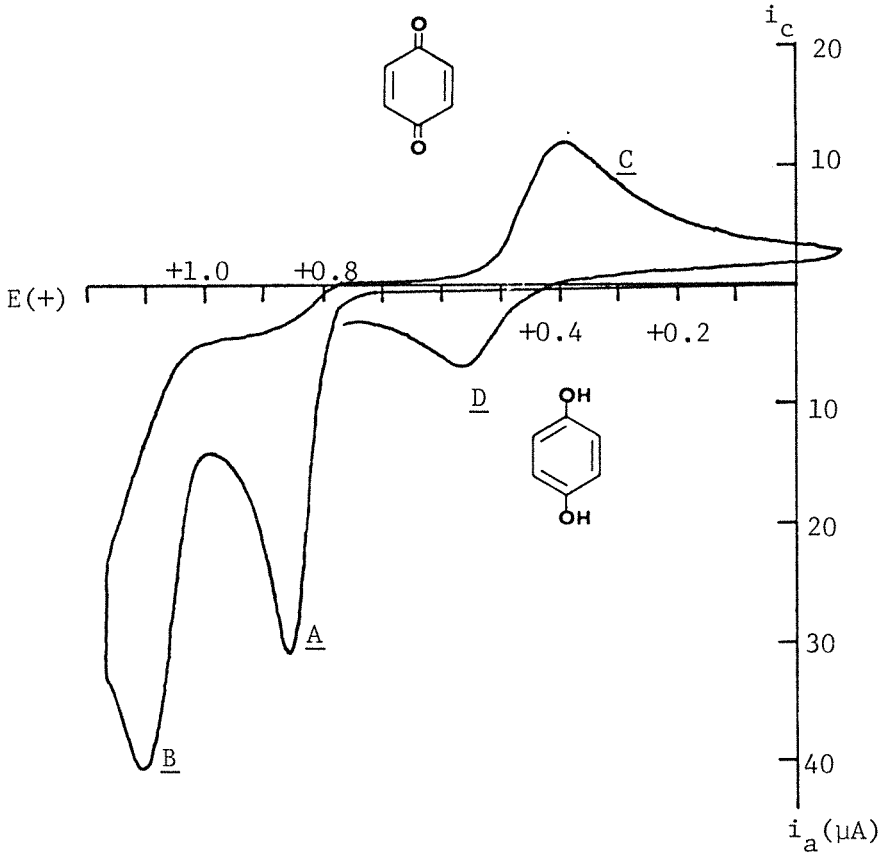
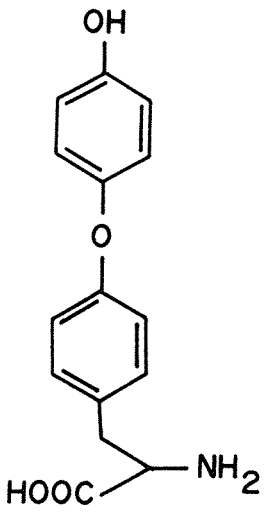
CV NOTES

THYRONINE





SAMPLE:	L-thyronine
MEDIUM:	1 M H_2SO_4
CONC:	5 mg/25 ml
RATE:	200 mV/s
ETRODE:	CPE
REF:	RE-1, Ag/AgCl
MODEL:	CV-1A

A: $2e^-$ oxidation of thyronine producing p-benzoquinone and tyrosine
B: oxidation of the tyrosine generated from thyronine
C: reduction of p-benzoquinone to p-hydroquinone
D: Oxidation of p-hydroquinone produced via wave C (not present on initial positive scan)

Note that waves C and D will appear after traversing wave A. It is not necessary to pass through wave B to generate p-benzoquinone. This can be proven by reducing the positive switching potential to 0.95 V. Peaks B, C, and D correspond with those for authentic samples of tyrosine, benzoquinone, and hydroquinone respectively.

2701 Kent Ave
West Lafayette
Indiana 47906