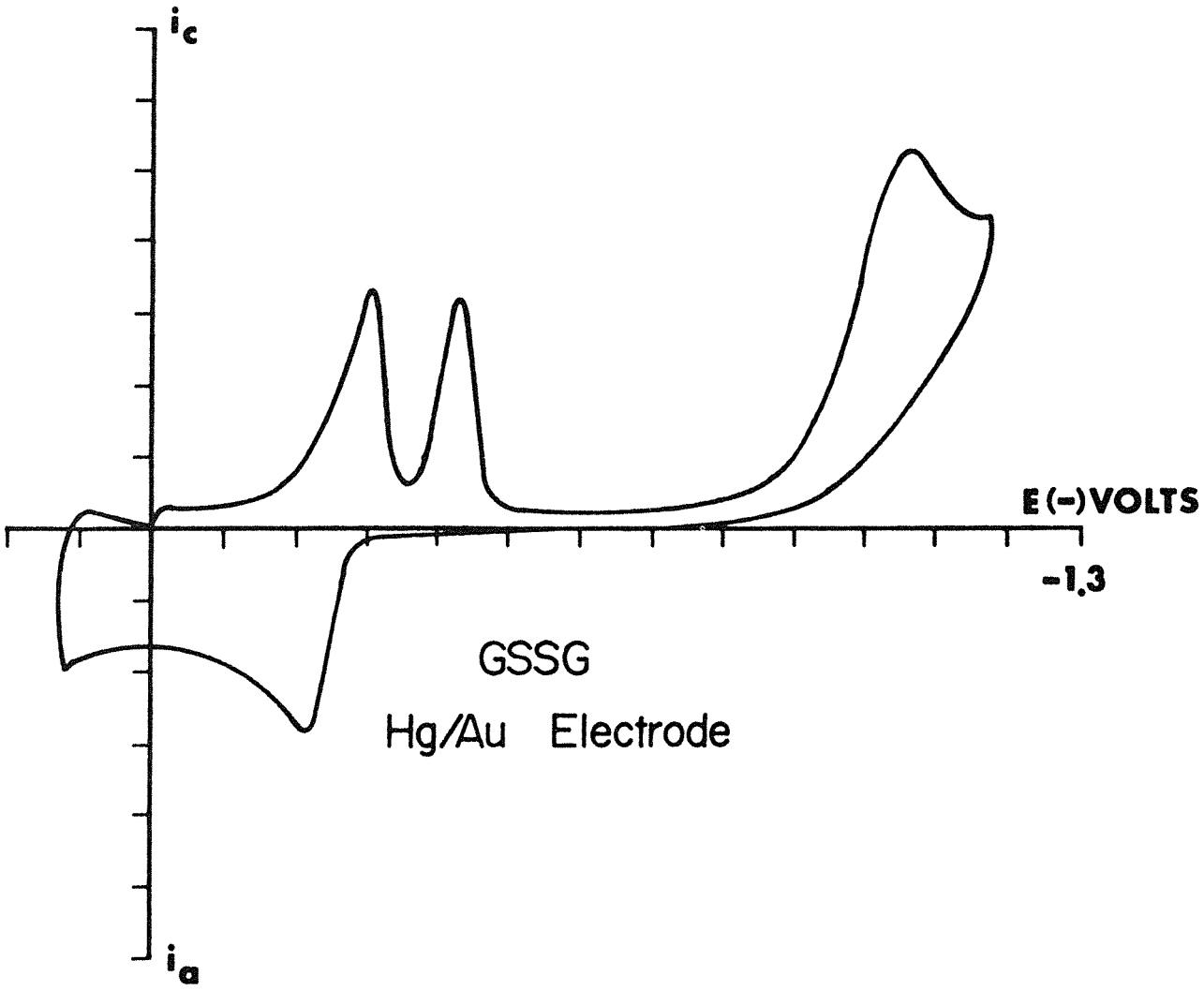
CV NOTES

OXIDIZED GLUTATHIONE



SAMPLE: Oxidized Glutathione (GSSG)

MEDIUM: Monochloroacetic Acid pH = 3.0

CONC: 1mM

RATE: 20mV/sec.

ETRODE: Au/Hg

REF: Ag/AgCl

MODEL: CV-1B

Glutathione is an important peptide present in a variety of tissues, such as liver, kidney, and brain. The balance of oxidized-to-reduced forms of GSH in these tissues is extremely important. Glutathione disulfide is reduced at Ep_a = -1.1V. The CV shows two adsorption waves at -240mV and -420mV. These could be due to the reduction of an adsorbed mercury disulfide complex. Electrolysis studies show that the peak at -1.1V is due to GSSG $+2e^- +2H^+ \longrightarrow$ 2GSH. Possible mechanisms for the other peaks include reduction of $(GS)_2$ Hg which may be adsorbed to the mercury surface.

BAS
2701 Kent Ave
West Lafayette
Indiana 47906